THE PATUXENT PARTNERSHIP ANNUAL REPORT



ACADEMIA

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DEVELOP. CONNECT. ACHIEVE.



The Patuxent Partnership is transactional, connecting the dots to increase collaboration among academia, industry, and government, from technology to STEM initiatives, fostering growth and opportunities for the betterment of all.



The Patuxent Partnership, known by many as "TPP," is a non-profit member organization that works with government, industry and academia to advance technology, increase STEM education and workforce development, and support economic growth in our area.

TPP hosts programs, forums, panels and other activities on topics of interest to our members. We create opportunities for the exchange of ideas and information. We have time for networking and sharing during our programs. COVID brought TPP 'in person' programs to a halt in mid-March. Our planned full day program on the Great Powers Competition was put aside for later, along with other planned activities and programs. After doing some research, TPP moved to an online format for programs. We continue to identify issues and topics of interest to our members, and the subject matter experts to discuss these topics. There are challenges to online formats in an area where not everyone has the same tools, or access to the internet, to say nothing of 'on line burnout.' We work to overcome these challenges, as we continue to provide valuable information and resources to our members and the broader community.

Our programs and outreach also serve to focus on the innovation center at the St. Mary's County Airport, and the increasing development there. The recently announced Naval X Tech Bridge, led by Rick Tarr at NAWCAD, will be a catalyst for our community. Our collaboration with academia supports growth of our ecosystem, and increases STEM research and engineering, as well as other STEM careers important to the Navy and the defense community workforce. We continue to support the Naval Aviation Systems Consortium (NASC). Nontraditional acquisition vehicles such as Other Transaction (OT) Authority are important tools for the Tech Bridge.

Our ongoing Partnership Intermediary Agreements (PIA) with NAWCAD and Indian Head support their missions and keep the community informed. Our Educational Partnership Agreement (EPA) with NAWCAD and St. Mary's College of Maryland (SMCM) supports research, programs and internships. From applied physics to human factors, SMCM faculty and staff are supporting NAWCAD and the community. We are working to engage with Indian Head through our EPA and our PIA, to identify partnering opportunities and to increase the connections between Indian Head and Pax River.

TPP and CSM have a strong working relationship. For almost ten years TPP has had a Pathways Scholarship at CSM that supports engineering, cyber and computer science. This \$10,000+ annual commitment covers two full scholarships. One of the scholarship requirements is that these CSM students agree to apply to the UMD Engineering programs in Southern Maryland. Most of the graduates ultimately go to work for the Navy at Pax River. TPP also supports The Flight Academy at CSM, also known as the Aviation Classroom Experience (ACE). The ACE has programs during the academic year and two one-week ACE summer camps. The ACE programs are on hold for the time being, due to COVID-19.





LIKE NO OTHER CONNECTION

a message from our EXECUTIVE DIRECTOR & BOARD PRESIDENT

Dear TPP Members, Friends and Colleagues,

What a year FY20 has been for all of us. COVID19 has had dramatic and profound changes, and we do not see a return to in person programs and activities for months to come. It will come, and we will be ready to welcome you.

Last year it was the Federal government shutdown, this year it is COVID19. Unfortunately, unlike the shutdown in early 2019, COVID19 continues to have a major impact on our day to day lives, and of course on the work of TPP. Our last 'in person' program of FY20, just days before COVID19 required the shut down of such activities, was a TPP-ANA program at the Patuxent River Naval Air Museum and we had full house (hangar) for the program.

Meanwhile, we look for other ways to stay connected. Teams, Zoom and WebEx are part of every workday. You have learned with us, as we use new platforms. It has been a challenging and rewarding year for TPP. The opportunity to work with all of you in industry, government, academia, along with organizations such as the Southern Maryland Navy Alliance, TechPort and Leadership Southern Maryland, has allowed us to expand our network and our impact. It is all about you, our members, and the opportunity to work with you and get to know you. TPP is all about "connecting the dots."

We continue to support the Naval Aviation Systems Consortium (NASC) in support of the technology needs of the Naval Air Warfare Centers (NAWCs) and the Naval Air Systems Command (NAVAIR) through the use of Other Transaction (OT) Authority. We work with CMG, the Consortium Manager, and NAWCAD.

Our partnership with St. Mary's College of Maryland (SMCM), through our Education Partnership Agreement





(EPA), involving the classic sciences, and with the Center for the Study of Democracy, continues to flourish. The EPA, which includes NAWCAD, facilitates research work and internship opportunities.

TPP was awarded the 2019-2020 MD JSHS grant. Partnering with NAWCAD and SMCM, we doubled student participation from the prior year. We pivoted to a virtual symposium, just two weeks before the event, which was scheduled to take place at SMCM.

Despite the current challenges, our Southern Maryland region continues to move forward, and TPP is pleased to be a part of it. Working with our members, the Navy and our community to provide worthwhile programs and resources is of critical importance to us.

We appreciate and value your comments and suggestions, your participation in our events and activities, and your support of STEM workforce development. You make us look good! We look forward to the return to programs, events and networking with all of you.

Thank you for the privilege of serving you and working with you to Develop, Connect and Achieve. We look forward to the coming year, which promises to be full of surprises!





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Bonnie Marie Green Executive Director

Bert Johnston President, Board of Directors

OUR MEMBERS



Many of our members are Navy focused, primarily NAWCAD & NAVAIR. Others are engaged across the Department of Defense, the Department of Homeland Security, and other Federal, State and local organizations. Still others support these efforts through education and outreach. Our members are actively engaged in improving our quality of life through education, workforce development and retention, community support, and cultural activities.

Southern Maryland is a great place to live, work and thrive, and our members help to make that happen. They support our programs and activities, including volunteering to serve as judges, observers, and mentors.

Our members are invested in a wide range of activities and collaborations designed to increase interest and involvement in STEM disciplines throughout the community.

OUR BENEFACTORS

ASEC	НТіі	Northrop Grumman
Bell	KBR	PAE
Boeing	L3 Harris	Raytheon Technologies
General Dynamics Information Technology	Lockheed Martin	SAIC
	Naval Systems, Inc.	Survice Engineering Company

Member of the Year: Whitney Bradley and Brown, Inc.

Whitney Bradley and Brown, Inc. (WBB) is the 2019 The Patuxent Partnership (TPP) Member Organization of the Year. WBB was founded in 1981 as a leading government and public sector solutions provider that contributes innovative advances in technology, tactics, and techniques in support of its clients that include the US Army, Department of Defense, Federal Government, management consulting, US Navy, US Marine Corps, US Air Force, technical consulting, Health - VHA / VA, and Homeland Security. Its headquarters are located in Reston, VA; with a local office in Lexington Park. WBB was selected based upon the company's performance, support of TPP's mission, their corporate culture, and company and employee involvement in community affairs and volunteer activities.

WBB has made significant contributions to The Patuxent Partnership (TPP) and Southern Maryland in a variety of ways, including sponsoring and providing subject matter expertise to TPP programs, and attending TPP events throughout the year. WBB brought its significant Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) experience presence, to Patuxent River to provide engineering and program management support services to Navy S&T management organizations and SBIR/STTR programs offices.

WBB's Pax River office has grown over the past year in both its customer offerings and its physical footprint. They doubled their office space and significantly expanded meeting spaces to meet customer requirements. They have opened their space to community organizations like Leadership Southern Maryland, as well as to their customers such as NAVAIR, for meetings and training opportunities.

WBB teams with other local businesses. They have formed relationships with a number of small businesses to identify and collaborate on development and capture of opportunities, supporting their ability to grow and thrive within the Pax River market. Their business analytics and Artificial Intelligence capabilities bring new tools and capabilities to the market in order to support and diversify the Southern Maryland business environment.

Southern Maryland leadership and innovation environment through Leadership Southern Maryland (LSM), and the young professionals community through the St. Mary's County Young Professionals organization.

Highlighted accomplishments of WBB's Patuxent River Office employees include -

• Recognition by the Vertical Flight Society (VFS) for their contributions to bringing the Future Vertical Lift (FVL) program to fruition. Two WBB employees were mentioned in the new book Advancing Vertical Flight as integral to charting the path towards the next generation of vertical lift aircraft, which will be planned, developed, and tested at Patuxent River Naval Air Station.

• Supporting LSM through participation in the with Class of 2019 Executive Leadership Program. Playing a lead role in to the development of a leadership program for emerging leaders in Southern Maryland to complement the LSM Executive Program. The LSM Emerging Leaders Program (LEAP) was approved by the LSM Board to begin in January 2020. Another WBB employee applied for and was accepted into the inaugural LEAP class.

• Developing, leading, and executing the "V-22 Osprey: Meet the Airplane" community event that required industry and government collaboration, which put a regional spotlight on the innovations and advancement at Patuxent River through future vertical lift and the unique T&E community.

 Participating in the 2019 Dragon Boat Festival, which raised funds for the Southern Maryland Community Resources nonprofit organization that creates opportunities for individuals with disabilities in SoMD.

• Engaging 500+ local young professionals and over 10 corporate sponsors through leadership within St. Mary's County Young Professionals (SMCYP) network. SMCYP worked closely with TPP, the St. Mary's County Department of Economic Development, the St. Mary's County Museum Division, and the St. Mary's

WBB is very supportive of its employees taking on leadership roles and community engagement across Southern Maryland.In 2019, WBB Pax River employees supported the Patuxent River Naval Air Museum Association (PRNAMA), including service on the PRNAMA board, the



Chamber of Commerce to host six major social events,

push for addressing

economy.

millennial retention and

PROGRAMS

16

programs

1273 attendees **4** venues

Center for the Study of Democracy

TPP and the Center for the Study of Democracy at St. Mary's College of Maryland have a history of collaboration, jointly sponsoring and presenting programs of interest to our members and the broader community. Traditionally, we co-sponsor an annual Patuxent Defense Forum and other programs throughout the year, discussing issues related to U.S. domestic and foreign affairs and defense. This year's programs were limited due to COVID-19.

Association of Naval Aviation Squadron #18

TPP has partnered with the Association of Naval Aviation's Squadron #18 Patuxent River for more than 10 years, hosting over 40 panel presentations to date. The panels focus on topics of interest to the naval aviation community. These programs are an outstanding opportunity to share the Navy's significant contributions and what is happening "inside the gate" with our members and others. Net proceeds from these programs support STEM initiatives and scholarships in Southern Maryland.

NAWCAD Industry Day

22-Oct | University System of Maryland at Southern Maryland **Mr. Jeff Guarnero**, Head, NAWCAD Procurement Group/CCO; **RDML John Lemmon**, Commander, NAWCAD; **Ms. Leslie Taylor**, Executive Director, NAWCAD; **Mr. Rick Tarr**, Director, Tech Transfer Office, NAWCAD; **Mr. Lawrence Butts**, Deputy Director, Office of Small Businesses Program, NAWCAD; **Mr. Al "Bunky" Hensler**, Division Head, AD 2.5.1 Procurement Group

TPP 2019 Annual Meeting

30-Oct | University System of Maryland at Southern Maryland

Ms. Bonnie Green, Executive Director, The Patuxent Partnership; **RADM Bert Johnston**, USN (ret), President, TPP Board; **Ms. Lisa Swoboda**, Director, Office of Military & Federal Affairs, MD Department of Commerce; **Ms. Helga Weschke**, Director, Federal Business Relations, Office of Military & Federal Affairs, MD Department of Commerce

Cybersecurity Maturity Model Certification (CMMC) Update

22-Jan | University System of Maryland at Southern Maryland **Ms. Katie Arrington**, Chief Information Security Officer for the Office of the Undersecretary of Defense for Acquisition

2020 St. Mary's County Science & Engineering Award Program

19-Feb | Patuxent River Naval Air Museum

In collaboration with INCOSE Southern Maryland, Mr. Tommy Luginbill, Director, TechPort, gave remarks.

Strategic Brown Bag Luncheon with Dr. Dale Moore

03-Mar | Bell Conference Room



2.19.20



2020 St. Mary's County Science & Engineering Award Program 2.19.20



TPP/ANA Panel: Naval Aviation's Flight Plan to Infinity (and at least) 2021 and Beyond w/ RADM Greg 'HyFi' Harris, OPNAV N98 3.11.20

TPP/ANA Panel: Naval Aviation's Flight Plan to Infinity (and at least) 2021 and Beyond w/ RADM Greg 'HyFi' Harris, OPNAV N98

11-Mar | Patuxent River Naval Air Museum

Sponsor: Compendium Federal Technology

CAPT Errol 'Mooch' Campbell, PMA-259, Air-to-Air Missiles, (representing PEO(T)); **Mr. Gary 'Too Kool' Kurtz,** SES, PEO(CS); **MajGen Greg 'Maz' Masiello**, USMC, PEO(A);**CAPT Sam Messer**, PMA-281, Strike Planning and Execution Systems, (representing PEO(U&W)

Maryland JSHS

26-Mar | Virtual Platform (originally scheduled at St. Mary's College of Maryland)

Adaptative Acquisition Framework with Mr. Dave Cadman

28-Apr | Virtual Platform **Mr. Dave Cadman**, Acting Director, Office of Acquisition Enablers Leadership: A Network Based View for Competitive Advantage with Dr. Dale Moore 19-May | Virtual Platform

Innovating in Crisis - ART of collaboration (Webinar 1) 09-Jun | Virtual Plaform Moderators: Matt Scassero, Director UMD UAS Test Site; Kevin Switick, President, AVIAN

SOMD Update with Senator Jack Bailey and Delegate Brian Crosby

10-Jun | Virtual Platform

Strategic Brown Bag Luncheon with Dr. Dale Moore

3.3.20





TPP/ANA Panel: Naval Aviation's Flight Plan to Infinity (and at least) 2021 and Beyond w/ RADM Greg 'HyFi' Harris, OPNAV N98 3.11.20





Adaptive Acquisition Framework with Mr. Dave Cadman 4.28.20

PROGRAMS

NAWCAD Industry Day

Through our Partnership Intermediary Agreement with NAWCAD, TPP supports NAWCAD Industry Day events. These Industry Days facilitate dialogue between representatives from NAWCAD labs, contracting experts, and NAWCAD leadership, and over 300 industry representatives.

Defense Acquisition Workforce Continuous Learning

Many of our programs align with Department of Defense Acquisition Workforce continuous learning goals for professional improvement. Our programs offer a variety of opportunities for the defense workforce to learn about new acquisition, technology, and initiatives and broaden technical expertise. Programs presented in the last year provided the opportunity for acquisition workforce employees to earn up to 54 continuous learning points. TPP also is working with the Defense Acquisition University (DAU).

Young Professionals

In 2017, TPP held its first program focused on the under-35 workforce to support professional development and workforce retention for the region's young professionals. Since then, we have expanded our collaboration to sponsor additional events, partnering with the Young Professionals groups in the tri-county region (St. Mary's, Calvert, and Charles counties), the NAVAIR Professional Development Council, and the local community.

The ART of Collaboration (Webinar 2)

16-Jun | Virtual Platform

Moderators: **Matt Scassero**, Director, UMD UAS Test Site; **Kevin Switick**, President, AVIAN

Speakers: **Micah Periman**, Southern MD Community Help During COVID-19 Facebook Group; **Matt Hayes**, Southern MD Loves You/ TechPort

Paycheck Protection Program (PPP) Update with Chesapeake Bank of the Community with Jimmy Burke and Patrick Pierce

17-Jun | Virtual Platform

Jimmy Burke, President, and **Patrick Pierce**, Executive VP and Chief Banking Officer, for the Community Bank of the Chesapeake

Contributing and Connecting to Community -ART of Collaboration (Webinar 3)

14-Jul | Virtual Platform

Reports from smART teams: Collaboration, Community Outreach, Economic Recovery, Education, Innovation, Youth & Teens

The Adjutant General of MD - MG Timothy E. Gowen, MD National Guard

30-Sept | Virtual Platform



SOMD Update with Senator Jack Bailey and Delegate Brian Crosby

06.10.20

Leadership: A Network Based View for Competitive Advantage with Dr. Dale Moore

05.19.20



The Adjutant General of MD -MG Timothy E. Gowen, MD National Guard 09.30.20

Paycheck Protection Program (PPP) Update with Chesapeake Bank of the Community with Jimmy Burke and Patrick Pierce

06.17.20

THE ART OF COLLABORATION

June 9, 16 & July 14

A number of initiatives emerged in Southern MD during the COVID-19 pandemic that demonstrated the rapid response, spirited collaboration, and adaptive thinking that are hallmarks of thriving innovative communities. A working group (that included representatives from government, industry, non-profits and academia) came together to highlight this adaptive thinking and innovative responses to community needs throughout southern MD. TPP was part of this smART Collaboration Working Group.

The smart Collaboration Working Group recognized that there were many more people who wanted to be doing and/ or contributing more. As a result, a three-part webinar series, The ART of Collaboration, was designed to unleash the talent, expertise and resources of people eager to make a difference in this challenging time. People and groups were brought together to identify Southern Maryland's needs during COVID, as well as to collaborate creatively to address them.

The Southern MD community is a strong and innovative community.

We can - Adapt. Respond. Thrive.

Webinar 1: "Innovating in Crisis"

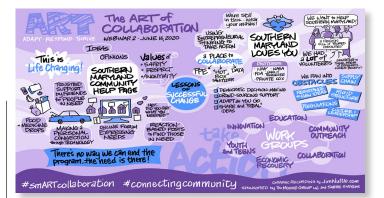
Three local success stories of collaboration and innovation were highlighted to support those on the frontlines and others in crisis; Share and discover additional community needs.

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Webinar 2: "The ART of Collaboration"

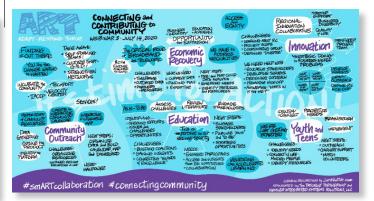
Learn the ART of Collaboration from leaders featured in the first webinar. Attendees were given the opportunity to join an action group based on common concerns. Break out groups included-

- Collaboration
- Community Outreach
- Economic Recovery
- Education
- Innovation
- Youth & Teens



Webinar 3: "Connecting & Contributing to Community"

Outbriefs were shared from the action groups that identified needs and opportunities for each of the groups, to include actions they had accomplished.



STEM EDUCATION INITIATIVES

TPP devotes substantial time and effort and resources to education and workforce development. Our strategic plan goals include supporting STEM outreach and broader education initiatives, including programs on topics of interest to the Navy community and our members. TPP supports economic development and the diversification of our Southern Maryland economy, working on behalf of our community.

TPP works with other nonprofit organizations, public and private schools in Southern Maryland, St. Mary's College of Maryland (SMCM), the College of Southern Maryland (CSM), and the University System of Maryland at Southern Maryland (USMSM). In the past year we have worked with the Fort Meade Alliance on several initiatives, including Project Scope. Security clearances are essential to many jobs in the Fort Meade Region, so the Fort Meade Alliance created Project SCOPE to help students in high school and college, as well as transitioning workers and military veterans to understand, navigate and master the security clearance process. In addition, we work with the NAWCAD Strategic Education Office to advance STEM education and outreach. A number of TPP member organizations also support STEM initiatives.

TPP has had an Education Partnership Agreement (EPA) with NAWCAD and SMCM for almost ten years. This EPA supports research, internships, technology innovation, skilled artisan development, and other areas of interest. It includes working to support unmanned systems (quadcopters) in the tri-county high schools, outreach regarding camps, internships and other education activities, and starting last year, Tech Jobs Rule.

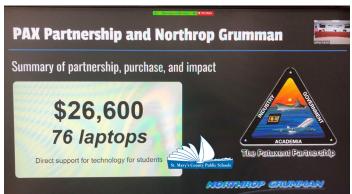
TechJob Rules, a pilot program, is an initiative with the James A. Forrest Technology Center (Forrest Center), The Strategic Education Office of NAWCAD, The Patuxent Partnership, and some of our member companies. Talented high school students who are interested in skilled work in manufacturing and STEM fields are given paid apprenticeship opportunities with local industry and the government. These organizations assess the demand for skilled workers in specific areas.

When there is a need for specific work expertise, paid apprenticeship opportunities are established. Students who will be entering their final year of high school, and have completed at least one to two years at the Forrest Center, are eligible to apply for these apprenticeship opportunities. There is an interview process after which, in conjunction with student resumes and academic performance, students are hired. An individualized work plan is developed by the apprenticeship coordinator, working with the industry or

government representative, for each apprentice.

Programs include Aviation – Automotive Refinishing and Repair; Automotive Technology – CADD – Diesel Technology – Electrical Wiring – Engineering – IT Networking – Production Engineering (Manufacturing) – Welding

From 2006 through 2019, TPP has sponsored the Summer Space Camp at St. Mary's County Public



DISCOVER your skills through Tech Jobs Rule Apprenticeship Program!

Tech Jobs Rule is the Dr. James A. Forrest Career and Technology Center's new and innovative apprenticeship program designed to further train and prepare students for workforce shortages in the STEM or manufacturing career fields. Students can apply for this program after completing 1-2 years of training at the Forrest Center.

Apprenticeship • Opportunity • Career

For additional information, please contact one of the following:

<u>Strategic Education Office of NAWCAD</u> nawcadeoo.fct@navy.mil

<u>MaryKay Myers</u> The Patuxent Partnership marykay.myers@paxpartnership.org

<u>Mary Jane Selph</u> Tech Jobs Rule Apprenticeship Coordinator maryjane.selph@paxpartnership.org

Schools (SMCPS). NAWCAD also has supported this summer program. In 2019, in recognition of the broader range of topics, the camp was rebranded as Aerospace Techventures Camp. Over the course of four to eight days, students entering grades 2 through 11 explored concepts such as Engineering, Rocketry, Aeronautics, Coding, Robotics, Space Science and Space Citizenship. COVID19 changed everything. SMCPS was unable to have summer camps this year. TPP looked for other ways to support SMCPS during the pandemic. SMCPS had a critical need for laptops to enable remote learning. Many students did not have laptops and TPP decided to use the funds that normally would go to the Aerospace Techventures Camp, to purchase laptops for students. TPP Benefactor Northrop Grumman, a key supporter of SMCPS, liked the idea and working together we provided funds for the purchase of 76 laptops, at a cost of almost \$27,000.00.

Cyber Patriot is the National Youth Cyber Education Program. It was created by the Air Force Association to inspire K-12 students to careers in cybersecurity or other STEM disciplines critical to our nation's future. The heart of the program is the National Youth Cyber Defense Competition, the nation's largest cyber defense competition. Cyber Patriot encourages students to learn about cyber security and fosters their interest in cyber career opportunities. This supports the critical need for cyber professionals in government and in the private sector; TPP and TPP Benefactor Northrop Grumman support Cyber Patriot. Teams participated in the state Cyber Patriot competition in January.

Science Fairs & Expos play an important role in getting students interested in STEM and STEM related careers. The science fairs and expos in St. Mary's, Calvert, and Charles counties showcase middle and high school projects and the broad interests of the students. TPP recognizes their work with awards in junior and senior divisions. Frequently, some of our local award winners go on to compete at the regional level.

Robotics programs can be found in nearly every school in Southern Maryland and are a fun and successful way to engage and educate our students and get them interested in STEM-related careers. Over 1,200 students are involved in competitive robotics in Southern Maryland.

STEM-ING is designed to introduce middle school girls to STEM-related careers. TPP has worked with NAWCAD in supporting the STEM-ING program since its inception. As a partner and sponsor



CSM ACE Flight Academy

of this event, TPP and some of our member companies and sponsors provide mentors, volunteers, and the financial support needed to ensure the program's success and growth. TPP supports fundraising and secures sponsors for the various workshops. STEM-ING did not take place due to COVID-19.

The Pathways to Engineering Program at CSM provides a path for students seeking engineering degrees from the A. James Clark School of Engineering, University of Maryland (UMD) in Southern Maryland. TPP provides two full scholarships each year for students in the Pathways to Engineering Program at CSM. Scholarship recipients must agree to continue in the UMD engineering program offered in Southern Maryland. The Pathways/UMD engineering partnership provides additional opportunities for local students to continue their education while remaining in Southern Maryland. NAWCAD has a program for students as they enter the UMD engineering degree program offered here in Southern Maryland. It includes tuition assistance, and part time employment that can lead to full time work for the Navy.

The National Academy of Finance (NAOF) at Chopticon High School prepares students for careers in financial services. TPP has been part of the NAOF since its inception. TPP serves on the Program Advisory Council for NAOF, and is actively engaged with students and faculty. TPP sponsors a NAOF intern each summer. The internship opportunity provides real world experience that demonstrates the value of the classroom instruction.

Southern Maryland Math Circles is a math program that engages students in a non-classroom structure. Sponsored by TPP member RED-INC, it is led by Dr. David Kung from the Mathematics Department at St. Mary's College of Maryland, with support from other faculty and students. These sessions bridge the gap between classroom curriculum and the exploration of open-ended math problems that challenge students of all ages. RED-INC sponsorship enables students to access to this extracurricular program free of charge.

The TPP UAV Quadcopter Program got its start as part of a grant to TPP from the Office of Naval Research. This ONR STEM workforce development grant fostered the development of curriculum and other initiatives designed to encourage students to study STEM courses and ideally, go to work for the Navy. The quadcopter program was designed to foster an interest in autonomous technology, particularly UAV technology and engineering. While the ONR grant has ended, student interest in UAVs continues to grow. The program is open to all high school students in the tri-county area. Training session are provided at the students' assigned school. TPP worked with member Aviation Systems Engineering Company (ASEC) to develop an online training program available to all students. This online training is being utilized at other

schools throughout the country. TPP continues to work with schools in the tri-county area, in the post-grant sustainment phase. NAWCAD also supports the quadcopter program.

The Applied Physics Endowed Fund at St. Mary's College of Maryland was established by TPP in 2012, to support the development of an applied physics curriculum. The fund supports research, internships, and professional development opportunities through collaborative efforts between SMCM, NAWCAD, and the DoD community in Southern Maryland. Many of the SMCM graduates go to work for the Navy at Patuxent River and elsewhere. Our support of the physics curriculum at SMCM directly supports STEM workforce and development. Faculty engagement in research at NAWCAD is another benefit.

The Aviation Classroom Experience (ACE) is offered by the College of Southern Maryland. It introduces eighth grade students to Naval Aviation and autonomous aerial systems. CSM also offers a summer ACE camp. The ACE is a starting point in developing student interest in these areas of study, and in Navy careers. CSM is building its curriculum in this area. The ACE is at the Leonardtown campus. Due to COVID 19, no programs currently are being offered.



CSM ACE Flight Academy - Instructor Extraordinaire, Lyn Whitmer

MARYLAND JUNIOR SCIENCE & HUMANITIES SYMPOSIUM

(MD JSHS)



This was the second year that TPP collaborated with the Naval Air Warfare Center Aircraft Division (NAWCAD) and St. Mary's College of Maryland (SMCM) to host the Maryland JSHS Symposium. The MD JSHS epitomizes the importance and value of our Educational Partnership Agreement with NAWCAD and SMCM. The JSHS is sponsored by the Army, Navy and Air Force to expose students to STEM careers across the Defense Industrial Base.

The number of participants increased substantially—almost twice the number of students we had in the 2018-2019 competition. High school students throughout Maryland participated in the project or poster competition. All students in grades 9-12 enrolled in public, private, or home schooled were eligible to participate. Participating students had submitted abstracts and papers in various specified categories. Each paper was reviewed by three subject matter experts. Ten students were invited to present their papers and ten other students were invited to present their posters.

Originally scheduled to take place on Saturday, March 28, at SMCM, the COVID-19 shut down forced us to move to a virtual format less than two weeks before the scheduled date. This created numerous problems that had to be resolved quickly and creatively. An immediate challenge was that our participants from high schools throughout Maryland did not all have access to the internet, zoom and other virtual programs. This meant the students had to make their presentations on the phone, the only technology available to all students, after forwarding poster/project work to TPP. The in-person symposium had judges from various regions of the state. The move to a virtual presentation by phone meant that we had to find other judges, who could be available when the students presented, to judge the presentations. Our colleagues at NAWCAD, and in particular the Strategic Education Office, went to work and we had new judges. It was a lengthy, time consuming and successful process coordinated by TPP and supported by SMCM.

Students who were selected to make presentations at the Maryland JSHS were awarded scholarships from \$200 to \$2,000. Five of the Maryland JSHS students were invited to the National JSHS, and three were awarded academic scholarships at that event. It is a testimony to these students' teachers and mentors, and of course their parents, that they competed in the virtual MD JSHS.

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NAVAL AVIATION SYSTEMS CONSORTIUM (NASC)

The Patuxent Partnership is pleased to continue its association with Consortium Management Group, Inc. (CMG), on behalf of the newly formed Naval Aviation Systems Consortium (NASC), which supports the Naval Air Warfare Center Aircraft Division (NAWCAD) Other Transaction (OT) Agreement with CMG. CMG manages the Consortium and administers the OT Agreement with NAWCAD. The Agreement, initially executed in July 2019, is a five-year, no ceiling agreement which covers the full spectrum of the Navy's aviation-technology domains that was. Through its unique structure, NASC Consortium members are able to work with the Government to identify opportunities, target their technology offerings, expand into new markets and grow their businesses. The Patuxent Partnership has co-hosted and supported several events with CMG – including an Industry Day and smaller meetings for NAWCAD cohorts in California, MD. Additional information is at www.NASCsolutions.org.

IPA PROGRAM

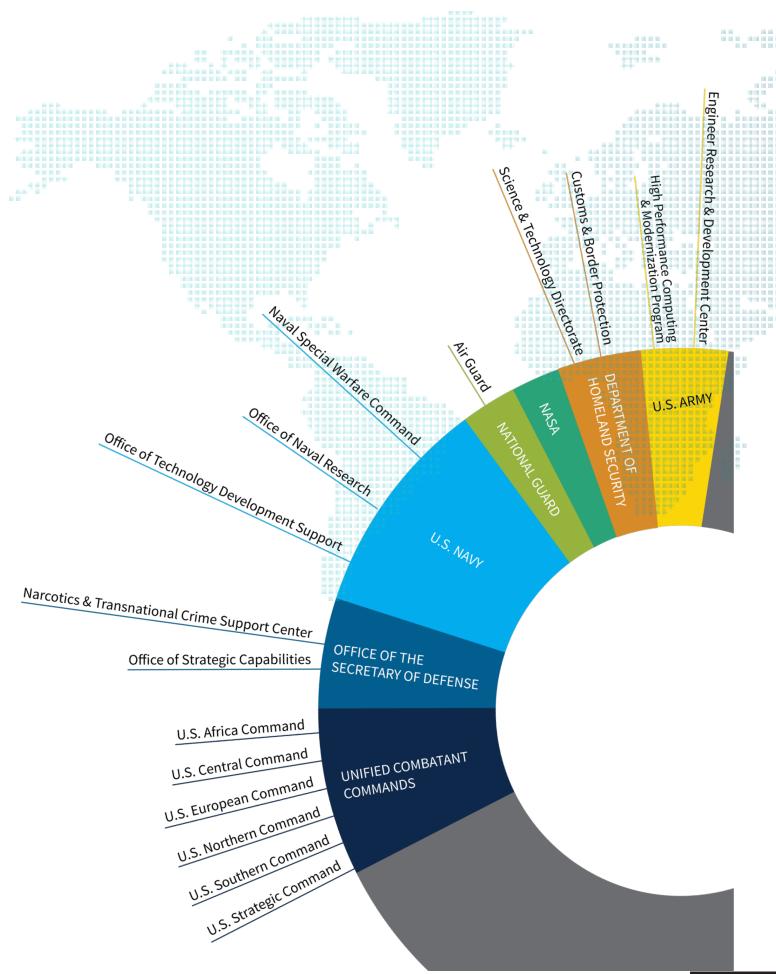
The Intergovernmental Personnel Act Mobility Program strengthens the government's capabilities and the accomplishment of agency mission requirements. The program allows for the temporary assignment of personnel between the federal government and eligible non-profit organizations. The IPA program is instrumental in the transfer and use of new technologies and other science and technology requirements, and promotes collaboration among government agencies.

TPP was authorized to participate in the IPA program in 1999, initially to support the Navy at Pax River. Since then, we have developed long-term relationships with many federal departments and agencies, including the Departments of Defense and Homeland Security.

TPP employs subject matter experts and details them to government agencies where they serve in senior positions to facilitate technology transfer and foster knowledge sharing across, within, and among government agencies, academia, and private industry. Many of our IPAs provide science and technology support. They are recognized experts in their fields, current in the latest technologies, and experienced senior-level managers.

With the insights derived from their work about emerging technologies and trends in science and technology development, our IPA employees help us strengthen our programs and foster big-picture discussions with our partners, members and the DoD throughout the year.





BOARD OF DIRECTORS



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Vice President, Director of Business Solutions Programs, PSI Pax, Inc.



Ed Rule Member at Large

President/CEO, Naval Systems, Inc.



Chuck Angus

Business Development/ Capture Executive, Airborne Electronic Attack, Raytheon Technologies



Mike DeManss

Managing Director, DeManss Consulting



Steve Eastburg Executive Vice President,

Smartronix, Inc.; RADM (ret), USN



Heidi Fleming

Director, Navy and Marine Corps Programs, Lockheed Martin; CAPT, USN (ret)



Mike Johnston

Director, PAE Applied Technologies



Chris Kaselemis

Director, St. Mary's County, Dept of Economic Development



Gary Kessler

President, Kessler Integrated Systems Solutions



Ron Oblen

Managing Consultant, Defense, Guidehouse



Tom Phelan

Director of Air Vehicle Programs, KBR



Frank Schenk

Senior Enterprise Account Executive, Digital Media, Adobe



Leslie Taylor Navy Liaison

Executive Director, NAWCAD



Linda Vassallo

Deputy County Administrator, Calvert County



Michael Wick

Provost and Dean of Faculty, St. Mary's College of Maryland



Matthew Scassero

Director, UMD UAS Test Site; CAPT, USN (ret)



Bonnie M. Green

Executive Director



COMMITTEES

BOARD GOVERNANCE

The Board Governance Committee is responsible for ensuring that the board composition and structure is in compliance with the bylaws and contains a diverse group of directors capable of accomplishing the mission and objectives of the organization. The committee provides the Board with periodic review of board composition and terms, identifies new board member candidates, and keeps the Board aligned with its roles and responsibilities and with the organization's purpose.

FINANCE

The Finance Committee is responsible for ensuring the organization's financial stability by providing oversight on its budget and finances. The committee's primary role is to provide the expertise needed to assure the full Board that the organization is on sound financial footing. To perform this role effectively, committee members work as a team with the Executive Director, Finance Director, auditors, and other financial professionals.

ACADEMIC & OUTREACH

The Academic & Outreach Committee identifies and recommends initiatives, programs and financial support aligned with our mission and the TPP strategic plan. Committee members provide regional support for STEM education-related activities and identify new opportunities to support STEM workforce development.

IPA COMMITTEE

The IPA Committee focuses on the work of our IPAs, strengthening our relationships with government agencies, academia and our members.

MEMBERSHIP COMMITTEE

The Membership Committee focuses on the recruitment of new members, engagement of current members, and assistance to members in partnering with each other and the greater Southern MD community. It also brainstorms ways to demonstrate the value of TPP membership.

STRATEGIC PLANNING

The Strategic Planning Committee is responsible for developing the organization's mission, vision, and goals through the creation and implementation of a comprehensive strategic plan to be implemented by the Board of Directors. The committee regularly reviews the organization's goals to ensure the strategic plan is in alignment with ever changing objectives of the community and Navy partners.

<u>HEADQUARTERS</u> STAFF

Bonnie M. Green Executive Director

MaryKay Myers Finance Director

Jen Brown Programs & Membership Director

Shelley Frey Executive Assistant STEM Outreach Coordinator

Michelle Reloba Human Resources Manager

Kelly Taylor

Staff Accountant

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LIKE NO OTHER

2019 TPP Annual Meeting - TPP Staff 10.30.19



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