

**HRMFFA FUTURES ADVISORY COMMITTEE REPORT  
(Unanimously approved by the HRMFFA Board 15 December 2022)**

**EXECUTIVE SUMMARY**

**BACKGROUND**

The Futures Advisory Committee was formed to advise the HRMFFA Board of Directors and staff on actions and positions to be taken by the Board that prepare the region to support Federal installation needs of the future. It was charged with examining future (15+ years) defense strategy, weapon systems, and Federal installation requirements and determining strategic initiatives our region can undertake to continue to attract, retain and grow the Federal presence in Hampton Roads. It is intended to identify potential opportunities to position the region to attract additional Federal investment as well as private sector industries that support those missions. It was also intended to examine potential threats that should be addressed before they can jeopardize existing installations or missions.

**COMMON CONCERNS AMONG INSTALLATION LEADERS**

To align with the Commonwealth's efforts to support military installations in Virginia, the Futures Committee grouped the common findings from our installation leaders into three categories: Resilience (climate and energy), Compatibility, and Quality of Life. A summary of the concerns for each of the categories is below. Recommended actions for each item can be found in the detailed report.

**RESILIENCY:**

**a. Sea level rise and persistent flooding**

Since most of the Federal installations in the region are along the water, sea level rise and flooding were a common concern heard by the committee. In addition to actions needed by the Federal agencies to protect their installations, local actions must be taken to make critical infrastructure and transportation routes more resilient to flooding as 70 – 80% of military personnel live, and nearly 100% of Federal civil servants, live in the surrounding communities.

**b. Energy (sufficient, reliable, and resilient)**

Federal installations must have sufficient, reliable, and resilient energy sources to carry out their missions. Brownouts, curtailing of natural gas supplies, or lack of redundant power feeds were among energy concerns heard by the committee. Electrical capacity concerns could be exacerbated in the future as the Federal government pushes to electrify their vehicles and facilities.

## **COMPATIBILITY:**

### **a. Encroachment**

Incompatible development encroaching upon Federal installations is always a concern. Due to the lessons learned from Oceana's near-death experience and the vigilance of HRMFFA, the communities of Hampton Roads have done a good job preventing incompatible development around the installations. However, there were still a few encroachment concerns discussed including:

- **Norfolk International parallel runway:** A proposed parallel runway would have major impacts on Navy operations on Joint Expeditionary Base Little Creek – Fort Story.
- **BASF property near Fort Eustis:** The former industrial site to the north of the Third Port could pose potential problems for Army operations if incompatible development was allowed.
- **Former Navy fuel storage area near Coast Guard TRACEN Yorktown:** Both the Coast Guard and National Park Service expressed concern about any potential commercial development on this land.
- **Northwest Annex:** The Navy has expressed concerns in the past about development around the Relocatable Over the Horizon Radar (ROTHR) facility at Northwest Annex in Chesapeake.
- **Jefferson Lab environmental cleanup:** A small legacy Army cleanup site is located on lab property. This area needs to be remediated so as not to interfere with future expansion.

### **b. Broadband connectivity and growth of 5G telecommunications technology**

The broadband fiber optic ring under construction in the region offers tremendous opportunity as the future digital backbone in the region. However, for Federal installations to benefit the region must ensure stringent hardware and cyber security protocols are followed as these networks are developed.

## **QUALITY OF LIFE:**

### **a. Quality of K-12 education**

The quality of local K-12 public education has long been a priority of military families and the DoD. In 2021, Congress required all the military departments to factor a community's support for military family readiness in future basing decisions. The quality of schools throughout the region will be considered, not just those of the host municipality.

### **b. Childcare**

Securing access to high quality childcare is an imperative to many military families where both parents work, or where the military member is a single parent. Lack of access to childcare can often lead to a military member separating from the service. While the military is working to increase childcare capacity on base, they will still rely extensively on off-base care.

### **c. Spouse licensure reciprocity and employment**

Military spouse careers are often interrupted by the frequent moves required of military members. A leading contributor to military spouse unemployment is the lack, or high cost, of childcare. Another common barrier is the transfer of licenses or certifications from one state to another. Military spouse unemployment or underemployment can lead

to retention and readiness issues as military members decide to leave the military to support their spouse employment and family economic needs.

**d. Affordable workforce housing**

A lack of affordable workforce housing to rent or buy within military Basic Allowance for Housing (BAH) rates near Federal installations is causing military members to have to live farther away from their duty station to find suitable housing. Modest cost of living is an advantage when it comes to stationing military assets. If the cost of housing in Hampton Roads continues to climb, this could have a negative impact on future basing decisions.

**e. Healthcare and mental health access/capacity**

The lack of readily available mental health services has been frequently noted as a concern by military installation leaders. The consolidation of military health care under the Defense Health Agency has consolidated services and pushed care for military dependents onto off-base care providers.

**f. Attracting and retaining talent**

Federal agencies in the region are concerned with attracting and retaining talent. Many of the quality of life issues noted above play a substantial role in attracting quality employees to the region. Finding ways to keep more of the approximately 15,000 separating service members each year in the region will benefit the Federal agencies and private employers as well as help attract economic development opportunities.

## **PREPARING FOR FUTURE MISSIONS/OPPORTUNITIES/INVESTMENTS**

The committee also learned of several promising future missions or opportunities at the Federal installations in the coming years. A summary of those items are below and recommendations for each can be found in the detailed report.

**a. Jefferson Lab High Performance Data Facility (supercomputing)**

Jefferson Lab is now pursuing a proposed High Performance Data Facility (HPDF), an anticipated \$300-500 million federally funded construction project. The HPDF, when completed, would be the world's most modern supercomputing and data analysis facility.

**b. Shipyard Infrastructure Optimization Plan (SIOP)**

The Navy aims to invest over \$25 billion in infrastructure improvements to its four public shipyards over the next 20 years. The Navy is first creating digital twins of each of the shipyards to model the impacts of various facility and process improvements. Norfolk Naval Shipyard's development plan should be complete in late FY23 or early FY24 which should then unlock further funding for design and construction projects.

**c. New Navy Constellation Class Frigate (FFG) being fielded**

The Navy began procuring their new frigates in FY2020 and wants to buy a total of 20 of the ships. They will begin being fielded at the end of this decade and the initial ships will be homeported on the West Coast. Eventually, some number of the ships will be homeported on the East Coast.

**d. Next Generation Air Dominance (NGAD) fighter for Air Force at JBLE and Navy at NAS Oceana (retirement of F-22s in 2030s)**

The Air Force and Navy are currently developing their next generation of fighter aircraft dubbed "Next Generation Air Dominance" or NGAD. The Air Force wants to begin

fielding these new aircraft in the early 2030s and retire the F-22s as the NGAD becomes operational. Similarly, the Navy intends to begin retiring its F/A-18 Super Hornets in the 2030s as it fields its own version of NGAD. Ensuring Langley and Oceana are receive the NGAD should be a priority.

**e. Growth of Air Force Intelligence, Surveillance and Reconnaissance (ISR) missions**

Langley Air Force Base is home to two ISR Wings (ISRW) conducting 24/7 intelligence missions worldwide. The Air Force has indicated it could grow these wings in the coming years at Langley potentially bringing an additional 2,500 – 3,000 personnel to the base by 2030.

**f. Increased Use of Unmanned Platforms**

The Air Force and Navy are shifting investment into future autonomous unmanned air, surface, and subsurface systems. While not requiring as many personnel to operate and support, they are the future and will be supported by the most sophisticated artificial intelligence, data analytics and intelligence companies in the world.

**g. Community partnerships and Intergovernmental Support Agreements**

Across the country, military installations and local communities are faced with the realization that their continued success depends on their ability to collaborate and seize opportunities to operate more efficiently. An alternative approach is partnerships between public entities and between public entities and private organizations. Congress has provided the Department of Defense with various authorities enabling them to enter into these partnerships, but those authorities have not been extended to all other Federal agencies in the region.

**h. TRACEN Yorktown pier repairs to accommodate homeporting of cutters**

Coast Guard Training Center Yorktown is studying its existing pier to see what repairs and improvements would be required for it to host cutters in the future. During our Board trip to DC in October 2022, Coast Guard reps said they currently did not have plans to homeport cutters at Yorktown in the future, but could potentially place smaller patrol boats there.

**i. Demystify “Behind the Fence Line” with Local Community**

Federal installation leaders are looking for ways to bring the local community onto their installations to have a better understanding of what goes on at the various installations in the region. This not only helps the communities and installations be better neighbors, but it also turns local citizens into better advocates for the Federal missions and helps with recruiting future service members.

**j. Encourage Industry/Startups Associated with Research at Federal Labs**

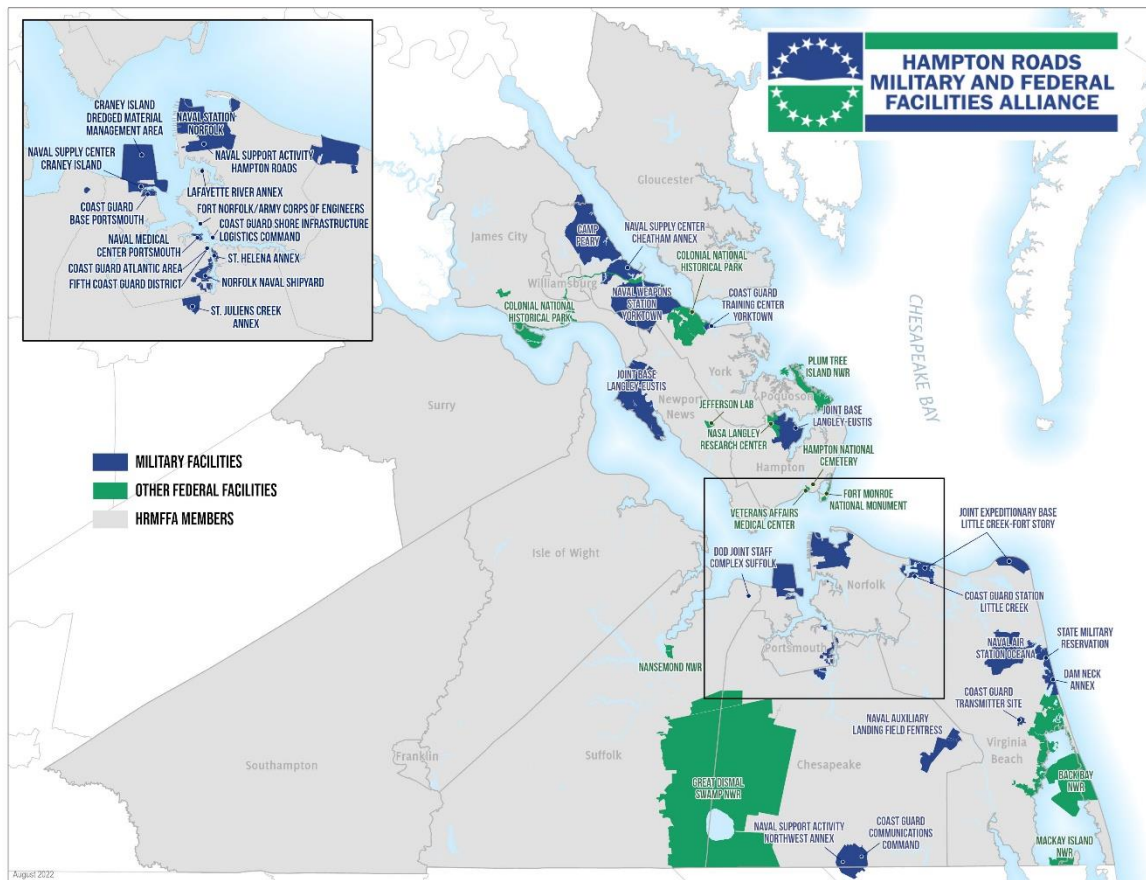
Hampton Roads is blessed to have two world-class Federal research facilities located in the region with NASA Langley Research Center and Jefferson Lab. This offers tremendous opportunities for startups and industry partners to locate in the region to take advantage of the technologies and facilities at the Federal Labs.

# FUTURES ADVISORY COMMITTEE REPORT

## I. BACKGROUND

The Futures Advisory Committee was formed to advise the HRMFFA Board of Directors and staff on actions and positions to be taken by the Board that prepare the region to support Federal installation needs of the future. It was charged with examining future (15+ years) defense strategy, weapon systems, and Federal installation requirements and determining strategic initiatives our region can undertake to continue to attract, retain and grow the Federal presence in Hampton Roads. It is intended to identify potential opportunities to position the region to attract additional Federal investment as well as private sector industries that support those missions. It was also intended to examine potential threats that should be addressed before they can jeopardize existing installations or missions.

The Committee broke into teams of 3-5 people to conduct interviews with the various Federal installation leaders between summer of 2021 and fall of 2022. Installation leaders were provided with a set of standard questions to consider prior to the meetings, but were free to discuss topics of their choosing. Some leaders chose to provide written answers, others provided presentations, and some simply held open discussions. The Committee notes and any materials provided by Federal leaders can be found in the Appendix.



## **II. COMMON CONCERNS AMONG INSTALLATION LEADERS**

The Virginia Secretary of Veterans and Defense Affairs (VADA) has developed three lines of effort in their work to support the military presence in the Commonwealth: Resilience (energy and climate), Compatibility, and Quality of Life. To stay aligned with the state's efforts, the Committee chose to group the common findings from our interviews into those same categories. The following are a description of the common concerns we heard from Federal installation leaders.

### **RESILIENCY:**

#### **a. Sea level rise and persistent flooding**

One need only look at a map of the Federal installations in Hampton Roads to realize most of them are on the water and susceptible to sea level rise, storm surge, and persistent flooding. Department of Defense (DoD) leaders in the Pentagon are also becoming more aware of coastal risks to installations in Hampton Roads. For example, the Air Force delayed a decision on whether to build a new hangar for the new F-22 Formal Training Unit (FTU) or renovate an existing hangar to meet mission needs. Part of the hesitation on investing in a new hangar was due to frequent flooding and sea level rise on the Langley flightline. We also learned during our October 27 trip to the Pentagon that the Air Force is studying how they will include climate impacts into their future strategic basing process. The various installations are looking at what needs to be done to fortify their own shorelines. However, Federal leaders told us that 70 – 80% of their personnel live off base in the surrounding communities. Even if the base is protected from flooding, the mission will be negatively impacted if personnel can't get there due to impassable roads or critical off-base utility systems are off-line due to flooding. Hampton Roads must address these concerns collectively to ensure the future viability of many of our Federal installations.

### **RECOMMENDATIONS:**

- Continue advocacy with our Congressional delegation (CODEL) to allow Federal lands to be included in Army Corps of Engineers Coastal Storm Risk Management (CSR) studies.
- Utilize flood resilience projects identified in multiple Joint Land Use Studies (JLUS) as a roadmap for making region and military bases more resilient. Advocate for increased funding for the DoD Office of Local Defense Community Cooperation (OLDCC) for implementation of JLUS recommendations.
- Include Federal installations in municipal and regional coastal resilience and flood mitigation planning efforts.
- Advocate for the Commonwealth to establish a permanent Chief Resilience Officer to oversee implementation of Virginia's Coastal Resilience Master Plan.
- Advocate for the Commonwealth to establish robust funding sources or finance mechanisms to assist localities with coastal resilience and flood prevention efforts.

**b. Energy (sufficient, reliable, and resilient)**

We heard from installation leaders that they must have sufficient, reliable, and resilient energy sources to carry out their missions. The DoD in particular has been emphasizing energy resiliency of their installations for over a decade due to potential threats of disruption to the nation's electrical grid during a conflict. We know some large natural gas users such as Norfolk Naval Shipyard, Naval Station Norfolk, and Newport News Shipbuilding have at times had to curtail operations during the winter to ensure enough natural gas for residential customer heating. We heard from Joint Base Langley-Eustis that it is nearly at 100% capacity right now for the electrical feeds to the base which could lead to significant power outages should one of those feeds go down. Other installations are concerned that they are at risk of catastrophic outages since they only have a single electrical feed to the base. We heard from the Deputy Assistant Secretary of Defense for Installations that DoD plans to electrify its non-tactical vehicle fleet and facility heating in the coming years. The Navy wants to run all its light vehicles on electricity by 2027. The Army plans to convert its entire non-tactical fleet to electric vehicles by 2035. These increased loads could strain local electrical grids that don't have sufficient capacity.

**RECOMMENDATIONS:**

- Utilize the Hampton Roads Alliance's recently released Energy Roadmap for opportunities to increase the supply of reliable and affordable energy in the region.
- Advocate for additional DoD funding for energy resilience projects to ensure local installations have adequate and resilient energy infrastructure.
- Continue to work with the CODEL to advocate for DoD to use existing area-wide authorities with utility providers to be able to quickly award microgrid and other resiliency projects on local installations.
- Continue to assess viability of Small Modular Reactors as a contributor to energy power generation and redundancy.

**COMPATIBILITY:**

**a. Encroachment**

Incompatible development encroaching upon Federal installations is always a concern. The very formation of HRMFFA can be traced back to the 2005 round of Base Realignment and Closure (BRAC) where Naval Air Station Oceana was initially put on the BRAC list due to incompatible development around the airfield. Due to the lessons learned from Oceana's near-death experience and the vigilance of HRMFFA, the communities of Hampton Roads have done a good job preventing incompatible development around the installations. However, there were still a few encroachment concerns discussed.

- **Parallel runway at Norfolk International Airport.** The airport has envisioned a second parallel runway in their master plan since the early 1970s. An effort to get approval of Phase 2 of an Environmental Impact Statement to construct the parallel

runway in 2016 raised serious concerns with the Navy and how it would impact operations on Joint Expeditionary Base Little Creek – Fort Story. The Navy again expressed major concerns about the parallel runway during the airport’s recent master plan update. The airport completed the master plan update in 2021 which continued to identify the parallel runway as a future goal, but one that is not needed within the 20-year planning horizon for the master plan. Both parties agreed to continue to collaborate on the issue going forward.

- **BASF property near Fort Eustis.** The former BASF industrial site lies to the north of the Third Port at Fort Eustis on the other side of Skiffes Creek. Fort Eustis officials expressed concern about future development of that site. They indicated light industrial activities wouldn’t pose a problem, but housing or other commercial development could be problematic in that area. They have met with James City County officials who are supportive of Fort Eustis’ concerns.
- **Former Navy fuel farm near Coast Guard Training Center Yorktown.** Naval Weapons Station Yorktown owns approximately 100 acres that used to operate as a fuel depot. The fueling operation was shut down several years ago and the Navy is in the process of demolishing it and performing environmental remediation actions. Both the Coast Guard TRACEN and Colonial National Historical Park mentioned they would not want to see commercial development on this land as it could encroach upon their missions. TRACEN leadership expressed interest in acquiring the land from the Navy for possible future expansion or to provide a backup entry point to the installation.
- **Northwest Annex.** The Navy has expressed concerns in the past about development around the Relocatable Over the Horizon Radar (ROTHR) facility at Northwest Annex in Chesapeake. Facilities or other metal structures such as wind turbines can interfere with the radar’s operation. The ROTHR has a transmitter site in New Kent County and the Navy would want to examine potential impacts to ROTHR of any land-based wind farms between Northwest Annex and New Kent County and areas further north and west of New Kent.
- **Jefferson Lab environmental cleanup.** Jefferson lab mentioned they still have a small legacy environmental cleanup action from when the site was owned by the Army. It was a potential issue while competing for the Electron Ion Collider. Not as much of an issue right now but they still want the Army Corps of Engineers to complete it so it wouldn’t impact any future expansions.

## RECOMMENDATIONS

- Municipalities should create Military Influence Overlay Districts or similar instruments that reflect the types and intensity of compatible uses around the Federal installations. These overlays can also identify areas where closer coordination with the installation is required before approving future development.



- Continue to monitor Norfolk Airport parallel runway initiative and help facilitate communication between the airport and Navy. Stress importance of continued mission viability of Little Creek and not performing any actions that could jeopardize long-term viability of its use as an amphibious and special operations base.
- Monitor future disposition of Naval Fuel Farm in Yorktown to ensure Coast Guard and Yorktown Battlefield missions are not negatively impacted.

**b. Broadband connectivity and growth of 5G telecommunications technology**

Hampton Roads is in the process of building out its own broadband fiber optic ring to connect the entire region and serve as the backbone of the region’s digital ecosystem. The ring will also connect to the multiple high-speed subsea data cables landing in the region. When completed, the region will have lower cost, faster service, and broader coverage delivered to residents, businesses, and educational institutions. This higher speed digital ecosystem can also be a benefit to our many Federal installations. However, in order for Federal installations to benefit, the region must ensure stringent hardware and cyber security protocols are followed as these networks are developed.

**RECOMMENDATIONS**

- Facilitate communication with regional network authority and Federal installations to ensure Federal partners can take advantage of the regional high-speed and high-capacity digital ecosystem.
- Champion the adoption of the Navy’s Passive Telecommunication Infrastructure (PTI) initiative across the bases in Hampton Roads. Assess feasibility of expanding to the Army and Air Force installations in the region.

**QUALITY OF LIFE:**

**a. Quality of K-12 education**

The quality of local K-12 public education has long been a priority of military families and the DoD. In 2018, the Secretaries of the Army, Navy, and Air Force sent a joint letter to the National Governors Association stating they would consider the quality of schools near bases when making future basing decisions. In 2019, the Air Force took this a step further and introduced their Support of Military Families (SoMF) scorecard where they ranked every base in the Air Force based on the quality of their local schools. In 2021, Congress weighed in and required all the military departments to factor a community’s support for military family readiness in future basing decisions. While local education is important to all families, it is particularly pertinent to military families who are required to relocate frequently and only live in an area for a short amount of time.

**RECOMMENDATIONS**

- Encourage local school systems to participate in the Purple Star School program which helps schools respond to the educational and social-emotional challenges military children face during their transition to new schools.

- Encourage local school systems to become familiar with the military services school scorecard systems and work to ensure they are succeeding in educational outcomes and scoring metrics.
- Encourage local school systems to regularly interact with Federal installation leaders and school liaison officers to address any concerns as they arise.
- Ensure local school systems are tracking military-connected kids to ensure schools receive appropriate amounts of Federal Impact Aid. School systems with at least 19.5% military connected students are also eligible for DoD Impact Aid Supplemental funds. There is also DoD Impact Aid for Children with Severe Disabilities.

#### **b. Childcare**

Securing access to high quality childcare is an imperative to many military families where both parents work, or where the military member is a single parent. In fact, lack of access to childcare in a dual-military family can often lead to one of the military members separating from the service. On-base child development centers (CDCs) cannot accommodate all military children requiring care. For example, Joint Base Langley-Eustis has the largest waitlist for CDC care in the Air Force with over 750 children on the list. Part of the reason the waitlist is so large is that JBLE has 51 provider vacancies at Langley and Eustis CDCs. Filling those vacancies would allow them to care for another 250 children. Navy Region Mid-Atlantic reports similar extensive waitlists and vacancies amongst providers. While the military is working to increase childcare capacity on base, they will still rely extensively on off-base care. They have set up fee assistance programs to help service members with the increased costs for off-base care, but there are not enough private providers participating in the program. JBLE tells us there are only three private providers on the entire Peninsula that participate in the program.

#### **RECOMMENDATIONS**

- Encourage municipalities to examine ways to incentivize childcare providers to increase local capacity or to participate in the military's fee assistance program through tax incentives, expediting permitting, etc.
- Encourage private childcare providers or early childhood education centers to expand capacity in the region.
- Look for ways to encourage new childcare partnerships such as Newport News' recently announced Early Childhood Center and training facility.
- Advocate with the CODEL to increase MILCON funding for on-base child care facilities and pay/benefits of CDC providers.
- Advocate for changes to the way the military requires childcare facilities to be supported by non-appropriated funds.

- Advocate for the Commonwealth to exempt military family child care providers who are already certified by the military from Virginia licensure/certification requirements.

**c. Spouse licensure reciprocity and employment**

Military families often rely on the dual incomes provided by working spouses to make ends meet. However, spouse careers are often interrupted by the frequent moves required of military members. A recent survey by Blue Star Families indicated 35% of military spouses report they are unemployed but want to work. A similar number report significant underemployment due to frequent PCS moves. A leading contributor to military spouse unemployment is the lack, or high cost, of childcare. Another common barrier is the transfer of licenses or certifications from one state to another. This data is certainly in line with what we heard from Federal installation leaders during our interviews. In addition to economic stability of military families, spouse unemployment or underemployment leads to retention and readiness issues as military members decide to leave the military to support their spouse employment and family economic needs.

**RECOMMENDATIONS**

- Advocate for the Commonwealth to include military spouses in their Virginia Values Veterans Employment Grant program to incentivize hiring of military spouses. Grant program currently offers private employers \$1,000 for every eligible veteran hired up to \$10,000.
- Advocate for the Commonwealth to continue to remove barriers for the transfer of professional licenses for military spouses that move to Virginia.
- Advocate for Virginia to join the remaining three interstate licensing compacts for Audiology/Speech-Language Pathology, Licensed Professional Counselor, and Advanced Practice Registered Nurse.
- Advocate for Virginia to join new interstate licensing compacts in 2023 for Teaching, Social Work, Cosmetology, Dentistry/Dental Hygiene, Massage Therapy, School Psychologists, and Dietetic Nutritionists.
- Encourage local municipalities to give preference to hiring military spouses.
- Continue support of Hampton Roads Veterans Employment Centers and their work to connect military spouses with employers in the region.
- Advocate with CODEL to support expanding Federal tax incentives for employers who hire military spouses (i.e. Military Spouse Hiring Act).

**d. Affordable workforce housing**

A lack of affordable workforce housing to rent or buy within military Basic Allowance for Housing (BAH) rates near Federal installations is causing military members to have to live farther away from their duty station to find suitable housing. The lack of affordable

housing options is also causing military families to have to stay in temporary lodging for far longer than the 14 days they are reimbursed for temporary housing expenses. One of the advantages of Hampton Roads that makes it an attractive place to station military missions is its relatively modest cost of living. If the cost of housing in Hampton Roads continues to climb, this could have a negative impact on future basing decisions.

#### RECOMMENDATIONS

- Work with the HRPDC to support their affordable workforce housing initiatives.
- Encourage municipalities to approve permits for development of multi-family and higher density residential units in proximity to military installations.

#### **e. Healthcare and mental health access/capacity**

The lack of readily available mental health services has been frequently noted as a concern by military installation leaders. The consolidation of military health care under the Defense Health Agency has consolidated services and pushed care for military dependents into off-base care providers. Additionally, some military members are hesitant to seek mental health care through the military health system due to perceptions it could negatively impact their careers.

#### RECOMMENDATIONS

- Continue working with Hampton Roads Chamber of Commerce's Military Affairs Committee Subcommittee on Mental Health to improve care options in the region.
- Work with military mental health organizations such as The Headstrong Project to increase mental health care options for military and veterans in the area.
- Ensure community social service entities are aware of various mental health resources available to active duty, veterans, and their family members.

#### **f. Attracting and retaining talent**

Like many private sector employers, the Federal agencies in the region are also concerned with attracting and retaining talent. Many of the quality of life issues noted above play a substantial role in attracting quality employees to the region. A substantial talent pool lies in the approximately 15,000 military members who retire or separate from the service in Hampton Roads every year and their spouses. Finding ways to keep this talented pool of veterans and their spouses in the region will benefit the Federal agencies and private employers in Hampton Roads as well as help attract economic development opportunities.

#### RECOMMENDATIONS

- Support improvements to quality of life issues mentioned above to help make Hampton Roads an even more attractive place for veterans and non-veterans alike to call home.
- Advocate for the General Assembly to remove the 55 years old age requirement for military retired pay to be partially exempt from Virginia state taxes. The law passed in

2022 requires military retirees to be 55 years old in order to have up to \$40,000 exempted from state income tax. Eliminating the age restriction will be an attractive incentive to keep younger retirees in Virginia and Hampton Roads.

- Continue to support state incentives for employers to hire veterans to maintain a high-quality pool of talent in Hampton Roads.
- Support partnering across City/State/VSOs to host job fairs.

### **III. PREPARING FOR FUTURE MISSIONS/OPPORTUNITIES/INVESTMENTS**

#### **a. Jefferson Lab High Performance Data Facility (supercomputing)**

Jefferson Lab is now pursuing a proposed High Performance Data Facility (HPDF), an anticipated \$300-500 million federally funded construction project. The HPDF, when completed, would be the world's most modern supercomputing and data analysis facility. This facility would bring together state-of-the-art high-performance computation coupled with advanced data storage, wide-area networking, and artificial intelligence/machine learning capabilities to support the U.S. Department of Energy's computing needs across the full breadth of the agency's basic and applied research programs. This facility would also diversify the lab's mission and open possibilities for future expansion and increased collaboration with other Federal agencies in the region such as NASA, DoD, and NOAA. Most importantly, this project provides an opportunity to make Jefferson Lab a dual-purpose facility and provides commercialization opportunities in the High-Performance Computing (HPC) space. A recent study by Hyperion showed the ROI from HPC investments to be \$507 per every \$1 invested. Additionally, the HPDF would nearly double the lab's current operating budget, increasing by \$125 million per year with a total effect in Virginia of \$252 million annually.

#### **RECOMMENDATIONS**

- Advocate for Commonwealth to contribute \$43 million towards the construction of a shell building for the HPDF to strengthen the lab's proposal to DoE.

#### **b. Shipyard Infrastructure Optimization Plan (SIOP)**

Under an initiative originally developed and proposed by HRMFFA to improve Norfolk Naval Shipyard (NNSY), the Navy aims to invest over \$25 billion in infrastructure improvements to its four public shipyards over the next 20 years. The Navy is first creating digital twins of each of the shipyards to model the impacts of various facility and process improvements. NNSY's development plan is underway and should be complete in late FY23 or early FY24 which should then unlock further funding for design and construction projects.

#### **RECOMMENDATIONS**

- Continue to advocate to the CODEL and the Navy for dedicated funding and an expedited timetable for executing improvements at NNSY.

**c. New Navy Constellation Class Frigate (FFG) being fielded**

The Navy began procuring their new frigates in FY2020 and wants to buy a total of 20 of the ships. The ships will be smaller than the current Arleigh-Burke class destroyers and will have a crew of approximately 200 sailors. They will begin being fielded at the end of this decade and the initial ships will be homeported on the West Coast. Eventually, some number of the ships will be homeported on the East Coast.

**RECOMMENDATIONS**

- Advocate with the CODEL for the Navy to base some of the new frigates in Hampton Roads.
- Ensure conditions in the region continue to be conducive to hosting Navy manned and unmanned ships by prohibiting incompatible development around Navy installations and unencumbered access to military training ranges off the coast of Virginia.

**d. Next Generation Air Dominance (NGAD) fighter for Air Force at JBLE and Navy at NAS Oceana (retirement of F-22s in 2030s)**

Both the Air Force and Navy are currently developing their future 6th generation fighter aircraft dubbed “Next Generation Air Dominance” or NGAD. The Air Force wants to begin fielding these new aircraft in the early 2030s and retire the F-22s as the NGAD becomes operational. Similarly, the Navy intends to begin retiring its F/A-18 Super Hornets in the 2030s as it fields its own version of NGAD. Langley AFB is currently home to two operational F-22 squadrons. It will also host the F-22 Formal Training Unit (FTU) for all pilot and maintainer training beginning in 2023 as that mission moves from Florida’s Tyndall AFB. Naval Air Station Oceana is the Navy’s East Coast Master Jet Base and home to sixteen Super Hornet squadrons. We are not aware of any current plans to host F-35 fighters at NAS Oceana. Both the Air Force and Navy versions of NGAD are planned to be manned aircraft. However, they will have the ability to control multiple unmanned combat aerial vehicles that will fly with them.

**RECOMMENDATIONS**

- Advocate with the CODEL, Air Force and National Guard leadership for the Air Force to make Langley AFB home to the first CONUS NGAD combat squadrons and a potential FTU as the aircraft are fielded and the F-22 is retired, and to maintain the partnership between the 1st FW and the Virginia Air National Guard.
- Advocate with the CODEL and Navy to make NAS Oceana the home for their future East Coast NGAD squadrons as they are fielded and the Super Hornets are retired.
- Ensure conditions in the region continue to be conducive to hosting military fighter aircraft and unmanned aircraft by prohibiting incompatible development around military airfields and unencumbered access to military training ranges off the coast of Virginia.

**e. Growth of Air Force Intelligence, Surveillance and Reconnaissance (ISR) missions**

Langley Air Force Base is home to two ISR Wings (ISRW) conducting 24/7 intelligence missions worldwide. The Air Force has indicated it could grow these wings in the coming years at Langley potentially bringing an additional 2,500 – 3,000 personnel to the base by 2030. Langley has planned for this growth by creating an ISRW campus on the north side of the base as well as planning to move the Armistead gate to Commander Sheppard Blvd to accommodate increased population on that side of the airfield.

**RECOMMENDATIONS**

- Continue communication with JBLE leadership on the timing of this future mission growth and community support requirements (housing, schools, childcare, etc.).
- Advocate with CODEL and Air Force for appropriate MILCON resources to support new mission beddown.

**f. Increased Use of Unmanned Platforms**

The Air Force and Navy are shifting investment into future autonomous unmanned air, surface, and subsurface systems. These systems are sometimes viewed as less attractive for communities because they will likely fly fewer hours and require less operations and maintenance personnel than manned fighter units. But optionally manned aircraft are the future and will be supported by the most sophisticated artificial intelligence, data analytics and intelligence companies in the world. Recruiting and maintaining the highly technical workforce will be a challenge.

**RECOMMENDATIONS**

- Work with the Virginia CODEL, Air Force, Navy, and FAA to ensure transit corridors exist to support transit of unmanned autonomous systems between their bases (inside or outside Hampton Roads) and the Virginia Capes training areas.

**g. Community partnerships and Intergovernmental Support Agreements**

Across the country, military installations and local communities are faced with the realization that their continued success depends on their ability to collaborate and seize opportunities to operate more efficiently. Budgetary constraints are encouraging both military and civilian communities to re-evaluate their operations and seek alternatives to the status quo. One alternative approach is partnerships between public entities and between public entities and private organizations. Potential partnering opportunities exist among local cities/counties/states, utility companies, universities, and private sector property managers, developers, and financiers. These Public-Public and Public-Private Partnerships (P4 Partnerships) enable multiple stakeholders to work together to achieve a common goal. Together, they can develop creative ways to leverage the capabilities and resources of military installations, local government, commercial entities, and non-profit organizations and, in the process, potentially protect mission capabilities, reduce operating costs and the cost of services, and maintain quality. Congress has provided the Department of Defense with various authorities that enable them to enter into these partnerships with public or private entities.

## RECOMMENDATIONS

- Continue communication with local installation leaders and look for ways to foster partnership opportunities.
- Encourage municipalities that host installations to hold regular partnership meetings with Federal installation leaders to identify potential opportunities.
- Advocate with CODEL to extend DoD partnership authorities to the Coast Guard and other Federal agencies located in Hampton Roads.

### **h. TRACEN Yorktown pier repairs to accommodate homeporting of cutters**

Coast Guard Training Center Yorktown is currently conducting a study of its existing pier to see what repairs and improvements would be required for it to host cutters in the future. During our Board trip to DC in October 2022, Coast Guard reps said they currently did not have plans to homeport cutters at Yorktown in the future, but could potentially place smaller patrol boats there.

## RECOMMENDATIONS

- Continue communication with TRACEN Yorktown leadership on potential of future homeporting of additional assets.
- Advocate with CODEL to support infrastructure investments needed to support additional assets at TRACEN.

### **i. Demystify “Behind the Fence Line” with Local Community**

We heard from Federal installation leaders that they are looking for ways to bring the local community onto their installations. There is a desire for the average citizen to have a better understanding of what goes on at the various installations in the region and educate young people on the tremendous opportunities service in the military offers. This not only helps the communities and installations be better neighbors, but it also turns local citizens into better advocates for the activities that take place on the installations and helps with recruiting future service members.

## RECOMMENDATIONS

- Encourage communities to look for ways to collaborate with local installations on various open houses, air shows, and other events to bring local citizens on the bases.
- Help facilitate and encourage local elected officials touring the various installations to have a better understanding of their missions, impacts, and support requirements.

### **j. Encourage Industry/Startups Associated with Research at Federal Labs**

Hampton Roads is blessed to have two world-class Federal research facilities located in the region with NASA Langley Research Center and Jefferson Lab. These facilities are at the



cutting edge of technological research and have offices dedicated to helping commercialize the technology derived from their research and development. This offers tremendous opportunities for startups and industry partners to locate in Hampton Roads to take advantage of the technologies and facilities at the Federal Labs.

#### RECOMMENDATIONS

- Encourage regional and municipal economic development agencies to market Federal lab collaboration opportunities to outside companies.
- Facilitate interactions between regional and municipal economic development agencies and Federal labs to see where they can better collaborate on commercialization opportunities.

#### **IV. 2022 NATIONAL DEFENSE STRATEGY (NDS)**

The current global strategic environment is characterized by the increasing disruptive power of innovative technology, greater competition from revisionist forces, and a volatile international order. China's growing economic power, technological sophistication, and global influence allows it to exert unprecedented control over the Indo-Pacific, threatening the liberal order of the U.S. and its allies. Russia's effort to erase the modern state of Ukraine has expanded and strengthened the NATO alliance, but has increased international volatility and damaged U.S. interests in the Middle East. Because of technological innovations and the prevalence of non-state actors, rogue nations like North Korea and Iran have the capability to present credible threats to the U.S. due to the low-level barrier of entry to cyberspace and cyberterrorism capabilities. In response to an increasingly tumultuous strategic environment, the DoD has outlined specific objectives to counteract these challenges to the U.S. and to promote America's global influence and security by investing in the modernization of key capabilities and the strengthening of strategic partnerships and alliances.

In October, the Department of Defense (DoD) released the unclassified National Defense Strategy (NDS), Nuclear Posture Review (NPR), and Missile Defense Review (MDR). For the first time in its history, the DoD conducted all major strategic reviews in an integrated way, aligned with the National Security Strategy (NSS). By weaving these documents together, the entire Department is matching resources to goals.

The 2022 NDS sets DoD's strategic direction and priorities for the Joint Force, identifying how the U.S. military will meet growing threats to U.S. national security interests and to a stable and open international system. The 2022 NDS identifies four top-level defense priorities that the Department must pursue to strengthen deterrence:

- a.** Defending the homeland, paced to the growing multi-domain threat posed by the People's Republic of China (PRC);
- b.** Deterring strategic attacks against the United States, allies, and partners;

- c. Deterring aggression, while being prepared to prevail in conflict when necessary – prioritizing the PRC challenge in the Indo-Pacific region, then the Russia challenge in Europe; and
- d. Building a resilient Joint Force and defense ecosystem.

The 2022 NDS also identifies three ways in which the Department will achieve its priorities – integrated deterrence, campaigning, and building enduring advantage.

### **Impact of the NDS on HRMFFA Military Installations**

DoD’s military installations are power projection platforms that make possible the defense of our nation, and investments in their facilities and infrastructure directly enable NDS implementation. However, DoD is facing grave challenges to ensure those power projection platforms can support the warfighter. The DoD has most recently stated they have a backlog of maintenance and repair that exceeds \$137 Billion. However, in written testimony this year before the House Armed Services Committee (HASC, Paul Cramer, the Principal Deputy Assistant Secretary of Defense for Installations, suggested the department is “considering a pivot away from the current models it uses to assess facility conditions and building Facilities Sustainment, Restoration and Modernization (FSRM) budgets.” He said the “new model for facilities spending would move away from assessments of DoD’s overall real property portfolios, and toward a new model that makes more “granular” assessments of each facility.” The Pentagon also rated over 30% of their facilities and infrastructure as poor or failing. Recent funding increases help but do not come close to what is necessary to erase the backlog. They must look to new ways to reduce costs while prioritizing funding towards those installations and infrastructure that directly support the warfighter and enable the NDS.

One way DoD can reduce costs is to close “excess” installations and facilities. Although the legacy of BRAC 2005 is 17 years behind us, the DoD previously requested authorization from Congress to conduct another BRAC round for six years in a row, most recently in the FY18 budget request. They based this request on analyses demonstrating they have as much as 21% excess capacity. The Biden Administration has not requested a BRAC authorization for their FY22 or FY23 budget requests; however, last year the Air Force seriously considered using existing authorities to request the closure of some Air Force installations. And privately, the Army, Air Force and OSD leaders all share their desire for another BRAC round.

Every dollar the DoD spends must support the NDS and there are never enough dollars in the budget to do what the DoD needs. Today, more than ever, the DoD is collaborating with communities to find ways to support their bases and provide for the troops and their families.

Another challenge issued to communities by DoD is to help build and sustain resilient installations. Invest inside and outside the installations’ fenceline to improve the cyber, energy, and environmental resilience of the overall military/civilian community. The resiliency of military installations will certainly be a contributing factor to determining military value in future basing decisions.

## **The View from Washington, DC**

***Biden Administration*** - The recently released NSS and NDS roughly mirror the strategies released by the Trump Administration. There will be continued focus on developing capabilities to counter China and address the rise of near peer threats. The Biden Administration's FY24 budget request will likely continue the effort to retire legacy platforms, weapons and equipment that do not meet the capabilities needed in a near-peer threat environment. The Administration will continue to put significant focus and resources towards research, development and testing of new technologies, particularly unmanned capabilities. Expect a renewed focus on testing and deployment of new capabilities to the INDO-PACOM Area of Responsibility (AOR).

The Office of Management and Budget (OMB) continues to look for efficiencies within the DoD budget, including the potential for requesting the closure or mothballing of individual bases, or an authorization of a new BRAC round. The retirement of Senate Armed Services Committee (SASC) Chairman, Senator Jim Inhofe, combined with the addition of new members on the Senate and House Armed Services Committees, provides a fresh opportunity to request a BRAC round. And while it is very unlikely Congress would support the request, Army and Air Force leadership support a BRAC request.

The Air Force has stated "Quality of life challenges military families face are directly tied to military family readiness, resilience, and retention of the force." A nation-wide effort being led by the spouse of the Chief of Staff of the Air Force is focused on their top five challenges which include housing, education, medical, spousal employment and healthcare. Similarly the Army has said "Quality of Life programs promote the health and well-being of the Army's people, increasing recruiting and retention and reducing overall stress and uncertainty. Increased quality of life for Soldiers, Army civilians, and families is directly tied to increased Army readiness."

There is no doubt DoD will continue to focus on finding savings to invest in new technologies and quality of life issues for servicemembers and their families. Spousal employment, reciprocity for professional licenses, quality of local schools, and affordable decent housing will remain a focus. Money for installations will continue to be a low priority.

***Congress*** - The 118th Congress will kick off in January with a slim Republican majority in the House and potentially a one seat Democratic majority in the Senate. Divided government will result in another two years of gridlock given the small majorities and internal divisions in both parties. The active policy making and passage of significant legislation over the last two years is not expected to continue.

Passing the annual National Defense Authorization bill and Defense/MilCon appropriations bills will be a challenge for the next two years. The Republican majority campaigned on raising the defense budget a minimum of 3% to 5% every year. Democrats will support the Biden Administration's budget requests, but the Progressive wing of the party may join forces with the Republican Freedom Caucus to cut defense spending. Republicans have already signaled their intention to remove climate change initiatives, abortion protections, anti-

extremism policies and issues deemed “woke” from the annual NDAA. House Republicans have also announced their intention to conduct investigations of the chaotic withdrawal from Afghanistan and the origins of Covid-19. Deterring China from invading Taiwan will take center stage alongside a debate on continued support for Ukraine’s defense. Congress will continue to block the retirement of legacy platforms rejecting the “divest to invest” proposals from the Pentagon. Expect the Congress to push for investment before divestment.

One bright spot for the region’s shipbuilding and ship repair industry is the elevation of a new Republican leader on the Senate Armed Services Committee, Senator Roger Wicker (R-MS). Senator Wicker has supported legislation sponsored in the House by Reps. Wittman and Courtney to expand investment in the Navy’s public and private shipbuilding and repair industries. With the new House majority, Rep. Wittman will switch places with Rep. Courtney and Chair the House Armed Services Seapower Subcommittee.

## **V. APPENDICES**

### **a. Individual meeting notes/slides**