



# Future of the IC Workforce: Gaining Information Advantage

## OVERVIEW

The Intelligence and National Security Foundation (INSF) partnered with QinetiQ US to host a three-part virtual series evaluating the *Future of the Intelligence Community (IC) Workforce*. This year's series discussed key issues facing the IC workforce as they relate to "Gaining Information Advantage" and provided recommendations to ensure the IC is prepared to meet the challenges and maximize the opportunities present in today's complex strategic environment.

During the three panel discussions, senior government and industry subject matter experts shared their insights on creating information advantage through the workforce, alliances and partnerships, and by employing cutting-edge tradecraft during the collection and analysis of open source intelligence (OSINT).

### THE WORKFORCE

MAY 15, 2023

Speakers:

Scott Colton  
*Deputy Director for Mission Services, DIA*

Christine C. Parker  
*Senior Strategist, Acting Senior Advisor to the Chief Human Capital Officer, NSA*

Pamela Hardy  
*QinetiQ US*

Moderator – Lindy Kyzer  
*Director of Content and PR at ClearanceJobs.com*

### ALLIANCES AND PARTNERSHIPS

AUGUST 14, 2023

Speakers:

David Cattler  
*Assistant Secretary-General for Intelligence and Security, NATO*

Maj. Gen Michelle McGuinness,  
Australian Army  
*Deputy Director for Commonwealth Integration, DIA*

Moderator – Lindy Kyzer  
*Director of Content and PR at ClearanceJobs.com*

### TRADECRAFT AND DATA

OCTOBER 13, 2023

Speakers:

Randy Nixon  
*Director, Open Source Enterprise, CIA*

Corey Vitello, PhD  
*Senior Director, Global Security and Workplace Solutions, Roku*

Moderator – Lindy Kyzer  
*Director of Content and PR at ClearanceJobs.com*

## KEY FINDINGS

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### ***UNIQUE TRAINING OPPORTUNITIES AND SPECIAL INCENTIVE PAY BENEFITS ARE KEY TO MAINTAINING A COMPETITIVE ADVANTAGE IN ATTRACTING AND RETAINING A TALENTED WORKFORCE.***

IC employers offer a wide variety of financial benefits like incentive pay for foreign language proficiency or STEM backgrounds, student loan repayment programs, and individual incentives to individuals who have considerable opportunities with market competitors.<sup>1</sup> Additionally, the IC's willingness to dedicate significant resources towards training and professional development contributes to a competitive advantage over other employers.<sup>2</sup> Whether in government or industry, amplifying both the unique career growth and mission opportunities to prospective candidates supports attracting and retaining a talented workforce.

### ***MODERNIZED RECRUITING SYSTEMS HAVE IMPROVED EMPLOYER-CANDIDATE COMMUNICATION AND ASSESSMENT OF THE TALENT POOL THROUGHOUT THE APPLICATION PROCESS.***

Integrating new technology—such as the “Handshake” application platform—into human resource systems has enabled IC employers to better develop and evaluate the available applicant pool through improved communication.<sup>3</sup> Employers have broadened their geographic reach beyond traditional recruiting hotbeds, allowing the IC to access new talent pools and develop connections with a more diverse group of prospective employees.<sup>4</sup> These modernization improvements have also extended to better forecasting the skills needed for future mission requirements. While previously the IC often focused recruiting efforts towards applicants with linguistic and cultural expertise, some agencies have expanded desired skill sets to include data literacy, data analysis, and strategic problem solving.<sup>5</sup> Other recruiting transformations include shifting from a model focused on refilling anticipated workforce attrition to one that prioritizes skills in new mission areas.<sup>6</sup> Strategic workforce planners are identifying the technical skills needed up to ten years in the future and have tailored their recruiting process accordingly.<sup>7</sup>

### ***PERSONAL RELATIONSHIPS AND HUMAN CONNECTIONS ARE ESSENTIAL TO ALLIANCES AND STRATEGIC PARTNERSHIPS.***

While alliances and international partnerships are often codified through treaties, memorandums of understanding, or other formal agreements, personal relationships between partners are what bring these relationships to life.<sup>8</sup> As personnel move to different assignments, new perspectives gained from experiences working alongside international allies and partners enable innovative approaches to solving complex problems in new mission areas.<sup>9</sup> In an intelligence and national security capacity, it can take a significant amount of experience and training to work effectively in a coalition or alliance environment.<sup>10</sup> Sustaining embeds, liaisons, and personal engagement between key stakeholders goes a long way towards strengthening alliances over a long-term basis.

### ***TRANSPARENCY AND CROSS-FUNCTIONAL INTEGRATION SUPPORT EFFECTIVE INFORMATION SHARING AMONGST INTERNATIONAL ALLIANCES AND PUBLIC-PRIVATE PARTNERSHIPS IN THE INTELLIGENCE COMMUNITY.***

When designing new platforms and technologies for intelligence and information sharing, partner integration must be accounted for from the initial conceptualization of the program.<sup>10</sup> This facilitates effective information sharing between allies and partners when the stakes for successful partner integration are high during a crisis. Greater prioritization of OSINT can also contribute to a flexible information sharing environment.<sup>10</sup> Furthermore, integrating OSINT analysts across functions and in different mission areas deepens the level of insight in an all-source mission and mitigates “stove-piping” of key information.<sup>10</sup> While information sharing can carry its own sensitivities in the private-sector regarding proprietary information, leveraging the corporate culture of transparency inherent to many tech companies can advance new ways to cooperate amongst industry partners.<sup>10</sup> Government agencies can also strengthen trusting relationships with industry through acknowledging the emphasis placed on transparent corporate culture, particularly in the tech sector.<sup>10</sup>

## ***HUMAN-MACHINE TEAMING ENABLED BY ARTIFICIAL INTELLIGENCE HAS LED TO AN OSINT “RENAISSANCE”.***

Advances in artificial intelligence (AI) and machine learning have revolutionized the collection and analysis of open-source intelligence in both government and private-sector mission areas.<sup>16</sup> These emerging technologies have proven to be a force multiplier when processing enormous volumes of open-source

data, allowing human capital to be preserved for highly complex and nuanced analysis.<sup>17</sup> While AI offers incredible opportunities to advance OSINT tradecraft, this technology does not serve to replace the human analyst; AI is best when augmenting human talent.<sup>18</sup> OSINT analysts with the knowledge and wherewithal to employ artificial intelligence tools will be key to gaining and maintaining information advantage in today's complex strategic environment.

## **CONCLUSION**

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During the 2023 Future of the IC Workforce multimedia series, INSF and QinetiQ US examined some of the key issues surrounding Gaining Information Advantage through bringing together senior leaders from government and industry to discuss the IC workforce, alliances and partnerships, and tradecraft and data. In supporting the IC workforce, our series found that unique training opportunities and special pay incentives will be critical for attracting and retaining top talent. Modernized recruiting platforms and processes have also allowed IC employers to tap into a broader and more diverse applicant pool. While sharing emerging technology developments amongst international alliances is key for effective cooperation, personal relationships are the foundation of these strategic partnerships. Integrating OSINT capabilities across functions also contributes to successful information sharing in both international and public-private mission contexts. Lastly, AI tools have driven an OSINT “renaissance”. Prioritizing skill development for the IC’s workforce to use, understand, and manipulate these tools will ensure the optimal employment of this key technology through augmenting—not replacing—human capital, its most important resource.

## REFERENCES

<sup>1</sup>Christine Parker: "NSA takes our compensation options very seriously, especially when we're talking about...market competition in STEM and in our cyber organizations. Foreign language is another place where we offer incentives...there are flexibilities in incentives where you can provide individual incentives to someone who might have options outside of the government...Much like the private sector we're able to offer some incentives to keep people with the government."

<sup>2</sup>Christine Parker: "Scott alluded to the developmental opportunities that we provide and I really feel like that's somewhere that we have an edge over our competitors. The government invests so much time and important energy into developing our workforce and giving people an opportunity to become even more expert in the field when they're working within the agency."

<sup>3</sup>Christine Parker: "We're using 'Handshake' as well. Especially when you're out talking to college students, it's made that relationship a little easier to manage and it's enabled us to push information to students that might not have otherwise been able to have that [communication with] the agency."

<sup>4</sup>Scott Coltson: "We've really moved away from the Eastern part of the United States...and we're looking at universities down in the southwest, we're looking at Historically Black Colleges. We're really trying to improve the diversity of our recruiting pool."

<sup>5</sup>Scott Coltson: "10 to 15 years ago, we would look for people that were steeped in a language and steeped in a culture and look to try to recruit those people to come to DIA. But now we're much more strategic than that. We are looking at critical skill sets, problem solvers, strategic thinkers, data excellence, how to visualize data, use data, manipulate data and it has really transformed the way we are recruiting."

<sup>6</sup>Christine Parker: "In the past, we were focused on an organizational model of how we hire to attrition and going forward we're saying what kind of skills do we need to bring on board, what are our priority areas?"

<sup>7</sup>Christine Parker: "We're bringing in our strategic workforce planning organization to really think those [priorities] long term. Our SWT Team is looking five years out, seven years out and saying what are we going to need over the next five to ten years and how do we start to build those pipelines now?"

<sup>8</sup>David Cattler: "Our business is inherently a people business. It is based on our personal interactions and relationships, I'd argue probably almost as much, if not more so than it is based on all the formal agreements that we sign with each other, because if the people do not give life to those agreements, they kind of don't matter as much as they should and as much as our leaders think they will when they give the political consent for us to pursue them."

<sup>9</sup>Maj. Gen. Michelle McGuinness: "The human-to-human connection... is the critical part of...the insights and the trust you build from knowing each other...and carrying that trust over to new organizations and institutions."

<sup>10</sup>David Cattler: "Nearly every intelligence and security officer gets deep training on counterintelligence and how to protect ourselves, and unfortunately a lot of it, at least in the very beginning when you're junior and you're less aware of how the business works, tends to be so defensive...that you really can't do much...with another human being but certainly not with someone from a foreign country, and I think it takes a lot of experience and...training and...interaction with partners in a range of settings in order for you to get your inhibitions still maintained at a proper level but lowered enough that you can actually work coherently in these arrangements with other nations."

<sup>11</sup>Maj. Gen. Michelle McGuinness: "Integration can never be a bolt-on, it can never just be the sprinkling on top, it's got to be foreseen. It's never as effective or efficient unless it's built in."

<sup>12</sup>Maj. Gen. Michelle McGuinness: "In the same vein as open-source intelligence, the more we can harness this, the better flexibility we have over sharing information. I don't think we've seen greater information sharing than over the last year as we've released...things the public needs to know."

<sup>13</sup>Randy Nixon: "Our folks are embedded...right beside our operators, our warfighters, and our analysts to be able to provide our expertise to that all-source mission, both here in Washington and in the field...that's the number one way you get really smart connections is [through linking] the people with the technology. Everything's a human-machine team if you do it right."

<sup>14</sup>Corey Vitello: "When I think about competitive advantage over a competitor, there is a fine line where I will not share proprietary information...however if a competitor of mine...has a security issue...and I have some answers based off of the people we have on ground...we're always going to reach out...and collaborate."

<sup>15</sup>Corey Vitello: "There's a little bit more hesitancy...for the private sector to share with the public sector not knowing where that information is going to go and how it's going to be used...it's a sizable gap in trust between private sector...at a tech company where we have a lot of transparency and trust amongst our entire organization."

<sup>16</sup>Randy Nixon: "Up until a week and a half ago, our information was really our greatest weakness. In the open-source world, we collect such a vast volume of information...at such a scale that it was impossible for any of our mission partners and customers to read it all...We have rolled out an AI-empowered tool that solved that problem for us...so we're at...I've called it a Renaissance."

<sup>17</sup>Randy Nixon: "We're really looking forward to...get[ting] out of the business of doing some of the very time consuming but less complex type of work...and now all we need to do is actually check its work and then add the deeper thoughts...So that gives us the ability to spend our time doing the more difficult parts of OSINT."

<sup>18</sup>Randy Nixon: "I saw a great quote the other day...that said, 'AI is not going to take your job; somebody who knows how to use AI is going to take your job.'"



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## ABOUT INSF

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