

Challenges and Implications of Human Terrain Analysis for Strategic Intelligence Thinking

By Myron Varouhakis¹

The U.S. Army's Human Terrain System (HTS) is perhaps one of the most interesting and intelligence support programs in the government arsenal, both in terms of originality as well as impact. HTS is a rather young program – less than a decade old² – and yet during this time it managed to grow from a concept to a program and to recruit, train and deploy hundreds of personnel into two conflicts: Iraq and Afghanistan.

A lot has been written already about it,³ and as with any intelligence-related government program, it is not free of controversy. In this case, some of the controversy is rooted into the nature of the program – sociocultural intelligence – something that the American Anthropological Association has been opposing⁴ because it recruits people with Ph.D.s from the humanities and social sciences. Other controversies and criticisms have dealt with the quality and field performance of some of the recruited and deployed personnel.

Still, despite any inherent adversities that come with a program that seeks to hire academicians who are willing to leave the comfort of university life and deploy

¹ Dr. Myron Varouhakis is Lecturer at the Brunel Centre for Intelligence & Security Studies of Brunel University in London. In the past he served as an HTS strategic-level analyst at the ISAF Joint Command HQ in Kabul. In 2009, he received the Walter L. Pforzheimer Award presented by the Studies in Intelligence.

****The views expressed in this essay are solely those of the author and do not represent the official position of the U.S. Army or of the Human Terrain System.***

² U.S. Army, "Human Terrain System: The History of the Human Terrain System." <http://humanterrainsystem.army.mil/history.html>

³ For example: Montgomery McFate and Steve Fondacaro, "Human Terrain System during the First 4 Years," *Prism* 2(4): pp.63-82; Maja Zehfuss, "Culturally Sensitive War? The Human Terrain System and the seduction of Ethics," *Security Dialogue*, 43(2): pp.175-190; Roberto J. Gonzalez, "Towards Mercenary Anthropology? The New US Army Counterinsurgency Manual FM 3-24 and the Military-Anthropology Complex," *Anthropology Today*, 23(3): pp.14-19; Mike Hill, "Terrorists Are Human Beings: Mapping the U.S. Army's 'Human Terrain Systems' Program," *Differences*, 20(2-3): pp.250-278; Nigh, Norman. 2012. *An Operator's Guide to Human Terrain Teams*. CIWAG case study series 2011-2012, ed. Andrea Dew and Marc Genest. Newport, RI: US Naval War College, Center on Irregular Warfare and Armed Groups.

⁴ American Anthropological Association, "AAA Opposes U.S. Military's Human Terrain System Project." <http://www.aaanet.org/issues/AAA-Opposes-Human-Terrain-System-Project.cfm>

in a warzone, HTS has been proven to be resilient and with notable successes. The program started as a concept back in 2005 when the U.S. forces in Iraq were confronting a violent and widespread insurgency and the commanders on the ground needed a better understanding of the social and cultural dimensions of the human terrain that they were up against.⁵ HTS came to life and later found a home in the U.S. Army Training and Doctrine Command (TRADOC-G2).⁶

Since then, the program grew and managed to deploy dozens of teams in Iraq and Afghanistan, gaining quickly the support of commanders on the ground who at times had to go to great lengths to keep their HTS team until the day their troops had to fold tents. HTS personnel quickly demonstrated the value of the program. In a 2013 interview with the *Small Wars Journal*, Gen. David Petraeus noted that the HTS teams “were valuable.”⁷ Petraeus, who as commander at Fort Leavenworth supported the establishment of the program, has for decades – since 1986 – noted the importance of having a strong understanding of the human terrain.⁸ He has stressed that such understanding is needed “in each particular situation, and the importance of understanding the terrain, having a very nuanced, detailed feel for the context of each situation, not just nationally, but sub-nationally and literally all the way down to each valley and each village.”⁹

The HTS has done exactly that, serving on the frontlines from Village Stability Operations (VSO) and alongside Special Operations Forces (SOF) units, all the way to the strategic level. “Military and civilian personnel, regardless of rank or position, benefit from the higher degrees of understanding, awareness, and interpretation that social sciences frameworks offer,” noted a 2012 case study analysis of HTS by the U.S. Naval War College.¹⁰ Those efforts by the HTS personnel, though, did not come cheap. HTS has lost four its members while on deployment.¹¹

Still, Petraeus¹² has also noted that those recruited into the program have varied a lot in terms of knowledge and capabilities, while some IC managers have

⁵ U.S. Army, “Human Terrain System: The History of the Human Terrain System.” <http://humanterrainsystem.army.mil/history.html>

⁶ Ibid.

⁷ Octavian Manea, “Reflections on the ‘Counterinsurgency Decade’: Small Wars Journal Interview with General David. H. Petraeus,” *Small Wars Journal*, (September 1, 2013): <http://smallwarsjournal.com/jrnl/art/reflections-on-the-counterinsurgency-decade-small-wars-journal-interview-with-general-david>

⁸ Ibid.

⁹ Ibid.

¹⁰ Nigh, Norman. 2012. *An Operator’s Guide to Human Terrain Teams*. CIWAG case study series 2011-2012, ed. Andrea Dew and Marc Genest. Newport, RI: US Naval War College, Center on Irregular Warfare and Armed Groups: p.45.

¹¹ U.S. Army, “Human Terrain System: Memoriam.” <http://humanterrainsystem.army.mil/memoriam.html>

¹² Ibid.

noted that HTS products have also varied from good to bad, and sometimes even indifferent.¹³ Both statements are valid and the views point out the difficulties faced by a program that seeks to hire high-quality researchers for a term-position and deploy them to a warzone.

There are many factors that have had a significant influence on the quality of an HTS field product. Although not all of them are present in each case, the following list¹⁴ identifies some of the most prominent factors:

- The quality of the researcher is certainly a major factor that has had an impact on the quality of products. Every single product of HTS has been designed to address one or more of the commander's Priority intelligence Requirements (PIR). In doing so, a researcher has to decide if the best method to address those questions. This initial stage is where things get problematic. Some PIRs are seeking to address a "what" type of question, while others a "why" type of question. Some seek both. This means that some questions are best addressed by employing a quantitative approach, others by a qualitative approach, and others by a mixed-methods approach. Although in principle this should not be an issue, it did become one because the vast majority of those who were recruited into the program were almost exclusively familiar only with qualitative research. Moreover, methodologically some of the recruits were more advanced than others and that made a significant impact on the reliability of the data collection instruments and validity of the data.
- Lack of access to the population due to security concerns at times also hampered significantly data collection efforts and thus the quality of those products. In some instances it made any field data collection efforts a non-starter, while in some other instances it resulted in a complete revision of the research design and sampling.
- Some researchers were more experienced in field interviews than others – some had no experience – and that also impacted the quality of data that was used in some of the reports.
- Another factor that influenced the quality of some of the products has been associated with the quality of the interpreter that accompanied the HTS researcher in the field. Most teams have had a CAT I, while very few had a CAT II and even fewer had a CAT III. Those who have worked with interpreters in the field can certainly understand the differences in quality between the three.

¹³ Based on author's discussions with various managers from civilian agencies of the U.S. Intelligence Community who were familiar with the U.S. Army's Human Terrain System.

¹⁴ The list is a product of the author's field observations and review of operational assessments during his work as a strategic-level analyst with HTS.

- Also, having a female researcher member on the team versus not having one has also been a factor, as those who lacked one were faced with difficulties in interviewing women from the local population – thus excluding a significant segment of the population and limiting the scope of any findings.
- Some teams were understaffed – some had just one or two members only, when the standard HTS field team has four members (team leader, two social scientists, and a research manager) – for several months, while some were without a field researcher for long periods of time.
- Finally, delays in field data collection due to various logistical reasons have in the past rendered some products outdated.

Despite those adversities, there have been several HTS teams that have made significant contributions to the mission of the units that they were working with. In fact, when retrograding started in Afghanistan a few years ago, there were several units (U.S. and allied) that demanded to keep their HTS capability all the way to the end of their mission. This value-added function of HTS to the military field commanders has been acknowledged as a success story.¹⁵

Strategic Level HTS in Afghanistan

The NATO mission in Afghanistan has by far been the largest footprint of HTS in a warzone, reaching over 100 deployed personnel during its peak.¹⁶ Although by its nature HTS has had a fairly successful role at the VSO and brigade level, the biggest challenge was proving its value at the strategic level. The challenge was not so much in whether it was valuable at that level, but rather in whether strategic planners and Intelligence Community (IC) partners truly understood the purpose, function and specialized capabilities that it had to offer. Several were the instances where that understanding was lagging, even after the attending of a briefing about the program.¹⁷ That at times led to unreasonable requests – sometimes in the form of current intelligence – that truly reflected a genuine lack of understanding of HTS.¹⁸

Still, via continuous briefings and discussions with IC managers and strategic planners, the HTS strategic-level team managed to develop some innovative and highly informative research designs and products to inform the senior leadership. Some of the most notable capabilities that HTS brought to the strategic planning was theory-based prediction and methodological rigor that lent to systematic data

¹⁵ U.S. Army, “Human Terrain System: Testimonials.”

<http://humanterrainsystem.army.mil/testimonial.html>

¹⁶ Information is based on the author’s field observations during his work as a strategic-level analyst with HTS.

¹⁷ Ibid.

¹⁸ Ibid.

collection and analysis that was unparalleled to any other traditional collection disciplines.¹⁹ As the unique nature of its capabilities became apparent, the strategic-level team of HTS was involved in numerous short- and long-term projects, while it cultivated and developed partnerships with various sections within the IJC HQ and ISAF HQ.²⁰

In several instances the HTS strategic level team was the lead in projects that required the involvement of multiple sections of the IJC HQ and ISAF HQ, and even in alongside senior leadership.²¹ In those projects the team was responsible for the overall data collection strategy, developing data collection methodology and instrument, deployment of the instrument, data collection and data analysis.²² Utilizing theory-driven approaches, the team was able to examine highly complex and large-scale issues in a systematic and methodologically rigorous manner that sought to minimize data error.²³ Those were some of the strengths that truly set the HTS strategic level team apart from other elements within the IJC HQ.

Specifically, in one case a member of the HTS strategic level team developed an algorithm that was pulling data from multiple sources (both classified and unclassified) and then was plotting the national trends on a map on a regular basis.²⁴ The product was one of very few that were being used in periodic briefings before the IJC commander, while this specific product continued to be updated and be briefed even after the specific team member completed their deployment.²⁵ The product later was produced by a relevant agency of the IC in close partnership with the U.S. Army.

In another case, the HTS strategic level team was asked to develop a data collection strategy for a “threat forecasting” project.²⁶ I was the lead in that project, which entailed the following: designing the data collection strategy and sampling; developing the data collection instrument; training and being part of the data collection team that had members from other IJC HQ elements; collecting the data and analyzing the data. This project went beyond the traditional scope of the HTS mission, and due to its sensitive nature it presented unusual challenges for the team. In spite of those challenges – which cannot be discussed in an unclassified forum – the project was successful as it was designed in a fashion that increased the reliability and validity factors, while maintaining a fairly simple field data collection structure. The data collection involved a three-member team – including myself, and two others from the IJC HQ– and required extensive travel as the project had

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

national scope. Each member of the data collection team had an integral role and we all had to work in concert in order to ensure that the HUMINT data was collected in a systematic fashion and that did not deviate from the agreed protocols. Overall, the project was assessed by several elements within the IJC prior to the data collection phase, and it was also presented to relevant elements that were external to the IJC. Finally, due to the significance of the project, the senior leadership of the IJC HQ requested that a field report was filed right after each data collection mission, in addition to the final report that would come at the end of the project.

In a similar but separate request, the HTS strategic level team was asked to develop a data collection strategy and instrument for a quantitative “threat forecasting” project.²⁷ I was the lead in that project, which required the collaboration of several sections from within the IJC HQ and ISAF HQ. Although this was a more limited tasking as it did not entail the actual data collection and analysis by the team, the reliability of the instrument and the validity of the measures included in it had to be developed in a fashion that ensured strong reliability – meaning that it was measuring what it was supposed to be measuring and do so reliably over time. The design and data collection instrument were produced after a series of meetings and consultations with relevant sections. The final product was delivered to the head of research for the region from a relevant agency, who was working on a larger research design, and who presented it to the Commander of ISAF.

These are just a few of a handful of projects lead by the HTS strategic level team that were both significant and successful in terms of their scope and impact.

Housed in the Information Dominance Center (IDC) of the IJC HQ, the HTS strategic level team took full advantage of the IDC’s mission, which was to conduct long-term intelligence analysis.²⁸ This separation from the daily grind of current intelligence cycle, allowed the HTS team to truly showcase some of the best tools in its arsenal. After all, the HTS was never meant to have a current intelligence function. Also, the IDC itself was a new and innovative concept that was developed by the military to provide not only a long-term analysis to the senior leadership, but also a more concerted distribution of intelligence to subordinate units and regional commands.²⁹

The HTS strategic level team also had access to an extensive depository of knowledge that was developed by the organization’s research activity in the country over the past years.³⁰ That knowledge, whether it is about a remote village near the Afghan-Pakistan border or a large city in a previously controlled area by

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

the Taliban south of the country, truly gave an edge to the team.³¹ Having access to such a database allowed the team to quickly build deep understanding that fed into the development of a larger picture.³² It also enabled to the development of more refined data collection strategies and analysis.

A success at the strategic level for HTS was essential as it proved that it could also be a very valuable asset beyond the village-level and regional level in the theater of operations. The work that it has done at the strategic level it also allowed the cultivation of better understanding of its mission and capabilities by the strategic planners and NATO partners. It also lent to a more expansive program that now has pilot projects that provide support to various U.S. military strategic commands.

“Social science research can be tailored to the operational relevance of the consumer, whether a general, a commander, or an intelligence organization; in fact it is best utilized when guided and administered by the consumer,” Norman argues in his case study of HTS for the U.S. Naval War College.³³ “Social scientists provide intelligence organizations a clearer picture of the non-combatant side of the population. While traditional intelligence is mainly focused on the kinetic population, social science research focuses entirely on the non-kinetic side of the population.”³⁴

The private sector also took notice of these trends and some defense and intelligence sector companies in the U.S. have been quick to develop programs that seek to offer some variation of HTS capabilities to their government clients.

Sociocultural Intelligence and the IC

Sociocultural Intelligence (SOCINT) is a young and growing area of intelligence and some of the lessons learned from the experience and work of the HTS strategic level team in Afghanistan can certainly provide some additional insights to discussions about how SOCINT can be best utilized within the IC. Some of the most important lessons can be summarized as:

- a. Theory-driven SOCINT can aid in strategy formulation and assessment
- b. Use of mixed-methods offers enhanced scope and depth of understanding
- c. Instrumentation reliability that measures what is intended to measure

³¹ Ibid.

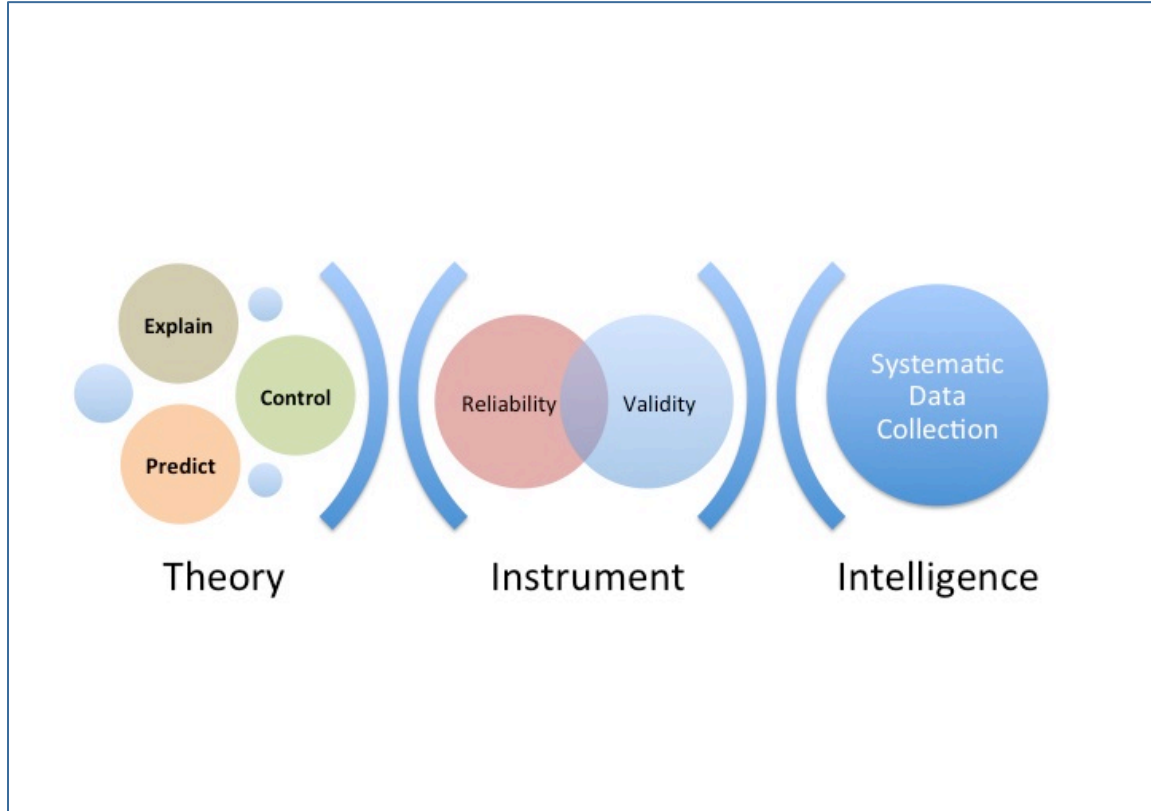
³² Ibid.

³³ Nigh, Norman. 2012. *An Operator's Guide to Human Terrain Teams*. CIWAG case study series 2011-2012, ed. Andrea Dew and Marc Genest. Newport, RI: US Naval War College, Center on Irregular Warfare and Armed Groups: p.45.

³⁴ Nigh, Norman. 2012. *An Operator's Guide to Human Terrain Teams*. CIWAG case study series 2011-2012, ed. Andrea Dew and Marc Genest. Newport, RI: US Naval War College, Center on Irregular Warfare and Armed Groups: p.47.

- d. Strong internal and external validity in data that is unparalleled
- e. Ability to develop and analyze large quantitative datasets
- f. Systematic examination of complex issues and ability to replicate

GRAPH 1. SOCINT’s Methodological and Theoretical Rigor



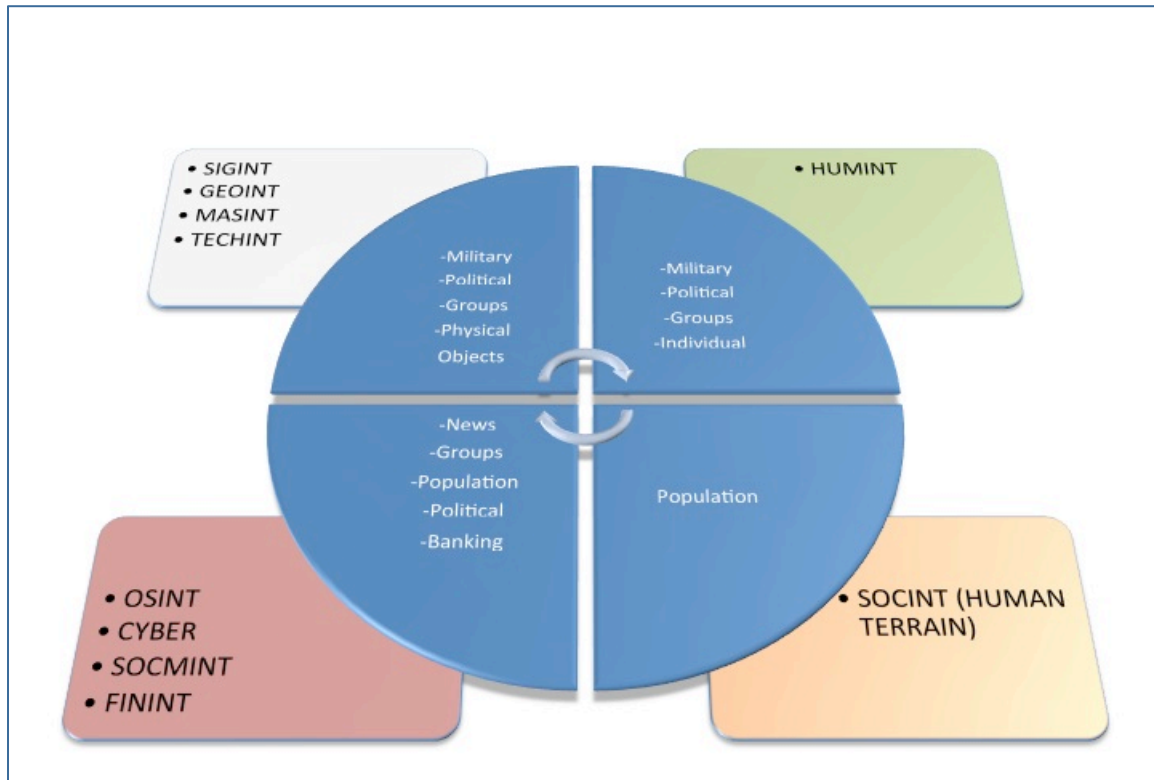
Overall, these lessons identify capabilities that are very unique and different from those offered by any of the other traditional intelligence-gathering disciplines. At the same the uniqueness of those capabilities also set SOCINT apart by the fact that it is not meant to be a current intelligence tool – although it can perform some current intelligence tasks within some limitations. This means that the IC should be looking at SOCINT as a capability for horizon scanning and futures intelligence – an area where there is definitely room for growth.

“While we do not have a crystal ball, we have an obligation as intelligence professionals to look beyond the next horizon to not only highlight key events around the globe, but to explain the forces that are likely to shape those developments in the weeks, months and years to come,” said CIA Director John Brennan during the agency’s first public national security conference in June 2014.³⁵

³⁵ Georgetown University, “CIA Director Speaks at Agency’s First Public National Security Conference,” *Georgetown University News*, June 12, 2014:

Director Brennan’s comments certainly point to a need for developing additional capabilities in the areas of horizon scanning and futures intelligence. SOCINT can certainly play a central role in that arena by focusing on population-centric intelligence, a focus that cannot be addressed in a similar capacity by any of the other traditional intelligence-gathering disciplines. That was something that it became very clear during the course of the work of the HTS strategic level team in Kabul.

GRAPH 2. SOCINT’s Complimentary Intelligence Function



SOCINT, if employed properly, can be proven to be one of the best kept secrets in intelligence gathering. Not only can SOCINT “scan” for emerging and highly complex issues that can arise from a section of a population – think of Arab Spring and beyond – but it can also work hand-in-hand with other intelligence gathering disciplines to develop a more detailed and nuanced understanding of emerging issues and threats. In other words, if developed properly, SOCINT can also function as an integrated complimentary resource for current intelligence, providing additional granularity to the decision-making process. Its ability to use theory to explain manifestations that otherwise would be open to speculation, as well as its ability to make theoretically-grounded predictions, can give IC managers the ability to introduce another layer to testing for analysis biases.

Another area where SOCINT can be used is in the guiding of some future covert operations. Although this is perhaps one of the least-discussed aspects of SOCINT, the experiences of HTS strategic level team indicate that this would certainly be an area that can be further developed and be very successful.

Just like with any other intelligence-gathering discipline, the most critical aspect of a successful SOCINT unit is its human capital. Unlike, though, the other intelligence-gathering disciplines, recruitment for SOCINT can be proven extremely challenging as the desired expertise that recruits should possess cannot be solely identified by their resume. Some of the lessons learned from HTS can provide some insights about some of those issues. These are some of the main lessons learned³⁶:

- a. Not all Ph.D.s are created equally. This cannot be stressed enough, and although HTS made changes to its recruitment screening process, this issue has remained to this day, albeit to a lesser extent.
- b. There is research and then there is research. Any SOCINT candidate will have to have a very robust peer-reviewed publication record, while several of them should be single-authored and/or lead-authored studies. That is because it is the only standard method to measure a candidate's research abilities across all functions. This part has also been a point of contention within HTS, with some of the recruits not meeting this criterion. The Army never employed the peer-review measure as a tool. As a result, there have been considerable inconsistencies in the quality of the research.
- c. Interdisciplinary training and work. It is essential at the SOCINT candidates have a strong interdisciplinary understanding that has been gained during their schooling and research work. Lessons learned show that individuals who have narrow academic experience have had difficulty undertaking projects that required different theoretical and methodological approaches.
- d. Methodologically well-rounded researchers. Any SOCINT candidate should have background both in quantitative and qualitative methodology, with a proven publication record of using both. Lessons learned from HTS indicate that lack of working knowledge of either methodological approach can significantly limit the abilities to examine issues that require mixed-methods to answer the critical questions.
- e. Understanding of intelligence. Although not a critical requirement, lessons learned from HTS show that some recruits had difficulty bridging academic research with intelligence requirements. As such, it is important that any agency hiring SOCINT personnel ensures that there is a transition period where they are introduced to the world of intelligence.

In conclusion, as HTS has successfully proven, SOCINT can be extremely

³⁶ Information is based on the author's field observations during his work as a strategic-level analyst with HTS.

valuable at the strategic level. At the same time, lessons learned from the extensive work of HTS in Iraq and Afghanistan has provided a good foundation on how to expand the use SOCINT beyond the Army. There is certainly a lot to be gained by fully integrating SOCINT in the IC, especially in terms of horizon scanning and futures intelligence. Successful development and sustainment of such strategic level capacity will need to not only have a well-informed recruitment process and supportive work environment, but also a robust investment in fostering greater understanding across the IC and with the intended consumers. Lessons from HTS clearly demonstrate that attention is needed equally in all those areas in order for such an endeavor to be successful, and considering what can be at risk, one simply cannot afford not to take them into account.