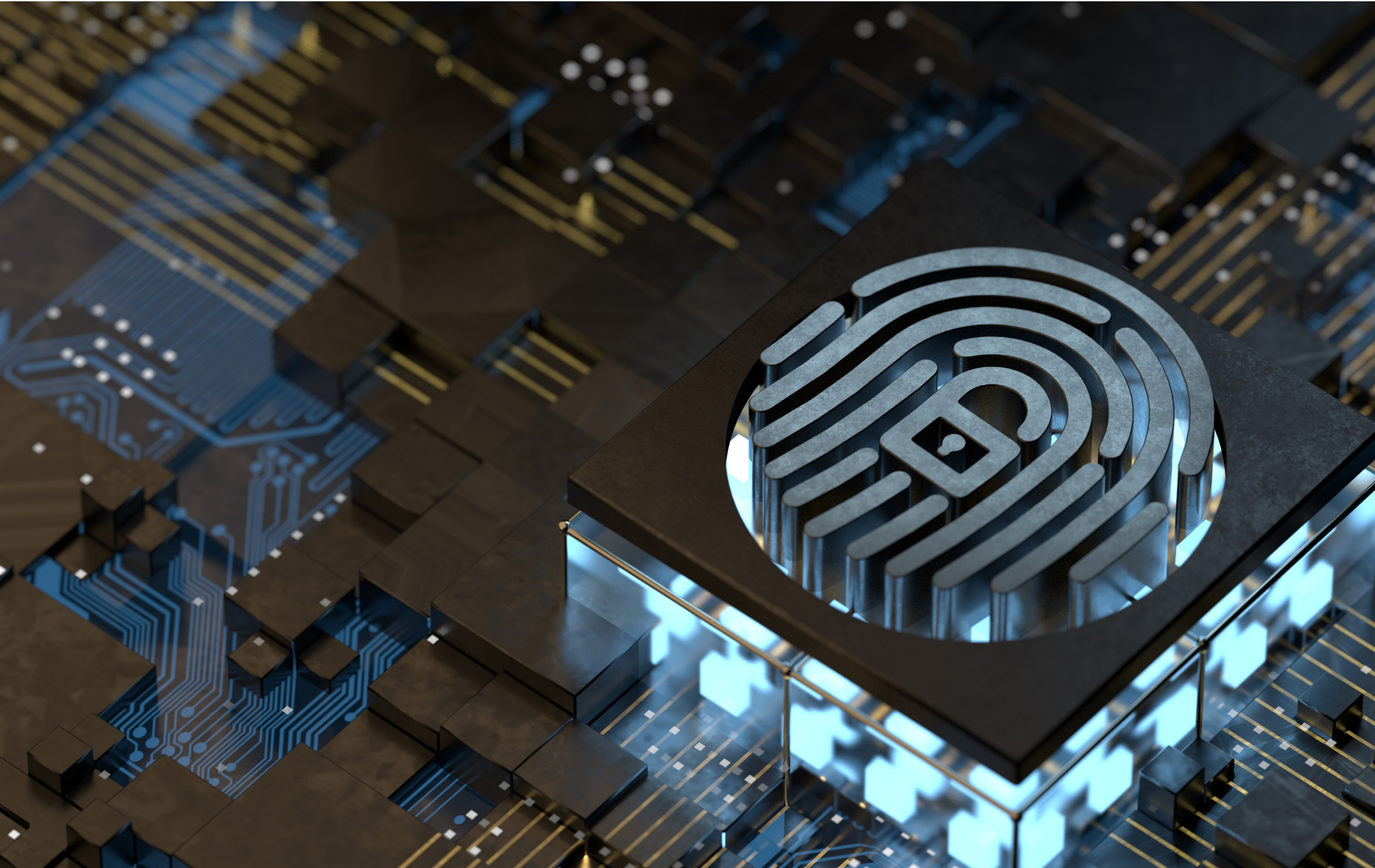


# CYBERSECURITY

Minimizing risks and maximizing security to enable mission success

**Michael Baker**

INTERNATIONAL



# CYBERSECURITY SERVICES FOR A SMART AND SECURE NATION

Rapid and continuous advancements in 5G connectivity, digital controls, machine learning and robotics are fueling increased demand within the Department of Defense (DoD) for smart technology. The DoD recognizes the opportunities associated with these technologies and is actively incorporating them into current and future facilities and infrastructure.

Unfortunately, new cyber-attack vectors are added to the Global Internet of Things (IoT) daily, increasing the threat to military missions. Bad actors are smart, determined and armed with elusive tools and technology to infiltrate technology systems, presenting threats to critical infrastructure, operations and human life.

Michael Baker International's cybersecurity team solves the toughest cyber technology challenges through a multifaceted program spanning systems, infrastructure, platforms, verticals, agencies and more. By taking a master planning and forensic approach to cybersecurity for DoD agencies, our engineers, forensic technologists, planners, developers and programmers custom design risk-mitigating systems and plans to ensure continuity of operations, protection of property, financial assets, human safety and peace of mind so you can focus on delivering your missions safely and efficiently.

*We Make a Difference*



## National Initiative for Cyber Education Strategic Planning

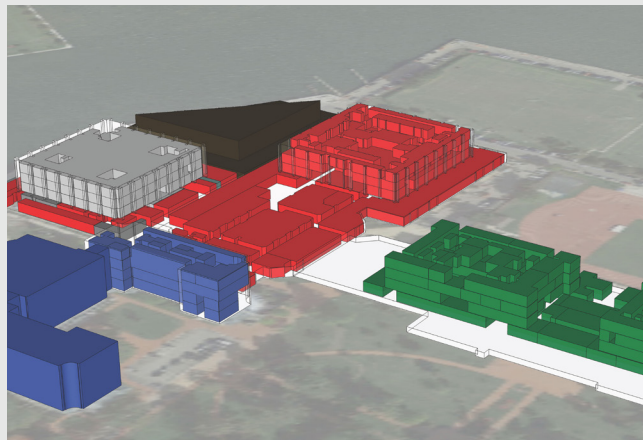
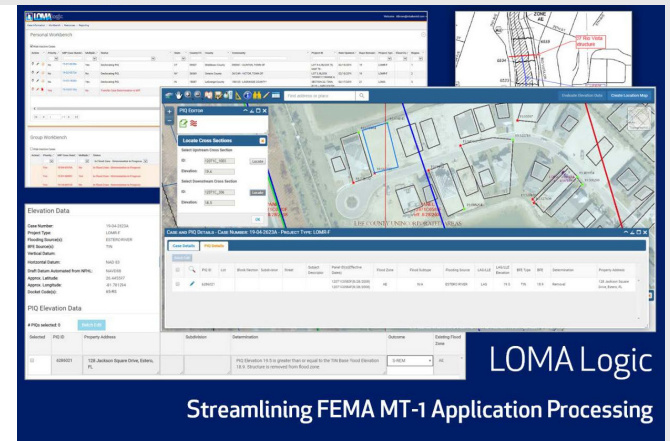
### General Services Administration

Michael Baker provided program management, stakeholder outreach and strategic writing support for the National Protection & Programs Directorate's Office of Cybersecurity and Communications, which plays a lead role in safeguarding and securing cyberspace. Support encompassed the development of strategic documents related to cybersecurity awareness campaigns and efforts.

## Networking and Cybersecurity for Critical Infrastructure Systems

### Federal Emergency Management Agency (FEMA) & U.S. Dept. of Homeland Security (DHS)

FEMA contracted Michael Baker to manage public applications for insurance-related property or structure flood zone evaluations. We custom built a tool and web service called LOMA-LOGIC to automate public application processing and enhanced the tool's functionality, while testing added cybersecurity measures across interactions with external systems.



## U.S. Naval Academy (USNA) Academic Realignment Plan

### Annapolis, Maryland

The USNA is undergoing a significant, long-term academic realignment to comply with a congressional mandate. For this realignment, Michael Baker provided architectural services, space utilization analysis, detailed sequencing graphics at the room level by phase for each department and facility. The plan established a strategy and accompanying plans for the location of each academic department within the existing academic buildings and the new Cyber Education Building, which is currently under construction.



## Airborne Warning and Control System Hangar and Alert Facility

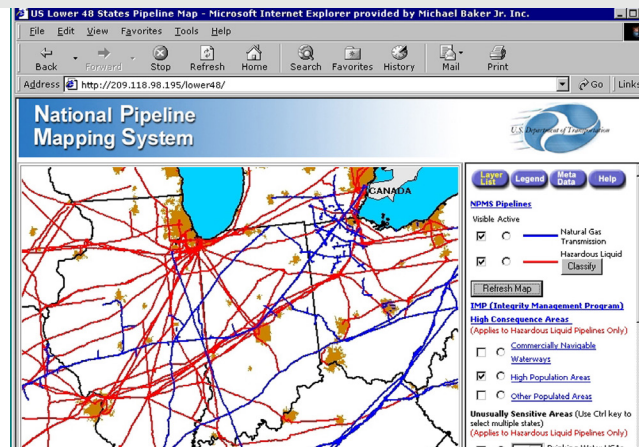
### Joint-Base Elmendorf-Richardson, Alaska

Michael Baker is responsible for the secure and non-secure communications cable onsite and inside the renovated hangar and adjacent new alert facility. The cybersecurity designs entail security systems for the buildings, consisting of intrusion-detection equipment, access control, video surveillance, closed-circuit television and a public address system, all of which comply with intelligence community requirements for secure work areas.

## National Pipeline Mapping System (NPMS) – Nationwide GIS Database Repository Services

### U.S. Department of Transportation (USDOT)

Michael Baker manages the USDOT Pipeline and Hazardous Materials Safety Administration's NPMS geospatial data repository. The company is responsible for maintenance and enhancement of the NPMS websites and associated applications and ensures that the public-facing system adheres to federal and NIST cybersecurity criteria for a secure data environment.



## Employee Certifications

- Certified Ethical Hacker
- Certified Information Systems Security Professional
- Certified Cloud Security Professional
- CompTIA Security+
- Computer Hacking Forensic Investigator
- GIAC Certified Intrusion Analyst
- Outside Plant Designer
- Registered Communications Distribution Designer

## CAPABILITIES

### Assessments

- Forensic Investigations
- Network Architecture Reviews & Risk Analysis
- Network Traffic Inspection & Analysis
- Penetration & Vulnerability Compliance Assessments
- Risk Assessments

### System Planning

- Communication Protocol Development
- Encryption
- Integration of Data Acquisition, Monitoring & Cognitive Computing
- Intrusion Detection & Prevention Strategy
- Network Segmentation & Traffic Management
- NIST Cybersecurity Framework
- SIEM Strategy
- Zero Trust Access Models

### New Construction & Integration

- Access Control Systems
- Cybersecurity Defense Strategies
- Instrument & Controls Design Engineering
- Network Engineering
- Security Camera Systems
- Server Environment Transitions
- Telecommunications Design

### System Hardening

- Building Automation Systems
- Distributed Control Systems
- Energy Management Systems
- Industrial Control Systems
- Local Area Networks
- Process Control Systems
- Supervisory Control and Data Acquisition

### System Monitoring & Compliance

- Certificate Issuance
- Cyber Incident Reporting for Critical Infrastructure Act Planning & Reporting
- Cybersecurity Documentation Development
- Cybersecurity Network Training
- Data Backups & System Redundancies
- Full Network Maintenance
- Intrusion Detection & Prevention Systems
- Malware Detection & Response
- Network Traffic Management

Visit [mbakerintl.com](http://mbakerintl.com) to learn more about our capabilities and iconic projects.

# CONTACT

Niek Veraart, AICP, ASLA, ENV SP  
National Practice Lead, Planning  
P: 917-509-0468  
E: niek.veraart@mbakerintl.com



Susan Howard, CISSP  
National Practice Lead, ICS/OT Cybersecurity  
P: 503-891-0903  
E: susan.howard@mbakerintl.com



Fred Gordy  
National Practice Lead, Building Cybersecurity  
P: 404-906-3004  
E: fred.gordy@mbakerintl.com



Elizabeth Bradford, MS, ENV SP  
National Resilience Lead  
P: 845-392-4053  
E: elizabeth.bradford@mbakerintl.com



**Michael Baker**  
INTERNATIONAL

WHETHER BUILDING NEW OR STRENGTHENING EXISTING BUILDINGS OR INFRASTRUCTURE,  
OUR TEAM HAS THE EXPERIENCE TO MEET OPERATIONAL TECHNOLOGY AND CYBERSECURITY NEEDS.

## READINESS



Work with us to prepare your people, processes and technologies to achieve sustained excellence and withstand adversary circumstances.

## CYBER RESILIENCE



We implement smart technologies to build resilience and reduce risks to vital assets, systems and networks.

## QUALITY STANDARDS



Our experienced staff adhere to ISA/IEC 62443, NIST SP 800 series standards and others based on client requirements.

## MISSION-TAILORED OPERATIONS



Our comprehensive array of protective solutions leverages proven frameworks, tools and methodologies to assess and mitigate threats to critical systems and infrastructure.

## EXTENSIVE EXPERIENCE



Michael Baker's experienced team understands the challenges of managing and operating highly secured networks. We stand ready to support your technology, security, operational and analytical support needs.

## FUTURE READY



As we move to a more automated world, our team has experience integrating legacy systems with new technology, helping you evolve to today's needs and standards.