

A SPECIAL FORUM:

COVID-19 AND THE ROLE OF THE MILITARY



NOVEMBER 2021

OPENING AND CLOSING REMARKS:

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Building upon decades-long academic work on traditional passive and active defense missions regarding combating terrorism and fighting wars, this Forum will discuss the role of the military amid the Covid-19 pandemic. Selected topics include, past experience, future risks, and “best practices” response strategies at home and abroad.

Video of the full conference may be found here: <https://www.youtube.com/watch?v=VEXYloOGwAk>

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“COVID -19 AND THE ROLE OF THE MILITARY”

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I. PREFACE

PROFESSOR YONAH ALEXANDER AND PROFESSOR DON WALLACE, JR.

EDITORS

The national, regional, and global spectrum of biological challenges is limitless. Throughout recorded history, these safety concerns stem essentially from two inevitable sources of enduring actual and potential dangers to individuals, communities, societies, and civilizations.

The first critical threat is caused by Mother Nature's disasters, such as earthquakes, cyclones, and infectious diseases. The second concern is man-made menaces, including violent radicalism, terrorism, and war. The key question is whether the United States and the international community are prepared to identify, prevent, and counter current and future biological threats.

In this context, the current report on **"Covid-19 and the Role of the Military"** [November 2021] consists of contributions by invited interdisciplinary academics and practitioners who participated at a special virtual Forum held August 23, 2021 at the Potomac Institute for Policy Studies. The program of this event began with opening remarks by Dr. Jennifer Buss [CEO, Potomac Institute for Policy Studies]. The virtual Forum was moderated by Professor Yonah Alexander [Director of the International Center for Terrorism Studies]. Presentations and discussion were by Lieutenant General [Ret.] Vincent Stewart [20th Director of the Defense Intelligence Agency [DIA]]; Distinguished University Professor Rita Colwell [University of Maryland, College Park; Johns Hopkins University, Bloomberg School of Public Health]; Major General [Ret.] Dr. Mihail E. Ionescu [Professor, National School of Political and Administrative Studies [SNSPA], Bucharest, Romania]; and Ambassador [Ret.] Charles Ray [Former U.S. Ambassador to Cambodia and Zimbabwe]. Closing remarks were delivered by Gen. [Ret.] Alfred Gray [29th Commandant of the U.S. Marine Corps [1987-1991]; Senior Fellow and Chairman of the Board of Directors and Regents, Potomac Institute for Policy Studies].

The preface of this report offers an overview of Mother-Nature and man-made threats as well as selected perspectives on passive and active military missions during war and peace times.

MOTHER NATURE AND MAN-MADE BIOLOGICAL THREATS

Biological agents are micro-organisms too small to be seen with the naked eye and can include bacteria, viruses, and fungi. Some of the most serious viral agents are those that produce, for example, smallpox and yellow fever. Bacterial agents can induce the plague and Anthrax.

Biological threats are difficult to control as they require a delivery system, or "vector," that can make distribution difficult and dangerous. Furthermore, it seems likely that if terrorists were to use a biological weapon, they would probably choose a bacteriological rather than a viral or rickettsial agent due to available countermeasures as well as the difficulty of cultivating viruses.

In addition, toxins, the poisonous byproducts of micro-organisms, plants, and animals, fall somewhere between biological and chemical agents as they are non-living substances. Toxins are relatively easy to manufacture and extremely virulent. Botulinum toxins, for example, can be more toxic than some nerve agents on an equal-weight basis.

Moreover, many agents are considered capable of spreading disease among humans, animals, or plants. Disease develops when people and animals are exposed to infectious micro-organisms or to chemicals which are produced by such organisms. After an incubation period, during which organisms are multiplied, the disease may even cause death. Mention should also be made of a number of fungal pathogens, such as smut of wheat, which is capable of destroying crops as well as resulting in famine and costly diseases.

Despite the wide array of biological challenges, historical and contemporary records provide extensive evidence regarding the nature, intensity, and health security implications of existing threats. These massive data sources also serve as a warning to beware of future catastrophic losses to human lives as well as political, social, economic, and strategic costs to those societies affected by biological pathogen attacks.

For example, in the 14th Century, the Black Plague wiped out 30-60 percent of Europe's population. Likewise, the 1918 influenza pandemic, regarded as the deadliest in modern times, killed an estimated 50 million people worldwide, about 675,000 of them in the United States. In addition, the Asian flu, originated in China in 1957-1958, resulted in the death of some one to four million people.

More recently, the sudden Ebola outbreak that began in 2014 presented a major health security challenge nationally, regionally, and globally. This deadly disease created unprecedented fear and anxiety over public safety, not only in parts of West Africa, but also in the United States, Europe, and elsewhere.

In fact, the Ebola virus reappeared in the Congo at different times during 2018-2020. Similar outbreaks as well as other contemporary health security challenges are anticipated in the future.

Mention should be made of the Zika virus infection that is spread by mosquitoes [which are also the vectors of many other diseases], sexually, and through blood transfusion as well as laboratory exposure. The disease causes microcephaly and many other birth defects. Another grave humanitarian concern is the cholera epidemic that has occurred in war-torn Yemen where more than 100,000 cases have been recorded by World Health Organization [WHO] sources, a quarter of them children. This disease is caused by bacteria from water or food contaminated with feces.

Supplementing Mother Nature's biological threats are man-made intentions and capabilities to deploy a wide range of weapons against perceived or actual adversaries in the struggle for power within and among nations. From the dawn of history to modern times numerous theologians, philosophers, politicians, military strategists, scientists, academics, and other participants and observers of the world's security concerns have underscored the continued trends toward mass destruction capabilities.

In sum, to prevent a potential "Black Plague"- like disaster as well as man-made threats, it behooves all nations to recall the warning in Shakespeare's King Lear. "We make guilty of our disasters the sun, the moon, and stars, as if we were villains on necessity; fools by heavenly compulsions..." [Act 1, Scene 2].

Bill Gates similarly asserted in a February 2017 Security Conference in Munich that, "by the work of nature or the hands of a terrorist...an outbreak could kill tens of millions in the near future unless governments begin to prepare for these epidemics the same way we prepare for war."¹

More recently, Avril Haines, Director of National Intelligence, stated inter alia in her opening remarks of the "Annual Threat Assessment" released on April 14, 2021 that: "The effects of the current pandemic will obviously continue to strain governments and societies over the coming year, fueling humanitarian and economic crises, political unrest, and geopolitical competition as countries, such as China and Russia, seek advantage through "vaccine diplomacy" to build influence and in some cases demand accessions from other governments. Countries with high debts or that depend on oil exports, tourism, or remittances face particularly challenging recoveries, while others will turn inward or be distracted by other challenges. The critical impact of the pandemic has also served to highlight the importance of public health to national security."²

COVID-19: AN ACADEMIC CONTEXT

The national, regional, and global spectrum of biological challenges is limitless. The first critical threat is caused by mother nature's infectious diseases. The second concern is man-made including terrorism. More specifically, COVID-19 alarmed the world in 2019 and 2020 because of similarities with the SARS [the respiratory syndrome] some 18 years ago, which killed almost 800 people. On March 11, 2020 the WHO declared the escalating biological threat a pandemic and two days later registered 8,710,703 COVID-19 cases, which had resulted in a total of 225,817 deaths. By October 31, 2021, the United States registered 45,984,022 COVID-19 cases resulting in a total of 746,366 deaths. During the same period, the pandemic confirmed 246,547,227 cases with a total death toll of 4,995,569 worldwide.³

Many questions have arisen during the pandemic ranging from the exact origin in China, to whether the worst is yet to come, to what are the best response practices to prevent the next potential outbreaks.

In view of the expanding biological threats that pose continual and unprecedented security challenges to the United States and abroad, we organized a total of six Zoom conferences in 2020: "Combating Global COVID-19: From Isolation to International Cooperation" [March 26, 2020]; "Combating Global COVID-19: A Preliminary Assessment of Past lessons and Future Outlook" [April 14, 2020]; "Global COVID-19 and the Economy: Costs, Lessons, and Future Outlook" [May 20, 2020]; "Global COVID-19 and Energy: Threats and Responses" [June 25, 2020]; "COVID-19 and Sports: Threats and Responses" [July 30, 2020]; and "A Lab of One's Own: Fighting Bioterrorism, Cholera, and COVID-19" [November 17, 2020]. The videos of the six Forums are accessible at the ILI website [www.ili.org].

Additionally, four printed publications drawn from the 2020 Events have already been released: Monograph on "Global COVID-19 and Sports: Exposure Claims and Liability Mitigation Considerations" [September 2020]⁴ and "Global COVID-19 and Sports: Threats and Responses" [October 2020]⁵; "Combating Global COVID-19: From Isolation to International Cooperation" [November 2020]⁶; "A Lab of One's Own: Fighting Bioterrorism, Cholera, and COVID-19" [December 2020].⁷

Eight Zoom conferences were held thus far in 2021: "Combating Terrorism Amid Covid-19: Review Of 2020 And Outlook For 2021 And Beyond" [February 25, 2021]⁸; "Combating Biological Threats: A Legal Agenda For Future National And Global Strategies" [March 31, 2021]⁹; "Covid-19 and the Role of Communication" [April 29, 2021]¹⁰; "Covid-19 and the Role of

Human Rights” [May 26, 2021]¹¹; “Covid-19 and the Role of Technology” [June 29, 2021]¹²; “War or Peace in the Middle East: Quo Vadis?” [July 22, 2021]¹³; “Covid-19 and the Role of the Military” [August 23, 2021]¹⁴; and “Post 9/11: Twenty Years of Multilateral Counter-Terrorism Cooperation” [September 09, 2021].¹⁵

Three reports have been printed in 2021: “Combating Terrorism Amid COVID-19: Review of 2020 and Future Outlook” [June 2021]¹⁶; “Combating Biological Threats: A Legal Agenda For Future National And Global Strategies” [August 2021]¹⁷; and “Post 9/11: Twenty Years of Multilateral Counter-Terrorism Cooperation” [October 2021].¹⁸

THE ROLE OF THE MILITARY: SELECTED PERSPECTIVES

The role of force in the struggle for power within and among nations is a permanent fixture of international life. As James Madison observed during a debate on the adoption of the Constitution in 1787, “There never was a government without force.” Likewise, Sir Winston Churchill in a note to the First Sea Lord on October 15, 1942 remarked: “Superior force is a powerful persuader.”

And yet, early guidance on the role of the U.S. military domestically is defined by the 1869 Posse Comitatus Act. It specifically delimits the domestic use of federal military force in a law enforcement role:

The Posse Comitatus Act encompasses legal constraint on the use of military force to combat domestic acts of terrorism. The option to direct a federal military response, however, is available to the President under the provisions of 10 USC 332 and 333 or a proclamation under 10 USC 334 would be necessary to implement such action. If a federal military response were required, coordination between the Departments of Justice and Defense would clearly be necessary to integrate civilian and military forces.¹⁹

That is, while the investigative and operational responsibility for coping with terrorism at home lies with the FBI, and host countries are obligated overseas for planning, coordination, and implementation of precautionary measures, initial protective responses to terrorist actions against U.S. armed forces and bases remain a local U.S. military command responsibility in all locations.

In addition, military force may be required to restore order and preserve lives in such other situations as:

- When the appropriate law enforcement system is unable to deal with political and ideological violence on a wholesale and protracted basis.
- When a cross-border paramilitary terrorist or guerrilla campaign, conceivable at home but more likely against a foreign military base, is prolonged. This situation requires military force for protection duties, hot pursuit, and sanctuary for base destruction.
- And when civil authorities or police are clearly inadequate in terms of personnel, training, or weapons to deal with hostage rescue of after emergency counterterrorist operations.

Clearly, the unique capability of the armed forces to protect the security and liberties of democratic states must be used with great care, and usually only when other remedies have been found inadequate. Notwithstanding, the U.S. military’s role is quite likely to be a vital last line of defense for the protection of U.S. personnel overseas and the guaranteeing of security for U.S. foreign bases.

Additionally, the U.S. military response includes *inter alia* broader missions such as clandestine counterterrorist infiltrations of terrorist organizations, covert support for foreign counterterrorist military operations, overt U.S. military preemptive operations, and overt U.S. military operations against identified terrorist bases and forces used against American targets.

Finally, this section of the preface is drawn from the introduction by Professor Yonah Alexander in the IUCTS published report “The Role of the Military in Combating Terrorism” [August 2016].²⁰ Significant contributions were made to the report by General [Ret.] Alfred Gray, 29th Commandant of the U.S. Marine Corps [1987-1991], and Lieutenant General Vincent R. Stewart, at that time Director of the Defense Intelligence Agency.

Other distinguished participants who contributed to this study include: Rear Admiral [Ret.] Terry McKnight [First Commander of Joint Task Force 151]; Brigadier General Richard C. Gross [Legal Counsel to the Chairman of the Joint Chiefs of Staff]; Lieutenant-Colonel Sébastien Chênebeau [The French Liaison Officer at Joint Staff J7]; Colonel [Ret.] Timothy G. Murphy [Former Senior staff member USAF and State Department official]; Brigadier General [Ret.] David Reist [Former Senior U.S. Military Commander in Iraq]; Dr. Lawrence J. Korb [Senior Fellow at American Progress]; Brigadier Chaudhary Sarfraz Ali [Defence and Army Attaché, Embassy of the Islamic Republic of Pakistan]; Colonel [Ret.] Gary Anderson [Former Chief of Staff for the Marine Corps War fighting Lab]; and General [Ret.] William E. [Kip] Ward [Former Commander of the United States Africa Command [AFRICOM] and Deputy Commander, United States European Command].

ACKNOWLEDGEMENTS:

Professor Alexander wishes to express his deep appreciation for the decades-long academic partnership with the International Law Institute [ILI] and the Potomac Institute for Policy Studies [PIPS]. He is most grateful to Professor Don Wallace, Jr., Robert Sargin, Daniela Rodas [University of California, Berkeley], and Kelly Ho [University of California, Davis] from ILI, as well as the PIPS leadership of Dr. Jennifer Buss [CEO], General Al Gray [USMC [Ret.], Chairman of the Board] and Gail Clifford [VP for Financial Management & CFO]. Special thanks are due to both Professor John Norton Moore and Professor Robert Turner, [Center for National Security Law, University of Virginia] for their continued inspiration and support of our academic work for many years.

Also, the internship program of the International University Center for Terrorism Studies [IUCTS], that is coordinated by Kevin Harrington, has provided research and administrative support for this publication. The IUCTS interns include: Victoria Airapetian [University of Maryland, College Park graduate], Sydney Betancourt [Stetson University, graduate], Sarah Butcher [Texas Tech University undergraduate], Matthew Dahan [the American University], Daan de Zwart [the University of Amsterdam graduate], Caleb Dixon [University of California, Berkeley], Emma Goldsby [University of Kentucky], Kaley Henryon [Mercyhurst University undergraduate], Stephen Mathews [Pennsylvania State University undergraduate], Matthew Phenenger [Ohio Wesleyan University graduate], Avgustina Peycheva [Moscow State Institute of International Relations, PhD], Rebecca Roth [Princeton University undergraduate], Maxim Ryabinin [Syracuse University], and Virag Turcsan [Erasmus Mundus Joint International Master's degree].

END NOTES:

¹ Avi Selk, "Bill Gates: Bioterrorism Could Kill More Than A Nuclear War – But No One Is ready To Deal With It." The Washington Post. February 18, 2017.

² Avril Haines, "2021 Annual Threat Assessment of the U.S. Intelligence Community" Office of the Director of National Intelligence. April 13, 2021.

³ The statistical data is drawn from John Hopkin's University global COVID-19 data, October 31, 2021.

⁴ <https://www.ili.org/images/stories/documents/ICTS-SPORTSCOVID-MONOGRAPH%202020.pdf>

⁵ <http://ili.org/about/news/1243-iucts-and-ili-host-ambassador-s-forum-global-covid-19-threats-and-responses.html>

⁶ https://potomacinstitute.org/images/ICTS/IUCTS_COVID%20Isolation%20and%20Cooperation%20Report.pdf

⁷ https://potomacinstitute.org/images/ICTS/IUCTS_LabofOnesOwn_RitaColwell_2020_F.pdf

⁸ <https://www.ili.org/about/news/1269-ili-hosts-combating-terrorism-amid-covid-19.html>

⁹ <https://ili.org/about/news/1275-combating-biological-threats.html>

¹⁰ <https://www.youtube.com/watch?v=JDXgaPGMOLs&t=4191s>

¹¹ <https://www.dropbox.com/s/q9smt725d4fcial/cv19hr-05-26-2021.mp4?dl=0>

¹² https://www.dropbox.com/s/v2fpbz13ndlhr8j/covid19andtechnology7_14%20-%20SD%20480p.mp4?dl=0

¹³ <https://www.dropbox.com/s/lr8ptivii3l1hkv/IUCTS-July-22-2021.mp4?dl=0>

¹⁴ <https://www.youtube.com/watch?v=VEXYloQGwAk>

¹⁵ <https://ili.org/about/news/1358-iucts-hosts-post-9-11-twenty-years-of-multilateral-counter-terrorism-cooperation.html>

¹⁶ https://www.dropbox.com/s/2thenve1fkfxhul/IUCTS_Ambassador%20Forum_Combating%20Terrorism%20Amid%20Covid_2021_.pdf?dl=0

¹⁷ https://ili.org/images/stories/documents/IUCTS/IUCTS_Combating-Biological-Threats-2021.pdf

¹⁸ https://ili.org/images/stories/documents/IUCTS/POST_9_11_Multilateral-Cooperation.pdf

¹⁹ For details see, for instance, James B. Motley, U.S. Strategy for Counter Domestic Political Terrorism [Washington, DC; National Defense University, 1983], p. 46.

²⁰ <https://potomacinstitute.org/images/ICTS/ReportRoleoftheMilitary.pdf>

II. SELECTED HIGHLIGHTS [DRAWN FROM THE FORUM'S PARTICIPANTS]

1. The military response has helped mitigate some of the effects of the pandemic, here in the United States and abroad.
2. The military played an integral part in the way that the U.S. responded to the pandemic.
3. The DOD has been discussing how to deal with pandemics since as early as 2006.
4. COVID-19 placed the country in war-like crisis conditions. This raised the question, what role should the military play in combating it?
5. Three priorities were understanding the virus, translating and gathering intelligence, and developing a treatment.
6. In addition, the DOD identified 19 critical planning categories, including bio-surveillance and vaccine transport.
7. Looking back, the National Guard covered every one of these tasks and priorities.
8. "The Department [DOD] played its role flawlessly."
9. One question is whether we are organized to do this a second time, and there is no question that we will have to.
10. The "worst case scenario" would be if terrorist organizations found a way to exploit a virus and turn it into a bio-weapon.
11. The Navy, and the military in general, can bring the capabilities of the U.S. both globally and locally.
12. The military has played a key role in providing logistics for needed equipment and supplies, an effort that has had a large impact in combating the pandemic.
13. Airborne transmission is one of the key factors in understanding COVID-19; we have to address combating the disease in a different way than simply treating individuals, but rather protecting against transmission.
14. Being able to deliver and distribute vaccines to as many people as possible in as many countries as possible is critical.
15. We lack an understanding of the pandemic; people must understand that the virus is mutating and replicating rapidly.
16. We have to address and understand how to prepare for a pandemic, such as distancing, masking, and vaccination efforts in a combined approach.
17. The military is exemplary in that it has provided protection for the U.S. and other nations.
18. Because we are going to face more pandemics in the future, we should focus on the lessons to be learned, coordination, and preparation.
19. Governments and the public should consider investing in the next generation, focusing attention on the role of education.
20. This current polarization is due to the education system that has failed for not educating about transmissibility, vaccines and their effectiveness, and limitations.
21. It is vital to rebuild our public health system; it must be funded properly, be coordinated, supplied, and have personnel trained adequately.
22. Romania is a medium sized country, with a population of 18 million people, and a military that has been downsizing since the end of the Cold War.
23. The WHO announcement of a global pandemic has shifted the security understanding of the country and expanded it to include the health of the nation as a major concern.
24. Romania, as a response to the strategic shock of the COVID-19 outbreak, turned to the military as a major responder to the crisis.
25. The military has been deployed all over the country and due to their structure and presence in the area has been successful in aiding healthcare workers and hospitals during the pandemic.
26. The Romanian military maintained its participation in international missions and military exercises alongside their COVID-19 response activities within Romania.
27. Romania closely cooperated with the EU and NATO on COVID-19 responses and will receive EU funds to rebuild its economy as part of a larger EU response.
28. U.S. Military assistance to civilian authorities was conducted at high quality.
29. U.S. Military deaths remained low as safety protocols were implemented and enforced uniformly.

30. Military aid to civilian authorities takes away from U.S. Armed Forces' main goal of protecting the nation from outside adversaries.
31. "Every day spent doing these missions, as worthwhile as they are, is a day lost in developing the capability to perform your main mission which is to meet and defeat the enemies of the country, and the longer you do it, the farther in arrears you get in being able to do your primary mission."
32. Civilian capability must be cultivated so the military is assisting, not filling in, for gaps in civilian services.
33. U.S. Military must work harder to develop international contacts to work together at finding potential endemic and pandemic level viruses and preventing outbreaks.
34. The U.S. Military should have agreements with local virology labs and institutions studying deadly viruses that include science cooperation, technology sharing, and people on the ground working with the labs to identify and prevent deadly outbreaks.
35. The United States must take the lead in forming a global response to the next pandemic.
36. U.S. domestic politics should not get in the way of forming and implementing a comprehensive U/S based policy toward the next global pandemic.
37. The U.S. in the future must alert for state and non-state actor bio-terrorism threats that seek to employ pandemic level viruses.
38. Somebody has to be in-charge of this pandemic and crisis response in America.
39. We don't have a corner on the market when it comes to answers or ideas, so we must listen to all peoples' ideas.
40. When dealing with crises, we must learn to work with adversaries and prioritize what is good for the nation and the world.
41. International war games on this topic would be a helpful tool to ensure preparedness.
42. We need responsible organizations, leadership, and crisis management plans that are international in scope.

III. OPENING REMARKS

DR. JENNIFER BUSS, CEO, Potomac Institute for Policy Studies

Thank you all to our speakers who are here today with us for another in the COVID-19 series with ICTS. General Gray and I are here on behalf of the Potomac Institute to welcome all of the speakers and attendees today. Professor Alexander has brought in the best experts to talk about how the military has responded to, and been able to help mitigate, some of the effects of the pandemic here in the United States and abroad.

I can tell you here at the Institute, we were asked to help the Air Force with their response to the Defense Production Act on how they were going to prioritize their requests out to industry. So the Institute hit the ground running last March to really help the U.S. military and their response.

I want to open up the discussion and have our distinguished speakers talk about their reflections and their perspectives of the military's response to the pandemic. The military was integral in the way that the U.S. responded to COVID. We look forward to hearing from all of you today talk and get your insight on how we might look to the future of what we could do. So thank you all, and Yonah, over to you.

IV. CONTRIBUTORS' PRESENTATIONS

This section of the Report consists of presentations made by the contributors at the Special Forum: "Covid-19 and the Role of the Military" that was held on August 23rd, 2021 via Zoom conferencing. Some updates and revisions were made by the invited participants.

LIEUTENANT GENERAL [RET.] VINCENT STEWART

20th Director of the Defense Intelligence Agency [DIA]

Professor Alexander, thank you for an incredibly gracious introduction and the opportunity to talk a little bit about the role of the military in the pandemic. I won't call myself an expert in this space, but I will offer some things. One, putting this conversation into context, and then talking about the planning factors that the Department went through, and then maybe at the end, give an assessment of how I thought they did.

In the spring of 2018, the then-Director of National Intelligence said the worldwide threat hearings, a hearing I'm thankful that I no longer have to do, offered the following: "We assessed that the United States and the world will remain vulnerable to the next flu pandemic, or large scale outbreak of a contagious disease that could lead to massive rates of death and disability, severely affect the world economy, strain international resources, and increase calls on the United States for support." I don't know if anybody read that, but that was what was put out in a worldwide threat hearing. On December 31, 2019, China reports a pneumonia of an unknown cause in Wuhan Province. They reported this to the World Health Organization. On January 1, 2020, the Chinese officials close the seafood market, thought to be the source of the viral pneumonia cases. What we now know is that patient zero is believed to have happened as early as November 2019, according to the official statements from the Chinese, and the first US Coronavirus cases reported in Washington on January 20, 2020. What we also know is that this deadly virus, this deadly global pandemic designated COVID-19, has taken the lives of 628,504 Americans, and 4,443,557 across the globe, this according to the Johns Hopkins COVID tracker. We also know that the pandemic is creating both a public health crisis and an economic crisis in the United States, disrupting lives, pushing the hospital system capacity and creating a global economic slowdown. What is still uncertain is whether the virus originated in the seafood market or was an inadvertent release from the biological lab in Wuhan. We now know much more in retrospect than we did at the time. How virulent is the virus; how is the virus spread; should we test; should we isolate; should we vaccinate without knowing much about the virus; can we develop a vaccine; how do we manage the crisis in the United States, do we take a global approach, or go it alone? What should our policy be? And that was a great debate in the early stages. On level, we understood that we were in a crisis. That we were in war-like conditions, and if we believe that we're at war to defeat this virus, and we have the most capable military in the world, for many the obvious question becomes: what role should the military play in fighting and defeating this virus? So, we took apart the situation, as we do as planners. We knew that we needed to do at least the following things: understand the virus; translate and gather intelligence; develop a counter to the virus itself— treatments, and or vaccines; understand how we can better identify the spread of virus; testing, support the development and treatment of vaccines, distribute the vaccine across states, municipalities, and tribal areas, all great intensive logistics efforts that we are particularly good at.

So, let's look at the mission of the Department relative to pandemics, and if you go to the army website it says, "the mission of the DOD, in a pandemic, is to preserve US combat capabilities and readiness, but not just for the sake of combat readiness, but to support US government efforts to save lives, reduce human suffering, and slow the spread of the infection." Now again, we've had at least that mission statement out there for two or three years, that was clear. The National Implementation Plan identifies 13 different tasks, and the rest of the Department must pay particular attention to these tasks. Interestingly enough, number one is advancing international cooperation. Tasks further secure that international commitment to transparency, scientific application, rapid reporting, and sharing of data. That was the number one task in the National Implementation Plan. Second, is build international capacity and ensure rapid response. Number three is the capability to rapidly respond either independently or in support of a more global response. Number four, ensure early warning and situational awareness. Number five, establish support and transportation strategy. Number six, establishing screening protocols and implementation agreements. Number seven, I found really interesting, ensuring effective risk in cases to increase national and international awareness, for risk of the virus, and appropriate behaviors to reduce these risks. Ensure that timely, accurate and credible information is provided by spokespeople, at all levels of the government. If there is a breakdown that I can point to almost immediately, it is how ineffective we were as a nation in communicating risk. And maybe we'll come back and talk about that. Number eight, providing guidance on maximizing search capacity with available resources. I will certainly talk about that. Comprehensive guidance on committing shielding. Clear guidance to the private sector and institutions. Rapid diagnosis and support. Establishing stockpiles and anti-virals and advanced technology and production capacity. Those are the 13 things that were identified that the Department of Defense paid close attention to. Typically, you take that guidance, and you build a series of essential tasks, and going back as early as 2006, the Department identified 19 critical planning categories: intelligence, force protection, bio-surveillance, interagency planning support, surge of medical care for US forces, patient transport and strategic airlifts, installations support to civilian agency, bulk transportation, on and on. 19 categories that were essential to the DOD. As a result of that

analysis, NORTHCOM [Northern Command] had the lead role as defense for the civilian authorities, and they designated a task force headed up by General Perna from the National Guard. What's interesting also about the planning guidance is it specifically talks about how to integrate the reserves in any support on the homeland.

So, we have a planning order that's issued by the Joint Staff, NORTHCOM has the lead as the supportive agency, the National Guard under General Perna is the Joint Task Force Commander, and they go about executing the task as assigned. When you look back now at what the National Guard and the Department did, they covered every task, whether it was communicating to mortuary affairs, refueling aircraft, border security, to international engagement. Whatever we did to recognize General Perna is not enough. Every task was covered. So, for instance, the National Center for Medical Intelligence, The United States Army Medical Research and Development Command, the Army Medical Research Institute of Infectious Disease, all went to work on finding answers to what was the cause, taking apart the virus, and creating opportunities for us to build a vaccine. From building and staffing alternative medical facilities, augmenting existing medical facilities, mortuary affairs, medevac'ing infected personnel, border security, manufacturing personal protective equipment, manufacturing and securing and transporting vaccines, and everything in between, the Department played its role flawlessly. So, we can look back now, and we can assess whether or not the speed at which we implemented the plan was the right speed. I cannot at this point suggest that there are any other tasks that would be inappropriate for the military. The issue becomes, how do we get the leadership to push forward, drive the military to implementing those tasks, and doing that in a coherent and efficient manner.

My final point is, are we organized to do this again, as we will have to. The lessons learned have not been codified, but we will need to address the lessons learned because none of this is new. We've all been talking about it as I indicated, as early as 2006, we were talking about how we deal with pandemics. So, with that as a context, and that as the roles that the Department was identified to play, the last thing I'll say is the Department is not the lead for these types of efforts. It's the Department of Homeland Security [DHS], and so how we coordinate and liaison with DHS becomes really critically important.

DISTINGUISHED UNIVERSITY PROFESSOR RITA COLWELL,

University of Maryland, College Park; Johns Hopkins University, Bloomberg School of Public Health; and Senior Fellow at the Potomac Institute for Policy Studies

Thank you, Yonah. It's a pleasure to participate in the panel. General Stewart provided information on the role of the military based on his extensive experience. A critical point to emphasize is that the military has the capacity to bring a wide array of capabilities of the U.S. to the global arena and at the same time operate locally. This duality is critical. A useful example is the Navy Hospital ship providing additional hospital beds for urgent care patients [Figure 1]. In some parts of the US, the capability to treat patients with severe COVID-19 is at full capacity, with no beds available. Hence, the experience of the military in the example of the Navy Hospital Ship, makes it possible to relieve pressure on local hospital systems. Shore-based hospitals were able to focus on COVID-19 cases. Community medical care, in general, therefore was accessible and overflow patients were treated.

The military is without parallel in its capacity to provide logistics, including equipment and supplies, within the U.S. and, by airlift elsewhere in the world where the COVID-19 pandemic is in progress [Figure 2]. Being able to transport needed supplies makes a significant difference in combating the pandemic. Pandemic disease cannot be viewed as local or limited, as occurred with Ebola in Africa, because COVID-19 is transmitted very long distances over long periods of time in aerosols, namely microdroplets. Airborne transmission is a key factor in understanding the disease. The COVID-19 virus is as transmissible as measles, which has long been considered the most transmissible of all infectious diseases. This means that we must address combating the disease differently from treating individuals, namely to protect against transmission. Vaccination is key and the focus must be to deliver vaccines into the arms of as many individuals as possible and in populations of as many countries as possible [Figure 2]. This is critical in combating COVID-19. Hence ensuring each of the combatants in each of the services are vaccinated is critical because it means not only will the personnel but also their families will be vaccinated, communicating the necessity of vaccination. It is indirect but a highly important component [Figure 3].

Understanding the pandemic is critical, that is, understanding the virus mutates during replication. In those who are unvaccinated, the virus can replicate rapidly, rearranging its genomic structure. It can select, at the same time, for a more virulent form. It's an ongoing battle best defended against by achieving ca. 70% vaccination. Airborne transmission of this virus is key to protection and prevention, a characteristic of the viruses not recognized until relatively recently.

The devastation caused by the SARS-Cov-2 virus is a warning to be prepared for the next pandemic. Lewis documents the socially responsible actions of distancing, masking, and vaccination, not just as effective individually, but in combination [Lewis, 2021]. The case can forcefully be made that local public health units must work in tandem to best fight a pandemic. The military exemplifies how mobilization and coordination of individual units can succeed, in a combined national and global effort.

Mathematical modeling, coupled with artificial intelligence, may prove to be a powerful tool for combating this pandemic and predicting others that may follow. No doubt there will be another, very likely including a variation of COVID-19. Other viral agents can be expected to be more transmissible, and more lethal. Appropriate actions to defend against future pandemics must be developed now, or face higher mortality and more devastation.

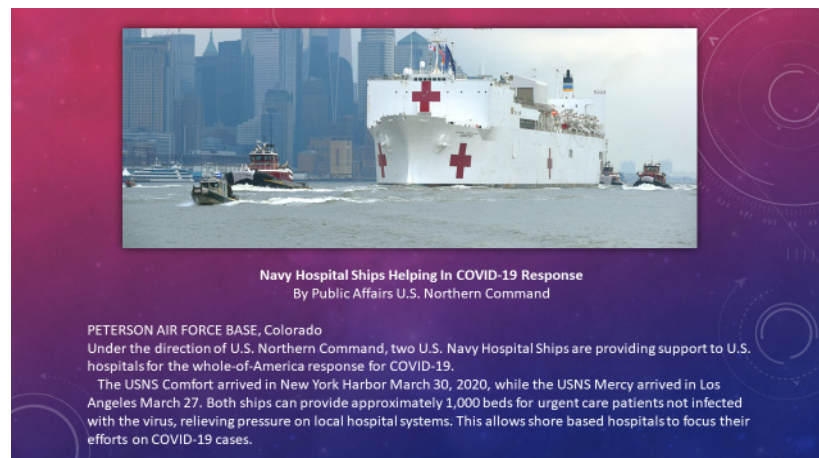
In conclusion, the military can provide protection for our nation and globally against future epidemics. We have, indeed, learned some lessons but those lessons must be coordinated to prepare for the next attack. We cannot afford once again to be caught by surprise.

A final comment is that it is not productive to dispute manmade versus laboratory release of the causative agent of the current pandemic. We are in a pandemic, and there will be other pandemics. We must focus on preparing for that next pandemic. We have a very critical task before us today and that is to combat COVID-19.

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Figure 1.



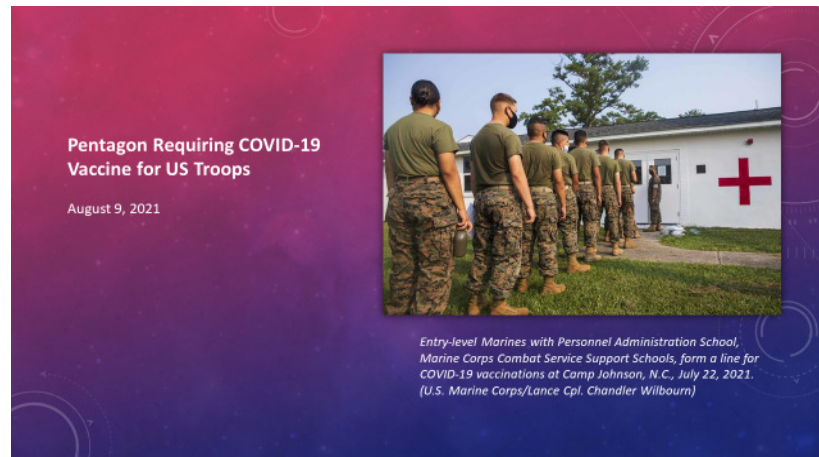
https://www.army.mil/article/244765/micc_unit_supports_covid_19_vaccine_sites_in_florida_georgia

Figure 2.



https://www.army.mil/article/244765/micc_unit_supports_covid_19_vaccine_sites_in_florida_georgia

Figure 3.



<https://www.military.com/daily-news/2021/08/09/pentagon-requiring-covid-19-vaccine-us-troops.html>

MAJOR GENERAL [RET.] DR. MIHAIL E. IONESCU

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ARMED FORCES DURING THE COVID 19 PANDEMIC: THE CASE OF ROMANIA

1. STRATEGIC SHOCK - The WHO announcement on March 11, 2020 of a global pandemic was equivalent to a veritable global 'strategic shock', with an impact in many ways identical to the sudden outbreak of a world war in the atomic age. Of course, it was realized almost immediately the differences of the situation installed at the global societal level from those of a global war. The Covid-19 pandemic remained, even so, equated to a 'strategic shock', so all the states took measures to resort to the use of their own military forces in its fight. That was the case in Italy, the first European country hit by a large scale of Covid-19 contagion, where the armed forces were mobilized from the beginning to help enforce the quarantine and maintain security. These activities were part of 'Operation Safe Roads' [Strade Sicure]. The armed forces have taken action to build field hospitals, transport patients, disinfect and sanitize public spaces, distribute medical products, and provide specialized personnel. Even heads of state, such as in France, E. Macron, have defined the new situation of global contagion as one of war, to which the whole of society, not just the military, must respond quickly and uniformly. The French military was involved immediately in the operation called "*Opération Résilience*" in the fight against the coronavirus pandemic: effective mobilization, consisting of logistical assistance to the health sector. The French Naval Forces carried out evacuation missions and support to the civilian forces on the island of Corsica. The Air Force has contributed to the evacuation, transport of patients and repatriation of French citizens from China.

So, suddenly, the pandemic instantly changed societies and led to major changes in the global landscape. The dynamics of this sudden transformation can be observed both at industrial and economic level, from the production of goods to tourism and transport, from the movement of people and the exchange of goods to unexpected outbreaks of economic isolationism, from revaluations of public policies to new reallocation of resources significantly improved in health sectors to the detriment of others. I quote here Nicholas Burns, former US ambassador to NATO, who said on March 20, 2020, just at the outbreak of the global contagion: "In a way, this crisis could ultimately have an impact as serious as a world war in terms of the number of people affected, in terms of the impact on the economy and on people's way of life. And so there has to be a local response [as well as] a global response. We see very little of it right now. And that gets to leadership. We need better leadership in many capitals of the world."¹

From a military point of view, perhaps the most significant evolution in the field of national security, the defense of the national borders and eventually the fulfillment of the alliance obligations moved rapidly -almost at the global scale- towards the sanitary-medical protection of the health integrity and the domestic order of the nation in question. The changes in the global geopolitical landscape and international strategic evolutions were also significant, some experts talking about the appearance of "new geopolitics" or the "geopolitics of the coronavirus" as a supplement of the old trends in the field.

¹<https://www.pri.org/stories/2020-03-16/covid-19-impact-could-be-serious-world-war-former-amb-says>

So, we had witnessed real attributes of an unexpected 'strategic shock' installed globally and to which every state and society had to respond immediately and efficiently. That this was the case is demonstrated by some figures regarding Romania. From the beginning of the Covid-19 'war', the epidemiological situation in Romania has been ascending, as of the 26th of October 2020, after only seven months, the number of people infected with the new Coronavirus reached 212,492, of which 151,811-cured patients, and 3% [6,470] of people infected-died. The above figures are appropriate, as can be seen, for a military war communiqué on the state of operations carried out, detailing the troops involved, the losses recorded in the fight, and the number of dead and wounded.

In addition to the fact that the military-like assault at the national level on the Covid-19 pandemic was mostly prepared as a strategic military operation, the tough measures taken were communicated to society by military ordinances, including the restriction of constitutional rights and freedoms, such as freedom of movement and of expression or the punishments applied for violating the new rules established for the area where the operation takes place, frequently at the beginning being the entire national territory. For example, in the case of Romania, the measures adopted by the state can be framed in three distinct stages - the first of the order, once the first cases of infection appear, the second with the obvious signs of a large health crisis, and the third with the installation of the alert state for effective combat of the enemy. Corresponding to each of these stages were arranged as the following: the designation of six hospitals, nationwide, for hospitalization of infected people, thermal scanners at airports and the establishment of emergency committees of epidemiologists and other specialties [stage 1, launched in late January 2020]; starting with March 8, 2020, the ban on public or private events in open or closed spaces, with more than 1,000 people. The set of preventive measures may include the suspension of the educational process in schools in preschool, middle school, high school, post-secondary and vocational education, between March 11-22, 2020, road and rail transport of persons for all trips to and from Italy.

The third stage began on March 16, 2020, the presidential decree establishing the state of emergency in Romania for 30 days, then extended monthly. The measures taken together with this new stage had consequences on all areas of socio-economic life [public order, economy, social protection, justice, etc.], the Ministry of Foreign Affairs being appointed nationally responsible by the Department for Emergency Situations. These measures provided that the army "supports, upon request, the Ministry of Internal Affairs to ensure security and protection of objectives/ areas, transport of personnel, materials and equipment to perform specific missions, epidemiological triage, medical assistance and other missions, depending on the evolution of the situation" and that "it supplements, if necessary, the staff and the technique for intervention, provided in the plans, depending on the evolution of the situation." All these measures of the third stage gained the force of law through the vote of the Romanian Parliament of May 15 regarding Law No. 15 on "measures to prevent and combat the Covid-19 pandemic."

2. NEW MISSION: SUPPORT FOR DOMESTIC AUTHORITIES - As we know and I have mentioned earlier, traditional geopolitics didn't stop with the outbreak of the Covid-19 pandemic and has not been replaced by the "Covid or vaccine geopolitics." For Romania that thing has been very important due to its location, on the Eastern flank of NATO, neighbor of Ukraine and the Black Sea where since 2014 Russia has shown constant signs of aggressiveness. Consequently, Romanian armed forces had to tackle concomitantly with the task of supporting the national authorities to act in accordance with the decided state of national emergency and to continue to fulfill the mission to defend the national interests together with the allies of NATO in that important strategic area of the Black Sea.

Concerning the first above mentioned mission, I would like to emphasize some of the directions taken by the activities of the armed forces during that period: civil authorities were supported to enlarge the necessary sanitary capacity by rapidly building three Deployable Military Hospitals - ROL 2 in Bucharest, Constanta and Timisoara; at the same time, more than 50 centers for epidemiological control and testing in the military and civilian hospitals in different districts of the country were created; providing military leadership to three district civilian hospitals in time of urgency in Suceava, Deva and Focsani where the civilian management failed. Up to August 2020, there were more than 100,000 activities to distribute food and medical care to the veterans and their families; military transport airplanes transported 270 tons of medical equipment within the country or in the Republic of Moldova and evacuated some citizens abroad or bringing them home; a .s.o.

At the end of 2020, underlined in the media were: the significant contribution of engineers from the 96th Genius Battalion "Cetatea București" and the 136th Genius Battalion "Apulum"; the appointment of military doctors to lead civilian hospitals as a last resort for managing the health crisis in severely affected localities; militaries from the CBRN17 Defense structures [for example, the 202nd CBRN Defense Battalion "General Gheorghe Teleman" - Disaster Intervention] carried out missions to decontaminate and disinfect the roads in the localities severely affected by the epidemic; the role of The National Institute for Health and Military Research and Development "Cantacuzino" as one of the eight test centers in Romania for the detection of infection with the new Coronavirus, which has constantly increased its testing capacity, currently reaching 700-800 tests per day; the soldiers of the 1st CIMIC Battalion [civil-military cooperation] from Bucharest who carried out several humanitarian assistance missions.

These are achievements of the armed forces in a period, which covered several months, when there was a complete lockdown, and the civilian circulation has been interrupted and being allowed only in accordance with the military dispositions [*ordonanțemilitare*] issued not by the military, but by the Ministry of Interior. Of course, it would not have been possible to fulfill such missions if the military would not have had capabilities as command and control, logistics, units of medical care and trained to cope with CBRN [Chemical, Biological, Radiological, Nuclear] threats, etc. As a matter of fact, here is why the armed forces were the first to be called to be involved in combating the Covid-19 pandemic, and the case of Romania was not the only one.

It was also due to the fact that the armed forces are distributed all over the country and also have its own strong points in the military hospitals located in almost every district [Romania has 41 districts] that the leader of the National Committee for Coordination of the Activities concerning the Covid 19 pandemic was installed Colonel Valeriu Gheorghita, a young and energetic epidemiologist. He was also responsible with the organization of the National Campaign of Vaccination still developing.

3. RESPONDING TO THE MAIN MISSION - Romanian armed forces had to continue its main mission to be ready to defend the national interests being threaten by an aggressive power and to support the allies in accordance with the national commitments. There were many facets in this regard.

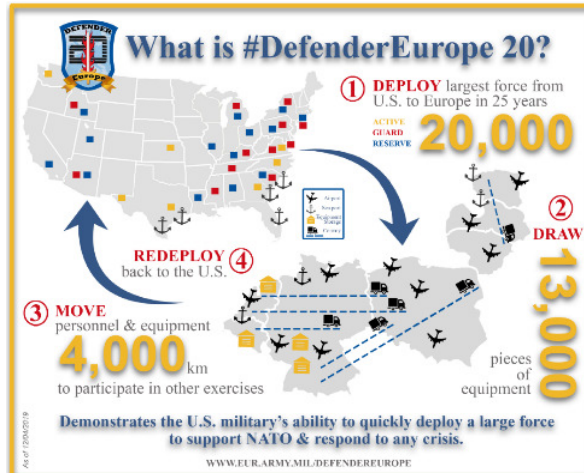
The first was to continue the missions already going on regarding the participation in the missions abroad, mainly in Afghanistan, but also in the Western Balkans or in Africa [Mali]. Thus, the Romanian Army participated in 2020 with a force of 2,376 military and civilians in missions and operations outside the territory of the Romanian state, and the Ministry of Internal Affairs with 1,009 military and police officers. For the year 2021, 1,940 soldiers and civilians were expected to take part in missions and operations outside the Romanian state, with 436 fewer than the previous year, and the Ministry of Internal Affairs will participate with 841 military and police officers, 181 fewer than in 2020. In order to make these troops operational in pandemic conditions, training programs had to be changed, appropriate equipment procured and distributed, as well as new rules of engagement developed. It was a considerable effort considering both the pandemic and its shortcomings, characterized by traffic restrictions, total or partial lockdowns, isolation of families and uncertainty about their situation, as well as many other missions that the army had to accomplish domestically.

Another specific circumstance was that certain members of the army were already engaged in partnership actions with allies or neighbors, they had to adapt to the situation imposed by the pandemic and complete their missions. In this case, we can cite the mission fulfilled uninterruptedly from January 16, 2020 to June 5, 2020 by two Romanian ships, one of them, "Vice Admiral Constantin Balescu" being the commanding ship of the Standing NATO Mine Countermeasures Group Two- SNMCMG2-operating on the Black Sea and Mediterranean Sea. Ships from Bulgaria, Turkey and Germany were part of the allied group, later joining Greek ships. With the onset of the pandemic on 15 March, measures were taken on board NATO naval vessels to prevent and possibly combat the contamination of crews with the new virus, and the program to restore the combat capability of ships and crews were adapted to the epidemiological context, the activities planned in the ports of call being limited, reduced, or canceled.

For ten weeks, Romanian ships traveled 5500 nautical miles, performing with Allied ships maneuvers and naval evolutions to discover mines, as well as training exercises for divers in the barocamera, as well as a COVIDEX exercise, on the scenario of a real case of Covid infection. On board a ship and the implementation of the procedures established at the level of the Allied Maritime Command [MARCOM] for that kind of action.²

The main component in that regard is the participation of the Romanian military during the exercises in 2020 - 2021 together with other NATO allies on the territory of Romania or on the Black Sea, but also on the territories of other allies. Romania has participated since the outbreak of the Covid-19 pandemic in two large annual military exercises organized by the USA in Europe, Defender 2020 and Defender 2021. Such exercises are conducted annually by the US military, being the concrete signal of the US commitment to defend Europe and compliance with the NATO treaty, especially article 5.

² Capitan-comandor Mihai Egorov „Suntem la comanda unei grupări navale a NATO, in "Revista de Marina", nr. 5, 2020 -https://www.navy.ro/media/revista_mr/numere/rmr207.pdf



Defender Europe 20- As of March 13, due to the outbreak of the global pandemic all movement of personnel and equipment from the United States to Europe for Defender-2020 has ceased. Since January, the Army deployed approximately 6,000 soldiers from the United States to European theater. Approximately 9,000 vehicles and pieces of equipment from Army Stocks and 3,000 pieces of equipment were sent via sea from the United States. And, in coordination with Allies and partners, it also completed movement of soldiers and equipment from multiple ports to training areas in Germany and Poland.

On March 16, European Command announced the appropriate adjustments to Defender- 2020: the linked exercises to it - Dynamic Front, Joint Warfighting Assessment, Saber Strike and Swift Response - will not be conducted. Forces already deployed to Europe for other linked exercises will return to the United States. So, if initially a deployment of 20,000 US troops was expected, the Secretary of Defense has decided to block any movement of personnel and military assets from the United States overseas. In fact, only the combat team of the armored brigade already present on the European territory will take part in the war games.³

It is worth mentioning that NATO, in such circumstances, also took the measure to cancel some already planned exercises, which was immediately noticed by the allied states, especially the small ones on the eastern flank. In Romania, this fact produced a negative impact reflected in the military press, which analyzed the significance of the decision for the relevance of the alliance, but also for Romania's defense capacity.

Defender Europe 21 was the largest US-led military exercise in Europe in 25 years, began on May 3rd at an opening ceremony in the Port of Durres, Albania, attended by the highest local authorities and the Supreme Commander of NATO Forces in Europe, General Tod D. Wolters. Building on the success of last year's much smaller deployment due to the pandemic, Defender-Europe 21 includes a larger number of allied and partner countries. NATO activities are in a wider area than planned for 2020. More than 28,000 multinational forces from 26 nations will conduct operations almost simultaneously in more than 30 training areas in 12 countries, including Romania, to practice defending NATO's eastern flank. Of the more than 28,000 soldiers, 2,900 will be US soldiers. Gen. Wolters said "What we are attempting to do, is improve our strategic transparency and alignment. Something that hasn't been done with this scope and scale since the 1940's." ⁴

³<https://www.europeafrica.army.mil/ArticleViewPressRelease/Article/2113178/exercise-defender-europe-20-update/>

⁴<https://www.eucom.mil/article/41217/defender-europe-21-dv-day>



Defender 21, 2021, DV Day

Also, Romanian military naval forces took part in exercises organized by neighboring nations, such as 'Sea Breeze' between June 28 and July 10, 2020, the USA and Ukraine being the host countries, and the participation totaling about 2000 soldiers from Bulgaria, Georgia, Norway, Romania, Spain, and Turkey.⁵



The U.S. warship Porter, shown here in an undated photo, steamed into the Black Sea Sunday, July 19, 2020.

The same naval military exercise, which has already become traditional, took place in 2021, for 13 days, from the end of June to July 11, with the USA and Ukraine as host countries and the participation of 32 states [5,000 troops, 32 ships, 40 aircraft and 18 special operations and dive teams].⁶

⁵<https://www.navytimes.com/news/your-navy/2020/07/20/nato-black-sea-exercise-kicks-off-as-moscow-puts-its-regional-forces-on-alert/>; https://www.c6f.navy.mil/Press-Room/News/News-Display/Article/2664158/us-sixth-fleet-announces-sea-breeze-2021-participation/utm_source/twitter/utm_medium/social/utm_content/100002187929379/linkId/100000050972966/

⁶<https://www.dw.com/ro/sea-breeze-exerci%C8%9Biu-militar-de-amploare-%C3%AE-n-marea-neagr%C4%83/a-58077338> - The 13-day exercise began shortly after Russia claimed on June 23 that it fired warning shots and dropped bombs in the path of the British destroyer HMS Defender to force it to change course from the Crimean city of Sevastopol. While the UK's Defense Ministry denies that the British ship was fired upon, Moscow warned that it was prepared to engage any NATO vessels entering the territorial waters around Ukraine's Crimean Peninsula.- <https://www.foreignbrief.com/daily-news/natos-sea-breeze-2021-naval-exercise-to-conclude/>

4. THE ARMY was also called upon to be actively involved in the elaboration of the National Recovery and Resilience Plan, adopted by each EU member, and widely funded by the European organization. The European measure was determined by the need for the Member States to take energetic action as early as possible in order to recover the economic consequences caused by the outbreak of the pandemic and the drastic restriction of economic activity. To this end, for the first time at EU level, after long debates, it was decided to allocate funds at European level to each Member State, some non-reimbursable, but pending the implementation of projects to recover and build resilience to pandemic-like calamities.

At national level, within this plan, the army [The Ministry of National Defense] is involved in projects belonging to the following fields: transport, health, education, research, innovation, digitalization, and resilience. crisis situations. I mention this aspect because I consider it related to the issue discussed in this meeting, because as we know the transport infrastructure -and not only- in Eastern Europe, is deficient and poses problems for the mobility of military forces in crisis and war situations for NATO or/ and partners. The sensitive situation in the region where Romania is located - which has a supply of almost 1000 km with Ukraine is a convincing argument that the involvement of the Ministry of Defense in road or railway infrastructure projects, as well as those related to river navigation on the Danube is beneficial for the future development of its specific missions.

5. COOPERATION WITH NATO AND EU - Since the outbreak of the pandemic, the actions of the Romanian armed forces have been coordinated with the corresponding structures in NATO and the European Union, relative to disaster response, as well as regarding cooperation with allies. It should be noted here that initially, at the level of both organizations, there were worrying hints of possible international cooperation to combat the pandemic properly. In the case of the EU, for example, some member-states in the early days of the pandemic were tempted to close their borders, so that in some cases significant columns of waiting vehicles were formed. Brussels' swift intervention has left the danger looming over one of the EU's main foundations - the free movement of people and goods - unaffected. In the case of NATO, the initial US decision to cancel the Defender 20 exercise has raised concerns about the validity of the US commitment to defending the old continent. Also in this case, the rapid intervention in this regard, as well as the measure of planning joint transatlantic exercises, have dispelled such unfounded fears.

NATO's objective response could not be to organize a coalition of member states against the pandemic, because, being a military alliance, it did not have the necessary capabilities in sufficient quantities for the scope of such a project, but also because this paradigm shift required a huge effort, organization, and implementation, which required time. However, it should not be underestimated that there were all expectations from this point of view, and certain measures at the level of some states [cancellation of the Defender-20 exercise, for example] made those who shared such hopes wonder if NATO did not manifest a kind of withdrawal from Europe. Coordinated efforts at the level of the North Atlantic Alliance have not been lacking, however, from the very beginning. Thus, the action was continued in response to the requests of the partners and the ongoing missions of PK, a scientific project was developed on Tuesday for the development of nine devices for diagnosing Covid-19. In the geopolitical plan, the US and UK navies sent four military ships to the Barents Sea near the Arctic coast of Russia to highlight the freedom of navigation. At the same time, NATO coordinated allied response measures to the hybrid war waged by Russia and China, which gained unusual magnitude in the wake of the Covid pandemic. But the most important factor was the coordination of the Allies to maintain in the new conditions -budgetary constraints and reallocations of resources, the involvement of the military mainly in actions to combat the epidemic, a precarious economic situation- fighting capabilities and strengthening defense capacity. Such efforts are still needed because we are in a stage of great financial constraints, and the budgets of the parity are calibrated differently than in the normal periods, since the health of the population has become the most important vector of national security.

Referring to what Burns mentioned in the previous quote, we must point out that the Covid-19 stage, at least so far, has highlighted a slip of the Alliance's geo-strategy from the east-west to the north-south axis, an amplification of the hybrid war with themes and new horizons for influencing the allied public opinion, generated especially by the pandemic file. Resilience has become the watchword of the alliance's actions, preparing companies to absorb and respond to non-traditional future threats, including from a global pandemic perspective, but also from negative economic and financial developments being obviously crucial in the short term. No less, it is necessary to combat any tendencies of isolationism or "single" response to challenges, being already demonstrated in this pandemic period that a common approach is best not only for relief, but also for fulfilling its global responsibilities.

The European Union responded, due to the political-economic and social caliber of the organization, after some initial hesitations quickly overcome, coordinated to the crisis, and reached a success in July, which in other circumstances would have required years of preparation to be reached. I am referring to the decision to set up a financial fund to support the economic recovery of its members and resume economic growth, as well as to restructure on a digital and ecological basis the common future of almost one trillion euros [much of the amount being grants and the rest EU interest loans]. From a military perspective, in April 2020, Josep Borrell, High Representative of the European Union for Foreign Affairs and Security Policy, chaired an online meeting of defense ministers in member states. During it, after each one presented the measures taken, the decision was made to create a true EU staff for the exchange of information and expertise between Member States, on military assistance in support of civilian authorities. This body created ad-hoc will develop strategic communication in pandemic conditions and works to identify lessons learned and good practices for the future. The

acquired expertise is intended to be used to strengthen the capabilities of the European armed forces and will be reflected in EU defense initiatives.

6. COMBATING MISINFORMATION [HYBRID WAR] - The pandemic period highlighted a significant increase in the forms of hybrid warfare carried out by countries with authoritarian, undemocratic political regimes and, consequently, demanded and requested for the future, adequate response capacity. It has been observed that in various forms of hybrid warfare, the misinformation of these regimes uses themes and vectors derived from recent experience of pandemic evolution and targets social groups / sectors easily influenced so as to create moods favorable to their own actions and geopolitical targets. The literature in the field is constantly enriching, so I limit myself to two examples from the panoply of the hybrid war waged by Russia during the pandemic. The first refers to an EU study from March 2020, when Brussels, which mentions the misinformation promoted by Russian offices in the countries of the organization in the new conditions, that is apart from trying to gain some kind of public support in the target countries -as was the case in Italy, where Moscow delivered aid to combat the pandemic- misinformation was promoted to increase Eurosceptic trends. The second example is the recently promoted by the highest level in Russia on the history of the component Slavic nations of the former USSR - in this case Russia, Ukraine and Belarus- which are considered to form a tri-ethnic stock for. The latter thesis, which has become official in Russia, tends to weaken Ukrainian and Belarusian statehood, erasing national, linguistic, and historical identity. There appears to be a need in the current circumstances of the evolution of the pandemic for hybrid forms of warfare to be identified and adequately addressed.

7. CONCLUSION - The subject is vast, and the knowledge of the experience of each army during the pandemic will reveal both common and particular things of action. The experience of the Romanian army highlights that:

- a. It is necessary that in cases similar to the Covid-19 pandemic, the response be coordinated from the global scale to the regional and national one, the existing institutions for this purpose having to be calibrated accordingly from the previous period;
- b. The involvement of the military forces must be done from the first moment, in an already existing legal framework and the support given to the local authorities must be calibrated in order not to affect the capacities necessary for the 'classic' national security;
- c. The organization of the national military forces must include sufficient structures for an efficient support in such cases: CBRN, Engineers and CIMIC units;
- d. Military hospitals to be connected to the national network in a pre-established plan for the general national response to such pandemics, and the construction of new ROL-2 hospitals to be decided according to the extent of the contagion;

AMBASSADOR [RET.] CHARLES RAY

Former U.S. Diplomat in Asia and Africa as well as Deputy Assistant Secretary of Defense for P.O.W/ Missing Personnel Affairs

Thank you for including me. I'd like to echo what everyone has already said—I think the military performance here in the US and abroad has been first rate given the conditions they've had to work under. Military support to civil authority is a time-honored tradition in this country. We provided military support in natural disasters throughout my twenty years in the military from the 60s to the 80s, and I think we can learn some lessons from this pandemic from the military. If you look at the statistics for example, the infection rates per 100,000 among military personnel is slightly lower than the general population, and when you consider a military environment and the nature of military operations that is actually quite remarkable. The military tends to be healthy and younger, so the death rate was significantly lower than the civilian population. I think the lessons to be learned from that are that the military, despite a slow start, took very decisive action to minimize or mitigate the impact of this virus.

Being retired military, I have spent a lot of time on military bases over the last 18 months, and things such as masking, social distancing and quarantines have been more uniformly applied in the military, than in civilian communities and with much better effects, so that's a lesson to be learned. The other thing though, and, and this might sound as I might be sounding as if I'm backing away from what others have said, but I'd like to expand on something that Dr. Colwell said about the need to invigorate our public health system. We should never forget that the military's role in supporting civilian authority is supposed to be when the civilian authority is overwhelmed, and they need the military to fill in the gaps. Well, if you don't have a civilian capability, it means that you're turning entirely to the military to do it, and the problem with that is that the military's primary role is to defend the nation against all manner of adversaries. And I think we were lucky during this pandemic that none of our adversaries decided to take advantage of it and start some conflict somewhere, that our military might not have been able to cope with because it was tied up with helping out in the pandemic, and it would not have had the resources to deal with it.

I think we have to keep in mind though that our adversaries are probably doing their own lessons learned from this, and we might not be so lucky the next time, and I would just close with a comment that was made to me many years ago after the unit I served in when I was stationed at Fort Bragg, North Carolina deployed for its third Disaster Assistance Mission during the time that I was there. And one of the colonels that I worked with said that every day spent doing these missions, as worthwhile as they are, is a day lost in developing the capability to perform your main mission, which is to meet and defeat the enemies of the country. And the longer you do it, the farther in arrears you get in being able to do your primary mission. So, I would just say I strongly agree with Dr Cowell; we need to build the civilian capacity to deal with these pandemics, so that the military, in fact, is truly doing what it was designed to do; filling in when the civilian capacity has been overburdened, not filling in because the civilian capacity was not there. Thank you.

PROFESSOR RITA COLWELL

All I can say is that I agree so fully with you, Ambassador Ray. If we don't do this, the next pandemic is really going to decimate the country.

V. QUESTION AND ANSWER DISCUSSION

Selected comments by the contributors to this report during the discussion following the presentations. Some of the invited attendees from the United States and internationally participated during this segment.

GENERAL [RET.] ALFRED GRAY

How would you grade the overall performance of the military during this operation?

LIEUTENANT GENERAL [RET.] VINCENT STEWART

I think the military did a fantastic job once unleashed. I mean everything from manufacturing N-95 masks to moving vaccines to localities. But the planning effort was something I think we could be very proud of our military. Since I don't get straight A's, I'd give them an A-minus in terms of speed of action. And I don't know at this point if the speed of action was delayed by other agencies, but in terms of the tasks they were assigned, communicating, supporting, creating, manufacturing, delivering, and securing. I think they did a fantastic job. I would like to have seen it faster, and hence an A-minus instead of an A.

PROFESSOR YONAH ALEXANDER

In terms of preparing for the so-called "mega disaster" and whether we are dealing with a mother nature trigger or a man-made threat, should we fight or combat pandemics like war situations?

LIEUTENANT GENERAL [RET.] VINCENT STEWART

I think if I understand the question, we're going to see other pandemics, this is not the last one that we'll see, we'll see this again. We will see mutation of viruses as we're seeing now. Because we're flat, and people can travel globally, we will see the spread of these pandemics. I just was briefed this morning, you may have seen the image of the C-17 with 60 to 800 Afghans in the body of that airplane, none of them vaccinated. And they're now moving to Qatar and moving to camps in the United States. So yes, we will see pandemics, yes there is sufficient evidence to suggest that something is happening with the climate. And so those lead to other disaster events that you need to be able to support; you look around the globe at the fires that are breaking out in every corner of the globe, and you must believe that there's something behind that, whether that's a man-made or historical cycle, those will cause us additional challenges for how we support climate changes, and how we support future global pandemics. I hope I came close to answering your question.

PROFESSOR YONAH ALEXANDER

Do you think that governments and the public should consider investing in the next generation, not only of scholars, but scientists, engineers, and technologists and others? Should we, because it takes a very long time, also try somehow to focus attention on the role of education in democratic societies?

PROFESSOR RITA COLWELL

STEM education and general science education are critical to a successful society in the twenty-first century. Tragic political polarization more likely due to a failed education system, has left far too many that lack understanding of what transmissibility of a virus is and why it is so lethal. A public not understanding vaccines, and both their power and limitation, is highly vulnerable. Without even a rudimentary knowledge of science, both individuals and the nation have a severe handicap. It isn't necessary to become a scientist, but it is critical to have some knowledge of the basic principles of science and technology. It is important today and more so in the future.

However, what is most important today is the need to rebuild our public health system. Our public health system has been underfunded for years. We have failed it miserably. It has not been supported properly, and the local, regional and national public health units need to be rebuilt and coordinated. The public health units require sufficient supplies, trained personnel, and funding to keep us safe. We will be even more severely devastated in another pandemic if we do not rebuild our public health system.

PROFESSOR YONAH ALEXANDER

From your many years in military and diplomatic work, in light of the experience that we had over a year and a half or so, what should the government do in terms of the role of diplomacy in increasing international cooperation to combat pandemics? Secondly, what should the role of the government as well as the international community prioritize at this time?

AMBASSADOR [RET.] CHARLES RAY

First, I'd like to say, we've got to learn how to walk and chew gum at the same time. We have deal with the current situation, while at the same time, we need to be looking at what to do to deal with the next one. I mean, thank goodness for a military. Our response to the pandemic once it had taken hold was . . . well let's just say I'll give us a B+ instead of an A minus, because I don't look at it as just the military response but the whole of government response. I think a lot more could have been done and must be done in developing international contacts and relationships. So that we can start mapping the potential origins of these pandemics in places like China, like the Congo River Basin, the rain forest where people are coming into increasing contact with wildlife habitats, and we're running into these animal to human transmission of diseases.

A nightmare scenario that troubles me is that the next pandemic will be as contagious as COVID but as deadly as Ebola. And if we wait until it takes hold before we start responding to it, we're going to see a lot more than 600,000 people in the US dead, a lot more than 4 million worldwide, so we need to start looking at ways to, to forecast or predict, and to stop it at the source, to minimize or mitigate it at the source. And the way we do that is through international contacts, international relationships, or diplomacy. We need to have more cooperation in science and technology. We had at one point I believe people from the Centers for Disease Control, working in China. But, prior to the pandemic we had reduced that capacity to zero. Instead of reducing our international footprint in these areas, we need to increase it, we need to have people where these diseases might originate so that they can work with locals to try and minimize it or stop it there, rather than trying to fight it off after it's already jumped the ocean.

PROFESSOR RITA COLWELL

"I feel obliged to emphasize what is obvious, namely that a pandemic is an international problem. There is no way around it. You cannot stop a global epidemic only by addressing the borders of one country, or the borders of any single country, whether it be Romania, Russia, or any other country of Europe, Asia, or in the southern latitude. The current pandemic, with its airborne-transmitted infectious agent, has the potential to continentally transmit, I believe, not solely by people in airplanes but also in airborne droplets.

How can we combat this pandemic via a diplomatic route? I ask my colleagues the question, how can we act internationally to coordinate a pandemic response?"

AMBASSADOR [RET.] CHARLES RAY

I think we can do it by having agreements with countries. Just as an example, I was reading about a Congolese research lab that is studying these viral diseases in the Congo Basin. I'm sure we probably have contact with them, but we should have people on the ground, we should have agreements, and people on the ground so that we can share technology, share information, and work with each other to try and identify these potential diseases before human transmission becomes widespread. We spend billions on things that blow up. We should start spending a few million on things to keep things together. I remember a Marine Corps general friend of mine when I worked at the Pentagon once said, if we can afford to spend the money we do to make war, we should be able to afford to spend the money to prevent it. And so, there is more we can do and we need to have the political will to invest in the non-kinetic, people to people type relationships where share information, share technology, and we look for these problems before they're slapping us in the face.

LIEUTENANT GENERAL [RET.] VINCENT STEWART

While I support the idea of US leadership, who steps up when the United States doesn't? Because from my perch, yes, I would like to have seen greater leadership, but I also didn't see anyone in Europe step up and say "okay, we got this we can't count on the Americans, so.."

AMBASSADOR [RET.] CHARLES RAY

To address what you said about who steps up to take a leadership role internationally, I think one of the things, in my personal view, that might have contributed to that was this “Me first, the heck with you” attitude that we were conveying to the world, and people followed our lead. I mean, I put myself in the place of say Germany or France, if the US, a country that has been the leader of the free world for four decades is saying, “forget about you I'm looking out for me,” well, what can you expect other countries to do,, they're going to follow that example and look out for themselves and so if we want to have, to go back to basic military I mean, in order to ensure that every person in your unit is capable of leading, you have to show you're a model of leadership, so that they feel confident enough to step forward when needed. If the leader is seen as only caring about himself, I mean you don't look old enough to have been in Vietnam, General Stewart, but I was there, and that's where the term “fragging” came from. From what was done to leaders who cared more about themselves than they cared about their troops. And countries are no different. If the country that is seen as the leader is not setting the example others will not step up and put themselves in the hot seat.

PROFESSOR RITA COLWELL

Research shows that unless we vaccinate developing countries such as India, South America, and other parts of southeast Asia, there will be an unlimited amount of COVID variants and the pandemic will not end. So, how do we get agreement and cooperation to work on getting vaccines to everybody?

Right now the evidence is beginning to show that there is good immunity from the two widely distributed vaccines, namely Moderna and Pfizer, but that immunity declines. It was first reported to decline at eight months after the second vaccination, but later data show it may decline after six months. The question then, is how do we defeat this pandemic if the immunity is not fully effective? We cannot vaccinate only in the U.S. and Europe. We must achieve sufficient vaccination in India, Asia, Latin America, in fact globally or we will not climb out of this pandemic. There may be the threat of the Lambda variant, and the whole Greek alphabet of additional variants to contend with, some of which may be weakly infective, but some will be highly transmissible and even more dangerous. How do we achieve global agreement and cooperation to provide vaccines for everybody?

AMBASSADOR [RET.] CHARLES RAY

I think that's where we need to dispatch battalions of diplomats backed up by scientists who can talk the talk and reach out to the countries that have the capability of manufacturing the vaccines and start forging agreements to build up stockpiles, because I agree with you. If we don't vaccinate people in remote villages in South America, Africa, and Asia, we're just waiting for the next pandemic to come and really wreak havoc. You get it done by doing it, and we need to start working on doing just that.

LIEUTENANT GENERAL [RET.] VINCENT STEWART

You may recall in the National Implementation Plan that identified the 13 different tasks, number one: advanced international cooperation. Secure international commitment to transparency, scientific cooperation, rapid reporting of human and animal cases and sharing of data. If I were advising the Chinese as a strategic global plan, I would tell them to first of all, go put together the Marshall Plan for dealing with this pandemic. Turn all your economic engines against the defeat and be the presence and the leadership going forward, because we can't count on Western nations, and that would be my strategic plan if I were advising the Chinese. It's also the strategic plan if I were advising any administration in the West.

AMBASSADOR [RET.] CHARLES RAY

That's good advice for the whole world. We need to put aside our partisanship in the first instance. I yearn for the old days when foreign policy stopped at the water's edge, and we fought domestically but when it came to issues of international importance, we put our political differences aside and did what was necessary. We need to have leadership that's willing to knock a few heads together internationally to go back to that, and if it means offending people, I volunteer to be the first one to start hurling insults if needed, because we can't afford not to. I don't think we can afford a repeat of COVID-19.

PROFESSOR YONAH ALEXANDER

In light of how COVID was handled and the events in Afghanistan, can the United States regain its place as a world leader?

AMBASSADOR [RET.] CHARLES RAY

I think we can, but the question is whether we will, and I would say that we have to start with changing the attitudes at the top. We need to establish the organizations and the relationships. Not just empowering the people on the ground to do it, in order to do that we need the people at the top who develop the policy, and who pass the budgets to have the political will to do what's necessary. Until we get a commitment at the top that we will try to actually build a better world, we're going to be fighting these brushfires until we run out of water.

LIEUTENANT GENERAL [RET.] VINCENT STEWART

Let me tell you my worst-case scenario. Having the world watch the impact of this pandemic in the United States and around the world. If I were a terrorist organization, and I wanted to build a martyrdom operation, because if you're going to blow yourself up, you know you're going to die, I would infect a number of folks with the disease, and I would send them to New York, London, Paris, etc., and have them go through customs, because we're going to forget about this in a couple years, it's going to be "yeah remember that thing that happened a couple of years ago?" So I would be very patient and I would do the martyrdom operations with the individuals who are infected. I'd send them to all the major cities, and I will see at that point whether we've learned our lesson that international coordination is important, that getting the word out accurately is important, the judicious use of the military where they can, etc., but if I were running the global terrorist martyrdom operations that could be really interesting.

AMBASSADOR [RET.] CHARLES RAY

And I think we have to keep in mind, it doesn't have to be a terrorist organization to do it. It could be a hostile nation. I won't name the nations that would have the will to actually mount an operation like that, but that's my worst nightmare—not a terrorist operation, but a hostile nation that decides to do that very thing.

VI. CLOSING REMARKS

GEN. [RET.] ALFRED GRAY

29th Commandant of the U.S. Marine Corps [1987-1991]; Chairman of the Board of Directors and Regents, Potomac Institute for Policy Studies

Thank you, Yonah. Thanks also to all the panelists for a superb discussion on a major, very real challenge—not only to our country, but to today's world as we know it.

It is clear from the discussion that we must set the example by putting someone in charge of the pandemic and crisis response here in America. Hopefully other nations will take the cue and put somebody in charge, as well. First, it is very important for this organization, whether it's the State Department or a new organization, to understand that we don't have a corner on the market of answers and ideas. It is clear from what we heard in the discussion from Romania today that there are good ideas in many different countries and regions around the world. We must somehow access, study, and listen to these good ideas. Second, this organization must really understand the national elements of power. It's not just military, economic, societal, or technology—it's all elements of national power created in this great country and in other countries around the world. The military may be a model but that is only a model. Third, this organization must be properly funded by the United States Congress and, without question, it must be international in scope. It must include countries that may be considered adversarial at this point in time. We must stop talking so much about peer-to-peer relationships and start talking about what is good for the nation and the world. We're going to have to learn to deal with adversaries—people we don't deal with—like China, Russia, and others. We have experience with this through NATO and with other international organizations, which can be helpful. But again, it includes all the elements of national power.

After study, international war games on this topic, such as “what if” games, can show just how prepared you really are and what steps you have to take to be further prepared. You need a good and responsible organization with good and responsible leadership. The organization must function well in crisis management mode.

The Potomac Institute has long believed in non-partisanship advice to our nation and the international community. We should consider coming up with a plan that this country and other countries may find useable. It certainly won't hurt, and it would serve to point out all of the different issues, of which there are many. The problems may seem insurmountable but they are not—they are solvable. We have solved different challenges before. We solved nuclear challenges to some extent, and we've solved other challenges. We have to do the best we can here for the good of all mankind.

And again, I want to thank all the panelists. It was a very interesting event.

VII. ABOUT THE EDITORS

PROFESSOR YONAH ALEXANDER is the Director of the International Center for Terrorism Studies [at the Potomac Institute for Policy Studies] and the Inter-University Center for Legal Studies [at the International Law Institute]. He is a former Professor and Director of Terrorism Studies at the State University of New York and the George Washington University. Professor Alexander also held academic appointments elsewhere such as American, Catholic, Chicago, Columbia, and Georgetown's Center for Strategic and International Studies [CSIS]. He has published over 100 books and founded five international journals. His personal collections are housed at the Hoover Institution Library and Archives at Stanford University.

PROFESSOR DON WALLACE, JR., Yale University BA, Harvard University, LLB, is a Professor of Law at Georgetown University as well as Chairman of the International Law Institute. He is a US delegate to UNCITRAL, vice president of the UNIDROIT Foundation, a member of the American Law Institute, and the former chairman of the International Law Section at the American Bar Association. He is also the author and co-author of several books and articles.

VIII. ABOUT THE CONTRIBUTORS

DR. JENNIFER BUSS earned her B.S. in Biochemistry with a minor in Mathematics from the University of Delaware, and a Ph.D. in Biochemistry from the University of Maryland. She has served as Assistant Vice President, Vice President, then in 2018, was promoted to President of the Potomac Institute. Since joining the Institute as Senior Fellow in 2012, Dr. Buss has written and won numerous proposals, created several new centers and is in charge of all day-to-day business and operating functions of the Institute.

LT. GEN. [RET.] VINCENT STEWART retired from the U.S. Marine Corps after more than 38 years of active commissioned service to the nation. On his final tour of duty, he served as the Deputy Commander United States Cyber Command, one of the 11 Combatant Commands of the Department of Defense with military and civilian personnel stationed worldwide. Prior to that assignment, he served as the 20th Director of the Defense Intelligence Agency [DIA], culminating an intelligence career by overseeing the global defense intelligence enterprise supporting customers from the President of the United States, to the troops deployed around the world. In his other General Officer assignments, he served as the Commander, Marine Corps Forces Cyberspace Command and as the Director of Intelligence, for the U.S. Marine Corps.

A career intelligence officer, with over thirty years' experience in national defense, cyber security, information technology development and customer support, he served around the globe in leadership positions for both the Marine Corps and the National Security Agency, specializing in Signals Intelligence and Cyber Operations. He earned a Baccalaureate Degree from Western Illinois University, and has earned Masters' Degrees in National Security and Strategic Studies from the Naval War College, Newport, R.I. and in National Resource Strategy from the Industrial College of the Armed Forces, National Defense University, Washington, D.C. Additionally, he has completed executive development programs at Harvard University.

Among his awards and decorations are the Defense Distinguished Service Medal, the Navy and Marine Corps Distinguished Service Medal, the Defense Superior Service Medal; the Legion of Merit, the Bronze Star and the National Intelligence Distinguished Service Medal.

PROFESSOR RITA COLWELL is a pioneering microbiologist and the first woman to lead the National Science Foundation. She is a Distinguished University Professor at both the University of Maryland and Johns Hopkins University's Bloomberg School of Public Health and has received awards from the Emperor of Japan, the King of Sweden, the Prime Minister of Singapore, and the President of the United States. Her interests are focused on global infectious diseases, water issues, including safe drinking water for both the developed and developing world. She is a nationally recognized scientist and educator, and has authored or co-authored 16 books and more than 700 scientific publications. She produced the award-winning film, *Invisible Seas*, and has served on editorial boards of numerous scientific journals. She is the author of the highly acclaimed book *A Lab of One's Own* [Simon & Schuster].

MAJ. GEN. [RET.] DR. MIHAIL IONESCU - Professor of the Doctoral School with the National School of Political Studies and Administration In Bucharest. He was Director of the Institute for Political Studies of Defense and Military History with the Romanian Ministry of National Defense [2000-2020]. He was involved in various international research projects and a series of international initiatives within NATO and PfP framework. He co-chaired "Future of NATO" Study Group with the PfP Consortium of Defense Academies and Security Studies Institutes. Between 2006 and 2012 he established and co-chaired the Regional Stability within the Greater Black Sea Area Working Group of the PfP Consortium developing yearly conferences in Baku, Kiev, Kishinev, Istanbul, Tbilisi, and Bucharest. He was a member of the Parallel History Project on NATO and Warsaw Pact and Cold War International History Project, Washington D.C. Has published and coordinated more than 40 monographs and 100 studies on topics related to international relations, security and defense policy, and military history. Recent publications: *Eastern Partnership. A Civilian Security Perspective* [2017]; *The Romanians in the Great War [1914-1919]* - six volumes of documents [2015-2021] - available also in English.

U.S. AMBASSADOR [RET.] CHARLES RAY served 30 years in the Foreign Service [from 1982 to 2012], after completing a 20-year career in the U.S. Army. His Foreign Service assignments were Guangzhou and Shenyang, China; Chiang Mai, Thailand; PM bureau/ DCM in Freetown, Sierra Leone; Consul General in Ho Chi Minh City, Vietnam; ambassador, Phnom Penh, Cambodia; Diplomat in residence, University of Houston; deputy assistant secretary of defense for POW/Missing Personnel; and ambassador, Zimbabwe. He has a B.S. from Benedictine College, Atchison, KS; an M.S. from the University of Southern California; and an M.S. the National War College. He's also a graduate of the U.S. Army Command and General Staff College, the Army War College's Land Forces Commander Course, and the Defense Intelligence School's Postgraduate Intelligence Course.

GENERAL [RET.] ALFRED GRAY USMC [Ret] serves as Chairman of the Board of the Potomac Institute of Policy Studies [PIPS]. In addition to participating in monthly seminars related to the global terrorism challenge, he oversees the Center for Emerging Threats and Opportunities [CETO], which operates as a futuristic think tank for the Marine Corps at Quantico. General Gray has served as Board Chairman and CEO for several public and private companies and has consulted to United States and international industry and government. General Gray's other duties have included service on the Defense Science Board; the Defense Special Operations Advisory Group; the National Security Agency Science Advisory Board; the National Reconnaissance Office Gold Team; the Defense Operations Support Office Advisory Team; and as Director of the Advanced Concept Demonstration Technology for Combat in the Littorals. In 1991, Al Gray retired after 41 years of service to the United States Marine Corps. From 1987-1991, General Gray served as a member of the Joint Chiefs of Staff, was the 29th Commandant of the Marine Corps, and was advisor to both Presidents Reagan and George H. W. Bush. Among his awards are two Defense Distinguished Service Medals, two Navy Distinguished Service Medals, Distinguished Service Medals from the US Army, the US Air Force and the US Coast Guard, the Silver Star Medal, two Legion of Merits with Combat "V", four Bronze Star Medals with Combat "V", three Purple Hearts, three Joint Commendation Medals, the Meritorious Service Medal, the Navy Commendation Medal, the Vietnamese Cross of Gallantry with Palm and Star, as well as foreign awards from Argentina, Brazil, Chile, Columbia, Korea and The Netherlands. In 2008, General Gray was inducted into the National Security Agency Hall of Honor for rendering distinguished service to American Cryptology.

