UNIVERSITY OF MARYLAND
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APPLIED RESEARCH LABORATORY FOR
INTELLIGENCE AND SECURITY
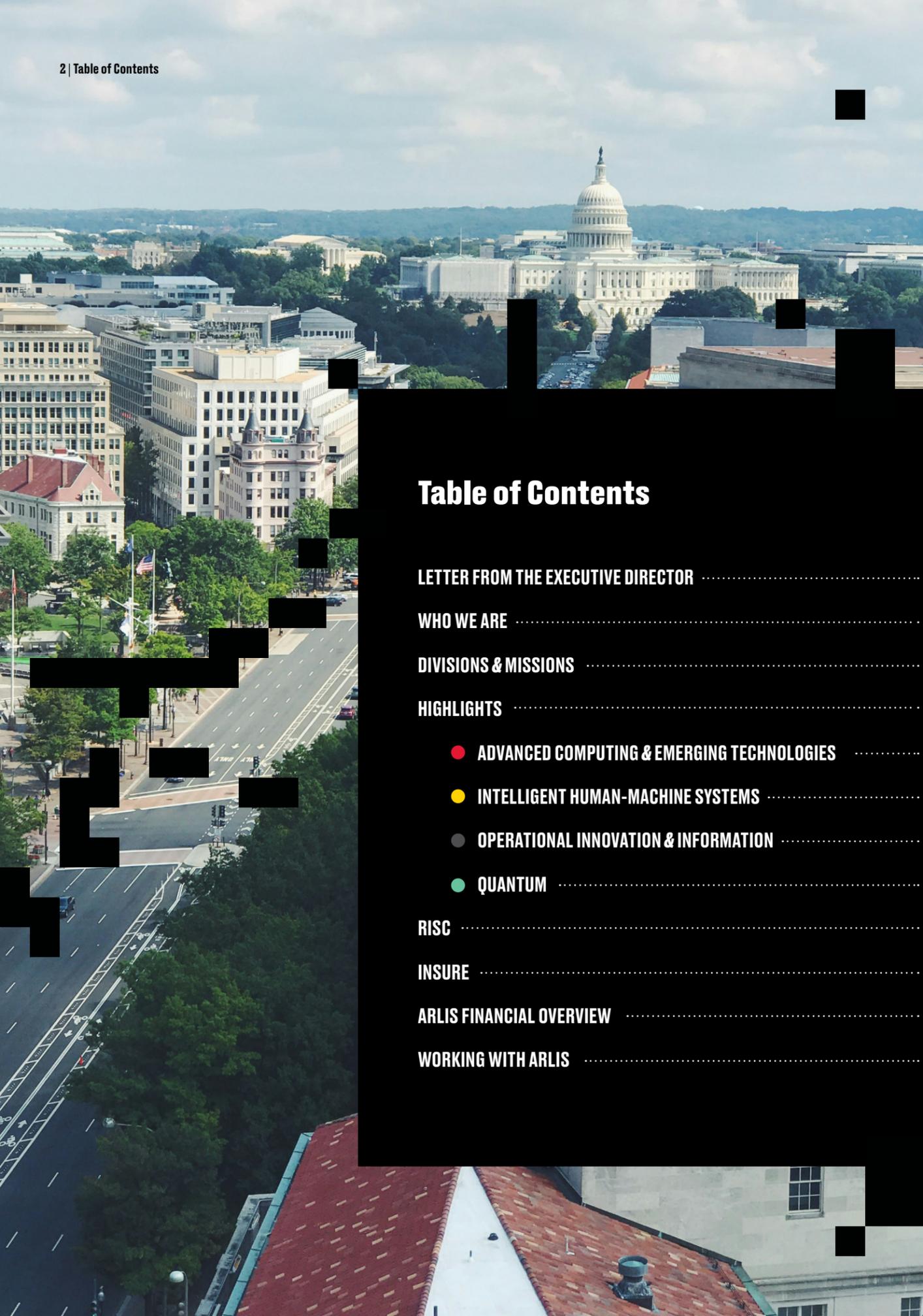
2025

ANNUAL REPORT

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Letter from the Executive Director

I am honored to present this year's Annual Report, highlighting our progress, impact, and continued commitment to delivering engagement advantage to the Nation's defense and intelligence operations.

Since our establishment in 2018, ARLIS has evolved into a trusted national center for applied research in intelligence and security. As the only University Affiliated Research Center (UARC) dedicated exclusively to this mission, we serve as a neutral, mission-driven partner to the Department of War (DOW) and the national security community.

This year, ARLIS expanded its impact across a wide range of research areas critical to national security, from strengthening the resilience of supply chains and securing the digital ecosystem to enhancing human performance and advancing trustworthy applications of artificial intelligence. A highlight of the year was the creation of the Maryland Institute for Quantum Applications (MIQA), which has quickly become a national leader in mission-informed quantum science. The establishment of the Capital Quantum Benchmarking Hub, in partnership with DARPA and the State of Maryland, underscores our leadership role in this strategic domain and demonstrates ARLIS's ability to unite government, academia, and industry around shared mission priorities.

Across all our research, ARLIS continues to advance the understanding of how technology and people interact in complex operational systems. Our multidisciplinary teams explore the frontiers of human-machine teaming, cognitive security, supply chain resiliency, and information advantage, ensuring that technology enhances, not replaces, human judgment and expertise.

Our workforce development mission also continues to grow through the Research for Intelligence and Security Challenges (RISC) program, a cornerstone of our commitment to cultivating the next generation of cleared technical and analytic talent.

As global challenges evolve and the pace of technological change accelerates, ARLIS remains steadfast in its mission with a focus on performance, excellence, and common purpose. Guided by collaboration across disciplines and missions, we will continue to lead with courage, integrity, and strategic foresight as we address the Nation's most pressing challenges.

Thank you for your continued partnership and confidence in ARLIS. Together, we are advancing the science of security and strengthening the Nation's enduring advantage in intelligence and defense.

Dr. John Beieler
Executive Director

APPLIED RESEARCH LABORATORY FOR
**INTELLIGENCE
AND SECURITY**

Who We Are

The Applied Research Laboratory for Intelligence & Security (ARLIS) at the University of Maryland (UMD) is a University Affiliated Research Center (UARC) dedicated to advancing research, innovation, and technology transition to provide engagement advantage for U.S. national security. ARLIS advances high-value research and state-of-the-art infrastructure to provide engagement advantage. ARLIS combines deep scientific expertise with operational insight to address challenges in intelligence analysis, cybersecurity, artificial intelligence / machine learning (AI/ML), quantum science, and human-machine teaming. Researchers, scientists, engineers, and analysts at ARLIS collaborate with government agencies, industry partners, and academic institutions to deliver actionable insights and transformative solutions through research and development. ARLIS provides access to world-class students and researchers, expanding the pipeline of skilled talent essential to drive technological innovation and strengthen national capabilities. Employees at ARLIS work on projects of critical importance, contribute directly to the Nation's security, and are supported by a culture that values integrity, collaboration, and professional growth.

Our Mission

ARLIS advances U.S. national security by operationalizing research, innovation, and technology that enhance decision-making and deliver engagement advantage.

What Makes ARLIS Different

- Trusted and Neutral Partner: As a government-trusted collaborator, ARLIS provides an impartial space where government, industry, and academia work together to develop mission-driven solutions.

- Integrated Expertise: Our researchers, scientists, engineers, and analysts work at the intersection of advanced computing, human systems, and operational effectiveness, ensuring our work remains both technically rigorous and operationally grounded.

- Mission-Driven Science: Every project at ARLIS is rooted in real-world mission challenges, translating scientific discovery into actionable outcomes for national security.

- Workforce Catalyst: Through programs such as Research for Intelligence & Security Challenges (RISC) and Intelligence and Security University Research Enterprise (INSURE), ARLIS builds the next generation of cleared researchers and technical leaders who will shape the Nation's future of intelligence and security.

Strategic Goals

ARLIS's strategic goals align with the national security and UMD strategies and guide our mission to advance defense and intelligence through research, innovation, and partnership:

1. Provide Engagement Advantage for National Security: Provide science, technology, and insights for national security decision-makers to navigate their complex environments.

2. Identify Risks to the National Security Environment: Apply research and innovation to identify risks to critical technologies, supply chains, and trusted personnel, strengthening national resilience.

3. Support the Defense Innovation Ecosystem: Foster collaboration, information-sharing, and innovation across government, industry, and academia to accelerate solutions that advance national security.

4. Drive Mission Impact Through Research and Development: Operationalize cutting-edge research to deliver trusted solutions for mission effectiveness across defense and intelligence domains.

5. Build the Workforce: Grow and equip the cleared technical workforce to meet future government needs.

6. Strengthen ARLIS: Improve ARLIS's organizational excellence and partnerships to ensure enduring impact, accountability, and innovation.

Divisions

ARLIS organizes its technical workforce into four interdisciplinary divisions, each aligned with mission areas that span the priorities of the DOW and the Intelligence Community (IC). Together, these divisions integrate advanced research, operational insight, and applied innovation to deliver enduring advantage for national security.

• ACET
Advanced Computing & Emerging Technologies

The Advanced Computing & Emerging Technologies Division advances research and engineering solutions that safeguard America's technological superiority and ensure the delivery of uncompromised capabilities across the defense and intelligence enterprise. The division's mission is to integrate advanced computing, secure digital ecosystems, and resilient technologies to help the Nation achieve and sustain technological overmatch and enduring asymmetric advantage.

By combining deep technical expertise with mission-driven problem solving, ACET enables the U.S. Government (USG) to dominate across the full spectrum of competition and conflict.

Securing the Digital Battlespace
ACET strengthens the integrity and resilience of critical information systems through technical information assurance, critical infrastructure protection, and operational technology defense. Researchers, scientists, engineers, and analysts develop AI-augmented tools and secure-by-design architectures that protect the confidentiality, availability, and integrity of mission data and networks.

Engineering Resilient Advantage
ACET enhances supply chain security, economic statecraft, and industrial resilience to reinforce the Nation's defense and manufacturing base. By combining systems engineering, risk analytics, and digital assurance, the team ensures that the United States can deliver and sustain uncompromised capabilities in the face of economic, cyber, and cognitive threats.

Accelerating Decision Superiority
ACET advances analytic insights, computing innovations, and software modernization to transform data into predictive, actionable intelligence. Leveraging artificial intelligence, advanced analytics, and model-based systems engineering, the team provides the decision advantage needed to out-think, outpace, and outmaneuver adversaries.

• IHMS
Intelligent Human-Machine Systems

The Intelligent Human-Machine Systems Division integrates engineering, science, and technology to drive innovations that keep people at the center of defense and intelligence operations. IHMS conducts research on socio-technical systems to design technology that effectively supports the Warfighter and IC. By focusing on how operators, analysts, and autonomous systems interact in complex environments, IHMS enables the United States to leverage science and technology to create human-machine systems that excel in rapidly evolving conditions.

Advancing and Assuring AI/ML for Decision-Making in Dynamic Environments
IHMS develops, tests, and evaluates artificial intelligence and machine learning systems that perform reliably under uncertainty. Using human-systems integration best practices, the division advances AI assurance across programs in battle management, command and control, information operations, and force protection.

Promoting Warfighter Readiness and Performance
IHMS enhances operator and analyst decision-making, sense-making, adaptability, force protection, and sustained performance to create a more agile and innovative DOW and IC. Through cutting-edge research, the division develops human-centered methods and tools that improve human performance across defense and intelligence roles through both human and human-machine solutions.

Advancing Human-Machine Teaming (HMT)
IHMS leads research on test, evaluation, verification, and validation (TEVV) for autonomous systems while exploring the policy and ethics of AI and autonomy. The division investigates counter–Unmanned Aerial Systems (UAS) and counter-swarm tactics, integrates commander's intent into adaptive AI agents, and ensures emerging technologies reinforce, rather than replace, human command and control.

• OI2

Operational Innovation & Information

The Operational Innovation & Information Division applies behavioral and social sciences to develop operational solutions and model the complexities of human behavior and motivation within the global information environment. OI2 collaborates across ARLIS divisions to integrate human understanding with advanced technology, ensuring information advantage for U.S. defense and intelligence missions.

Providing Decision-Making Advantage
OI2 delivers decision-making advantage through modeling and simulation of populations using AI/ML and large language models (LLMs). These approaches enable the creation of synthetic populations and data that illuminate how human behavior evolves within dynamic information environments.

Developing Foundational Understanding of Human Behavior and Language
OI2 constructs and curates human-produced data pipelines for applied use in national security and intelligence missions, providing linguistic expertise across multiple languages. This work supports deeper understanding of the human and cultural dimensions that shape global operations.

Designing and Executing Test & Evaluation for Complex Projects and Commercial Vendors
OI2 assesses the capabilities of AI, ML, and LLM-based tools applied to human decision-making at the intersection of technology and human behavior. By conducting independent test and evaluation, the division provides the government with objective insight into vendor solutions and commercial innovation.

• MIQA

Maryland Institute for Quantum Applications

The Maryland Institute for Quantum Applications at ARLIS identifies, analyzes, and matures quantum technology applications critical to national security and intelligence. Quantum computers, sensors, and networks have the potential to transform science, industry, and defense with new capabilities. MIQA provides trusted, independent expertise to support the USG in advancing and protecting quantum technologies.

Predicting Quantum Impact
MIQA evaluates emerging applications of quantum science and technology, from interpreting basic research to field-testing commercial products, and assesses their utility for the defense and intelligence sectors. By collaborating with academic pioneers, industry innovators, and government stakeholders, MIQA identifies which quantum applications offer strategic value and how the United States can best benefit from them.

Securing the Future
MIQA partners with USG organizations to address emerging risks and opportunities related to quantum technology. Before quantum capabilities are incorporated into critical industrial and national security systems, it is essential to understand their security implications. MIQA helps organizations operationalize quantum innovation in accordance with military and intelligence priorities.

Building the Right Bench
MIQA cultivates a multidisciplinary cadre of cleared subject matter experts who combine deep technical knowledge with awareness of DOW and IC priorities. Quantum science is complex, and MIQA's team of physicists, engineers, and computer scientists applies a science-first approach to address challenges at the intersection of quantum technology and national security.

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Acquisition & Industrial Security

Strengthens U.S. supply chains and innovation ecosystems by helping government programs identify and mitigate risks embedded in global industrial dependencies and digital assurance gaps. A&IS ensures the delivery of uncompromised technologies to the warfighter by combining analytic rigor, technical insight, and mission-informed systems thinking.

Counterintelligence for Strategic Competition

Equips government and industry partners to detect, mitigate, and manage insider threats and foreign influence, safeguarding trusted workforces, secure operations, and the integrity of national security programs. This mission area delivers methodologies and analytic tools that enable proactive detection and protection across the defense and intelligence enterprise.

Analytic Insights

Applies threat-informed systems thinking, advanced analytics, and deep technical expertise to transform complex data into actionable intelligence. By integrating human and machine analysis, this mission area empowers leaders to make faster, smarter, and more resilient decisions across missions and domains.

Modernizing and Transforming for Adaptive Resilience

Provides actionable pathways for modernization and transformation to ensure that critical capabilities remain uncompromised and adaptable to emerging threats. This mission area drives readiness through modernization frameworks that anticipate evolving warfighting and operational needs.

Command & Control Intelligence, Surveillance & Reconnaissance

Designs, develops, and tests AI-enabled systems that deliver decision superiority and accelerate operational effectiveness. C2ISR integrates multi-domain data and human-machine workflows to enhance situational awareness, command agility, and mission responsiveness.

Human Performance & Readiness Augmentation

Develops human-centered methods and tools to improve performance, sense-making, learning, and decision-making across defense and intelligence missions. HPRA leverages human-machine teaming and cognitive science to strengthen readiness and sustain performance under demanding operational conditions.

Information Warfare

Delivers tools and models to simulate adversary messaging, counter disinformation, and safeguard decision integrity. This mission area advances the understanding of how information is weaponized and provides capabilities to protect U.S. interests across the information domain.

Open-Source Intelligence

Operationalizes publicly available data to improve situational awareness and mission insight. Through AI-driven tools and analytic frameworks, OSINT enables real-time, responsible exploitation of open-source information to support defense and intelligence operations.

National Foreign Language Center

Develops and delivers innovative solutions for language training, assessment, cross-cultural immersion, and linguistic analysis.

Quantum Information Science

Mission-informed support at the intersection of quantum science and security.

HIGHLIGHTS

Advanced Computing & Emerging Technologies

ADVANCED COMPUTING & EMERGING TECHNOLOGIES

ARLIS Insights

In 2025, ARLIS launched ARLIS Insights, a new capability designed to close the gap between emerging technology innovation and national security decision-making. Recognizing the need for timely, accurate, and mission-relevant analysis of complex technologies, ARLIS Insights combines technical expertise, intelligence tradecraft, and policy awareness to provide trusted, independent perspectives on the technologies shaping the next decade of strategic competition.

By integrating expertise in artificial intelligence, quantum science, telecommunications, and systems engineering, ARLIS Insights translates complex research into clear, actionable analysis that informs government strategy and investment.

Outcomes

- Independent analysis of emerging technologies critical to defense modernization
- Assessments on national security applications of AI, quantum science, and next-generation communications
- Translation of technical complexity into concise, policy-relevant insights for senior decision-makers
- Bridges technical experts, intelligence professionals, and policymakers to align priorities and accelerate impact

ARLIS Insights delivers a single, trusted source of technical intelligence to ensure innovation and national security remain strategically aligned.

Threat-Informed Systems Thinking: A New Approach to Supply Chain Analysis

ARLIS introduced a threat-informed, systems-thinking approach to defending the defense industrial base through intelligence-driven supply chain analysis. This methodology blends systems engineering with analytic tradecraft to reveal vulnerabilities that traditional compliance frameworks often overlook.

By red teaming government platforms and simulating adversary campaigns across full system lifecycles, ARLIS identifies high-impact vulnerabilities and delivers threat intelligence that is not only accurate but actionable.

Outcomes

- Dual-discipline teams that combine intelligence analytic rigor with acquisition and industrial expertise to deliver findings that are both policy-relevant and operationally actionable
- Red-team realism that validates simulated adversary campaigns against operational constraints, ensuring relevance and prioritization of true mission risk

This approach provides a scalable, repeatable model for protecting critical systems and reinforcing the Nation's technological and industrial advantage.

Delivering Digital Sustainment Advantage for the U.S. Navy

In 2025, ARLIS continued critical collaboration with the U.S. Navy's Undersea Warfare Center to modernize sustainment and enhance operational performance for the Columbia-class submarine program, one of the Nation's highest-priority strategic deterrence platforms. The Navy's decision to exercise an additional option year reaffirmed confidence in ARLIS's ability to deliver mission-critical outcomes at scale.

ARLIS helped accelerate the Navy's transition to a fully digital sustainment environment by:

- Validating digital data for manufacturing use, demonstrating that digital artifacts could be used to fabricate components directly from digital engineering data.
- Modeling maintenance cycles to increase operational availability, providing evidence-based recommendations aligned to Fleet readiness requirements.
- Establishing a repeatable modeling framework that enables sustained optimization of readiness and sustainment decisions.

These efforts strengthen industrial-base responsiveness, improve sustainment efficiency, and ensure Columbia-class fleet readiness. Building on this success, ARLIS received a new award from the Naval Undersea Warfare Center to advance situational awareness and tactical control for the Columbia-class program.

Through these combined initiatives, ARLIS continues to help the Navy optimize sustainment, sharpen tactical performance, and accelerate the transition to digital-first naval capabilities, positioning the Columbia-class for enduring mission success.

Outcomes

- A validated digital sustainment framework supporting the Navy's highest-priority deterrence platform
- Increased operational readiness through data-driven maintenance modeling and predictive analysis
- A repeatable sustainment for lifecycle optimization and resource efficiency
- Advancing the Navy's transition to a secure, digital-first sustainment environment with measurable mission gains

Automating Secure and Responsible Information Management

Through the Technical Information Assurance (TIA) initiative, ARLIS advanced modernization of how the government protects and manages classified information. Working with the DOW, ARLIS researchers and engineers developed AI-augmented tools for automatic classification and declassification review, applying machine learning and natural language processing to improve accuracy, consistency, and speed.

This work was featured in the Information Security Oversight Office's (ISOO) FY 2024 Annual Report to the President, which highlighted ARLIS's systems-engineering model for automated declassification review as a model for modernization.

Building on this recognition, ARLIS is expanding its Information Security Review and Recommendation (ISRaR) framework, a systems-engineering approach that integrates policy, technology, and human expertise.

Outcomes

- Developed and demonstrated AI-augmented tools to modernize national information management
- A deployed ISRaR framework to integrate technology, policy, and human oversight for secure data sharing
- Strengthened the government's ability to protect, classify, and exchange sensitive information efficiently and responsibly
- Recognition by ISOO for advancing automated, systems-engineering approaches to declassification review

HIGHLIGHTS

Intelligent Human-Machine Systems

Advancing Human Performance for National Security

In 2025, ARLIS significantly expanded its capabilities in human performance research, enhancing readiness across DOW and IC missions. Working with partners such as the Office of the Under Secretary of War for Research and Engineering (OUSW(R&E)), U.S. Special Operations Command, and the Defense Health Agency, ARLIS developed applied research solutions to improve cognitive and physical resilience, adaptability, and decision-making in high-stakes environments.

Outcomes

- Neuromodulation for enhanced learning and human-centered workflow design for intelligence operations.
- Aptitude assessments and operational testing to ensure optimal human-system pairing.
- Development and evaluation of AI-enabled tools to augment human cognition and performance under operational conditions.

ARLIS continues to lead in human performance innovation, ensuring U.S. forces maintain readiness and dominance across future operational domains.

AI Assurance

Through partnerships with the Chief Digital and AI Office (CDAO), OUSW(I&S), and the Air Force Research Laboratory, ARLIS pioneered new methodologies for identifying and managing risk in AI-enabled systems. Using native data pipelines through the CDAO's ADVANA enterprise, ARLIS developed frameworks for measuring operational impacts of AI systems in real-world contexts, providing the Joint Staff with reusable, data-driven tools for evaluation.

Additionally, ARLIS collaborated with INSURE partners to develop neuro-symbolic methods for simulating operations and identifying early-stage risks, advancing the Department's ability to assess and certify AI capabilities before deployment.

Outcomes

- Delivered new tradecraft for testing and evaluating AI systems at the point of use.
- Provided operational metrics and reusable evaluation tools within the ADVANA enterprise.
- Developed simulation methods to identify AI risks early in capability development.
- Advanced the Department's capacity to certify and deploy AI systems safely, effectively, and in accordance with mission standards.

Ethical, Legal, and Societal Implications of AI

ARLIS led a series of workshops exploring the AI deployment in mission-critical contexts. Five recurring themes emerged:

- Environmental and cultural factors across task domains
- Deviation from protocol
- Defining AI alignment and accountability
- Emotional and cognitive dimensions of human decision-making
- Moral injury and ethical burden in human-AI collaboration

Outcomes

- Provided foundational insights shaping Department policy on ethical AI adoption.
- Identified operational conditions influencing trust, alignment, and human oversight of AI systems.
- Supported development of frameworks addressing moral & cognitive implications of AI.
- Strengthened ethical governance and accountability measures for AI in mission-critical applications.

HIGHLIGHTS

Operational Innovation & Information

Expanding Focus:
Open-Source Intelligence and Information Warfare

In 2025, ARLIS restructured and expanded its behavioral and social sciences portfolio into the Operational Innovation & Information (OI2) Division, launching two new mission areas: Open-Source Intelligence (OSINT) and Information Warfare.

OSINT

ARLIS's OSINT mission delivers tools and expertise to process and analyze the vast scale of open-source data generated daily. Leveraging AI and human-in-the-loop analytics, the team enables decision-makers to identify relevant insights quickly and reliably.

Outcomes

- Provided an AI-assisted data triage method to detect patterns across massive, unstructured datasets
- Developed Human-in-the-loop interfaces for trusted insight generation
- Modernized analytic frameworks integrating OSINT with classified streams
- Standardized vendor capability assessment methodologies

Information Warfare

ARLIS explores how adversaries exploit information systems and how the U.S. can defend and prevail in the information domain. This mission area restores "information warfare" as a core operational discipline.

Outcomes

- Established an Adversary influence modeling and simulation
- Operational testing environment of information operations strategies
- Doctrine alignment with the Secretary of War's directive to "confront, confound, and defeat adversaries in the information domain"

OPERATIONAL INNOVATION & INFORMATION

Advancing Open-Source Tradecraft:

ARLIS expanded its long-term partnership with the USG to prototype and evaluate AI, ML, and LLM tools for open-source intelligence. ARLIS delivered the Vendor Capability Assessment Framework, a standardized model for assessing commercial OSINT tools, now in operational use across DOW and IC programs.

By embedding responsible AI principles and measurable performance criteria, this collaboration ensures that machine-augmented analysis remains transparent, defensible, and mission-focused.

Outcomes

- Delivered a standardized model for evaluating commercial OSINT capabilities.
- Enabled sponsors to identify, compare, and adopt AI-driven tools safely and effectively.
- Advanced tradecraft integration by combining automated analytics with human-in-the-loop evaluation.
- Strengthened analytic rigor, transparency, and accountability in open-source intelligence exploitation.

Harnessing AI for Decision Modeling: OUSW(R&E) Research Initiative

Under a task order from OUSW(R&E), ARLIS is developing foundational methods for using large language models to generate synthetic populations and content for decision-support modeling. This research integrates computational science and behavioral modeling to simulate human decision-making under complex conditions, creating scientifically valid, explainable tools for defense analytics and strategic foresight.

Outcomes

- Pioneered new methods for integrating behavioral modeling and AI to simulate human decision-making.
- Advanced development of scientifically grounded, repeatable, and explainable LLM-based models.
- Provided new analytic tools to support defense planning, scenario testing, and decision analysis.
- Positioned ARLIS as a national leader in applying responsible AI to human behavior and operational modeling.

HIGHLIGHTS

Maryland Institute for Quantum Applications

Quantum Leadership: A National Institute

In 2025, ARLIS established itself as a national leader in mission-informed quantum science through the launch of the Maryland Institute for Quantum Applications. MIQA connects ARLIS physicists, engineers, and computer scientists with government sponsors and industry to accelerate breakthroughs in quantum computing, sensing, and workforce development.

Capital Quantum Benchmarking Hub

The Capital Quantum Benchmarking Hub, headquartered at ARLIS, is a partnership between DARPA and the State of Maryland. Championed by Governor Wes Moore, this initiative positions Maryland as the Nation's quantum epicenter, aligning federal and state investment to advance U.S. leadership in quantum research and workforce training.

By situating the Hub within ARLIS's secure research facilities, the government gains access to:

- Independent, trusted evaluation of quantum technologies
- Mission-informed research and applications
- Training pipelines connecting students and early-career researchers to DOW and IC missions

Together, DARPA and ARLIS ensure breakthroughs in quantum science are rigorously tested, trusted, and mission-aligned.

MARYLAND INSTITUTE FOR QUANTUM APPLICATIONS

DARPA Quantum Benchmarking Initiative

Under DARPA's Quantum Benchmarking Initiative (QBI), ARLIS is partnering with leading quantum companies to explore novel computational methods, materials modeling, and resource optimization for scalable, fault-tolerant quantum systems. This effort aligns with the Capital Quantum Benchmarking Hub and advances U.S. technological leadership in this critical field.

Strengthening Quantum Security

MIQA launched a new research initiative under the SEQCURE program, sponsored by the Secretary of the Air Force's Concepts, Development, and Management Office, to apply Zero Trust Architecture principles to quantum systems. This work evaluates the security posture of hardware, software, and cloud environments, providing recommendations to align emerging quantum technologies with national security standards.

689
APPLICATIONS

100
UNIVERSITIES

88
STUDENTS

35
SPRINT TEAMS
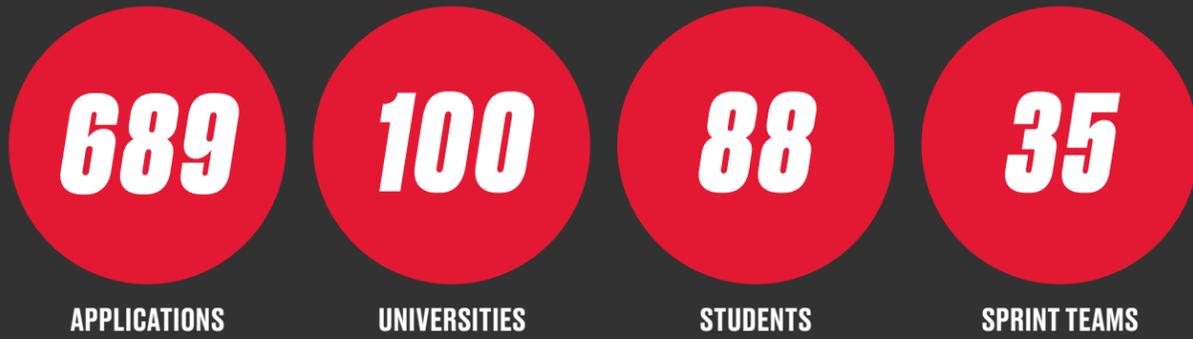
RISC

Research for Intelligence & Security Challenges

The RISC program serves as both a national innovation incubator and a premier pipeline for cleared technical talent. Managed by ARLIS, RISC recruits top students nationwide to solve real-world problems for defense and intelligence missions.

Each summer RISC provides mission sponsors with:
• Rapid-turn applied research with operational impact
• A cleared, multidisciplinary talent pipeline
• Strengthened partnerships between academia and the defense enterprise
• Early exposure for students to classified research environments

In 2025, RISC received 689 applications from over 100 universities, selecting 88 students across 35 innovation sprint teams. Participants represented disciplines including the following:

Aerospace Engineering	Cyber Security Engineering	Linguistics
Applied Mathematics	Data Processing	Mass Communication
Artificial Intelligence	Data Science	Mechanical Engineering
Biology	Electrical & Electronic Engineering	Philosophy
Business Administration	Geography	Physics
Chemical Engineering	Industrial and Systems Engineering	Political Science
Cognitive Science	Information Science	Psychology
Computational Linguistics	Information Systems	Public Administration
Computer Engineering	Intelligence and Security Studies	Secure Embedded Systems
Computer Science	International Relations	Security and Risk Analysis

Through RISC, ARLIS is cultivating the next generation of mission-ready professionals who will lead the future of intelligence and security.

INSURE

Intelligence and Security University Research Enterprise

INSURE, launched in 2020, enables the DOW and the national security community to access vetted academic expertise through a trusted, UARC-managed consortium.

INSURE includes a network of top R-1 research institutions and select smaller universities with demonstrated defense-research capabilities. Members benefit from clear government demand signals, access to secure infrastructure, and streamlined contracting approaches.

Outcomes
• Partnered on over $37 million in contracted research awards, most supporting faculty and students.
• Executed three INSURE Partnership Seedling projects initiated in 2024 and continuing through 2026.
• Integrated INSURE faculty into ARLIS programs, including RISC mentorship and USG partnership development.
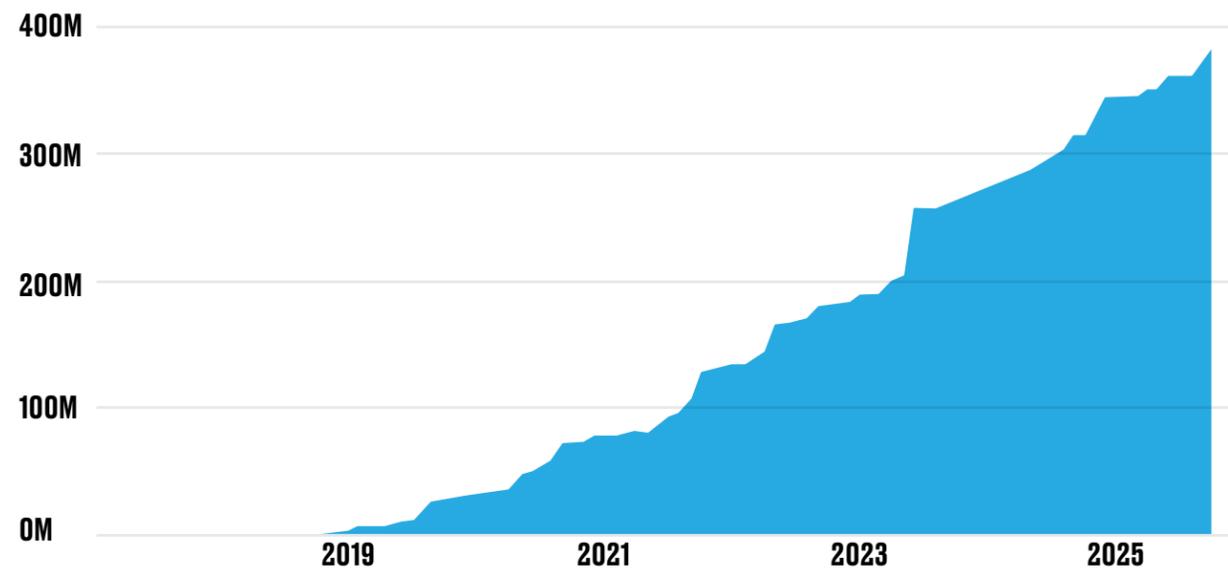
Through INSURE, the government expands access to cleared academic talent while enabling researchers to directly support mission-critical national security challenges.

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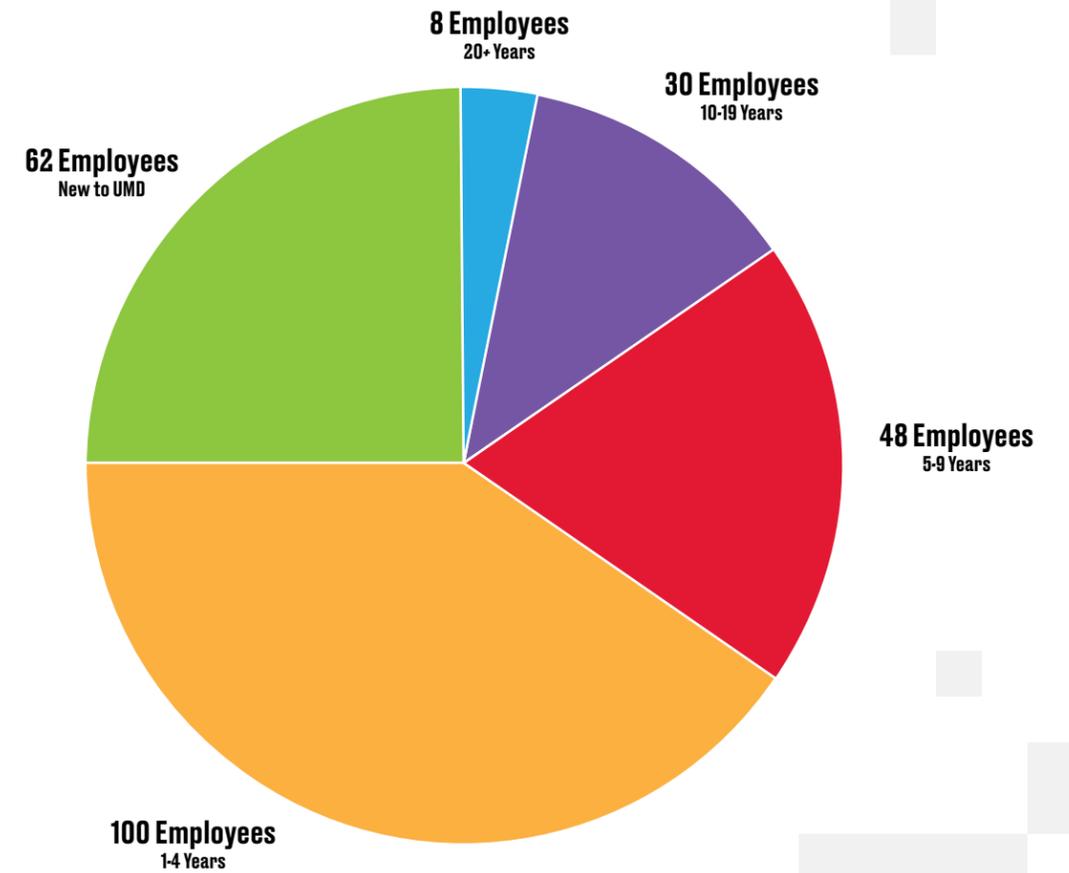CONTRACTED RESEARCH AWARDS

ARLIS Financial Overview

Awarded Funding Over Time

Number of Employees
[Years with UMD]

- **8 Employees** 20+ Years
- **30 Employees** 10-19 Years
- **62 Employees** New to UMD
- **48 Employees** 5-9 Years
- **100 Employees** 1-4 Years

Over the past several years, ARLIS has rapidly growth both awarded and obligated funding. Total obligated funding has increased from near zero in 2018 to more than $360 million by 2025, with the most significant acceleration occurring after 2020. Award funding has grown even more rapidly, reaching approximately $445 million, as our robust pipeline of potential projects converts into new and expanded work.

In calendar year 2025 ARLIS received $37 million in funding across nine new contracts and secured an additional $25 million of funding for existing efforts. ARLIS is proud of its growing and broad sponsor base, working with approximately 100 unique agencies, directorates, program offices, and private organizations since inception.

This financial growth has been supported by meaningful expansion in people, programs, and partnerships. Over this year, the organization added seven new staff and 22 new faculty, alongside 33 students, strengthening both research capacity and workforce development. Strategic organizational initiatives also advanced, including the launch of MIQA and the merger of another UMD unit, the National Foreign Language Center (NFLC), which integrated ten faculty and two staff, further broadening interdisciplinary capability.

Working with ARLIS

ARLIS is a trusted agent of the DOW and the only UARC dedicated exclusively to defense and intelligence missions. Sponsored by OUSW(I&S), ARLIS operates under an Indefinite Delivery/Indefinite Quantity (IDIQ) contract for rapid task order execution.

Why Work with ARLIS

Prime Location: Situated in the National Capital Region, minutes from Washington, D.C.
Secure and Mission-Ready: State-of-the-art secure facilities for classified research.
Academic Excellence: Access to UMD faculty and research infrastructure.
Swift Contracting: Faster acquisition via IDIQ task orders—completed in weeks, not months.
Authorized Contract Type: Cost-Plus-Fixed-Fee (CPFF) Completion contracts.

**WORKING WITH ARLIS**

Who Can Work with ARLIS

Any DOW warranted contracting officer may place a task order on ARLIS's primary sponsor IDIQ. Additionally, government sponsors outside DOW may pursue sole-source contracting with ARLIS for work aligned with UARC core competencies.

Projects not requiring secure ARLIS facilities may be coordinated through the University's Office of Research Administration.

Getting Started

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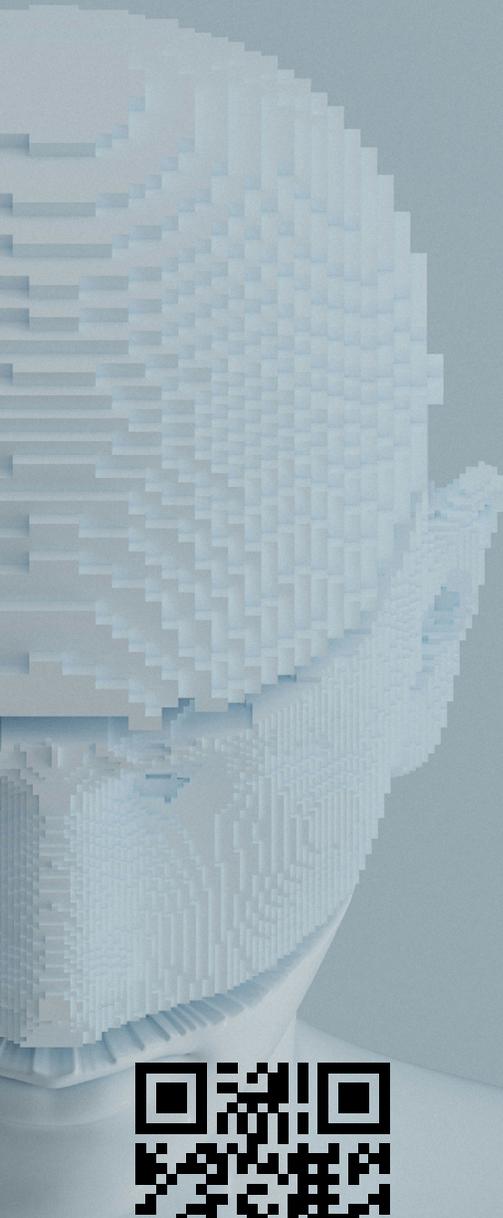
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