Weekly Media Report – Nov. 3-9, 2020
Further reproduction or distribution is subject to original copyright restrictions.

EDUCATION:
1. Joint Artificial Intelligence Center Keeps Branching Out
   (National Defense Magazine 3 Nov 20) … Yasmin Tadjdeh
   When the Pentagon’s Joint Artificial Intelligence Center was stood up in 2018, it was established to bring together the Defense Department’s various AI programs and projects.
   Two years later, JAIC is pivoting to new mission sets, expanding its portfolio and more closely working with industry.
   The organization, in partnership with the Defense Acquisition University and the Naval Postgraduate School, was slated to launch an intensive six-week pilot course in October to train over 80 defense acquisition professionals of all ranks and grades. The trainees will learn how to apply AI and data science skills to operations, [SECDEF Mark] Esper said.

RESEARCH:
   (Fox News 6 Nov 20) … Kris Osborn
   The fact that the Air Force’s new 6th-Gen aircraft has taken to the skies raises too many interesting questions to engage at one time. Many might wonder, who built the one that flew already? What might it mean for the F-35 and F-22?
   This challenge, explored by a Naval Postgraduate School essay called “The 6th-Generation Quandry,” posed the question as to whether it might be equally if not “more effective to postpone formal sixth-generation development until truly breakthrough advances emerge, while pursuing advanced variants of current, yet upgradeable platforms in the interim.

FACULTY:
3. Turkey’s Naval Expansion Doctrine Aims to Bring Greece, Cyprus to Knees - Analyst
   (Ahval 3 Nov 20)
   Turkey’s Blue Homeland doctrine, which lays claim to expansive territorial waters in the Aegean and Mediterranean seas, intends to submit Greece and Cyprus to Turkish ambitions in the region, Ryan Gingeras, professor at the U.S. Naval Postgraduate School, said in an article for Greek newspaper To Vima.

4. Turkey Remains Vital Route for Drug Trafficking
   (Ahval 5 Nov 20)
   Turkey sits along a well-known Balkan route for Afghan heroin destined for the European markets. Drugs have also been smuggled into the country from Brazil and Colombia in recent months. For decades, Turkey has grappled with serious challenges related to the illicit trade and use of narcotics… Ryan Gingeras, associate professor at the Naval Postgraduate School and an expert on Turkish and Middle East history, said the relative weakness of
Turkish money laundering laws play a role in the problem, citing the example of the Turkish government’s lifting of declaration limits on the amount of money inbound travellers were allowed to carry on their person.

ALUMNI:

5. **Who is Mark Kelly? Things to Know about Arizona’s Democratic Senate Candidate** (Fox News 3 Nov 20) … Julia Musto
   Arizona Democratic Senate candidate Mark Kelly, a Naval Postgraduate School alumnus, likes to say he comes from a tradition of service.
   As he reminded voters during the Oct. 6 debate against Republican incumbent Sen. Martha McSally, his parents were both police officers in West Orange, New Jersey, where he and his twin brother Scott were raised.

6. **Autonomous Drone Maker Skydio Adds Key Product and Engineering Executives to Growing Team** (Valdosta Daily Times 5 Nov 20)
   Skydio, the leading US drone company and world leader in autonomous flight, announced the addition of three key product and engineering leadership hires as it continues its rapid growth into the enterprise and public sector markets. Roy Goldman is appointed Head of Product Management, Ryan Reading appointed Head of Software Engineering and **Mike Ross, a Naval Postgraduate School alumnus**, appointed Senior Director of Product Management. These critical hires come on the heels of the company’s recent $100M Series C raise to fund the next phase of product development for the enterprise, public sector and defense markets. Roy, Ryan and Mike bring industry leading R&D expertise in IoT, cloud computing, autonomy, security, and aviation. They will play critical roles in realizing the company’s vision for the first-of-its-kind integrated enterprise autonomy stack.

7. **The Chief’s Desk** (Signalsas.com 6 Nov 20) … Chief Scott Freitag
   I’ve said it before and I will say it again, Operations personnel in the fire service are squared away operationally. What we lack is the same level of preparedness when it comes to the administrative part of the job. Conversely, I would say that our Non-Operations personnel are squared away administratively, but if we had to deal with some sort of administrative crisis, I believe we would find some gaps. This, in my opinion, applies to the private sector as well… Jackson Nickerson, Ph.D., of Washington University presented on the topic of strategic thinking during my **Executive Leaders Program through the Naval Post Graduate School**. According to Dr. Nickerson, it is our sympathetic nervous system that drives our fight, freeze, or flight instincts. It is our parasympathetic nervous system that allows us to remain cool, calm, and collected. Our sets and reps in training, as well as on the incident scene, allow us to rapidly identify and address an emergency event. This means we are able to override our sympathetic system’s tendency to react and allow our parasympathetic system to remain engaged and respond.

8. **Trussville Rotary Veterans Day Speaker Announced** (St. Clair Times 8 Nov 20)
   The Trussville Rotary Daybreak Club has announced its special Veterans Day speaker.
   On Wednesday, Nov. 11, Navy Capt. Bobby Markovich, commander, Strike Fighter Wing, U.S. Pacific Fleet, and Naval Postgraduate School alumnus, will speak to the club via Zoom.

UPCOMING NEWS & EVENTS:
November 11: Veteran’s Day
November 17: **V-SGL with Ambassador Harry Harris**
November 26: Thanksgiving
Ambassador Harry Harris

“Critical Allies: The U.S. / Republic of Korea Alliance”

17 NOVEMBER 1500 (PST)

U.S. Ambassador to the Republic of Korea Harry Harris is the first Asian-American to hold four-star rank in the U.S. Navy and the first to head U.S. Pacific Command (USPACOM), now known as the Indo-Pacific Command (INDOPACOM), from May, 2015 to May, 2018. He was nominated by President Trump on May 23, 2018 and confirmed by the United States Senate on June 28, 2018. Prior to USPACOM, he commanded the U.S. Pacific Fleet. From 2011 to 2013, Ambassador Harris served as the representative of the Chairman of the Joint Chiefs of Staff to the Secretary of State. In this role, he traveled to over 80 countries with the Secretary and participated in most of the Secretary’s meetings with foreign leaders.

Born in Japan and reared in Tennessee and Florida, Ambassador Harris graduated from the U.S. Naval Academy in 1978. He holds master’s degrees from Harvard’s Kennedy School of Government and Georgetown’s School of Foreign Service. His father served in the U.S. Navy, and was a veteran of both World War II and the Korean War. Ambassador Harris is married to Ms. Bruni Bradley, herself a career Naval officer.

V-SGL series page
www.nps.edu/sgls

Viewing link
www.nps.edu/web/video
Joint Artificial Intelligence Center Keeps Branching Out
(National Defense Magazine 3 Nov 20) … Yasmin Tadjdeh

When the Pentagon’s Joint Artificial Intelligence Center was stood up in 2018, it was established to bring together the Defense Department’s various AI programs and projects. Two years later, JAIC is pivoting to new mission sets, expanding its portfolio and more closely working with industry.

The organization is currently working on 30 different projects across six different areas including joint warfighting operations, warfighter health, business process transformation, threat reduction and protection, joint logistics and joint information warfare.

The center is built “around getting a spark going or getting a prototype or making a market in some way, and then handing it off for transition and scaling right to a customer,” said Nand Mulchandani, JAIC chief technology officer. “We’re now starting to demonstrate great and exciting success across those products.”

The joint warfighting mission initiative is the organization’s flagship product and is looking at means to transform the way the United States will go to war, Mulchandani said during an exclusive interview with National Defense on his first day back as chief technology officer after serving as the acting head of JAIC.

In late September, Marine Corps Maj. Gen. Michael Groen was confirmed by the Senate to serve as its director.

“Our early products … were really focused on kind of starter AI projects when it came to things like predictive maintenance and humanitarian assistance and disaster relief,” Mulchandani said. “The algorithms were not that hard. … [However,] joint warfighting is the hardest problem at the DoD for us to take on.”

The center is starting with technology such as human-machine teaming and decision support, Mulchandani said.

“There are different ways of displaying information, about communicating information, about absorbing information,” he said. “We’re spending time with our commanders, with training and education, etc., on how to absorb AI-enabled systems. And we want to do that in a very systematic, deliberate way where we start out with human-machine teaming, decision support, etc., and then work our way toward things like autonomy and others.”

Joint warfighting will contribute to many Pentagon efforts such as joint all-domain command-and-control and the Air Force’s Advanced Battle Management System program, he said.

In May, the center awarded the joint warfighting operations initiative’s prime contract to Booz Allen Hamilton. The contract has an $806 million ceiling.

However, the center would likely not spend all of the funding because the entire budget of the JAIC over a couple of years is around $800 million, Mulchandani said during a recent briefing with reporters. Despite the center being gung-ho about the initiative, a continuing resolution for fiscal year 2021 — which began Oct. 1 — could have an outsized effect on joint warfighting programs, he noted.

“What this really impacts … is new starts, our ability to start a bigger new project that we have been potentially forecasting for starting with new FY ’21 money,” he said. That will require some programs to be delayed.

However, JAIC “will be receiving some money as part of the CR that will allow us to kick-start some of these new projects and things along the way, and then scale them … when we get out of the CR mode” after a full-year appropriations bill is passed by Congress, he added.

JAIC had been planning for a continuing resolution for some time, Mulchandani noted.

“Many of our projects and products … have actually been pre-funded through much of the money that we got in FY ’20,” he said. “We have contracts and vendors and other things working months and months out into the new fiscal year. … We’re not in a crisis mode at all.”
Meanwhile, JAIC’s relationship with industry has continued to improve over the past two years, Mulchandani said.

When it was first stood up, much attention was put on what some perceived to be a reluctance from Silicon Valley to work with the Pentagon.

“A lot of people ask us [about] the whole thing with Google and Project Maven and whether that’s still a strained relationship, he said, referring to a 2018 incident where thousands of Google employees signed a letter objecting to the company’s work with the Defense Department’s Project Maven, a pathfinder AI effort to better analyze drone footage. Google subsequently backed out of the program.

However, JAIC collaborates closely with the tech giant now, he said.

“We’re working with Google on a number of projects directly ... whether it be health or other types … of products there,” he said. “We have contracts with Google that we’re working on, but all the other bigger vendors as well.”

Mulchandani said JAIC is working with all of the largest technology companies in Silicon Valley.

“Name an AI vendor and we either have work going on with them, or they’re involved in some way in some of the newer projects that we’re doing,” he said.

As the organization continues to work with industry, it is setting up initiatives to better take advantage of rapid acquisition, Mulchandani said.

It currently has partnerships with a number of contracting vehicle organizations such as the General Services Administration, the Defense Innovation Unit and the Defense Information Systems Agency. Additionally, legislation is currently in front of Congress that could grant JAIC direct acquisition authority.

“We obviously are very excited about that, [but] it’s not done yet,” he said. “When the final vote happens and we do get it, we’ll be very pleased and happy, and if we don’t get it, well, we’ll still be obviously continuing business with the partners that we have.”

The center is also working on an acquisition effort called Project Tradewind which is a way for JAIC and the Defense Department writ large to better reach out to small companies, he said.

Contract vehicles will be created that any organization across the department will be able to use to gain access to “teensy weensy, little companies that normally would hate to work with — or wouldn’t know how to work with — the DoD,” Mulchandani said. “They can use Project Tradewind’s acquisition frameworks to be able to interact with us in a very low overhead way.”

During remarks at the Defense Department’s Artificial Intelligence Symposium and Exposition, Secretary of Defense Mark Esper touted the work JAIC has done since its inception.

“We have come a long way since establishing the JAIC two years ago,” he said. “Today, more than 200 talented civil service and military professionals work diligently to accelerate AI solutions and deliver these capabilities to the warfighter. From helping the Joint Force organize, fight and win at machine speed, to enhancing wildfire and flood responses through computer vision technology, the JAIC is utilizing every aspect of AI as a transformative instrument at home and abroad.”

The center is lowering technical barriers to AI adoption by building a cloud-based platform to allow Defense Department components to test, validate and field capabilities with greater speed and at greater scale, he said.

“The goal is to make AI tools and data accessible across the force, which will help synchronize projects and reduce redundancy, among many other benefits,” he said.

JAIC is also working on ways to better train the Defense Department’s acquisition workforce to buy AI products, Esper noted.

The organization, in partnership with the Defense Acquisition University and the Naval Postgraduate School, was slated to launch an intensive six-week pilot course in October to train over 80 defense acquisition professionals of all ranks and grades. The trainees will learn how to apply AI and data science skills to operations, Esper said.

The Defense Department plans to request additional funding from Congress for the services to grow the effort over time, he said.
Dana Deasy, the Pentagon’s chief information officer, noted JAIC’s journey is still evolving. Meanwhile, the military is “generating positive momentum from our early days as AI pioneers toward a mature organization of AI practitioners,” he said.

The center is now starting to deliver real AI solutions to the warfighter while leading the Defense Department in AI ethics and governance, he noted.

Its budget is also growing. It went from $89 million in fiscal year 2019 to $268 million in fiscal year 2020, and the Pentagon plans to spend more than $1.6 billion over the next few years thanks to strong bipartisan support from Congress and Defense Department leadership, Deasy said.

The organization is already generating early returns on investment in its mission initiatives, from predictive maintenance to business process transformation, Deasy noted.

The center recently delivered an innovative engine health model predictive maintenance capability that is being utilized by Black Hawk helicopter maintainers from the U.S. Army’s Special Operations Aviation Regiment, he said.

Additionally, JAIC — via its business process transformation initiative — is delivering language-processing AI applications to the Washington Headquarters Service and the Pentagon’s administrative and financial management teams, Deasy said.

“These capabilities are automating the review of thousands of documents and memos for consistency, accuracy and compliance, thus increasing speed and efficiency while reducing manual, laborious processes,” he said.

The center is also laying down the foundations for the Joint Common Foundation, an AI development environment that will broaden opportunities for developers across the Pentagon to build and deliver artificial intelligence capabilities in a secure DevSecOps infrastructure, he said. According to the General Services Administration, DevSecOps promotes a cohesive collaboration between development, security and operations teams as they work toward continuous integration and delivery of products.

However, “while we develop and deliver these important near-term projects, we have to be ready for the contingencies of a changing and unpredictable operating environment,” Deasy said. “This is why I believe the true long-term success of the JAIC will depend on how the organization adapts and delivers real-world solutions when the strategic landscape and priorities change.”

The organization is already proving it can adapt via its Project Salus effort — which is named after the Roman goddess of health and well-being — that has helped with the federal government’s COVID-19 response, he said.

“Working alongside a team of private industry partners, the JAIC developed a predictive-logistics AI dashboard platform for the U.S. Northern Command that enabled National Guard teams to assist states and municipalities with mitigating panic buying and managing supply chains,” he said.

“That project went from concept to code in a matter of weeks. More importantly, it demonstrated the JAIC’s ability to support the emergent needs of a combatant commander and deliver real AI solutions during a national emergency.”


RESEARCH:

New Air Force 6th-Gen Aircraft Takes Flight with F-35

(Fox News 6 Nov 20) … Kris Osborn

The fact that the Air Force’s new 6th-Gen aircraft has taken to the skies raises too many interesting questions to engage at one time. Many might wonder, who built the one that flew already? What might it mean for the F-35 and F-22?
While the actual vendor responsible for producing the first Next Generation Air Dominance 6th-Gen stealth fighter to fly is not available for understandable security reasons, there are only a handful of vendors capable of engineering something like this. While specifics are not known or available, and no vendor has actually confirmed that a prototype actually exists, some of the main players likely capable of building a 6th-Gen aircraft might be Lockheed Martin, Northrop Grumman or Boeing, to name a few.

Lockheed and Northrop of course have extensive experience and expertise regarding stealth technology, an attribute any 6th-Gen fighter is most likely to incorporate. However, there is little value in speculating given the importance of secrecy to the project. After all, next to nothing is of course known about the new, fast-progressing B-21 stealth bomber slated for its first flight in the next year or two.

However, it takes little imagination to examine many of the most cutting-edge technical trends with a mind to their likely impact upon any kind of new 6th-Gen platform. One immediate and interesting question relates to the F-35, which the Air Force plans to fly and upgrade until 2070.

While early subcomponent prototyping and conceptual was underway over the last year, some raised the question as to whether it made sense to even build a new airframe given the promise and sophistication of the F-35. There are two interesting points here, one is that there likely are technological advances significant enough to inspire an interest in building an entirely new platform, and the other is the expectation that a huge priority will be placed upon 5th-to-6th Gen interoperability and massive amounts of continued F-35 modernization.

As for the first point, some early questions seem to have been resolved to a certain extent, given that a new 6th-Gen aircraft has already flown. Previous deliberations regarding a 6th-Gen fighter balanced themselves upon what may at the time have been the unknown maturity of various promising new weapons and technologies nearing a threshold of operational possibility. For instance, some now-in-development next-generation stealth technologies, including new radar-evading configurations, coating materials and advanced thermal-signature reduction are fast-approaching levels of combat readiness. Also, work on new stealth or artificial-intelligence-enabled sensors to ensure overmatch for decades to come may be showing promise as well.

Air Force developers seem to have come to the belief that new generations of stealth-fighter technology were sufficiently “approaching” if not “here,” inspiring a wish to build a new platform and push the current “art-of-the-possible” to the maximum extent.

This challenge, explored by a Naval Postgraduate School essay called "The 6th-Generation Quandry," posed the question as to whether it might be equally if not “more effective to postpone formal sixth-generation development until truly breakthrough advances emerge, while pursuing advanced variants of current, yet upgradeable platforms in the interim.

The 2016 paper, from the Naval Postgraduate School Acquisition Research Program, cites a handful of current systems showing significant long-term promise. The paper cites “new models of the F-35 optimized for air combat,” the emerging B-21, drone-launching C-130 “mother ships” and “weapons truck arsenal planes” are positioned to leverage current technological progress.

This issue, framed years ago by this essay, seems to have evolved in some interesting ways, at least to the point where the Air Force decided to go ahead and “build” a new 6th-Gen aircraft.

In and of itself, the decision answers some questions and seems to suggest that indeed sufficiently impactful new technologies were here or arriving to an extent justifying the interest in building a new jet. At the same time, the F-35 and F-22 are going nowhere.


Return to Index
Turkey’s Naval Expansion Doctrine Aims to Bring Greece, Cyprus to Knees - Analyst
(Alvah 3 Nov 20)

Turkey’s Blue Homeland doctrine, which lays claim to expansive territorial waters in the Aegean and Mediterranean seas, intends to submit Greece and Cyprus to Turkish ambitions in the region, Ryan Gingeras, professor at the U.S. Naval Postgraduate School, said in an article for Greek newspaper To Vima.

Turkey aims the realisation of its contemporary potential as power and firm control over the eastern Mediterranean and its vital waterways, as exerted in the Blue Homeland, are key to this goal, Gingeras said.

"From this vantage point, Greece and Cyprus are critical obstacles to be overcome," he said.

Turkey has been in a bitter dispute with Greece and Cyprus over maritime borders and drilling rights in the eastern Mediterranean, in addition to an ongoing row over the maritime borders of the Aegean.

Turkish President Recep Tayyip Erdoğan has adopted aggressive policies, sending seismic vessels, accompanied by warships, to disputed waters and signed a maritime deal with Libya that ignores territorial waters around Cyprus and a number of Greek islands.

Even Turkey's opposition supports Erdoğan's eastern Mediterranean stance, Gingeras said.

"The depths of this consensus in Turkey suggest that Blue Homeland is no ploy. It is a vision that intends to leave Greece and Cyprus little choice but to surrender," he said.


Turkey Remains Vital Route for Drug Trafficking
(Alvah 5 Nov 20)

Turkey sits along a well-known Balkan route for Afghan heroin destined for the European markets. Drugs have also been smuggled into the country from Brazil and Colombia in recent months. For decades, Turkey has grappled with serious challenges related to the illicit trade and use of narcotics.

Turkish authorities seized 18.5 tons of heroin, 80.7 tons of cannabis, as well as 1.5 tons of cocaine in last year's operations. They also confiscated 566 kilogrammes of methamphetamine and more than 1.2 tons of a cheap synthetic cannabinoid colloquially known as bonzai. Authorities also seized 8.9 million ecstasy pills and 22.7 million pills of captagon, a psychostimulant particularly popular in the Middle East, in nationwide counter-narcotics operations.

Despite the substantial amounts of illegal drugs seized in recent years, the number of drug traffickers operating in Turkey appears to continually increase. Many of these local networks have connections to Turkish drug trafficking groups operating in Europe.

The smugglers arrested by Turkish authorities in recent years originated from a considerable number of countries and reveal that foreign traffickers have also been operating in Turkey. The illegal drug trade in Turkey thus has a transnational character.

Given Turkey’s geographical location as a land bridge between supply countries in the East, such as Afghanistan, and key markets in nearby Europe and the Middle East, it is hardly surprising that it serves as a key vector of the lucrative drug smuggling route.

Although drug cultivation within Turkey has decreased since the 1970s, after its authorities put effective licensing schemes for poppy cultivation into force, Turkish traffickers have grown in power, global reach and market control across Europe – particularly in heroin trafficking, according to a 2017 Brookings report.
Turkey sees drug trafficking as a matter of national security. The drug trade has been a key source of terrorism financing in Turkey, especially for the Kurdistan Workers’ Party (PKK), according to the Turkish authorities. The PKK has been fighting an insurgency against the Turkish state for four decades.

In June, Turkey launched a cross-border air and ground campaign to target the PKK in various regions of northern Iraq’s mountainous Qandil area in response to an increase in attacks against Turkish military forces at home.

Since then, Turkey has intensified anti-drug operations across its Kurdish-majority southeast, so far confiscating several million cannabis roots and tonnes of cannabis, according to reports published by pro-government news agencies.

However, recent reports on the relationship between Naji Sharifi Zindashti, a prominent Iranian heroin smuggler, and Burhan Kuzu, a former deputy of the ruling Justice and Development Party (AKP), reveals how complex of drug trafficking is in the country.

Zindashti was arrested in Istanbul for possession of 75 kg of heroin in 2007, only to be mysteriously released in August 2010. Kuzu is currently facing charges of pressuring the judiciary for the Iranian drug lord’s prison release.

Current Turkish drug policies are not effective, comprehensive or integrated. The volume of narcotics flowing through Turkey has increased significantly in recent years. Drug traffickers in the country are estimated to generate approximately $15 billion annually.

Drug use has been on the rise, with a corresponding increase in the number of addiction cases. The drugs most frequently consumed are cannabis and bonsai, but consumption of heroin, a highly dangerous and addictive substance, is rising as well, according to a separate Brookings report.

Ryan Gingeras, associate professor at the Naval Postgraduate School and an expert on Turkish and Middle East history, said the relative weakness of Turkish money laundering laws play a role in the problem, citing the example of the Turkish government’s lifting of declaration limits on the amount of money inbound travellers were allowed to carry on their person.

The move in 2015, ostensibly to encourage foreign investment, raised concerns among international watchdogs including the Financial Action Task Force, which has long lobbied Turkey to strengthen its laws against money laundering, he said.

Gingeras also wrote in Foreign Affairs: “Over the last ten years, there has been a dramatic expansion in illicit trading and smuggling across the country. Part of the uptick has to do with the outbreak of the Syrian civil war in 2011 and the worsening state of Iraq’s internal affairs after the rise of the Islamic State (ISIS). In 2014, more than 8,000 individuals were taken into custody on charges of heroin smuggling, a twofold increase since 2009 and a fivefold increase since 2001.”

An increase in drug seizures does not necessarily indicate a change of trade flow through a country nor that its authorities are taking drug trafficking more seriously. Since there is no independent method of calculating trade volume, large seizures can either account for a large or small percentage of the flow.

In short, it is genuinely difficult to determine whether Turkey is as important or more important to the drug trade than it was in the last two decades.

Another issue to consider is the ongoing politicisation of Turkey’s Department for Combating the Drug Trade and Organised Crime. This department was clearly gutted after 2014 and remains somewhat tainted by its association with Gülenists, but still plays a big role in Interior Minister Süleyman Soylu’s morality-driven approach towards narcotics.

A 2017 report by Global Financial Integrity estimated the global drug trade to be somewhere between $426 and $652 billion a year. While the huge black market remains, it will likely continue to be a profitable business for criminal organisations and outlawed groups like the PKK.

The global war on drugs, driven primarily by the United States and its European allies, has been waged for almost 60 years without any success in reducing consumption nor the harm caused by the criminals who profit from it.

Successive Turkish governments have gone along happily with this drug war, and their policies are unlikely to change until global attitudes do. Without the political will to think of new policy approaches,
the drug war will likely continue to generate political capital for politicians and profits for criminal organisations.


Return to Index

ALUMNI:

Who is Mark Kelly? Things to Know about Arizona’s Democratic Senate Candidate

(Fox News 3 Nov 20) … Julia Musto

Arizona Democratic Senate candidate Mark Kelly likes to say he comes from a tradition of service. As he reminded voters during the Oct. 6 debate against Republican incumbent Sen. Martha McSally, his parents were both police officers in West Orange, New Jersey, where he and his twin brother Scott were raised.

Kelly, 56, graduated from Mountain High School in 1982 before attending the U.S. Merchant Marine Academy for four years and receiving a Bachelor of Science in marine engineering. In 1994, Kelly received a Master of Science in aeronautical engineering from the Navy's postgraduate program.

His father, Richard, was an Army veteran in the 82nd Airborne Division prior to his career in law enforcement.

In 1987, the now candidate became a naval aviator, serving in Japan and making deployments to the Persian Gulf in Operation Desert Storm.

In 1993, he attended the U.S. Naval Test Pilot School. His service has earned him almost two dozen military-related medals of commendation.

Three years later, NASA selected the brothers to be Space Shuttle pilots and Kelly flew his first four flights aboard the shuttle Endeavour.

Five years later, Kelly piloted the Space Shuttle Discovery -- the second "Return to Flight" mission following the loss of Columbia in 2003. This was after being successfully treated for colon cancer in 2007.

In 2008, Kelly flew his first mission as a commander and, after his final mission in 2011, Kelly announced his retirement both from NASA and the Navy.

Kelly's wife, former Arizona Democratic Congresswoman Gabrielle Giffords, was targeted in an assassination attempt at the beginning of the same year. Giffords sustained a severe traumatic brain injury from the attack.

The couple now live in the southeastern city of Tucson. They have two daughters.

Since his retirement, Kelly has authored multiple books — including a biography describing Giffords' shooting in detail — and has co-founded the near-space exploration company World View Enterprises.

In 2013, the couple founded the organization GIFFORDS as well as a political action committee named Americans for Responsible Solutions. The committee's mission is to support the Second Amendment while providing solutions to gun-related violence.

While Sen. McSally has told Arizonans she was the "Second Amendment senator," Kelly said he has owned guns and that the issue was personal for him.

A proponent of universal background checks, Kelly argued that stronger gun laws are "not inconsistent" with the Second Amendment.

"Our rights and traditions are so important. [The] Second Amendment is so important," he said. "But we can never let a bunch of kids in [their] classroom, you know, get killed and think there's nothing we can do about it."

Kelly announced his candidacy in February 2019, with a platform that includes plans for health care, veterans, the economy, border security and immigration, education, social justice, climate change and national security.
Kelly has expressed support for providing a public health insurance option and building on the Obama-era Affordable Care Act.

Although Kelly pledged not to accept money from corporate political action committees, McSally has blasted her opponent on the issue, calling him Senate Minority Leader Chuck Schumer's "star recruit" and giving him the Trumpian moniker "Counterfeit Kelly" for most of the debate.

Kelly, who has led the race in the past couple of months, rejected the labels, arguing he would be more independent in Washington, D.C., than McSally.

Demographics in the Copper State have changed with the introduction of younger voters – who tend to skew toward liberals – and Latinos, making the battleground an election toss-up.

https://www.foxnews.com/politics/who-is-mark-kelly-12-things-to-know-about-arizonas-senate-candidate

Autonomous Drone Maker Skydio Adds Key Product and Engineering Executives to Growing Team
(Valdosta Daily Times 5 Nov 20)
(UAS Weekly 5 Nov 20)

Skydio, the leading US drone company and world leader in autonomous flight, announced the addition of three key product and engineering leadership hires as it continues its rapid growth into the enterprise and public sector markets. Roy Goldman is appointed Head of Product Management, Ryan Reading appointed Head of Software Engineering and Mike Ross appointed Senior Director of Product Management. These critical hires come on the heels of the company’s recent $100M Series C raise to fund the next phase of product development for the enterprise, public sector and defense markets. Roy, Ryan and Mike bring industry leading R&D expertise in IoT, cloud computing, autonomy, security, and aviation. They will play critical roles in realizing the company’s vision for the first-of-its-kind integrated enterprise autonomy stack.

“Our breakthrough technology is a direct reflection of an incredibly talented team that spans hardware, software, and autonomy. I’m very excited to add Roy, Ryan, and Mike’s leadership and expertise to our team. In particular, their track record of delivering category-leading enterprise solutions with cloud connected hardware will be key for us in solving the challenges for drones to realize their potential in the enterprise,” said Adam Bry, CEO of Skydio. “Software is now the dominant factor for drones, and Skydio’s autonomy solutions are re-defining the industry by fundamentally changing the way people use drones. Expanding our team has enabled us to lift our skill sets in further areas such as IoT, automation and the cloud.”

Goldman comes to Skydio with over two decades of experience within product management of high-tech solutions for enterprise. He has held executive roles including SVP of Software & Product at Carbon, Inc., and Director of Software Development at Tesla. Goldman graduated from Stanford University with his PhD in Computer Science.

“I’m thrilled to join Skydio. With game-changing autonomy, Skydio’s drones are transforming manual, error-prone tasks into revolutionary, cost-effective solutions across a broad range of industries. I am eager to bring my experience with innovative software-driven, cloud-connected devices and apply it to Skydio’s exciting opportunities ahead. Existing solutions are based on a manual, hardware-centric design that makes them hard to use and easy to crash, limiting their applicability and increasing cost. Customers are clearly looking for easier to use solutions that deliver real automation. Skydio’s vision for an integrated enterprise autonomy stack will respond to this need and unlock the massive untapped potential of drones,” said Roy Goldman, Head of Product Management at Skydio.

Reading has over eighteen years of experience working in high-tech engineering for enterprise IoT, cloud and network security solutions. Reading joins Skydio from Samsara where he has been VP of Engineering and more recently VP/GM of Fleet Safety. Previously, he led Cisco Meraki’s MX security
team where he focused on advanced network security and spent several years in the Intelligence Community designing high security communication systems. Reading graduated from Missouri S&T University with his Bachelor’s degree in Computer Science. He is looking forward to leading the software team at Skydio and in doing so bringing the Skydio platform to life.

Ross comes to Skydio directly from Samsara, the fastest growing IoT company in the world, where he led the Telematics Product Group focused on cloud-connected fleet management hardware, tools, and applications. Prior to Samsara, Ross was a fighter pilot and experimental test pilot in the United States Navy, where he helped lead the carrier suitability flight test of the F/A-18 A-F, X-47B, and F-35C. He graduated from Stanford University with a Bachelor’s degree in Computer Systems Engineering, and holds a Master’s degree in Systems Engineering from the United States Naval Postgraduate School. In addition to his Part 107 certificate, Ross holds an Airline Transport Pilot Certificate, and both multi-engine and seaplane ratings. Ross’ professional background provides him the perfect blend of enterprise IoT and deep aviation expertise, allowing him to guide the development of Skydio’s integrated enterprise autonomy stack, focusing specifically on connected flight operations.

https://uasweekly.com/2020/11/05/skydio-adds-key-product-and-engineering-executives-to-growing-team/

Return to Index

The Chief’s Desk
(Signalsas.com 6 Nov 20) … Chief Scott Freitag

I’ve said it before and I will say it again, Operations personnel in the fire service are squared away operationally. What we lack is the same level of preparedness when it comes to the administrative part of the job. Conversely, I would say that our Non-Operations personnel are squared away administratively, but if we had to deal with some sort of administrative crisis, I believe we would find some gaps. This, in my opinion, applies to the private sector as well.

We are good at what we repeatedly do. Whether Operations or Non-Operations, we train sets and reps related to our primary job function. Unfortunately, at least from the operational perspective, we tend to focus our sets and reps on response. Don’t get me wrong, emergency response is the low frequency/high hazard part of a firefighter’s job that can cost them their lives, or if injured, their careers. We have to be default aggressive and ready to deal with any number of different high stress, high hazard events we may respond to throughout the shift. Everyone goes home means everyone trains to the point that we can respond both physically and mentally in the face of chaotic situations.

I’ve used the term ‘rapid cognition’ in a previous writing. Training for high-stress environments means training to recognize a situation within seconds and then decide how to respond appropriately based on the information you have. It’s not an easy thing for most people to do, but for firefighters, it’s a skill we begin to develop in recruit academy and continue to hone over the years.

Jackson Nickerson, Ph.D., of Washington University presented on the topic of strategic thinking during my Executive Leaders Program through the Naval Post Graduate School. According to Dr. Nickerson, it is our sympathetic nervous system that drives our fight, freeze, or flight instincts. It is our parasympathetic nervous system that allows us to remain cool, calm, and collected. Our sets and reps in training, as well as on the incident scene, allow us to rapidly identify and address an emergency event. This means we are able to override our sympathetic system’s tendency to react and allow our parasympathetic system to remain engaged and respond.

This is all fantastic for the part of our job that includes emergency response. However, we do not train the sets and reps we need to maintain the engagement of our parasympathetic system when not on an emergency scene. Nor do we focus training on the high frequency/low hazard part of our job –
administration, e.g. reports, paperwork, scheduling, etc. For those of you looking to promote in the coming years, you need to train for all aspects of your job, not just the fun part. There I said it, paperwork is not fun, trying to maintain your composure and maintain civil discourse no matter the situation, is not fun. However, both are required as you move through the ranks in all divisions within our agency.

If you think about times in your career when you’ve reacted, rather than responded, to an outside influence, I would guess that more often than not your reaction was in an administrative or non-emergency situation. It is amazing that we can control our internal systems enough to respond during an emergency event, but not during a tense dialogue in the station or at the office.

I’ve personally experienced this more than once in my career. As a matter of fact, I had to count higher than ten so I took my shoes off. I’ve improved my ability to respond rather than react over the years, but I’m certainly not perfect. I’ve been able to improve through both introspection as well as by performing a personal after-action following situations where I have lost my cool.

It is important to develop tools that work for you. There are books available that may provide nuggets, listening to some podcasts may help, and/or talking with others. That said, don’t read a book and haphazardly employ the principles or concepts. Trying to flip a switch and quote self-help books will not help you on your journey. You have to take the information, truly internalize it, and then decide how best to employ what you’ve learned. It takes emotional intelligence, intestinal fortitude, and sometimes a really good filter to realize some level of success. You will, at times, find yourself in situations where it is best to say, “Can we take 15 and then reconvene?” That is a good tool that more people should use in an effort to de-escalate a situation or to de-escalate their rising emotions.

Training for the administrative side of the job requires commitment. I cannot count the number of times over the years that I’ve read an incident report and wondered if the person writing it was on the same scene as me. As an Air Traffic Controller in the military, and as a paramedic student, I learned the importance of communicating clearly and completely; I’m still working on the concise part. Honestly, my paramedic reports were complete, concise, and clear, as were my incident and investigative reports.

When it was my responsibility to fill out a report, I made sure I sat down to write the narrative as soon as possible after the call. By sitting down as close to the incident as possible to complete my report I was able to clearly recall and articulate what happened. Remember, the report you write is for you, not anyone else. It is the only document you will be able to refer to if you are called to court. Society today is more litigious than when I started, so we are seeing far more record requests for your reports.

The more mundane reports are just as important, e.g. daily activity logs, training reports, inspection documentation, etc. All seem less important than your incident report. However, when someone reads your incident report stating that you performed a procedure or task, the next documents they will request are your training records. They want documentation showing that you were properly trained and qualified to take that action.

TeleStaff seems the bane of many officers’ existence. If you are not up on the program, or diligent with your inputs, someone’s pay, vacation, or sick time are likely to wind up incorrect. It is important that you take the time now to learn how the program works, and pay attention to detail.

Paying attention to detail is really the bottom line regarding the paperwork side of your administrative functions. Paperwork is not the fun or sexy part of being in Operations, but if you want to promote, you have to be able to clearly write and document.

We have a lot of openings in the coming years both in Operations and Non-Operations. If you’re in Ops, start spending a little more time on learning to control your emotions in non-emergency situations, and pay attention to the small things – they actually do mean a lot. If you are in Non-Ops, make sure you spend some time thinking through what could go wrong in your division, and how you would address an emergency issue should one occur. Focus on emotional intelligence as well, not just suppressing emotional outbursts, but how you deal with conflict and difficult conversations.

Sets and reps will help you respond in an emotionally-charged environment. They will also help to ensure you pay close attention to the detail required for all administrative functions of your respective positions.

https://www.signalsaz.com/articles/the-chiefs-desk-november-6th/
Trussville Rotary Veterans Day Speaker Announced
(St. Clair Times 8 Nov 20)

The Trussville Rotary Daybreak Club has announced its special Veterans Day speaker.
On Wednesday, Nov. 11, Navy Capt. Bobby Markovich, commander, Strike Fighter Wing, U.S.
Pacific Fleet will speak to the club via Zoom.

Markovich graduated from Andrews University, Berrien Springs, Michigan, in 1990 with a Bachelor
of Technology degree in aviation. After completion of Officer Candidate School, he was commissioned in
August 1995. He earned his wings of gold at Naval Air Station Meridian, Mississippi, in May 1997.

Markovich supported Operation Southern Watch and Operation Enduring Freedom on two separate
cruises during his first operational tour with the Warhaws of VFA-97.

He graduated from the Fighter Weapons School as a strike fighter tactics instructor in 2002 and
served as the standardization officer at STRIKE, Naval Strike and Air Warfare Center, Fallon, Nevada.

During his time at STRIKE, a record number of air wings were trained in preparation for Operation
Iraqi Freedom. Markovich also volunteered to spend five months at the Combined Air Operations Center,
PSAB, Saudi Arabia, where he worked nights on the operations floor.

Markovich went back to the fleet in 2005 as a training officer with the Vigilantes of VFA-151, where
he deployed in support of Operation Iraqi Freedom. In April 2006, he reported to the Stingers of VFA-
113, as a department head, where he deployed two additional times to the Western Pacific.

In May 2008, Markovich reported to COMNAVAIRPAC, Naval Air Station North Island, San Diego,
as the F/A-18 readiness officer for the West Coast.

In the fall of 2010, Markovich reported to the Rampagers of VFA-83 as executive and commander
officer, where he deployed in support of Operation Enduring Freedom. In July 2013, he reported to
COMUSNAVCENT, Bahrain as the future operations director. In August 2014, he reported to the
National Defense University, Eisenhower School, where he earned a Master of Science in national
resource strategy.

While assigned to the Joint Staff, J5, he served as a political-military planner in Western Hemisphere,
Homeland Division, Defense Support of Civil Authorities; the J5 lead to the Chairman's New
Administration Transition Team; and the executive assistant to the Vice Director for Strategic Plans and
Policy. He also earned his Executive Master in Business Administration from the Navy Postgraduate
School. Markovich assumed duties as Commodore for Strike Fighter Wing U.S. Pacific Fleet based at
Naval Air Station Lemoore, California, on May 7.

During his career, Markovich has accumulated 7,300 flight hours (civilian and military) and 925
arrested landings. His military awards include various meritorious individual and unit awards, including
two Meritorious Service Medals, six Strike Flight Air Medals, Joint Commendation Medal, six Navy and
Marine Corps Commendation Medals with Combat V.

https://www.annistonstar.com/the_st_clair_times/trussville-rotary-veterans-day-speaker-
announced/article_5eb16efe-21ec-11eb-8764-ef8787fe2289.html