

#### VISION STATEMENT

The Integrated Precision Warfare (IPW) Division of NDIA is the premier professional organization dedicated to advancing the art and science of precision engagement concepts and technologies.

IPW's mission is to advance offensive and defensive precision engagement concepts and technologies. IPW facilitates classified dialogue from the strategic to operational to tactical and technical levels between industry, academia and government organizations regarding our Nation's strategic competition.



Dr. Will Roper,  
Asst AF Sec (ATL)



Mr. James Guerts,  
Asst Navy Sec (RDA)

## Advanced Precision Strike for the Multi Domain Fight

By John Sordyl, Integrated Precision Warfare Secretary

The Precision Strike Association (PSA) and the Strike, Land Attack, Air Defense Division (SLAAD) have merged into the Integrate Precision Warfare (IPW), a new division of the National Defense Industrial Association (NDIA).

And IPW is pleased to announce a re-designed Precision Strike Technology Symposium (PSTS-20) that reflects the need to take all necessary precautions and social distancing measures for the safety of the attendees as the coronavirus pandemic runs its course. So join us as we convene virtually on 20 October 2020 in an unclassified webinar.

While COVID-19 has altered the operation of the precision strike community, the challenges posed by China and Russia remains unabated. Under the theme of **Advanced Precision Strike for the Multi Domain Fight**, PSTS-20 will focus on the tactical and technological challenges faced by our warfighters and the defense industry in this era of great power competition.

The agenda for this year's unclassified webinar is built around a half-day, interactive virtual session featuring the keen observa-

tions of Service Acquisition Executives. **Dr. Will Roper** will join us to provide the USAF perspective while **Mr. James "Hondo" Guerts** will provide the USN view.

Meanwhile, **ADM Scott Swift (USN, Ret)**, will provide a perspective on the technical challenges in the Pacific theater. NDIA officials will lead a discussion on the health and readiness of the Defense Industrial base.

PSTS-20 will also feature two special events: bestowing of the coveted William J. Perry Award to Dr. Roper, as well as announcement of the prestigious Johnson Award to Dr. Duane Brown and Mr. Danny Searle.

PSTS has always provided a classified forum to discuss many of the sensitive aspects of the challenges faced by the Precision Strike Community, and IPW feels this is remains a critical and irreplaceable venue.

Therefore, PSTS-20 will be conducting a classified roundtable that will be recorded, with the classified DVDs available for purchase.

This SECRET//NOFORN roundtable will include essential technical briefs that showcase up-and-coming capabilities and enabling technologies designed to mitigate the issues facing our warfighters today. From NAVAIR's speed-to-the-fleet initiatives, manned-unmanned teaming for air combat, hypersonic weapons strategy, to defense against the new technologies being fielded by our adversaries, the SECRET//NOFORN

**Published by:**

Integrated Precision Warfare  
 Division of NDIA  
 2101 Wilson Blvd, Suite 700  
 Arlington, VA 22201  
 tel: (703) 522-1820  
 www.ndia.org/divisions/integrated-precision-warfare

**Executive Committee:**

*Chair:* Ken Masson  
*Vice Chair:* Mark Converse  
*Secretary:* John Sordyl  
*Advisory Liaison:* Earle Rudolph  
*Communications:* Jeff Braun  
*Offense Committee Chair:* Chris Sprinkle  
*Offense Committee Co-Chair:* John Wilcox  
*Defense Committee Chair:* Dan Shaffer  
*Defense Committee Co-Chair:* Joseph Glebocki  
*C2/IBMIKC Committee Chair:* Matthew Klunder  
*C2/IBMIKC Committee Co-Chair:* Jeffrey Davis  
*Programs Committee Chair:* Kerrin Neace  
*Programs Committee Co-Chair:* Kurt Chankaya  
*Programs Committee Director:* Jen Thompson  
*EXCOM Advisor:* Charlie McCullough  
*EXCOM Advisor:* Marc Tang  
*EXCOM Advisor:* John Dolan  
*EXCOM Advisor:* David Uzzell  
*NDIA VP:* Dave Chesebrough  
*NDIA Director:* Kimberly William

**Board of Directors:**

Michael Bawden, Sandia National Laboratories • Dana Beyeler, Ellwood National Forge • Peter Bloom, Raytheon • Jeffrey Braun, Systems Planning and Analysis • LTC Ken Britt, USA (Ret), Army G-8 contract support • Chris Brunner, P&W • Kurt Chankaya, Lockheed Martin • Mark Converse, Cypress International • Harvey Dahljelm • Bill Dalecky, Pratt & Whitney (Emeritus) • Brig Gen Andy Dichter, USAF (Ret), SPA • CAPT Jaime Engdahl, USN (Ret.), NGC • Andy Erickson, Los Alamos National Laboratory • Kevin Fesler, Aerojet Rocketdyne • CAPT Christopher Flood, USN (Ret.), BAE Systems • Ken Gele, Lockheed Martin • Joe Glebocki, Aerojet Rocketdyne • MG Paul Greenberg, USA (Ret) • Jeff Haupt, The Boeing Company • Byron Jenkins, Lockheed Martin MFC • Suzy Kennedy, JHU/APL (Emeritus) • Maureen Koerwer, Harris Corp. • RADM Walter M. Locke, USN (Ret) (Emeritus) • David Lyon, U.S. Army Research Laboratory • Ken Masson, NGC Innovation Systems • Barry Maxwell, Kaman Precision Products • Andy McHugh, Tekla Research (Emeritus) • Bryan Mendiola, Excelis • Col John Meyer, USAF (Ret.), Synergy • Mark Mishler, L-3 Fuzing & Ordnance Systems • Thomas Murphy, Raytheon • Kerry Neace, JHU-APL • Phil Pardue, JHU-APL • Jim Pennock, MBDA • John Polcha, Leidos • Justin Rerko, MBDA • COL Dave Rice, USA (Ret), American Defense • Earle Rudolph, MBDA • Dick Rumpf, Rumpf Associates Int'l (Emeritus) • Wayne Savage, Raytheon (Emeritus) • Andrew Schwarz, RIX Industries • John Sordyl, Williams International • Dale Spencer • Mike Strano, Honeywell • Marc Tang, Northrop Grumman • David Uzzell, Boeing • Santiago Vaca, S Vaca & Associates • Dr. John Walter, JHU/APL

**Advisory Council:**

CAPT David Baird, USN/OPNAV • T. Gordon Brown, U.S. Army Research Laboratory • Buck Buchanan, PEO(W) • Val Frunza, NAVAIR • Maj Dan "Otis" Harper, USAF • LtCol Chuck Kelly, USMC (Ret), OSD (AT&L) • Stephen Klein, Air Force Institute of Technology • LTC Frank Leija, USA • LTC Jeffrey Munn, USA • CDR Eric Taylor, USN • Maj Ryan Thompson, USMC • Col Mark "Smash" Van Brunt, USAF • Maj Ryan Welborn, USMC

The Precision Strike Digest is published quarterly. Correspondence should be sent to the above address. The Association assumes no responsibility for unsolicited materials; these require return postage. Reproduction in whole or part is authorized with the appropriate credit. Copyright © 2020 by the Precision Strike Association, Inc. Postmaster: Please send any address changes received to the location identified above.



# Chairman's Column

2020 marks the exciting inaugural year of Integrated Precision Warfare (IPW), even

under the uncertainty of a pandemic.

We see IPW's mission as even more critical under the lockdown orders where the channels for the free flow of ideas among industry, academia, laboratories and the government are for all intents purposes severed.

As the world stays inside to ride out the coronavirus, global threats continue to march onward, taking large strides while the global population is stricken with a different fear.

The Precision Warfare community needs to maintain the watch, tending the advanced technology store and ensuring America and our Allies are prepared to deter and counter the opportunistic threats from China, Russia, Iran and North Korea.

It is my honor to introduce the new Integrated Precision Warfare organization chartered to tackle the pressing all-domain threat challenges facing our Nation.

In January, IPW was created by the merger of two National Defense Industrial Association (NDIA) affiliates: the Precision Strike Association (PSA) and the Strike, Land Attack, and Air Defense (SLAAD) Division. Today, IPW convenes these two previously separate communities under a common mission.

Building on the strong heritage of the PSA and the SLAAD Division, IPW is poised to offer the best of both organizations in large classified events and more intimate examinations of critical kill-chain, offensive strike and force defense challenges.

The IPW Community is leveraging its unique position to provide solutions through available technologies, materials and processes needed for

rapid transition to Warfighting capability. Join us and participate in meeting the global threat!

NDIA and IPW are honored to play a critical role in shaping the cutting-edge capabilities for our combat forces around the globe and to reestablishing US preeminence in conflict.

IPW's classified roundtables, large-scale classified symposia and in-depth cross-industry deep-dives promote the creative exchange of ideas and collaboration on solving the most stressing challenges to our National Defense.

IPW is committed to providing DoD leadership with the combined knowledge and expertise of the aerospace and defense industrial base on what is in the art of the possible today and how to focus on the key challenges of tomorrow.

While COVID-19 threw a monkey wrench our way in March, forcing cancellation of the 2020 Precision Strike Annual Review (PSAR), we are looking forward to the Precision Strike Technology Symposium (PSTS-2020) on October 20.

PSTS-20's theme is "*Advanced Precision Strike for the Multi Domain Fight*" and will focus on the threats, gaps and technological advancements that the combined IPW community is wrestling with. The symposia will explore DoD technology development efforts to rapidly deliver winning capabilities to the Warfighter. This is an opportunity to participate in the discussion and help shape the national response to this existential challenge. Aside from lively sessions, IPW will also be presenting the 24th annual William J. Perry Award and the Richard H. Johnson Trophy.

We look forward to your participation in IPW activities. When Government, Industry and Academia contribute to rejuvenating America's

See **Chairman's Column**, cont. on pg. 6

## Intro to NDIA's Integrated Precision Warfare

Integrated Precision Warfare (IPW), a new division of the National Defense Industrial Association (NDIA) in 2020, is a world-class organization dedicated to advancing the art and science of offensive and defensive precision engagement concepts and technologies.

The IPW Division focuses on DoD's kill chains by supporting the development of systems and networks that find, fix, track, target, attack, and assess hard and soft targets via both kinetic and non-kinetic means.

IPW provides an ethical environment for government, industry, and academic leaders to collaborate, promote national defense policy and strategy, rationalize capabilities with available technology, and to advocate for investment in critical science and technology.

IPW, a coalition of military, government, academic and industry subject matter experts, is organized as a not-for-profit, tax-exempt division under NDIA.

### Integrated Precision Warfare (IPW) Mission Statement:

IPW Division is the premier professional organization dedicated to advancing the art and science of precision engagement concepts and technologies. IPW's mission is to advance offensive and defensive precision engagement concepts and technologies.

To facilitate this mission, IPW provides an ethical environment for government, industry, and academic leaders to:

- Communicate and collaborate on solving critical issues facing the warfighter today and in the future.
- Discuss and expound upon on national defense policy and military strategy.

- Rationalize required military capabilities with the broad range of available technology and systems.
- Advocate for investment in critical science and technology areas in order to further the effectiveness of precision engagement operations.

IPW facilitates classified dialogue from the strategic to operational to tactical and technical levels between industry, academia and government organizations regarding our Nation's strategic competition.

IPW builds on the success of its long-standing, NDIA-affiliated predecessors: Precision Strike Association (PSA) and Strike Air Land Attack Air Defense (SLAAD) Division.

IPW brings Military, Government, Industry and Academia to a common forum to solve issues across joint, multi-domain kill chains in the era of great power competition.

IPW provides collaborative classified venues to critically consider enabling concepts and technologies supporting the integration of force across the entire (offensive and defensive) spectrum of warfare via both kinetic and non-kinetic means.

IPW is proud to continue marquee programs of its predecessors including: the Annual Review, the Technology Symposium and the Executive Roundtable Sessions.

### IPW Annual Review

The IPW Annual Review is a SECRET//NOFORN conference held annually in the early spring that focuses on national-level strategy, policy, guidance, and funding priorities as they pertain to precision warfare, as well as the current and assessed near-future state of competitor nations and potential adversaries through intelligence briefings.

Additionally, the Annual Review is an event where truly tough issues are tackled, including acquisition reform (success stories to learn by as well as failures and proposed solutions), adversarial technological breakouts (what we can learn from the successes of our potential adversaries and how we can catch up), shortening the development cycle (risk-informed decision-making), and many other topics.

The Annual Review provides context for the precision warfare community by inviting speakers at the top of Government leadership to explain the "so-whats" of top-level guidance such as the National Security Strategy, National Defense Strategy, National Military Strategy, Nuclear Posture Review, Missile Defense Review, Quadrennial Defense Review, National Defense Authorization Act, and other related guiding policies.

The Annual Review typically features distinguished speakers from top leadership positions including the Secretary of Defense, the Vice Chairman of the Joint Chiefs of Staff, Combatant Commanders, and members of Congress.

### IPW Technology Symposium

The IPW Technology Symposium (IPWTS) is a SECRET//NOFORN event that will combine PSA's PSTS and SLAAD's IAMD symposiums into one comprehensive event. Starting in 2021, IPWTS will be held annually in the autumn in the greater Washington DC area that focuses on the tactical and technological challenges faced by our warfighters and the industry.

Technology Symposium topics include: current warfighting chal-

See **Intro to IPW**, cont. on pg. 7

## 2019 Johnson Technical Achievement Award Bestowed

The Precision Strike Association (PSA) was pleased to present the 11th Annual Richard H. Johnson Technical Achievement Award and Johnson Trophy to Wayne Willhite and William L. Thomas at the 2019 Precision Strike Technology Symposium.

The Johnson Award recognizes outstanding personal technical achievement resulting in significant contribution to precision strike systems. Like Dick Johnson, for whom the award is named and is the first recipient, their accomplishments include stellar work on a large number of precision strike systems.

In particular, the Johnson Award jury noted their contributions to Net Enabled Weapons (NEW) technology, going beyond program boundaries to enable interoperability and open information exchange, ushering in dramatic new capabilities for operational forces. NEW spans multiple launch platforms, targeting systems, and guided weapons.

Wayne Willhite is recognized as a mentor who shares his insight, and in many cases, gives credit to others. From 1985 to 2018, he served in various roles supporting the US Navy's precision engagement technology. He supported initiatives that spanned many systems, including data flow validation, image process-

ing, and the operational validation of complex strike systems. This work positioned him to be a leader in creating the J-11 message set and then in establishing other means to validate NEW systems as an open architecture.

He has previously been recognized with a number of awards and honors, including the Meritorious Civilian Service Award, NAVAIR Fellows, the L.T.E. Thompson Award, and the Michelson Laboratory Award.

The work of William L. Thomas for the U.S. Air Force has impacted multiple generations of precision-guided weapons, both air-to-ground and air-to-air, and he has made personal technical contributions to many systems. His USAF career included joint weapons, which have enhanced operations across the DoD and a host of allied nations.

From 1984 to 2019, he served in various roles in precision strike, including work on BOXOFFICE, the USAF predecessor to AIM-9X, Wind Corrected Munitions Dispenser, and Small Diameter Bomb.

Thomas is the recipient of other prestigious awards and honors, including the 2018 AFLCMC Technical Leadership Award.

The other winners of the prestigious Richard H. Johnson Technical Achievement Award include: Robert

J. Whalen (2010); Robert H. Widmer (2011); Keith Sanders (2012); Gary Polansky (2013); Chris E. Geswender (2014); Wade Dyer and Paul Manz (2015), James 'Frank' Robbins (2016); Scott O'Neil (2017); and Carl Avila (2018).

Please join us for presentation of the Integrated Precision Warfare (IPW) Division's 2020 Richard H. Johnson Technical Achievement Award during the upcoming Precision Strike Technology Symposium (PSTS-20).

Johnson won the award posthumously, having personally led the design or redesign of many highly effective precision strike weapons, including the Paveway LGB, HARM, Javelin, and JSOW. His designs, or imitations of them, appear in nearly every nation's military where precision strike systems are employed. Johnson was a highly productive engineer whose life was marked by decades of innovation. He was also a record-breaking pilot.

The Johnson Award is bestowed annually at the PSTS based on deliberations of a distinguished jury of industry, government, and military members and of the IPW Nominating Committee.

Nominations are open to any U.S. or allied individual. ■

### PSTS-20 Preview, cont. from pg. 1

nature of the PSTS-20 roundtable will allow for insight into the full spectrum of adversarial threats and trajectories along with a look into the most game-changing technologies currently being explored.

Registration is now open, so sign up today! Details on how PSTS-20 will be conducted are available by going to: <https://www.ndia.org/events/2020/10/20/1pst-precision-strike-technology-symposium> ■





## USAF's Will Roper to Receive Perry Award

In recognition of his superb contributions to the Precision Strike Community, Integrate Precision Warfare (IPW), a new division of the National Defense Industrial Association (NDIA), takes great pride in bestowing the 24th annual William J. Perry Award to Dr. Will Roper, the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics, at the virtual Precision Strike Technology Symposium (PSTS-20) on 20 October, 2020.

The award is named in honor of former Secretary of Defense Dr. William J. Perry and recognizes exceptional contributions to precision strike systems in the private sector or public sector by an individual or team.

As the USAF's acquisition chief, Dr. Roper oversees more than 500

acquisition and research and development programs worth in excess of \$60 billion. He serves as the principal adviser to the USAF Secretary and Chief of Staff for R&D, test, production and modernization efforts.

Prior to his current position, Dr. Roper was the founding Director of the Pentagon's Strategic Capabilities Office. Established in 2012, the SCO imagines new—often unexpected and game-changing—uses of existing government and commercial systems: extending their shelf-life and restoring surprise to the military's playbook.

SCO projects include new concepts such as hypervelocity artillery, multi-purpose missiles, autonomous fast boats, smartphone-navigating weapons, big-data-enabled sensing,



Dr. Will Roper, Asst AF Sec (ATL)

3D-printed systems, stand-off arsenal planes, fighter avatars and fighter-dispersed swarming micro-drones.

Previously,

Dr. Roper served as the Acting Chief Architect at the Missile Defense Agency (MDA) where he developed 11 new systems, including the current European Defense architecture, advanced drones, and classified programs.

Before this, he worked at MIT Lincoln Laboratory and served as a missile defense advisor to the Under Secretary of Defense for Acquisition, Technology and Logistics. ■

## IPW Technical Achievement Award

We are pleased to announce the Integrated Precision Warfare (IPW) Division's 2020 Richard H. Johnson Technical Achievement Award to **Mr. Danny Searle** and **Dr. Duane Brown**. An award presentation will be made in the near future at a date to-be-announced.

The Johnson Award recognizes outstanding personal technical achievement resulting in significant contribution to precision strike systems that advance the defense of the United States.

Mr. Danny Searle has worked extensively with the NRO, Navy TENCAP, ONR and AF AC2ISR organizations to develop targeting technology. Mr. Searle was the Deputy Head of the Weapons Engagement Office at China Lake

that was charged with developing and fielding numerous targeting capabilities that span the spectrum of theater "Air Operations Centers" and individual soldier devices.

Mr. Searle has been instrumental in defining a portfolio of targeting technology projects that have transitioned to fielded systems in both the Air Force and Navy operations. He is known as the "Oracle of Targeting". Mr. Searle is currently the ISR & Targeting Lead for NAVAIR's Mission Engineering and Analysis Department.

Dr. Duane Brown is an expert in the analysis of targeting system accuracy assessments. He is the primary analyst that the National Geospatial-Intelligence Agency (NGIA) uses to produce a mathematical assessment



Danny Searle



Dr. Duane Brown

of various DoD vendor products purporting to produce weapon quality data. Mr. Brown has derived numerous statistical models for use in assessing targeting data products. This expertise has been the backbone of the NGA "validation" approval process currently in use DoD wide. Dr. Brown was the lead mathematician for the weapons engagement office, and is now the senior targeting technology engineer for NAVAIR's Mission Engineering and Analysis Department. ■

## PSTS-19 Wrapup

The Precision Strike Association (PSA) conducted its three-day SECRET/NOFORN Precision Strike Technology Symposium (PSTS-19) on 22 – 24 October 2019 at the Johns Hopkins University – Applied Physics Laboratory (JHU-APL) Kossiakoff Center, Laurel, MD.

PSTS-19 was orchestrated by PSTS Annual Review Chair Kerry Neace (JHU-APL) with assistance from the PSA Board of Directors and Advisory Council. Neace and PSA Chairman Ken Masson welcomed a large turnout of attendees on the first day of the annual meeting.

The event’s theme of **Flipping the Game – Imposing Cost through Multi-Domain Precision Strike** focused on the technology being developed by the precision strike community to impose strategic cost on adversaries while gaining a decisive tactical advantage in the current global environment.

The PSA was honored to host a large number of distinguished military leaders and experts. Mr. Kirk Shawhan provided an introduction from his perspective as JHU-APL’s Precision Strike Mission Area Executive. The Honorable Vicky Hartzler, representing Missouri’s 4th district, offered a riveting Congressional perspective. Lt. Col Frederick “Stryker” Hayley (USAF,

AFWIC) gave an in-depth perspective on Multi-Domain Command and Control.

The Office of Naval Intelligence provided an eye-opening comprehensive threat assessment on China. Meanwhile, Brig. Gen. John Raffert, USA, led an extremely valuable discussion on the US Army Futures Command Long Range Precision Fires cross-functional team. Matt Turpin (Palantir Technologies) provided insight into the political elements of peer competition. Dr. Milan “Mitch” Nikolich (OSD R&E) and Mr. Mike White (OSD R&E) discussed technology needs and solutions from the OSD perspective, followed by CAPT Robert Croxson, USN, on the seams in contested dynamic continuous warfare. Day 1 concluded with a very insightful panel that put air dominance into focus.

Day 2 provided a robust and in-depth assessment and dialogue focused on US strategic forces. We started with a threat scenario briefing given by the USN’s Kevin Wolfe (PMA-298). A keynote panel of Lt. Gen. Richard Clark, USAF, and SES James Kern (USN, SSP) highlighted the emerging threat and modernization of the nuclear triad.

In a very special luncheon ceremony, the 11th Annual Richard H. Johnson Technical Achievement Award was presented to Wayne

Willhite and William L. Thomas for their enabling leadership on Net Enabled Weapons. (See related article on p.4.)

NAVAIR’s Brian “Irish” Kelly and Major Derek “Kiwi” Williams, USAF, followed with Navy and Air Force perspectives on nuclear modernization. Dr. James Ellis (Lawrence Livermore National Labs) discussed the technical implications of the INF treaty. The day concluded with portfolio perspectives from Dr. Kaitlin Fair (AFRL/RWW) and CAPT Alex Dutko, USN.

The stage for Day 3 was set by a portfolio perspective delivered by USN CAPT Michael Wosje, (OPNAV 98). Dr. Thomas “Shotgun” Browning reviewed DARPA’s offensive and defensive portfolio, and Mr. Jim Dunn (USAF, HAF A5R) provided the keynote address on re-establishing force dominance. Mr. Adan Johnston (USN, PMA-201) discussed weapons advancements for the contested fight. The event closed with an enlightening panel on cognitive weapons in contested environments, led by the USAF AFRL/WD’s Dr. Emily Doucette, Dr. Angela Diggs, and Jaime Bestard.

PSTS-19 was an action-packed three days that provided exceptional value to all in attendance. ■

### Chairman’s Column, cont. from pg. 2

Government, Industry and Academia contribute to rejuvenating America’s might, we revitalize the uniquely American trait, rising to the challenge.

Bring your ideas to PSTS-20, participate in IPW events and consider becoming an IPW event sponsor. Sponsorship opportunities for PSTS-20 are available. Click

the link below to download the sponsorship and exhibitor forms: [http://www.precisionstrike.org/Events/PSTS\\_Sponsorship](http://www.precisionstrike.org/Events/PSTS_Sponsorship).

A note on COVID-19: IPW is closely monitoring national, DoD and NDIA responses to the coronavirus. As conditions change, IPW will keep membership and all registered guests informed about evolving plans. We will continue to adhere to prudent guidance to protect our

members and guests. We appreciate your understanding as we address this challenge.

Thank you for your involvement in Integrated Precision Warfare. We look forward to seeing you at PSTS-20 and at our Captains of Industry events!

Ken Masson  
Chairman  
Integrated Precision Warfare Division

## Intro to IPW, cont. from pg. 3

Challenges and environment, pioneering technologies from the DoD Service and National laboratories, novel strategies and concepts from industry thought leaders, and a range of other time-relevant subjects presented by a broad selection of organizations.

The Technology Symposium is contextualized through high-level leadership keynote speakers, including General/Flag Officers, Members of Congress, and industry leadership, as well as through timely intelligence and warfighter-based threat briefs throughout the symposium.

Guided by the topics concerning top leadership, the Technology Symposium is built around a foundation of technical briefs that showcase the up-and-coming capabilities and enabling technologies that will enable solutions to the issues the warfighter is facing today.

These briefings provide value to the Services and industry and often inspire new collaborations and novel ways to utilize these capabilities. While the agenda is tailored each year to be up-to-the-minute-relevant, recurring technology categories showcased include hypersonics, air defense, networks, electronic warfare, and guided missiles.

### IPW Executive Roundtable Series

IPW Executive Roundtable events are a cornerstone of NDIA's Captains of Industry Engagement where senior Service leaders are able to have an open dialogue at the senior industry level regarding capabilities, issues, and potential solution sets.

IPW Roundtables are known for providing a venue for military leaders to reach senior industry leaders/decision makers and for getting industry buy-in for on-going threat-driven, industry-informed, requirements generation efforts (i.e. the art of the possible).

IPW classified roundtables typically include the Services' resource sponsors focused on "communities of interest" where industry can help provide solutions to pressing DoD challenges. Roundtables develop enhanced dialogues around the specific interests, capabilities and threats and often generate follow-on engagements through IPW large events or direct industry-Service dialogues.

IPW is also proud to continue distinguished awards of its predecessors.

### Perry Award

The Perry Award is named in honor of former Secretary of Defense Dr. William J. Perry and recognizes exceptional contributions to precision strike systems in the private or public sector by an individual or team.

Dr. Perry served as Secretary of Defense from February 1994 to January 1997. He was Deputy Secretary of Defense from March 1993 until January 1994. Before joining the Clinton administration, Dr. Perry was chairman of Technology Strategies Alliances, a professor in the School of Engineering at Stanford University, and co-director of Stanford's Center for International Security and Arms Control.

From 1977 to 1981, Dr. Perry was Undersecretary of Defense for Research and Engineering. He has received numerous awards and decorations from the U.S. and foreign governments, non-governmental organizations and the military, including the Presidential Medal of Freedom in 1997 and the U.S. Department of Defense Distinguished Service Medal in 1980 and 1981.

The Perry Award honors the immediate and long-term impact that an individual or team has had in shaping the United States precision strike combat advantage.

Recipients over the two-decades since Dr. Perry received the first honor have exemplified excellence and leadership qualities that are a testament to the exemplary nature of the Precision Warfare community.

### Johnson Trophy

The Richard H. Johnson Technical Achievement Award (Johnson Trophy) is named in honor of Richard H. Johnson, recognizing outstanding personal technical achievement resulting in significant contribution to precision strike systems.

Dick Johnson, who was awarded the trophy posthumously, was an exemplar of such achievements, having personally led the design or redesign of many highly-effective precision strike airframes, including the Paveway LGB, HARM, Javelin, and JSOW. His designs, or imitations of them, appear in nearly every nation's military where precision strike systems are employed. Dick was a highly productive engineer whose life was marked by decades of innovation.

### A Strong Foundation

SLAAD was a division of the NDIA with roots in the Anti-Air Warfare Committee (AAWC) established as a committee of NDIA in 1982. In 1989, in order to reflect the complexity of the issues being addressed by the AAWC, its name was changed to Strike, Surface and Anti-Air Warfare Committee. This change was in recognition of the importance of strike and surface warfare and their inseparability from anti-air warfare. In 1997, the Committee's name was changed to SLAAD, again to reflect the focus and interests of the Committee and its government sponsors.

A hallmark of SLAAD was its robust Advisory Council made up of retired senior Navy leadership who



would actively communicate the issues facing industry to DoD Leadership and report back to the SLAAD EXCOM and board the current focus areas and Warfighting concerns within the Navy.

SLAAD effectively utilized this impressive Advisory Council as it held quarterly meetings at member facilities across the nation and in major force concentration areas to help promote high quality interaction between Navy and industry leadership on the most pressing issues of the day.

**SLAAD Mission:**

- Provide an effective communications vehicle for the exchange of views and information between Navy and other elements of DoD and industry on strike, land attack and air defense.
- Offer industry advice/perspectives to Navy and DoD on government policies, practices, needs and problems within the Division’s purview, and conducting special studies.
- Foster mutual understanding and effective working relationships between Navy and DoD and industry for the purpose of ensuring the design and production of effective and reliable equipment and systems meeting requirements at reasonable cost.

PSA provided a forum for disparate experts from the U.S. military, government, national laboratories, and industry in an ethical, collegial, classified environment to mesh the current and future challenges faced by the U.S. military with the art of the possible in precision strike technology.

PSA’s annual symposiums and reviews brought top federal and military leadership to a common forum with technical subject matter

experts (SMEs) and industry leadership, enabling candid dialogue that sought to solve issues across the entire kill chain.

PSA, a proud affiliate of the NDIA since 2001, was founded as the Cruise Missile Association in 1988.

Over its 30-plus year history, PSA cultivated a dedicated community of defense companies the U.S. National Labs collaborating with representation from the U.S. military services, the COCOMs, OSD, and the Joint Staff.

PSA explored opportunities to improve the ability of precision strike systems to find, fix, track, target, engage, and assess threats. Specific areas of focus included technologies and systems that accelerated the OODA loop such as C4ISR, C3, weapon system platforms, warheads, enabling technologies, and offensive and defensive cyberwarfare capabilities on precision strike.

PSA provided venues for candid and honest dialogue to share ongoing and anticipated research and development across the domain of systems and enabling technologies including precision munitions, standoff weapons including hypersonics, space domain systems, spectrum warfare, and strategic deterrence, as well as sensor technologies, fuzing, and energetics. It challenged existing technical and programmatic paradigms to ensure excellence and dynamism within the precision strike community. It also provided a medium for the identification of potential weaknesses and the solicitation for support in these areas.

**PSA Mission:**

PSA’s primary mission was to advance the art and science of precision engagement concepts and technologies. To facilitate this mission, PSA provided an ethical environ-

ment for government, industry, and academic leaders to:

- Facilitate open communication that focused on the issues facing the warfighter.
- Promote and elaborate on national defense policy and military strategy.
- Rationalize required military capabilities with the broad range of available technology and systems.
- Advocate for investment in critical science and technology in order to further the effectiveness of precision engagement operations.

**About NDIA:** The National Defense Industrial Association (NDIA) is the trusted leader in defense and national security associations. For more information, visit [www.ndia.org](http://www.ndia.org). ■

**CALENDAR OF EVENTS**

**Precision Strike Technology Symposium (PSTS-20)**

**Date:** October 20, 2020

**Location:** Virtual Meeting

**PSAR 2021**

**Date:** April 2021 (specific date TBA)

*Sponsorships and exhibit opportunities are available—for more information email [info@precisionstrike.org](mailto:info@precisionstrike.org) or visit our website: [www.precisionstrike.org](http://www.precisionstrike.org)*

*The IPW Digest is an important vehicle for the Integrated Precision Warfare Division to share information and to engage in discussion. You have an opportunity to share your passion about a particular topic.*

*Please contact IPW Secretary John Sordyl ([jsordyl@williams-int.com](mailto:jsordyl@williams-int.com)), if you would like to have an article included in *The IPW Digest*.*