State
of the
INFORMATION ANALYSIS CENTERS

FISCAL YEAR 2019

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PREFERRED
USE MEMO

A Preferred Use of DoD IAC Contracts memo was signed by Mr. Shay Assad, Director, Defense Pricing and Contracting (DPAC) and co-signed by Ms. Mary Miller, Principal Deputy, Director of Defense Research and Engineering for Research and Technology (PD, DDRE(R&T)), on 27 July 2018.

Left memo page:

- Pre-vetted contract performers, industry leaders in their fields
- Rapid turnaround of incremental funding on task orders, and the ability for sharing of task orders across customers, speeding execution of work
- Knowledge re-use that relies heavily on knowledge-mining in the over four million technical documents of the Defense Technical Information Center
- All at a low cost to the user, 1.2 percent in FY 2018.

These best practices result in a rapid acquisition process that can be readily tailored to many different problems and scenarios, meeting the diversity of technical challenges faced by DoD users.

The DoD IACs offer several multiple award, indefinite delivery/indefinite quantity contracts (MAC IDIQ) to meet this broad need (to become a single MAC IDIQ by FY 2019) covering these scope areas:

Advanced materials	Homeland Security & Defense
Alternative Energy	Information Sharing & Knowledge Management
Autonomous Systems	Medical
Biometrics	Military Sensing
Chemical, Biological, Radiological, and Nuclear (CBRN) Defense	Modeling & Simulation
Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR)	Non-lethal Weapons and Information Operations
Critical Infrastructure Protection	Reliability, Maintainability, Quality, Supportability, and Interoperability (RMQSI)
Cultural Studies	Software & Data Analysis
Cyber Security	Survivability & Vulnerability
Directed Energy	Weapons Systems
Energetics	

In continuing the policy of our predecessors established in January 2015, we encourage Requiring Officers and Contracting Officers to use the IACs as best value vehicles to acquire services that fall within the applicable scope areas. In developing acquisition strategies, all new and ongoing efforts should consider the DoD IAC contracts as vehicles of first choice.

Additional information on the DoD IACs can be found at http://iac.dtic.mil/. Questions regarding this action memorandum can be directed to the DoD IAC's Director, Mr. Thomas Gillespie, at 703-767-9235 or thomas.c.gillespie.civ@mail.mil.
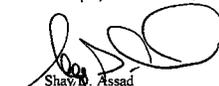
Shay D. Assad
Director, Defense Pricing
and Contracting
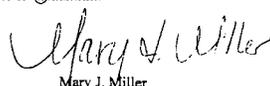
Mary J. Miller
Performing the Duties of the
Assistant Secretary of Defense
for Research and Engineering

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Right memo page:

OFFICE OF THE SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

JUL 2 7 2018

MEMORANDUM FOR COMMANDER, UNITED STATES SPECIAL OPERATIONS
COMMAND (ATTN: ACQUISITION EXECUTIVE)
COMMANDER, UNITED STATES TRANSPORTATION
COMMAND (ATTN: ACQUISITON EXECUTIVE)
ASSISTANT SECRETARY OF THE ARMY (ACQUISITION,
LOGISTICS, AND TECHNOLOGY)
ASSISTANT SECRETARY OF THE NAVY (RESEARCH,
DEVELOPMENT, AND ACQUISITION)
ASSISTANT SECRETARY OF THE AIR FORCE (ACQUISITION)
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

...ferred Use of Department of Defense Information Analysis Center Contracts

...tablished in 1946, the Department of Defense (DoD) Information Analysis ...) continue to serve as an essential resource for research and analysis in innovative ...s to support current and future operations. The DoD IACs continue to prove their ... maximizing the utility of DoD research and development dollars by emphasizing knowledge re-use and building upon previous research, development, and other technical information.

...e DoD IACs operate across a broad range of task orders for technical research and ...naging over 230 task orders and conducting $1.5 billion in research efforts in ...Y) 2017. Through the DoD IACs, research data is collected, analyzed, and re-...recurring technical challenges, stimulate innovation, and provide solutions to ...t requirements.

...program incorporates a number of best practices that make it a model for rapid ...ly acquisition of advanced Research and Development services:

- Open to all DoD components
- Full service assisted acquisition, that includes:
  - Customer Support Cell to assist users in developing a Performance Work Statement (PWS) that ensures work meets mission requirements
  - Dedicated contracting capability - expert in Research, Development, Test, and Evaluation contracting (research, analysis, studies, modeling and simulation, test, fabrication, prototyping)
  - Post-award surveillance of work to ensure quality, timeliness, scope, and correct billing
- Task orders that are flexible and scalable to the user's needs, supporting ceiling levels ranging from $1 million to $500 million

Both Mr. Assad and Ms. Miller recognize the DoD IAC program as a model for rapid and customer-focused acquisition of advanced Research and Development (R&D) services tailored to meeting the diversity of technical challenges faced by DoD customers.

Furthermore, Mr. Assad and Ms. Miller encourage Requiring and Contracting Officers to use the DoD IAC as best value vehicles to acquire services that fall within the applicable scope areas and to consider the DoD IAC contracts as vehicles of first choice.

LETTER FROM
THE DIRECTOR

To lead off this third annual installment of the State of the Information Analysis Centers (IAC) report, I am pleased to report the DoD IAC program continues to bring Research and Development (R&D) innovation to the Department of Defense Science and Technology (S&T) ecosystem. We provide critical, flexible, efficient, and cutting-edge research and analysis primarily to acquisition program managers, DoD laboratories, Program Executive Offices (PEOs), and Combatant Commands. The DoD IAC program continues to expand its offerings and capabilities beyond its foundational heritage as the Rocket Propulsion Information Analysis Center (RPIAC) in 1946 to now encompass groundbreaking R&D efforts across the technological spectrum.

THOMAS GILLESPIE
Director, DoD Information Analysis Centers (IAC)

The DoD IAC program is a model for the rapid and customer-focused acquisition of advanced R&D services tailored to address many different problems and scenarios, meeting the diversity of technical challenges faced by DoD customers across the breadth and depth of 22 technical focus areas. As part of the Defense Technical Information Center (DTIC), the expansive work going on in the DoD IAC program aligns with Dr. Griffin's mission as the Chief Technology Officer "to foster technological dominance across the Department of Defense and ensure the advantage of the American warfighter." Accordingly, the DoD IAC program has aligned its efforts to support OUSD(R&E)'s eleven modernization priorities depicted on page 18.

The fiscal year 2019 has seen the highest level of R&D funded work performed through the DoD IAC program, $2 billion in funded work. Given the DoD IAC's savings of approximately 16% on each task order awarded in FY19, this represents savings over $315 million. The DoD IAC program is continuing to increase the savings to the customer by reducing our Customer Shared Direct Cost from 1% in FY19 to 0.8% in FY20. To meet the increasing demand for IAC services into FY20, we are, in tandem with our Air Force contracting partners, pursuing the hiring of additional personnel to ensure we maintain our record of low times-to-award.

As the DoD IAC program looks to the future, beyond FY20, we stand ready to support a wide range of DoD R&D efforts across an ever-expanding customer base of both new and returning customers.

> *The Joint Staff J7 was restructured to focus on concept driven, threat informed capability development. The IAC contract vehicle has provided our government and contractor team the flexibility needed to address emerging and innovative concept requirements."*
>
> RON ROSENKRANZ
> Joint Staff, J7

IAC
BY THE NUMBERS

$9.37B
Value of Awards Since FY15

4.6
Avg Months (Solicitation To Award)

$2B
Annual Contract Obligations

550+
280
Customers
Active Task Orders (TO)

Funding for R&D by FY
(BILLIONS)

Year	Amount
2015	$1.290
2016	$1.280
2017	$1.444
2018	$1.871
2019	$1.974

2019 Funding for R&D by Service
(MILLIONS)

Service	Amount
Navy	$618.79
Air Force	$472.64
Army	$440.71
Marine Corps	$131.55
Other DoD	$286.11
Other Gov't	$24.57

2019 Funding for R&D by Agency Type
(PERCENTAGE)

Combatant Commands **2%**
Other **4%**
Laboratory **12%**
Program Executive Offices/ Program Managers **82%**
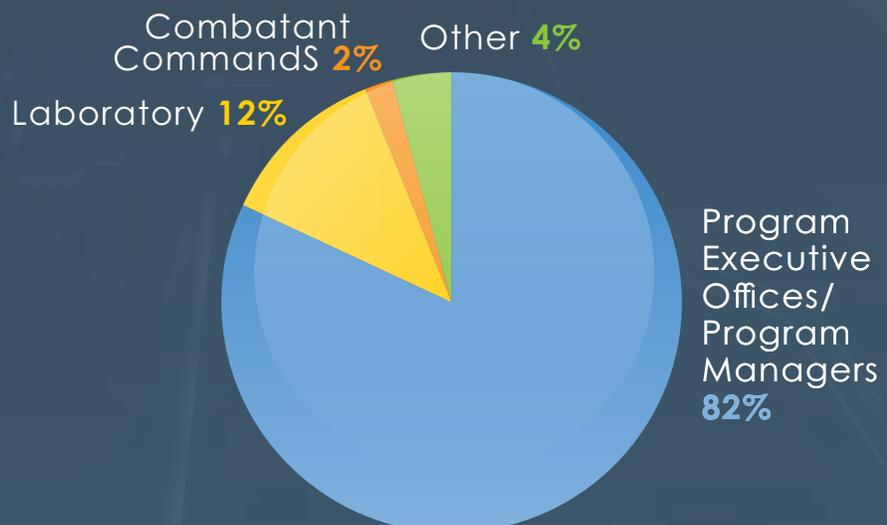
IAC ROLE

The IAC program is sponsored by the DTIC and is chartered to acquire, digest, analyze, evaluate, synthesize, store, publish, and distribute scientific and technical information (STI) and engineering data in a clearly defined specialized field or subject area of significant DoD interest or concern.

The IACs uses a team of experts to assess and provide relevant technical information and to support the DoD Acquisition Enterprise to meet user needs.

Implement a systematic interchange of scientific data and technological findings developed under DoD programs

Maximize resources and eliminate duplication of effort by reusing DoD RDT&E research and assets

Promote communication and collaboration among DoD scientists, engineers, acquisition professionals, and other federal agencies

Establish requirements and responsibilities to ensure that STI is a key outcome and a record of the R&E work conducted

SUPPORT R&E

Support USD(R&E)'s mission to foster technological dominance across the DoD and ensure the advantage of the American warfighter.

DTIC plays a critical role enabling the Department of Defense to meet emerging scientific and technological challenges, and maintain our military's competitive edge. The DoD invests more than $14B in science and technology each year, and DTIC's mission is to maximize that investment. DTIC continuously collects scientific and technical information and improves the digital search, analysis, and collaboration tools that make this information - 4.5M documents and counting - widely available to decision makers, researchers, engineers, and scientists across the department.

DOD INFORMATION ANALYSIS CENTERS

The DoD IAC program is divided into three domains (Cyber Security, Defense Systems, and Homeland Defense) and manages scientific and technical information across 22 technical focus areas (TFA).

Acquire STI from on-going research and open source

Analyze STI to assess knowledge base, identify trends, and fill gaps

ACQUIRE

ANALYZE

The IAC model is a systematic approach to reuse and share scientific and technical information to support and advance on-going research through actively acquiring, analyzing, synthesizing, and disseminating STI throughout the DoD.

DISSEMINATE

SYNTHESIZE

Provide research products to authorized users

Create STI to fill research needs and answer questions

Technical Domain	Technical Focus Areas (TFA)			
CSIAC	Software Data & Analysis	Modeling & Simulation	Cyber Security	Knowledge Mgmt & Info Sharing
DSIAC	Weapons Systems	Survivability & Vulnerability	Advanced Materials	Military Sensing	Directed Energy
	Autonomous Systems	RMQSI	Non-Lethal Weapons	Energetics	C4ISR
HDIAC	Homeland Defense & Security	Cultural Studies	Critical Infrastructure Protection	Alternative Energy
	CBRNE	Biometrics	Medical	WMD

WHAT WE DO
IAC SOLUTIONS

Our team of specialists helps researchers, engineers, scientists, and program managers utilize existing STI to drive innovation across the DoD with technical analysis and development of materiel solutions to advance the DoD's warfighting capabilities. Through unparalleled services, the DoD IAC program helps accelerate the acquisition lifecycle and enables customers to meet their needs in a cost-effective, efficient, and compliant manner.

ASSISTED ACQUISITION SOLUTIONS
Provide turn-key solutions to program needs by assisting in the development of customer requirements, processing all financial documents in an auditable environment, and monitoring contract performance

TECHNICAL SUPPORT SOLUTIONS
Answer technical inquires, provide access to the S&T community's Subject Matter Experts, conduct technical training, and develop technical products

RESEARCH AND DEVELOPMENT SOLUTIONS
Deliver R&D services to the DoD and S&T community across 3 domains (Cyber Security, Defense Systems, and Homeland Defense) and 22 technical focus areas to support DoD's critical requirements at all levels of research and engineering

WHAT WE DO
ASSISTED ACQUISITION SOLUTIONS

ACQUISITION MANAGEMENT

Provide hands-on expertise to develop complex customer requirements and scan ongoing research to match customers to existing IAC task orders. If there is no existing in scope task order, mature the customers' objectives into PWS tasks based on latest research.

- Start to finish assistance and collaboration from our team of experts from requirements definition through contract award

- Assist DoD organizations in combining research efforts

- Provide FAR-compliant PWS focused on customer desired outcome

- Provide reduced time to award

FINANCIAL MANAGEMENT

Manage customer commitments, obligations, and payments through the order lifecycle in an audit ready environment

- Review and accept customer's orders and ensure funds are correctly obligated

- Track the status of customer funds from obligation to close out

- Evaluate financial records of obligations to assist with customer audit requests and reconciliation efforts

PROGRAM MANAGEMENT

Provide fusion of data analytics and contract surveillance to ensure delivery

- Monitor program key performance indicators to allow timely decision-making in support of customers

- Monitor and assess post award contract execution to mitigate risk to the government

- Interface with the S&T community and relay customer feedback to improve processes
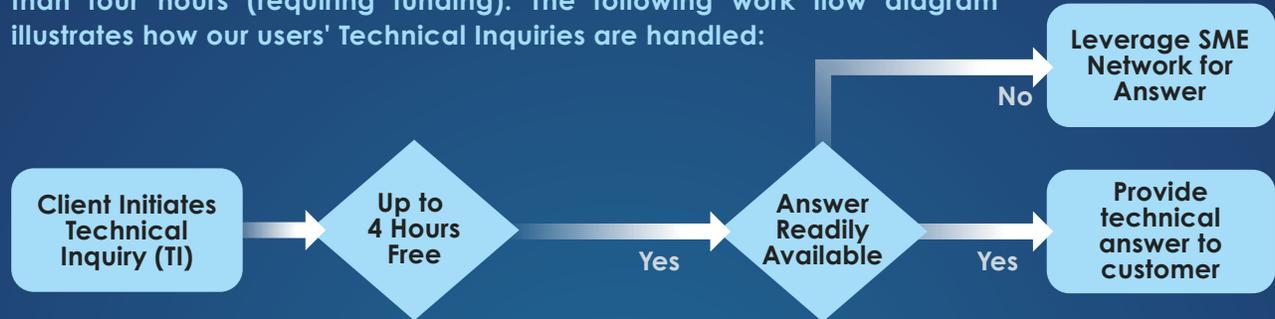
TECHNICAL INQUIRIES

DoD IAC provides rapid responses to users' Technical Inquiries in two levels: those that can be answered with up to four hours of free Technical Inquiry research and those that require more than four hours (requiring funding). The following work flow diagram illustrates how our users' Technical Inquiries are handled:

Client Initiates Technical Inquiry (TI) → **Up to 4 Hours Free**

— Yes → **Answer Readily Available**
— No (from Answer Readily Available) → **Leverage SME Network for Answer**
— Yes (from Answer Readily Available) → **Provide technical answer to customer**

— No (from Up to 4 Hours Free) → **SMART**

Subject Matter Analysis and Research Task (SMART)

Average Time to Award: 2 Weeks

- Up to 2 months of task order (TO) period of performance (PoP)
- Maximum $50k TO ceiling
- FFP LOE contract type

- Can be classified up to TS/SCI
- CONUS and/or OCONUS to include Overseas Contingency Operations (OCO)

ACCELERATED AWARD
2 weeks average time from requirement identification to award

LEVERAGE EXISTING STI
Accelerate research

ACCESS TO SME NETWORK
IAC network of 2300 active SMEs

LOW COST
0.8% Customer Shared Direct Costs (CSDC)

Contact Us

If you would like to learn more please email us at:
dtic.belvoir.iac.mbx.dodiacs@mail.mil

Check out additional resources:
https://dodiac.dtic.mil/services

WHAT WE DO
TECHNICAL SUPPORT SOLUTIONS
Training and Products

TECHNICAL TRAINING

The IACs provide in-depth technical training on current topics of particular interest in the DoD S&T Community led by domain subject matter experts.

Highlights: Topic-specific analyses from subject matter experts

Podcasts: Collections of 5 – 15 minutes videos that provide a summary of recent events, emerging technologies and topics highlighting best practices

Webinars: Hour long presentations providing an in-depth look at topics of particular interest to the DoD S&T community led by domain subject matter experts

TECHNICAL PRODUCTS

The domain IACs develop a wide variety of technical and informational products to provide the DoD S&T community a deeper understanding of emerging technologies and research. These products include State of the Art Reports, quarterly journals, infographics, digests, and a multitude of research materials.

State of the Art Report: Counter-Materiel (CM) Non-Lethal Weapons (NLW) Technologies
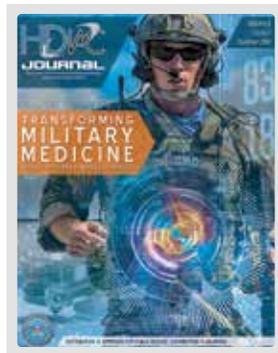
Quarterly HDIAC Journal: Volume: 6 #2 *Summer 2019*

Quarterly DSIAC Journal: Volume 6 #3 *Summer 2019*

BY THE NUMBERS

TECHNICAL INQUIRIES ANSWERED
3,000

TRAINING EVENTS
66

ACTIVE SMEs IN THE DoDIAC
2,300

TRAINING ATTENDEES
8,500

R&D SOLUTIONS
FOR BUDGET ACTIVITIES
Basic Research through Demonstration

$28B Indefinite Delivery Indefinite Quantity (IDIQ) Information Analysis Center (IAC) Multiple Award Contract (MAC)

IACMAC

Supports RDT&E services, other R&D related analytical services and development
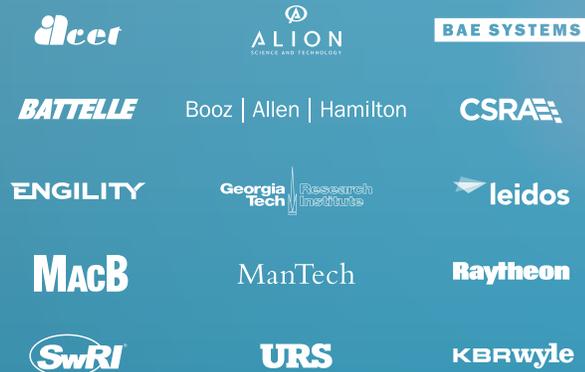
Average Time Solicitation to Award: 4.6 Months

- Up to 60 months of task order PoP
- No Minimum or Maximum
- All contract types (Cost-Plus-Fixed-Fee, Firm-Fixed-Price, Time & Material)

- Can be classified up to TS/SCI
- CONUS and/or OCONUS to include OCO

POOL 1 AWARDEES
TOs valued above $15M

acet	ALION SCIENCE AND TECHNOLOGY	BAE SYSTEMS
BATTELLE	Booz | Allen | Hamilton	CSRA
ENGILITY	Georgia Tech Research Institute	leidos
MacB	ManTech	Raytheon
SwRI	URS	KBRwyle

POOL 2 AWARDEES
TOs valued at or below $15M

AIS Agile Innovative Solutions JOINT VENTURE	BARBARICUM	BRTRC FEDERAL SOLUTIONS
DSA	DELTA Resources, Inc.	iai	NSi THE SOLUTIONS COMPANY
Systems Planning and Analysis Joint Venture Envisioneering, LLC	SONALYSTS		VAREN TECHNOLOGIES

POOL 3 AWARDEES
Requires CBRNE Facilities

BATTELLE	SwRI	MRIGlobal

ACCELERATED AWARD
4.6 months average time from solicitation to award

INCREMENTAL FUNDING
Fund projects as funds become available and project need arises

CO-FUNDING
Other agencies can fund in-scope reserach on same task order

LEVERAGE EXISTING STI
Accelerate research

LOW COST
0.8% Customer Shared Direct Costs (CSDC)

CUSTOMER SUPPORT CELL
Team of specialists works with you to mature requirements

Contact Us
If you would like to learn more please email us at:
@ dtic.belvoir.iac.mbx.csc@mail.mil

Check out additional resources:
https://dodiac.dtic.mil/services

R&D SOLUTIONS
FOR BUDGET ACTIVITIES
Basic Research through Demonstration

RAPID
Research, Analysis, Prototyping, Innovation, and Development (RAPID)

Average Time to Award: 8 weeks

- Maximum $1M task order ceiling
- All contract types (Cost-Plus-Fixed-Fee, Firm-Fixed-Price, Time & Material)
- Can be classified up to TS/SCI
- CONUS and/or OCONUS to include OCO
- Up to 12 months of task order PoP

SURVICE ENGINEERING COMPANY

QUANTERION SOLUTIONS INCORPORATED

ACCELERATED AWARD
8 weeks average time from requirement identification to award

LEVERAGE EXISTING STI
Accelerate research

INCREMENTAL FUNDING
Fund projects as funds become available and project need arises

LOW COST
0.8% Customer Shared Direct Costs (CSDC)

CO-FUNDING
Other agencies can fund in-scope reserach on same task order

Contact Us
If you would like to learn more please email us at:
@ dtic.belvoir.iac.mbx.dodiacs@mail.mil

Check out additional resources:
https://dodiac.dtic.mil/services

IACMAC

Supports RD...
related Res...
services and...
Scientific an...

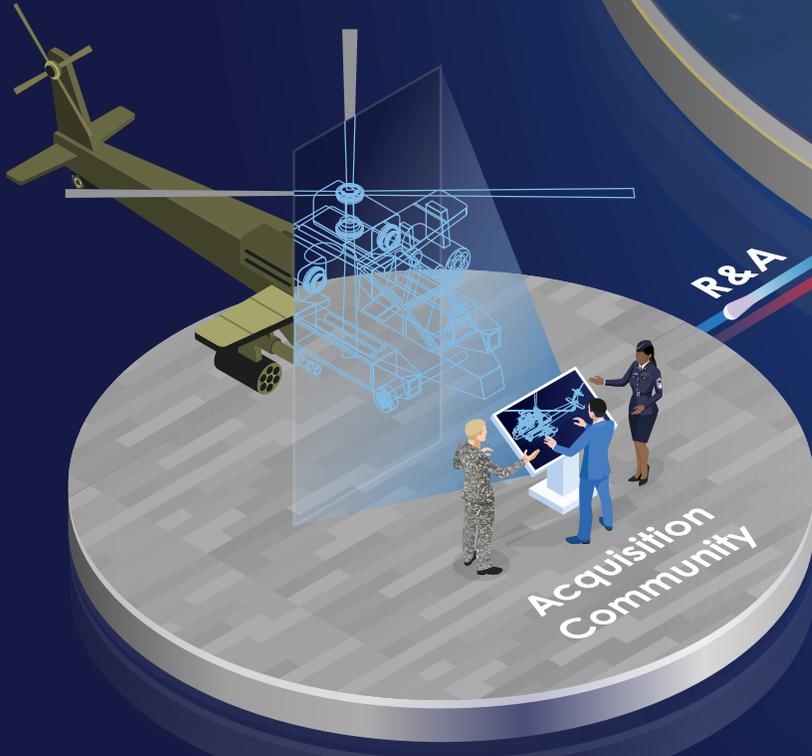**RAPID**

Provide rapid access to Research, Analysis, Prototyping, Innovation, and Development up to $1M and 12 months periods of performance.

S&T Management Community

Acquisition Community

R&A · STI

R&A · STI

HDIAC

ACQUIRE STI

DISSEMINATE STI

Research

Development

Demonstra...

Technical Products

Technical Training

DoD I...

THE IAC

OT&E services, other R&D
earch and Analysis (R&A)
d development, to produce
nd Technical Information (STI)

Laboratory
Community

STI

R&A

ANALYZE STI

CSIAC

Financial
Management

Program
Management

Acquisition
Management

Technical
Inquiries

SYNTHESIZE STI

DSIAC

SMART

Provide access to SMEs
to answer challenging
technical questions
requiring more than
4 hours of technical
research

STI

R&A

Operations
Community

MODEL

DoD IAC FY19
INNOVATIVE WORK

(Photo Credit: U.S. Army photo by Pvt. Gabriel Silva)

DEFENSE SYSTEMS DOMAIN

DEFENSE SYSTEMS PARTNERS ON HOVERBIKE CONCEPT

Summary of Effort: DSIAC prototyped a Malloy Aeronautics Tactical Reconnaissance Vehicle concept to validate performance metrics of the full scale hoverbike concept. The success of this demonstration resulted in starting a Navy program of record: the Unmanned Logistics System-Air as part of the Navy Small Tactical UAS Program Office. Further technical development continues today, and the Army has a goal of transitioning the technology as an autonomous resupply program of record.

(Photo Credit: GettyImage/Justin Sullivan)

NEXT GENERATION WARFIGHTER

Summary of Effort: Army Combat Capabilities Development Command C5ISR (Command, Control, Computers Communications, Cyber, Intelligence, Surveillance and Reconnaissance) Center developed a soldier-borne system for line of sight tracking and mapping in GPS-denied environments. Fusing the Next Generation Warfighter system with the MS HoloLens.

(Photo Credit: GettyImage/John Moore)

HOMELAND DEFENSE DOMAIN

HOMELAND DEFENSE PROCESS IMPROVEMENTS EXPEDITE SOUTHERN BORDER THREAT ASSESSMENTS

Summary of Effort: USNORTH Provost Marshal/Protection Directorate provides coordinated criminal threat information to support Customs and Border Protection operations along the southern US border. This effort streamlined existing processes, leading to faster development of criminal threat products and increased effectiveness of force protection efforts as a whole Homeland defense.

BIOMETRIC CAPTURE METHODS TO SUPPORT SOF

Summary of Effort: Analysis was conducted of technologies and traditional biometric capture methods to identify and integrate new tools to support the United States Special Operations Command (USSOCOM) Special Operations Forces (SOF) mission.


(Photo Credit: U.S. Army photo by Sgt. Michael J. MacLeod)

CYBERSECURITY DOMAIN
DOD CYBERSECURITY ANALYSIS AND REVIEW (DODCAR) PROLIFERATION

Summary of Effort: As cybersecurity compliance requirements continue to grow in quantity and complexity, security goals/objectives tend to shift to a compliance-based focus. One of the observed results from a recent OMB report states "Agencies continue to allocate their limited cyber funding to acquire single point solutions to provide capabilities for perceived security gaps, rather than allocating funds to address gaps that threat actors are actually exposing." In response, our team developed a five-day training workshop to address the OMB report which:

- Educated users on the NSA/CSS Technical Cyber Threat Framework and DoDCAR fundamentals
- Trained participants to employ this strategy within the context of NIST's Cybersecurity Framework
- Provided first-hand experience performing a real-world DoDCAR analysis; and
- Introduced the DoDCAR NextGen software tool and walked class participants through analysis-based training exercises
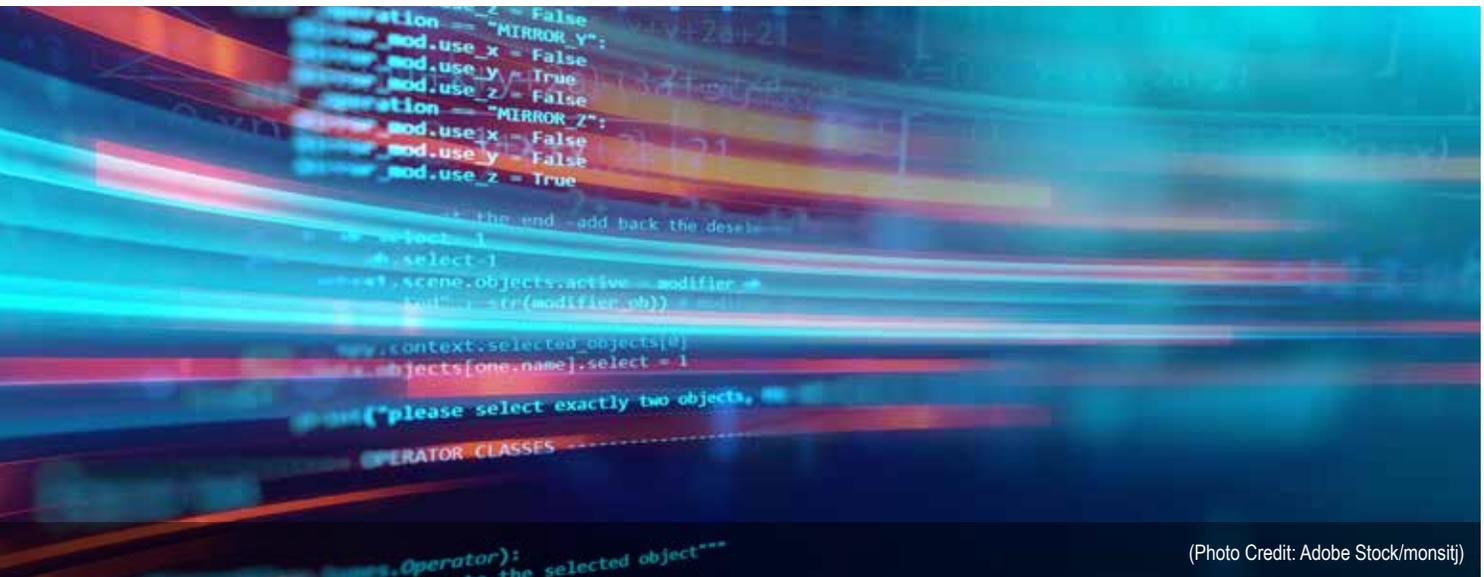
(Photo Credit: Adobe Stock/monsitj)

SPECIAL OPERATIONS TECHNICAL CAPABILITIES PLATFORM

Summary of Effort: USSOCOM required an advanced analytical capability that is capable of receiving, storing and processing mission data at the same speed as their special operations teams are accustomed to working – the result of this effort is the development of a Cyber Data Operations Capability (CDOC). This CDOC enhances collaborative, real-time decision-making, and enables the integration of hardware, software, cloud computing, data sources, and advanced analytics, without sacrificing data security.

CONTRIBUTIONS TO USD(R&E)
MODERNIZATION PRIORITIES

For the last seven decades, the DoD IAC has consistently provided expertise to the nation's toughest R&D challenges. We have brought speed and agility to meet urgent warfighter needs and provided greater benefit to the S&T community at large by continually facilitating exchange, reuse, and innovative application of existing STI. The DoD IAC program has evolved and kept up with the pace of the rapidly evolving S&T landscape by anticipating and responding to customer needs shaped by technological, political, and cultural changes.

The DoD IAC services support **22 Technical Focus Areas**, aligned to **USD(R&E)'s Modernization Priorities.**
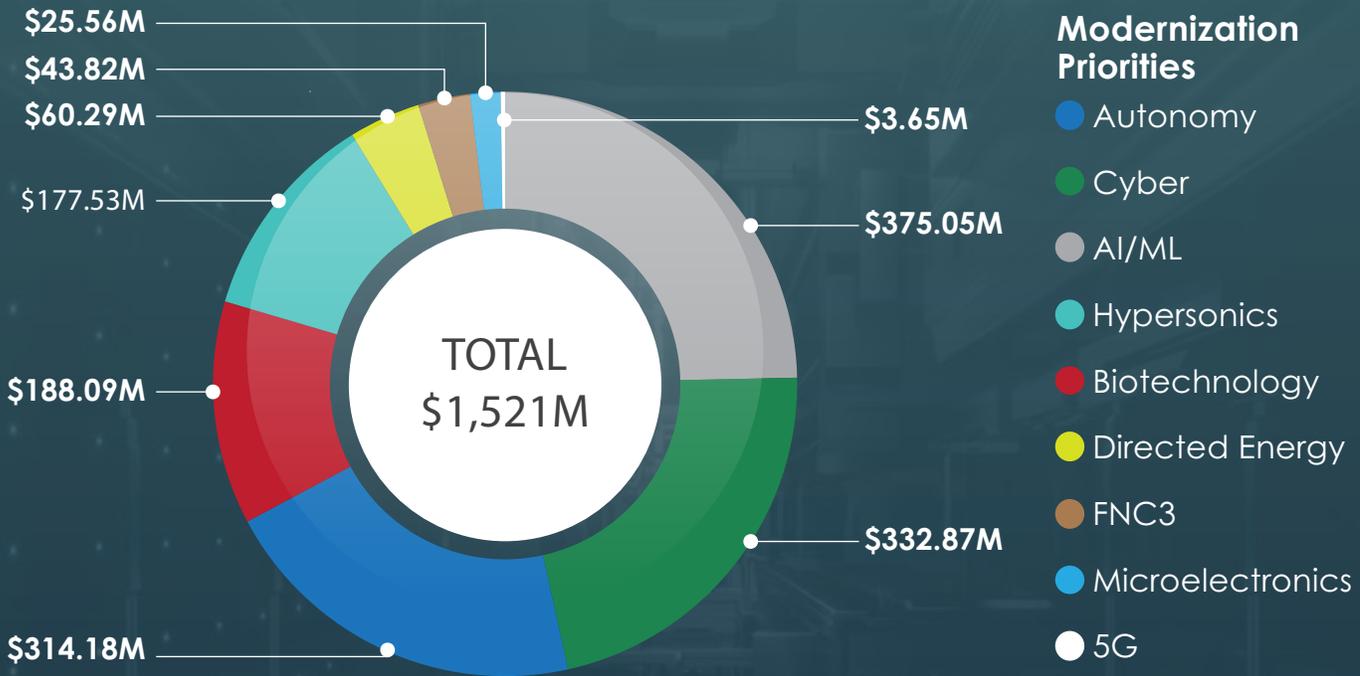
IAC work is designed **to advance technical superiority in** response to existing and emerging priorities.

11 *Modernization Priorities*

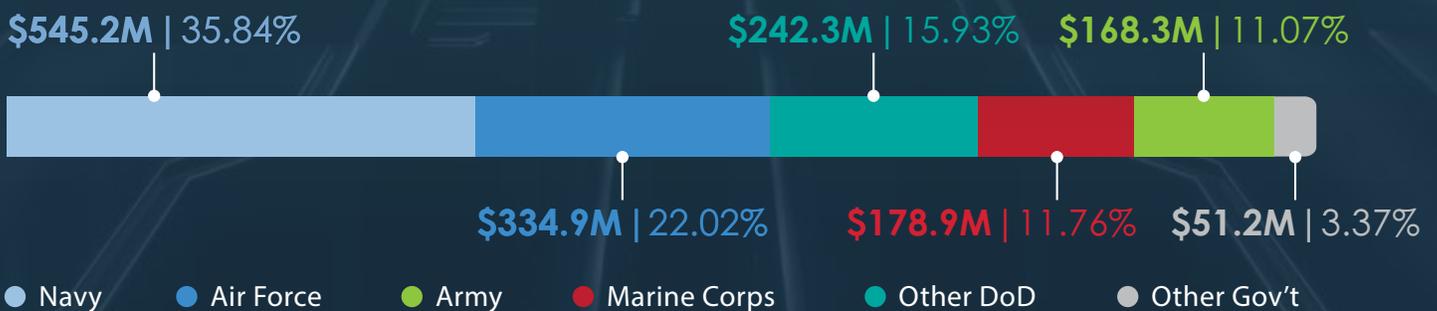**22** *Technical Focus Areas*

MODERNIZATION PRIORITIES: QUANTUM SCIENCE, 5G, FNC3 (FULLY NETWORKED COMMAND, CONTROL, AND COMMUNICATIONS), DIRECTED ENERGY, AUTONOMY, HYPERSONICS, AI/ML (ARTIFICIAL INTELLIGENCE/MACHINE LEARNING), CYBER, BIOTECHNOLOGY, MICROELECTRONICS, SPACE

CONTRIBUTIONS TO USD(R&E)
BY THE NUMBERS

Since 2018, the IAC program has awarded over $1.5B in R&D support across the following USD(R&E) Modernization Priorities:

$25.56M
$43.82M
$60.29M
$177.53M
$188.09M
$314.18M

$3.65M
$375.05M
$332.87M

TOTAL
$1,521M

Modernization Priorities
- Autonomy
- Cyber
- AI/ML
- Hypersonics
- Biotechnology
- Directed Energy
- FNC3
- Microelectronics
- 5G

The figure below illustrates the IAC awarded ceiling by Service/Agency across the Modernization Priorities shown above:

$545.2M | 35.84%   **$242.3M** | 15.93%   **$168.3M** | 11.07%

$334.9M | 22.02%   **$178.9M** | 11.76%   **$51.2M** | 3.37%

- Navy
- Air Force
- Army
- Marine Corps
- Other DoD
- Other Gov't

CONTRIBUTIONS TO USD(R&E)
INNOVATIVE WORK

FNC3 (FULLY NETWORKED COMMAND, CONTROL, AND COMMUNICATIONS)
United States Navy, NAVAIR PMA-209

Summary of Effort: A redesign of the Mobile User Objective System (MUOS) feature in AN/ARC-210 was developed for combat aircraft to enable recording multiple loadsets versus a single loadsets allowing combat aircraft to quickly network and communicate.

Machine Learning and Autonomy
Sandia National Laboratories, Weapon Security & Computer Science Programs

Summary of Effort: Research was conducted to develop autonomous object recognition systems, focusing on the integration of synthetic data and artificial scenarios for use in the development of defense-related sensor and imaging technologies.

Machine Learning
Air Force Research Lab (AFRL/CZ)

Summary of Effort: In an effort to maintain asymmetric technological dominance over adversaries through 2030, the US Air Force collaborated with the S&T community, higher education and business professionals to explore innovative solutions to meet future technical challenges. The result of this horizon-scanning cooperation was the identification of disruptive innovative technologies capable of addressing AF warfighter challenges.

Quantum
**Air Force Research Laboratory (AFRL/RI)**

Summary of Effort: Analysis on improving the efficiency of information compression, transmission, and manipulation in the quantum realm was conducted using Quantum Algorithm Analysis (QAA). This leveraged AFRL's theoretical quantum interference research to experimentally pursue an entangled photon approach to quantum gates including cluster states, and Linear Optical Quantum Computing. Quantum simulation software was used to apply entanglement as a resource along with performance benchmarks to measure the benefits of utilizing this advanced technology in various scenarios such as communication systems and error correcting code design.

WHO USES
THE IAC

Top users of the IAC services available to the DoD and government in FY19.

> **The IAC's flexibility and high level of support across its centers provided U.S. Pacific Fleet the ability to rapidly assess, develop, and implement solutions to complex problem sets confronting this theater of operation."**

ANDREW PENG
COMPACFLT, N55
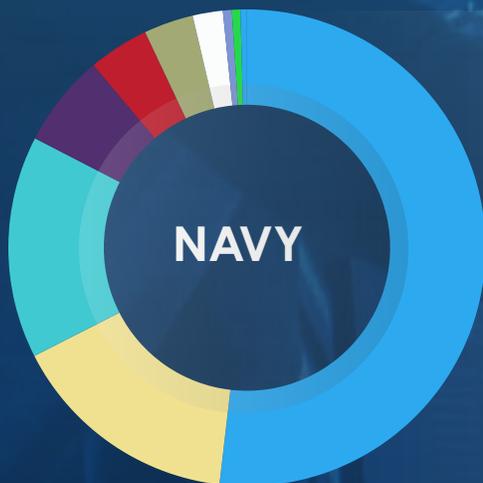
NAVY

%	Command
51.85% ●	Naval Air Systems Command
16.10% ●	US Fleet Forces Command
15.09% ●	Naval Sea Systems Command
6.30% ●	Space and Naval Warfare Systems Command
4.10% ●	Chief of Naval Operations
3.36% ●	Bureau of Medicine and Surgery
2.04% ●	Office of Naval Research
0.61% ●	Navy Reserve
0.57% ●	Office of the Secretary of the Navy

AIR FORCE

%	Command
59.52% ●	Air Force Materiel Command
8.26% ●	Air Force District of Washington
7.44% ●	Air Combat Command
6.19% ●	Office of the Secretary of the Air Force
5.37% ●	Air National Guard
4.42% ●	Air Education and Training Command
3.22% ●	Air Mobility Command
2.28% ●	Air Force Space Command
2.24% ●	Pacific Air Forces
1.05% ●	Air Force Reserve Command
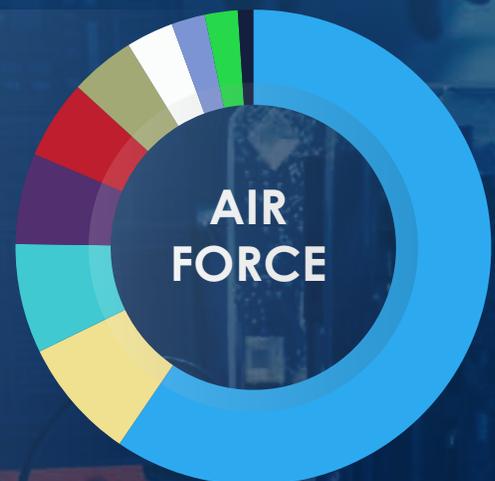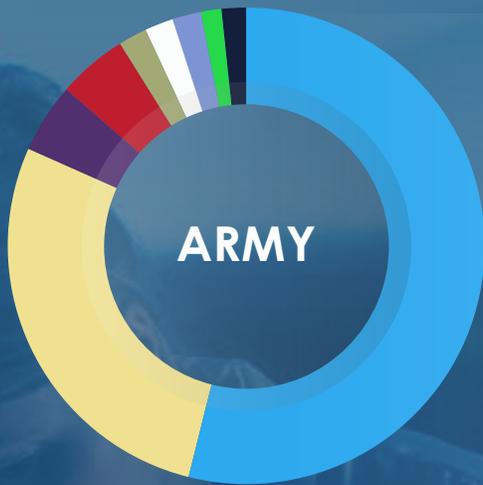
ARMY

54.43% 🔵	Assistant Secretary of the Army (Acquisition Logistics and Technology)
28.16% 🟡	Army Materiel Command
4.76% 🟣	US Army Corps of Engineers
3.76% 🔴	US Army Acquisition Support Center
2.03% 🟤	Office of the Secretary of the Army
2.00% ⚪	US Army Pacific Command
1.77% 🟪	US Army Criminal Investigation Command
1.57% 🟢	Army National Guard
1.51% ⚫	US Army Training and Doctrine Command

MARINE CORPS

53.08% 🔵	Marine Corps Systems Command
29.62% 🟡	Marine Corps HQ
6.02% 🟣	I Marine Expeditionary Force
4.45% 🔴	II Marine Expeditionary Force
2.13% 🟤	Marine Corps Forces Command
1.74% ⚪	Training and Education Command
1.62% 🟪	Marine Corps Forces Pacific
1.14% 🟢	Marine Corps Installation Pacific
0.19% ⚫	Marine Corps Logistics Command

OTHER DoD & Gov't
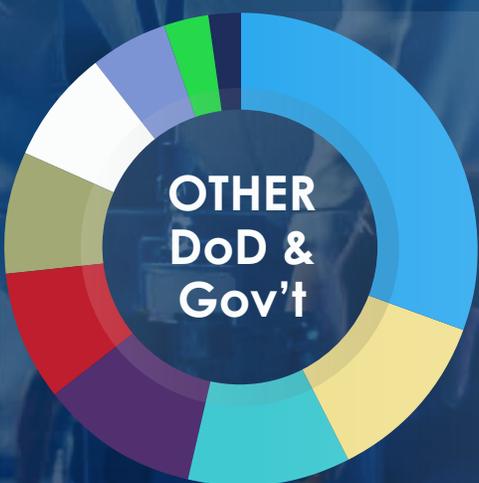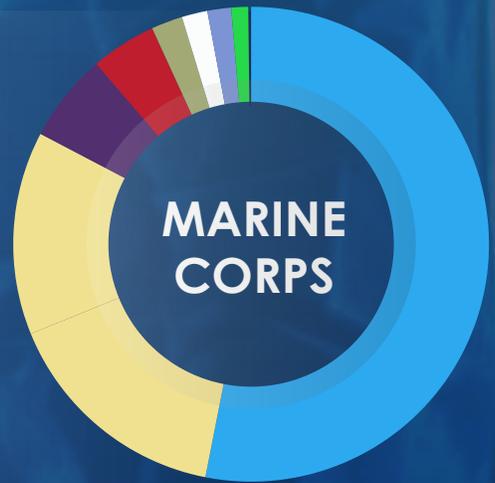
30.79% 🔵	Under Secretary of Defense for Research and Engineering, USD(R&E)
11.72% 🟡	National Geospatial-Intelligence Agency (NGA)
11.14% 🟢	Joint Chiefs of Staff
11.02% 🟣	Defense Health Agency (DHA)
8.77% 🔴	Missile Defense Agency (MDA)
8.50% 🟤	Department of Homeland Security (DHS)
7.56% ⚪	National Security Agency (NSA)
5.45% 🟪	Defense Logistics Agency (DLA)
2.88% 🟢	Under Secretary of Defense for Acquisition and Sustainment, USD(A&S)
2.17% ⚫	Joint Special Operations Command

FY19 SUMMARY
IAC PRIME ACTIVITY

The DoD IAC Program is supported by a select group of prime contractors who are industry leaders in their respective fields and who have been competitively screened for placement as part of the IAC program.

Booz | Allen | Hamilton
$655.9M
14

KBR
$340.1M
10

ManTech
$521.9M
4

PrescientEdge
$61.9M
2

NORTHROP GRUMMAN
$57.2M
1

acet
$56.0M
1

The graph to the right demonstrates the funding by Service and federal agencies.

31%

Navy

By competitively pre-screening prime contractors for a contract with the IAC program, we ensure government users of the IACs get the best performers ensuring the risk of non-performance is removed.

Georgia Tech Research Institute

$185.2M

2

ALION

$158.4M

3

ENGILITY

$91.1M

2

BATTELLE

$38.9M

1

BARBARICUM

$13.9M

1

Air Force	Army	Other DoD	Marine Corps	Other Gov't
24%	22%	11%	7%	5%

Note: These colors represent the identified Service in circles above.

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IAC PROGRAM OFFICE
& *REPORTING STRUCTURE*

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Have a Research and Development project you need to get started on?

To get started contact the CSC at:
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To talk to a government representative contact below:
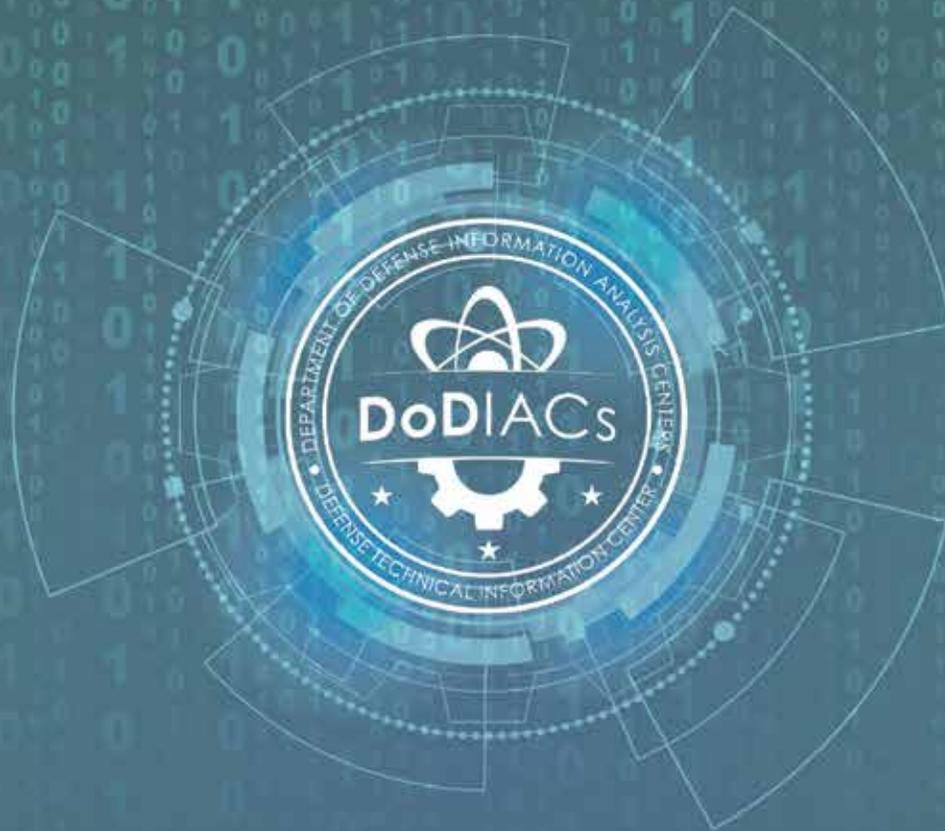
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