NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
PATUXENT RIVER, MARYLAND

TECHNICAL MEMORANDUM

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SPECIAL OPERATIONS RECONNAISSANCE (SOR) SCENARIO: INTELLIGENCE ANALYSIS AND MISSION PLANNING

by

Dr. Norman Warner
Ms. Lisa Burkman
Dr. H. Cheryl Biron

15 April 2008

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
PATUXENT RIVER, MARYLAND

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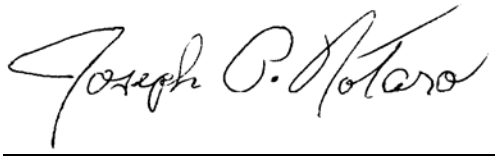

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Dr. H. Cheryl Biron

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14. ABSTRACT

The purpose of this document is to present the Special Operations Reconnaissance (SOR) scenario and the methodology used to generate and validate the scenario. The face of military team collaboration has changed due to gathering intelligence from broader and more diverse sources. As information sources become more complex, knowledge uncertainty increases. The internet has also provided greater communication opportunities, and military teams must be able to collaborate effectively in asynchronous situations. Collaboration tools must continue to evolve to keep up with this increasing complexity in communication. In order to assist in this evolution, a deeper understanding of team collaboration must be achieved. During team collaboration, there are many higher order cognitive processes that are both inside and outside the head of team members – these processes are known as macrocognitive processes. Since it is not possible to see what a person is thinking internally, the person's behavior must be studied in a controlled, rich environment. Ideally, this environment should be rich and emulate a real-world team collaboration problem. With the input of several military personnel with experience in intelligence analysis and mission planning, the SOR scenario was developed to serve as this environment. The scenario is intended to be realistic and complex, but should elicit information about the internal and external aspects of the macrocognitive processes. The SOR scenario is an intelligence analysis and mission planning scenario that requires a team of three participants to work together to solve various problems in an asynchronous- distributed environment. This scenario will help to deepen the understanding of team collaboration, team problem solving, and macrocognition, which will aid in the development of more effective team collaboration tools. These tools will improve military team collaboration in the warfare environments now and in the future.

15. SUBJECT TERMS

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SUMMARY

The purpose of this document is to present the Special Operations Reconnaissance (SOR) scenario and the methodology used to generate and validate the scenario.

With the advent of the internet, the face of team collaboration has changed. Today's military must gather intelligence from broader and more diverse sources. As information sources become more complex, knowledge uncertainty increases. The internet has also provided greater communication opportunities, and military teams must be able to collaborate effectively in asynchronous situations. Collaboration tools must continue to evolve to keep up with increasing communication complexity.

In order to assist in this evolution, a deeper understanding of team collaboration must be achieved. During team collaboration, there are many processes that are both inside and outside the head – these processes are known as macrocognitive processes. Since it is not possible to see what a person is thinking internally, the person's behavior must be studied in a controlled, rich environment. Ideally, this environment should be rich and emulate a real-world team collaboration problem.

With the input of several military personnel with experience in Intelligence Analysis, the SOR scenario was developed to serve as this environment. The scenario is intended to be realistic and complex, but should elicit information about the internal and external aspects of the macrocognitive processes. The SOR scenario is an Intelligence Analysis and mission planning scenario that requires a team of three participants to work together to solve various problems in an asynchronous, distributed environment.

This scenario will help to deepen the understanding of team collaboration, team problem solving, and macrocognition, which will aid in the development of more effective team collaboration tools. These tools will improve military team collaboration in the warfare environments now and in the future.

Contents

ACKNOWLEDGEMENTS

We would like to thank our sponsor, Dr. Michael Letsky of the Office of Naval Research (ONR-342), for funding this work under Understanding Macrocognition in Team Collaboration. Special thanks to Bill Dine of the Naval Special Warfare Development Group for his initial review and comments of the Special Operations Reconnaissance (SOR) scenario. LT Ford at the Mission Support Center, Naval Amphibious Base for reviewing the scenario's initial intelligence analyst tasks, information, and decisions. CAPT Jason Milbrandt for welcoming us to the Navy-Marine Corps Intelligence Training Center and giving us specific feedback and assistance with the scenario. Mike Iovino and his colleagues at the Wexford Group for their effort in reviewing, commenting, and providing feedback towards finalizing the SOR scenario.

INTRODUCTION

Over the past 20 years, advances in communication and information technology have changed the face of team collaboration activity. Collaboration technology is developing at an astonishing rate. The use of collaboration tools has become commonplace in today's industry, often changing the very structure of companies and organizations that use them. Today's military, for example, gathers intelligence through a wide variety of diverse sources (e.g., internet search engines, databases, interagency communications, historical data, video conferences, face-to-face meetings, the media, e-mails). Because of the tremendous amount of data available, military strategists are often faced with information overload. To further complicate the collaborative effort, much of that information comes from open sources such as the internet. As a result, knowledge uncertainty becomes a concern. Military intelligence is constantly changing and therefore strategists and operational personnel must continually monitor the ever-changing flow of information to ensure accurate and timely mission planning and execution (Wroblewski & Warner, 2005). Geographically distributed collaboration teams face additional burdens. Colocated teams have the advantage of real-time collaboration, while distributed teams often receive information asynchronously. To ensure continued effectiveness, it is imperative that collaboration tools enhance the collaborative effort rather than impede it. "Somehow we must digest all this data and information and organize it into meaningful and useful knowledge, and then through wisdom make intelligent decisions and judgments about what to do" (Nunamaker, et al, 2001). Unfortunately, current trends in collaboration tool development base these enhancements on intuition, rather than guide development with empirical research. As a result, the success of a particular tool is often the result of the dynamics of a specific collaborative team, rather than of the tool itself. Without focusing on the principles of cognitive psychology, human factors and team behavior, with validation through supporting experimentation, collaboration tools will not develop to their full potential.

Specifically what is needed is a *deeper understanding of how teams collaborate* when solving one-of-kind, time critical collaborative problems along with identifying and understanding the macrocognitive processes used during collaborative problem solving. *Macrocognition is defined as the internalized and externalized higher order cognitive processes employed by teams to create new knowledge during complex, one-of-a-kind, collaborative problem solving* (Letsky, Warner, Fiore, Rosen & Salas, 2007). Higher order is defined as the process of combining, visualizing, and aggregating information to resolve ambiguity in support of the discovery of new knowledge and relationships. *Internalized processes* are those higher-order cognitive processes that occur at the individual or the team level, and which are not expressed externally (e.g., writing, speaking, gesture), and can only be measured indirectly via qualitative metrics. *Externalized processes* are those higher-order cognitive processes that occur at the individual or the team level and that are associated only with actions that are observable and measurable in a consistent, reliable, repeatable manner or through the conventions of the subject domain that have standardized meanings. Given this deeper level of understanding of how teams collaborate, team collaboration tools can be developed that will support these cognitive processes, resulting in more effective team collaboration.

The challenge of understanding team collaboration is to study behavior in a controlled, but rich environment, emulating a real-world team collaborative problem solving setting as closely as possible. Critical to this is the use of an effective scenario. Heuer (1999) defines a scenario as a "series of events leading to an anticipated outcome and linked together in a narrative script". In the Collaborative Operational and Research Environment (CORE) Testbed at the Naval Air Systems Command (NAVAIR) Patuxent River, Maryland, scenarios are used to elicit information about the internal and external macrocognitive processes of collaborative decision making. Carefully crafted scenarios can be used as stimuli to understand the high level internal and external macrocognitive processes of collaborative decision making.

BACKGROUND

Event-based scenarios are used extensively throughout the fields of business, education, and research. Wroblewski and Warner (in press) describe four types of scenarios that are commonly used in collaboration research: gaming or pictorial scenarios, one-dimensional scenarios, multi-dimensional scenarios, and multi-dimensional/multi-domain scenarios. The type of scenario used is dependent on the intent of the research.

Gaming Scenarios: These empirically-based gaming scenarios rely on strategic, interactive games to serve as their foundation such as Kirsch's (2006) "Passing the Bubble" video game. The strength of gaming scenarios lies in their simplicity. While the range of complexity varies, these games typically rely on well-defined, but minimally complex tasks. As a result, there is a short learning curve for participants, allowing the researcher to spend less time training and more time on task. In addition, a typical gaming scenario requires a relatively low level of subject matter expertise, thereby increasing the participant pool dramatically. Ironically, the simplicity of gaming scenarios limits their use in collaboration research. While gaming scenarios can provide high level insight into simplistic decision-making, responses tend to be tactical in nature, providing little insight into a complex domain. Typical gaming scenarios focus on coordination rather than collaboration between team members.

One-Dimensional Scenarios: One-dimensional scenarios used in collaboration research usually require team members to solve a relatively simple, single solution task. These scenarios tend to be more collaborative in nature than gaming scenarios. Although they tend to be a bit more complex than gaming scenarios, they still are relatively simplistic, rendering it unnecessary to use highly trained operational personnel. Their limitation, however, lies in the fact that once a consensus is reached, the task is complete. No further negotiation or discussion is required. As a result, the metrics used for one-dimensional scenarios tend to be outcome-based (e.g., were the subjects right or wrong) rather than process-based. This, again, provides somewhat limited insight into the macrocognitive processes of team collaboration. An example of a one-dimensional scenario is Stasser's (1995) "The Case of the Fallen Businessman" in which teams are required to solve a murder mystery by evaluating transcripts from police interviews, newspaper clippings, and other forensic evidence.

Multi-Dimensional Scenarios: Similar to one-dimensional scenarios, multi-dimensional scenarios allow for a collaborative exchange between team members. The difference lies in their complexity. While one-dimensional scenarios require participants to reach a consensus on a single issue, multi-dimensional scenarios required several, complex solutions. The number of possible solutions is limited only by the team's creativity, resulting in a more realistic scenario. While the simplicity of one-dimensional scenarios limits the collaborative process, multi-dimensional scenarios allow for a rich, collaborative environment. As a result, the metrics used for empirical studies using these event-based scenarios can, not only be outcome-based but also processed-based. This allows for a more thorough and concise analysis of the macrocognitive processes of team collaboration. An example of a multi-dimensional scenario is the *Noncombatant Evacuation Operation (NEO): Red Cross Rescue Scenario* (Warner, Wroblewski, & Shuck, 2004).

Multi-Dimensional/Multi-Domain Scenarios: To ensure a comprehensive empirical investigation into the macrocognitive processes of team collaboration, it is essential the scenario chosen serves as an accurate representation of the intended domain. The complexity of multi-dimensional/multi-domain scenarios ensures a sense of realism and operational relevance as it applies across integrated domains. It requires situational constraints (e.g., time pressure, information uncertainty, dynamic information, cognitive overload) to ensure the realism critical to content validity. Equally as important, they elicit a high level of team collaboration so critical to the investigation. Because the focus of a multi-dimensional/multi-domain scenario is on operational relevance, it must be carefully constructed, with input from subject matter experts at every stage of its development. *The Special Operations Reconnaissance Scenario (SOR): Intelligence Analysis and Mission Planning* by Warner, Burkman, Biron, St. John, and Smallman (appendix A) is representative of a multi-dimensional/multi-domain scenario used to empirically investigate the macrocognitive processes of team collaboration.

PURPOSE

The purpose of this memorandum is threefold: *(1) to describe how the Special Operations Reconnaissance (SOR) Scenario: Intelligence Analysis and Mission Planning was developed, (2) to describe the team collaboration tasks within the scenario, and (3) to document the complete scenario package including experimenter instructions and scoring matrix.*

METHOD

As defined by Wroblewski and Warner (in press), scenario development is a concise, iterative process that can be broken down into eight steps: (1) define the parameters; (2) research the domain; (3) storyboard the scenario; (4) write the scenario text; (5) validate the scenario; (6) debrief the participants; (7) analyze the data; (8) evaluate and revise the scenario as necessary. The development of the SOR scenario followed each step with the details being discussed under each step.

(1) *Define the parameters*: More specifically, identify any limitations and expectations. Start with a plausible hypothesis and define the objective. What do you want to accomplish through the use of this scenario? Define the domain that best represents your needs. Define the metrics to measure both internal and external macrocognitive processes. What do you want to measure when the session is over? Should the metrics be outcome or process-based? Identify the appropriate subject pool. Are operational personnel available to serve as participants or do you need to rely on non-military personnel? Establish the time pressure. There should be enough of a time constraint that the participants feel somewhat pressured to make a decision, but not too little time that they feel forced to make a quick decision.

The *objective* of the SOR scenario is to represent a realistic team collaborative problem solving task in the areas of intelligence analysis and mission planning. This scenario is intended to be used in empirical experiments examining macrocognitive processes in team collaboration. The *metrics* used to score team performance on the SOR scenario are outcome-based (see appendix E). The process-based metrics (e.g., card sorting, concept maps, pre-/post-questionnaires) are also used in conjunction with the outcome-based metrics to understand how the macrocognitive processes interest with team performance.

In order to further assess team performance, a questionnaire was developed in addition to the points earned for each correct task solution. This questionnaire is essentially a test of the team's knowledge and understanding of the details of the scenario. The scenario developers combed through the entire scenario in its final form and selected both relevant and irrelevant information and rewrote them into statements. Some relevant statements were contextually changed into false statements. There are some pieces of information that were completely fabricated, like names and places, but are mixed with true information in order to create difficulty and complexity. Other statements are completely true and relevant, while other statements are completely true but are not relevant to the final scenario solution.

Each team must decide whether the statement is true or false. After this answer is determined, the team must give the *degree of* importance (or relevance) of the information presented based on a 4-point Likert-type scale with 0 being "Not Important" and 3 being " Very Important". An intentional assortment of both true and false statements was included, along with an assortment of both "important" and "not important" statements. "Importance" is defined as how pertinent or relevant the information is to the final task solution. For example, there are some statements that are false, but the content of the information is indeed relevant to the final solution. Conversely, there are statements that are true, but they do not afford any pertinent information. Likewise, there are false statements that are irrelevant and true statements that are relevant. This assortment of statements creates depth and difficulty for the teams – they must truly understand the events in the scenario to get a high score.

Depending on the objectives of the experiments, the SOR scenario can be used by operational military personnel or college students. Also, the specific parameters of solving the scenario tasks (e.g., uncertainty, time pressure, heterogeneous groups) can be varied as part of

the independent variables in the experiment to examine their impact on the macrocognitive processes and overall performance.

(2) *Research the domain*: Carefully research your intended domain. Identify the types of cognitive decisions that need to be made. Conduct a Cognitive Task Analysis or other knowledge elicitation techniques to help define a specific cognitive task performed by experts. This critical step serves as the foundation for an effective scenario.

In developing the SOR scenario, an assessment was made of the types of cognitive tasks and decisions that were involved in intelligence analysis and mission planning. The assessment started with using Pirolli's (2005) unclassified cognitive task analysis for intelligence analyst together with the advice Pirolli obtained from intelligence analysts at the Naval Postgraduate School. The results of this analysis were integrated with results from St. John's (2006) unclassified SLATE scenario along with information from the Mission Planning Users Conference in 2006. All this information was reviewed by LT Ford, an intelligence officer at the Mission Support Center, Naval Amphibious Base, Coronado, California, in 2006. Updates were made to the types of tasks, information, and decisions required by intelligence analysts and mission planners, which served as the foundation for the SOR scenario.

(3) Storyboard the scenario: Include as many constraints (e.g., time pressure, information uncertainty) as possible to emulate a real environment. Add enough unrelated, ambiguous cues (i.e., red herrings) to add an element of uncertainty. Create scenarios with multiple outcomes to avoid compromise between teams.

Given the information in step 2, intelligence analysis tasks along with the respective information and decisions were grouped. Then extraneous information and decisions for each tasks were developed. In addition, multiple paths relating the intelligence information was developed. All the information used for storyboarding was taken from unclassified open sources. In addition, all names were changed to reflect fictitious names along with dates. All photos were also changed, using photoshop, so that all pictures are fictitious. Only key historical figures and events were kept to reflect realism within the scenario (such as Bin Laden and the September 11 attacks). The output from step 3 was a storyboard of tasks, information and decisions that could be used to write the scenario story.

(4) Write the scenario text: Clearly define the mission statement to avoid participant misconceptions of their tasks. Write the scenario as a story. Begin with a general overview, leading to more specific details. Be sure to include all information needed to complete the task. The text should also include clear, concise, and carefully scripted facilitator guidelines to ensure repeatability and consistency between researchers.

The text of the SOR scenario was written around a story of Denkapsa Farah. The story starts 26 May 2006 where local intelligence indicates that an al-Qaeda element is reforming in the town of Disisabad in Eastern Afghanistan. This group may be attempting to strike a deal with a local coalition supported warlord, Denkapsa Farah. The overall instructions to the scenario

problem solving team is: “Based on the intelligence provided, work together as quickly and accurately as possible as a team to:

(1) Determine if Farah has an association with al-Qaeda (Task 1 --- 1.5 hr).

(2) Determine Farah location at a specific time (Task 2 --- 30 min).

(3) Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces (Task 3 --- 10 min).

(4) Analyze new and existing intelligence to determine Farah’s location at a specific time (Task 4 --- 30 min).

(5) Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces (Task 5 --- 10 min).”

In order to facilitate further collaboration amongst team members, each team member will be given unique information. All team members will be given the mission statement and general background information (appendix A). The mission statement provides the team members with the tasks they are to complete. The general background is a brief history of both the characters in the scenario and real events (such as the 11 September 2001 attacks) and people (Bin Laden). The other three sections of the scenario are Human Intelligence, Satellite Intelligence, and Additional Intelligence. Each team member will be required to share his or her information with the other team members, allowing for increased collaboration.

HUMAN INTELLIGENCE INFORMATION

One member of the team will be assigned with the Human Intelligence portion of the scenario. The information provided to this team member will involve such intelligence as hand drawn maps, written notes, banking transactions, phone records, and informant information. There are 15 individual pieces of human intelligence in the scenario (see appendix B).

SATELLITE INTELLIGENCE INFORMATION

Another team member will be responsible for the Satellite imagery in the scenario. As the title suggests, the team member assigned with this unique information will have the satellite photos in each task. The photos depict buildings from a bird’s eye view as well as closeup with heavier detail. The imagery contains geographical information as well. There are 25 satellite images in the SOR scenario (see appendix C).

The third team member will receive additional intelligence from the scenario. All other pieces of information not included in the first two categories have been placed into the “additional intelligence” group. Maps, photographs, open source information, and tapped phone

conversations make up this category. There are 10 additional pieces of information (see appendix D).

The details of the SOR scenario, the tasks, the specific information provided to solve the tasks, the specific instructions, the scoring sheet, and the SOR questionnaire are provided in appendix E.

(5) Validate the scenario: Progressive validation is critical throughout the developmental process. Continually seek feedback from subject matter experts to ensure content validity. Once the scenario is written, elicit independent readings to ensure such things as grammatical accuracy and content flow. Conduct a pilot study to identify any problems such as timing, clarity, instructions, procedures, and metrics.

The initial validation of the SOR scenario was provided by the Naval Special Warfare Development Group (Bill Dine, personal communication, 2007), which assessed the overall realism of the intelligence analysis and mission planning tasks at an unclassified level. Their results indicated that the SOR scenario was representative of intelligence analysis and mission planning tasks and would be a good scenario for assessing collaborative team problem solving for those domains. After another revision of the scenario, the scenario was sent through a second validation review by the Navy/Marine Corps Intelligence Training Center (Captain Jason Milbrandt, personal communication, 2007), which indicated that the scenario was realistic and valid. Their review resulted in a few changes, including a reliability matrix for each piece of information in the scenario.

(6) Debrief the participants: Elicit feedback from participants in the pilot study. Ask open-ended questions (e.g., Why did you make the choices you made? What would you do differently?). Explain any results or scores in a positive, nonjudgmental manner (Klugiwicz & Manreal, 2006).

The final validation was conducted using subject matter experts (i.e., Navy SEAL, CIA intelligence analyst, and Army mission planner) that performed as a collaborative team in solving the SOR scenario tasks. The debrief and their results provided information for final revisions of the scenario.

(7) Analyze the data: How robust are the findings? Are they dependent on the domain or the collaboration environment (e.g., face-to-face, asynchronous, and distributed)? Did the scenario meet the research objectives?

After analyzing all the data and suggestions from the iterative validation assessments, the SOR scenario was revised and determined to meet the research objectives. The scenario is a rich and realistic collaborative problem solving task for empirically studying the macrocognitive processes in team collaboration.

(8) Evaluate and revise the scenario as necessary: The development of a scenario is an iterative process. Throughout the process, the developer should constantly ask: Does the scenario tell a realistic story? Does it unintentionally guide the participants towards the right answer? Is there enough uncertainty? Is there more than one solution? Are the allotted time requirements realistic? Are the scoring metrics measuring the appropriate information? Once the need for modification is recognized, it is necessary to repeat each of the steps above until the scenario meets the objectives.

The SOR scenario has gone through multiple design iterations to improve the tasks, the types of information for each task, the decisions required, the levels of uncertainty in the information, the solution paths, and the method of scoring each of the five scenario tasks. The multiple validation process provided useful information that enabled these iterations to be successful.

DISCUSSION

Wroblewski and Warner (in press) cite various pitfalls that scenario developers often make that will undermine the effectiveness of the scenario. One pitfall is that a scenario may not be representative of the intended domain. In most instances, collaboration research is not transferable across unrelated domains. Another mistake that will negatively affect the effectiveness of the scenario is the failure to obtain Subject Matter Experts (SMEs) input throughout the entire development process. Wording the text of the scenario in such a way that participants are guided towards the correct answer is another potential problem. This can be avoided by providing some degree of vagueness in the scenario or using a complex scenario that requires more than one decision. Using inaccurate domain terminology is another common pitfall. This can become a major distraction among participants and undermines content validity. Also, creating a scenario of inappropriate length often results in either rushed decisions or extraneous conversation either of which will skew the results of any communication analysis.

Finally, creating a scenario of inappropriate difficulty can also undermine the effectiveness of the scenario. The challenge is to write a scenario that is neither too complex nor not challenging enough. Conducting a careful cognitive task analysis and obtaining SME input throughout the course of the development process will lessen the likelihood of this occurring.

Now that the scenario has been developed, there are several possible variables that could be tested for further understanding of macrocognition. Along with their model of team collaboration, Warner, Letsky, and Cowen (2005) give a list of possible variables of interest. Examples include placing the participants under time pressure, giving participants static information (information that stays the same throughout the experiment) or dynamic information (information that changes), and teams with culturally diverse members. Another interesting variable is knowledge uncertainty, where participants would not always be certain of the reliability and accuracy of certain pieces of information. Finally, the difference between face-to-face and asynchronous-distributed teams would expand knowledge and understanding of macrocognition. Examination of this variable might involve one condition where team members

are distributed amongst separated locations connected through an intranet or internet connection (asynchronous-distributed) and another where the team members are involved in a round-table discussion (face-to-face). Team members in each condition would work together to come up with the correct solutions for the scenario. For example, Warner, Letsky, and Cowen's (2005) study examined asynchronous-distributed versus face-to-face collaboration using the NEO scenario (see Warner, Wroblewski, and Shuck, 2004) and found differences between the two collaboration modes for some of the macrocognitive processes.

A deeper understanding of macrocognition should be achieved through the experimentation of these variables. Once this understanding is better established, it will open the possibility of creating better collaboration tools for an evolving world – particularly the military world. As technology broadens and the World Wide Web becomes an integral aspect of military communication, the information being passed along will become more complicated, less filtered, and therefore more uncertain. The military must maintain knowledge accuracy and reliability, and this can be achieved through the use of highly effective collaboration tools, which will in turn make communication more effective.

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APPENDIX A

***Special Operations Reconnaissance Scenario*:**

Intelligence Analysis & Mission Planning

January 2008

Lisa M. Burkman
Norman W. Warner
H. Cheryl Biron
Naval Air Systems Command
Human Systems Integration Department
Code 4.6
Patuxent River, Maryland 20670

Harvey Smallman
Mark F. St. John
Pacific Science & Engineering Group
San Diego, California 92121

***Special Operations Reconnaissance Scenario*:**

Intelligence Analysis & Mission Planning

MISSION STATEMENT

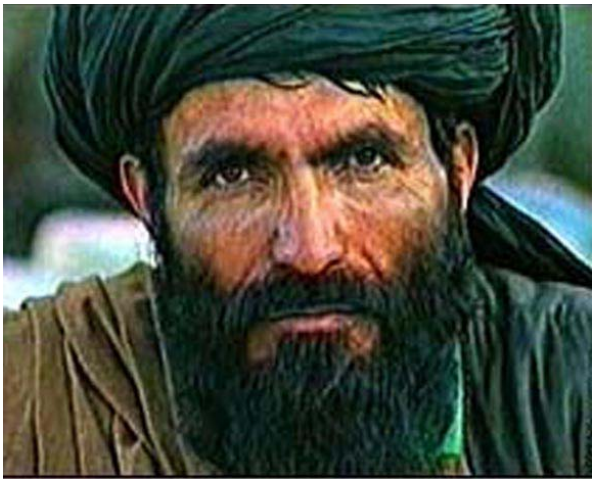
AND

GENERAL INFORMATION

***MISSION STATEMENT*:**

From Joint Task Force:

The date is 26 May 2006. Local intelligence indicates that an al-Qaeda element is reforming in the town of Disisabad in Eastern Afghanistan. This group may be attempting to strike a deal with a local, coalition supported warlord, Denkapsa Farah.



Picture 1
Denkapsa Farah
January 2005

Based on the intelligence provided, work together as quickly and accurately as possible as a team to:

(1) Determine if Farah has an association with al-Qaeda (Task 1 --- 1 hr).
(2) Determine Farah location at a specific time (Task 2 --- 20 min).
(3) Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces (Task 3 ---- 10 min).
(4) Analyze new and existing intelligence to determine Farah's location at a specific time (Task 4 --- 20 min).
(5) Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces (Task 5 --- 10 min).

BACKGROUND

(The credibility of the information provided in the Historical Background section has previously been established. This disclaimer pertains to the Historical Background information only).

Mission Information - Historical Background:

1988: Al-Qaeda is founded in Afghanistan by Osama Bin Laden.

1990: Denkapsa Farah establishes the Islamic Tooling Company (ITC), manufacturing tools for industrial machinery.

1991: Sudan becomes a base for al-Qaeda's business operations and preparations for jihad. A number of attacks on western targets are alleged to have been organized and supported from this base.

1993: (26 February) A 500 kg bomb explodes at the World Trade Center in New York City, killing six and injuring more than 1,000. Abbas Jaleel was convicted of plotting the attack and is currently serving a life sentence. Al-Qaeda's involvement remains unclear, but ties to Jaleel have been established. Jaleel's uncle, Kaleem Rashid, was also convicted to a lesser sentence for his role in the attack.

1996: Bin Laden returns to Afghanistan.

1998: (23 February) U.S. embassies in Kenya and Tanzania are bombed, killing more than 220 people. The U.S. retaliates with air strikes against alleged training camps in Sudan and Afghanistan. Bin Laden is later indicted in the U.S. for the bombings.

1998: (07 August) Ayman al Zawahiri co-signed and issued a *fatwa* (binding religious edict) under the banner of the World Islamic Front for Jihad Against the Jews and Crusaders.

2000: (12 October) In Yemen, suicide bombers ram a boat carrying explosives into the USS Cole. Seventeen American sailors are killed and 39 are injured.

2001: (11 September) Four hijacked commercial jets are flown into the World Trade Center in New York City, the Pentagon in Washington, DC, and a field in Pennsylvania. These coordinated terrorist attacks result in the deaths of approximately 3,000 people.

Intelligence indicates that al-Qaeda is allegedly behind the attacks. President Bush declares a Global War on Terrorism (GWOT).

(7 October) In support of GWOT, the U.S. launches attacks on Afghanistan, Bin Laden's suspected base of operations.

(12 November) Faysal Muhaymin is charged with conspiring with Osama Bin Laden to plan the 11 September attacks. (Farah's wife, Aishah, is a first cousin to Muhaymin.)

(21 November) Robert Cummings, a British citizen, is arrested for carrying explosives in his clothing aboard a commercial jetliner. During his detainment, he pledges allegiance to Osama Bin Laden. Robert Cummings is also known as James Beachum.

2002: (15 July) U.S. Homeland Security authorities arrest Jonathan Striker, a U.S. citizen, for planning to build and detonate a bomb laden with radioactive materials. Striker was arrested at JFK airport, returning from Disisabad, Afghanistan. Striker's alias is Jonathan Smith.

2003: (13 February) Qadir Abdulwahab, thought to be a senior leader in al-Qaeda, is arrested in Turkey. Intelligence indicates that Abdulwahab played a key role in the planning of the 11 September attack.

2004: (11 March) Ten bombs explode on commuter trains in Madrid, killing 191 people and injuring 1,800. Spanish officials state the investigation focuses on a militant organization with close ties to al-Qaeda.

(29 September) Six suspected al-Qaeda militants are charged with the 2000 bombing of the USS Cole. Four are sentenced to serve jail terms while two are sentenced to death.

(10 October) Pakistani police shoot and kill Sayyid Bahij, a suspect in the Madrid bombings.

(12 December) According to the U.S. Government, two-thirds of the top leaders of al-Qaeda from 2001 were captured, including Ramzi bin al-Shibh.

2005: (16 April) Yasar Murtaza and Ahmed Shafiq are tried and convicted in an Italian court for their role in the 11 September attacks. The two were accused of conducting reconnaissance of the World Trade Center and other U.S. targets. (Farah's son, Habil, is married to Shafiq's daughter, Saliha.)

2006: (15 May) Faysal Muhaymin is found guilty of conspiring to hijack planes and crash them into the World Trade Center. He is sentenced to life in prison.

APPENDIX B

***Special Operations Reconnaissance Scenario*:**

Intelligence Analysis & Mission Planning

HUMAN INTELLIGENCE

INFORMATION

(1) Human Intelligence is broken down by task and provided to the intelligence expert at the beginning of each task.

(2) All previous task intelligence can be used in future tasks.

TASK 1**: **Determine if Farah has an association with al-Qaeda

Human Intelligence – Coalition Support

The meetings that have been taking place between bin al-Shibh and al-Zarqawi frequent about 3 times per week. Informants from the town of Disisibad have been passing along information regarding the meetings. According to the informants, it is revealed that the two are not directly connected to al-Qaeda and are probably not involved in the recent reformation in the town. The search for more information continues.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

Human Intelligence – Forensic Accounting, I.T.C.

Forensic accounting investigations uncovered the following transactions between the Islamic Tooling Company (ITC) and various sources in February 2005.

I.T.C.

FEBRUARY, 2005

Date	Source	Accounts Receivable	Accounts Payable
02.02.05	Rahimid Chemicals		82.35 Af
02.02.05	AAF		682.39 Af
08.02.05	Hadir Mujib	1063.98 Af	
08.02.05	Ishaq Hasayn	885.79 Af	
08.02.05	Abdul Latif	1050.26 Af	
09.02.05	Franklin Thomas	2559.11 Af	
10.02.05	Abdul Amar	1555.78 Af	
11.02.05	Ying Lee	688.31 Af	
13.02.05	RRC		942.68 Af
13.02.05	Ishaq Hasayn	423.89 Af	
15.02.05	Ghassan Industries		56.31 Af.
18.02.05	Bakr, Inc		811.21 Af
22.02.05	Sayyid Bahij	5662.10 Af	
25.02.05	Theodore McMillan	7799.14 Af	

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Additional accounting investigations uncovered the following transactions between the ITC and various sources in May 2006.

I.T.C.

MAY, 2006

Date	Source	Accounts Receivable	Accounts Payable
05.02.06	Kaleem Rashid	4489.23 Af	
05.03.06	Iydar Muhaymin		568.45 Af
05.05.06	JJF		774.32 Af
05.05.06	Aden Hashi Farah Ayro	896.54 Af	
05.05.06	Barakah al Din	876.55 Af	
05.07.06	J. Beachum	9996.31 Af	
05.08.06	Esam Fakhir		557.33 Af
05.10.06	Jonathan Smith	264.96 Af	

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Human Intelligence – Audio Recording – Interview with Abdul Latif

Abdul Latif was captured in January of 2006 for his involvement in several terrorist attacks. He has been detained for several days and is being utilized as a source of information involving other possible terrorist cells. A 3-hr interview with Latif is held as authorities attempt to extract information. Below is a small excerpt of the interview. Latif does not speak English so a translator was brought in to mediate communication.

Investigator: We know you have other connections because all this work couldn't be done by one man.
Latif: I have no reason to give you any information, none at all *[inaudible).*
Investigator: Well, you must be aware that you'll get a lesser sentence if you help us. I don't have to tell you that.
Latif: I'm not foolish enough to believe that.
Investigator: Just give us one name that could lead us somewhere, that's all we need, or even part of a name. Any help you give us will only look better for you.

For the next hour and a half, the two men argue back and forth. Latif refuses to give any information.

Investigator: Look we've been through this too many times and I'm speaking clearly. There is clear evidence against you so you might as well give us something to work with –

Latif: And what reason do I have? Give me one good reason . . . you keep speaking of this lesser sentence, but I know full well you cannot offer such a thing. Regardless of what you promise, I still get life because you people will find me guilty.

Investigator: There must be someone out there, someone at one point who must have betrayed your trust. Maybe he did something horrible to you personally or something that harmed the regime. Or maybe he just betrayed one of your friends and now you have the chance to destroy him. You could finally get your revenge on someone – there has to be someone who did you wrong.

Latif pauses but eventually begins to speak.

Latif: There is someone who has wronged me. He took my land and left me and my family out in the cold for months. I couldn't pay, he was the landlord and I couldn't pay. He evicted me, my wife, my children. That was nearly 20 years ago. His name was Achmed Jumala. He has since made a lot of money, I don't know how or what he does exactly, but I know he has ties with al-Qaeda. He funds them now. But I have no allegiance with him, he is nothing. There's no use in me keeping quiet, he wronged me and my family morally. In the end, I have served God and all He stands for – you hedonists will be punished in the end, just as Jumala will be.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always			
	Some	*		
	Never			

Human Intelligence – Coalition Support - Missile Sites

Reports indicate that Majjam, a small village located 45 km east of Kundagan, was the primary location for Afghanistan's long-range missile program housed in the IJAT fabrication plant. A major building in the IJAT plant was destroyed in April 2006 by coalition forces. Evidence indicated this was a central location for airframe design, rocket engine development, and missile construction. Also found were prohibited missiles, support equipment, and specialized tools. Several distinct businesses were found on site:

(1) Labat al Sharif – R&D for missile propulsion systems.
(2) Afghan Weaponry, Inc. (AWI) – R&D for nuclear weapons.
(3) Helionic Industries – Produces missile casings.
(4) Fallahal, Inc. – Produces epoxy and fiberglass for missile casings.
(5) Rahman Productions – Produces the airframes and warheads for SCUD missiles and 122 mm rockets.

(Machining tools were found throughout the destroyed compound.)

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always			
	Some	*		
	Never			

Human Intelligence – Coalition Support – Farah Location

Farah's brother, Abubba, has been seen visiting Majjam, Sagian, Zabihir, & Fallenij over the past 3 years. For the past 10 years, his brother has owned and operated Rahimid Chemicals, a small factory that produces cleaning products. This company is co-owned with Muhammad Ja'al Kabar.

Abubba has many business affiliates in each of these cities – all known business affiliates are legitimate.

For the past 2 days, Farah and Abubba were seen regularly at the Zabihir and Ja'al Karem sites outside of Disisabad. It is believed that Farah is still around the Ja'al Karem site.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

Human Intelligence – Handwritten Notes

Handwritten notes have been provided by the locals indicating that Abubba is still in the area. These notes contain the Arabic symbol of a circle surrounded by stars, which indicate the information has been updated and is currently valid.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

Human Intelligence – May 2006 Phone Records – I.T.C.

Date	Time	From	To	Duration
05/04/06	0917	Zain Jagis	Denkapsa Farah	22 min
05/07/06	1213	Esam Fakhir	Denkapsa Farah	44 min
05/08/06	0845	Sahar Abbas	Denkapsa Farah	34 min
05/10/06	1449	Denkapsa Farah	Bashir Hassad	63 min
05/13/06	1022	Abubba Farah	Denkapsa Farah	5 min
05/13/06	1146	Denkapsa Farah	Abubba Farah	2 min
05/14/06	1745	Iyshak Babib	Denkapsa Farah	12 min
05/15/06	1511	Uday Majid	Denkapsa Farah	43 min
05/17/06	0732	Daoud al-Heed	Denkapsa Farah	21 min
05/18/06	1016	Denkapsa Farah	Bahir Kareem	23 min
05/22/06	1333	Denkapsa Farah	Abubba Farah	5 min
05/25/06	0748	Denkapsa Farah	Abubba Farah	3 min
05/28/06	0813	Abubba Farah	Denkapsa Farah	6 min

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

TASK 2: Determine Farah location at a specific time

Human Intelligence – Farah Location

Local supporters of the coalition indicate that Farah was seen early this morning in Section 1. He was going back and forth between the large office building with the flat roof and the multi-level building on the northern edge of the compound. Each time he moved between the buildings, he would enter a long narrow building on the eastern side of the larger building and directly in front of the multi-leveled building. (The function of either the long, narrow building or the multi-leveled building is unknown at this time.) Based on previous patterns, Farah leaves the compound after 1500, but is usually present at 1200. He has not previously deviated from this time frame.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

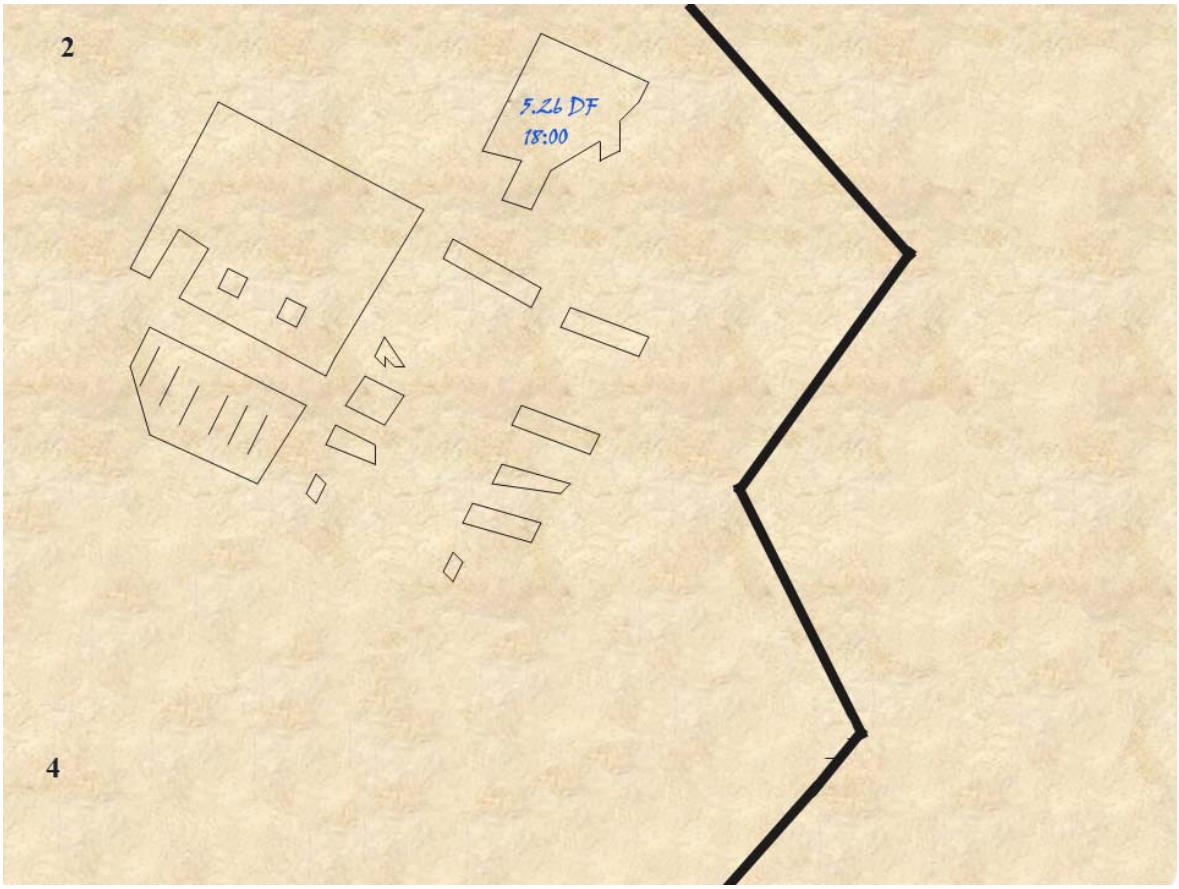
Human Intelligence – Farah Last Location

Farah was last seen entering the multi-leveled building through a door in front of the building, directly across from the long, narrow building.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Human Intelligence - Map

At 0430, 26 May 2006, Mu'ayyad Naim, a known al-Qaeda supporter, was captured near Zibihir. The attached hand-drawn map was found in his pocket.



Picture 15

Hand-Drawn Map from Mu'ayyad Naim

Date Obtained: 5.25.06 Time: 1300

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

Human Intelligence: Haja Al Fayad Location

Another individual, known as Haja Al Fayad, with no known aliases has been under strict surveillance for the past 3 months. Intel indicates that Al Fayad has displayed suspicious behavior, including taking photographs of the multi-level building on the western edge of the compound. An unidentified man can be seen in the photographs. It is suspected that this unidentified man is Denkapsa Farah. Al Fayad may have connections to al-Qaeda and he may in fact be responsible for the reformation in Disisabad.

Picture 16
Haja al Fayad
May 2005

Reliability of Information				
Source Reliability & Past Performance		High	Medium	Low
	Always	*		
	Some			
	Never			

Human Intelligence: Recorded Phone Conversation

On 24 May 2006, a "tapped" phone conversation between Mu'ayyad Naim and Haja Al Fayad is examined. The following is the transcript translated into English:

Naim: Hello?

Al Fayad: Yes, I'm here.

Naim: Are you coming? And is Jumala going to be joining you?

Al Fayad: We'll both be there at the time we agreed upon. I believe Jumala's brother will be there as well.

[Call Ended]

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

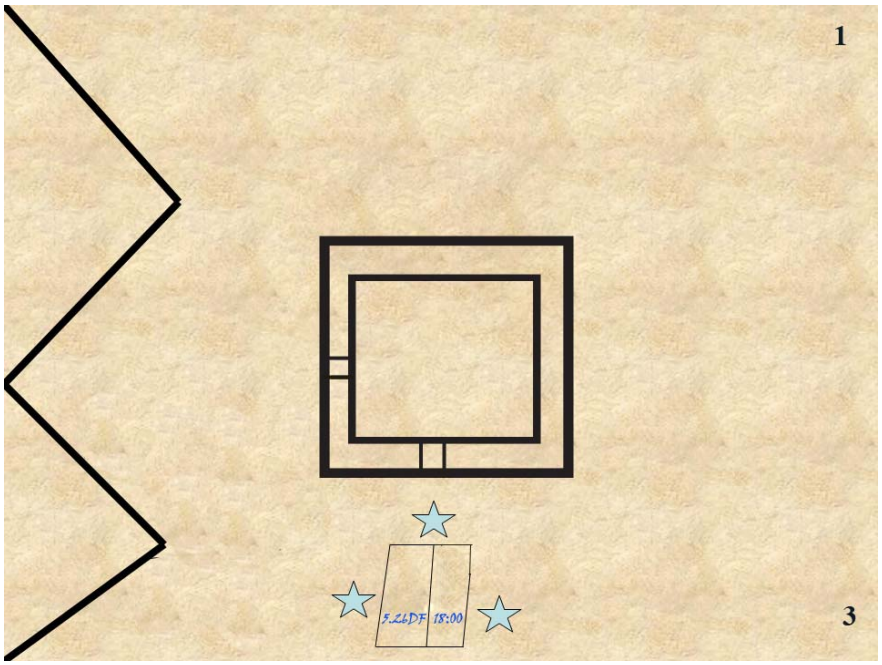
TASK 3: ***Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces***

NO ADDITIONAL HUMAN INTELLIGENCE FOR TASK 3

TASK 4*: *Analyze new and existing intelligence to determine Farah's location at a specific time

Human Intelligence – Hand Drawn Map 2

Mohammad Al-Faja, a supervisor at the Ja'al Karem compound suspected of being an al-Qaeda supporter, was captured and interrogated by coalition forces at 1630. A hand-drawn map was found in his pocket.

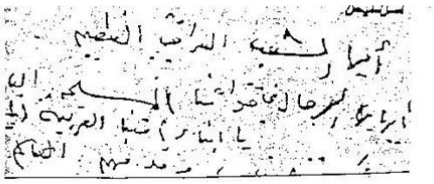


Picture 24
Hand-drawn map from Al-Faja
Date Obtained: 5.26.06 Time: 1640

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

Human Intelligence – Note

In addition, a handwritten note was also found in Al-Faja's pocket. The translation is as follows: "Meet with Achmed and his brother in the Mechanical Shop. 5.26 18:00. Bring the contract and € to close this multi-million dollar deal. Finally, we will have the manufacturing tools we need to complete our mission. Al Fayad should also be present at this meeting as well, he is also interested in our efforts. Soon our cause will be won. My brother Abdul sends his gratitude to you. Yours in the fight, Mohammed Latif."



Mohammed Latif

Picture 25
Handwritten note

Date Obtained: 5.26.06 Time: 1640

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Human Intelligence – Coalition Support

A regular informant has made authorities aware that Denkapsa Farah was actually known as Achmed Jumala before 1985. Farah was once a landlord in the Eastern Iraq between 1977 and 1983 and the informant had been one of his tenants. Since then, he has taken his current alias, Denkapsa Farah, and has used this name in his current business, Islamic Tooling Company, which was established in 1990.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

TASK 5: ***Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces***

NO ADDITIONAL HUMAN INTELLIGENCE FOR TASK 5

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APPENDIX C

***Special Operations Reconnaissance Scenario*:**

Intelligence Analysis & Mission Planning

SATELLITE INTELLIGENCE

INFORMATION

(1) Satellite Intelligence is broken down by task and provided to the intelligence expert at the beginning of each task.

(2) All previous task intelligence can be used in future tasks.

TASK 1**: **Determine if Farah has an association with al-Qaeda

Human Intelligence and Satellite Imagery – Museum Complex

Intelligence reports Farah has made frequent business trips to this museum complex in Zabihir over the past 3 years, presumably to sell tooling equipment. Satellite Intelligence indicates the presence of military vehicles and equipment.

Picture 4

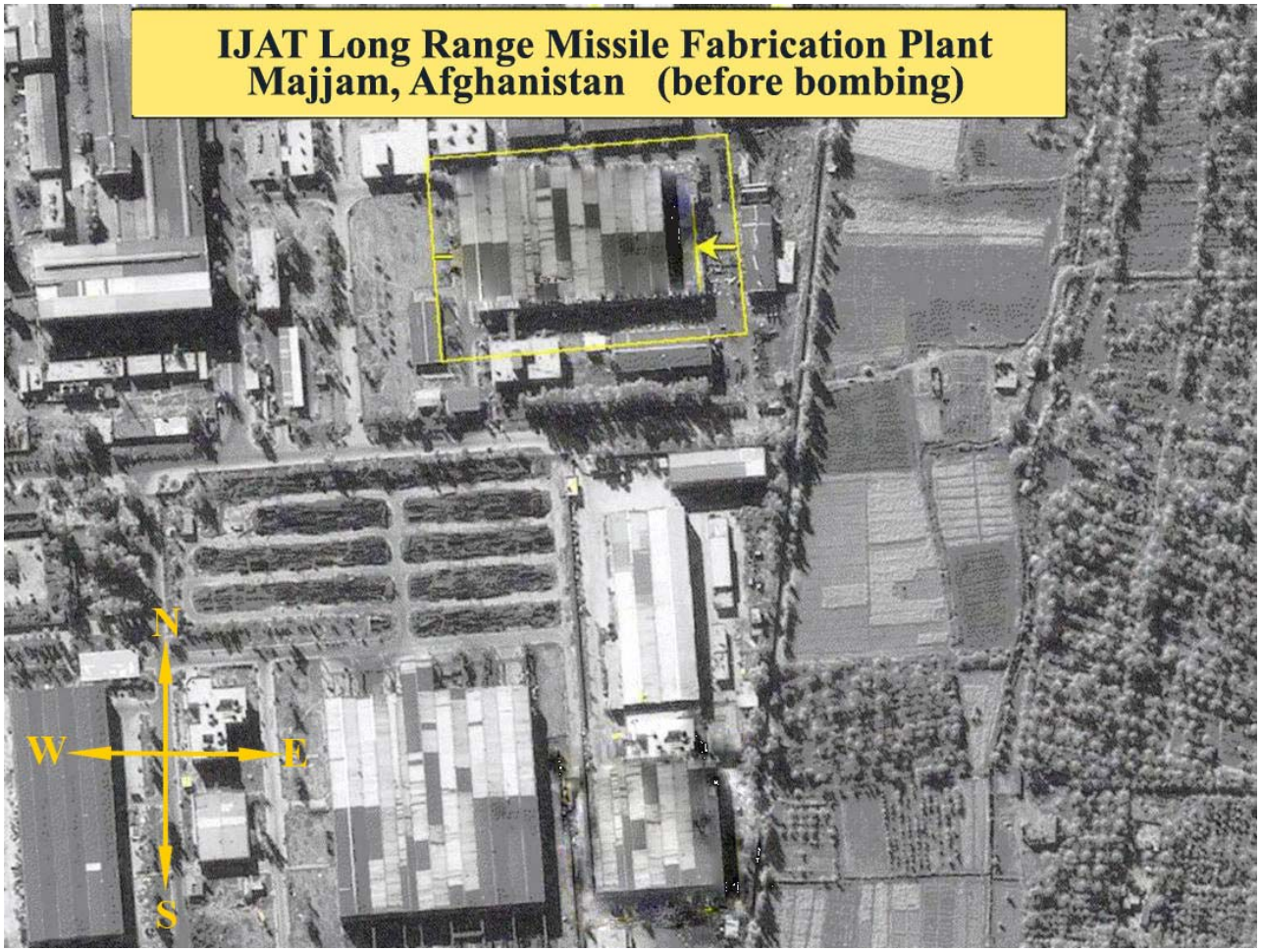
Museum Complex

Date Obtained: 5/24/2006 Time: 1345

Scale: 1 in. = 300 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

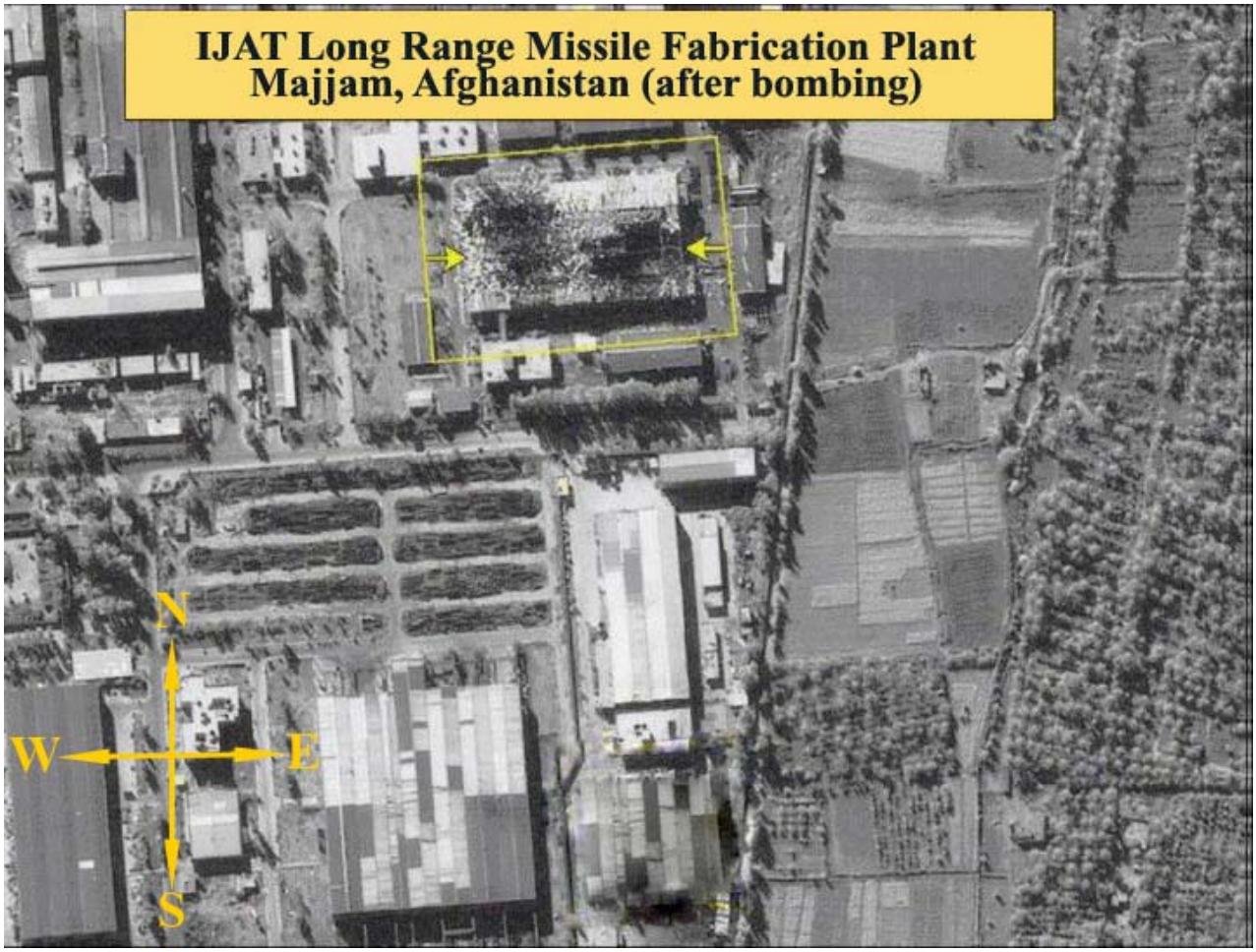
Human Intelligence - Satellite Imagery – IJAT Fabrication Plant before Bombing



Picture 6
IJAT Plant before Bombing
Date Obtained: 04.30.06 Time: 1100
Scale: 1 in. = 60 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – IJAT Fabrication Plant after Bombing



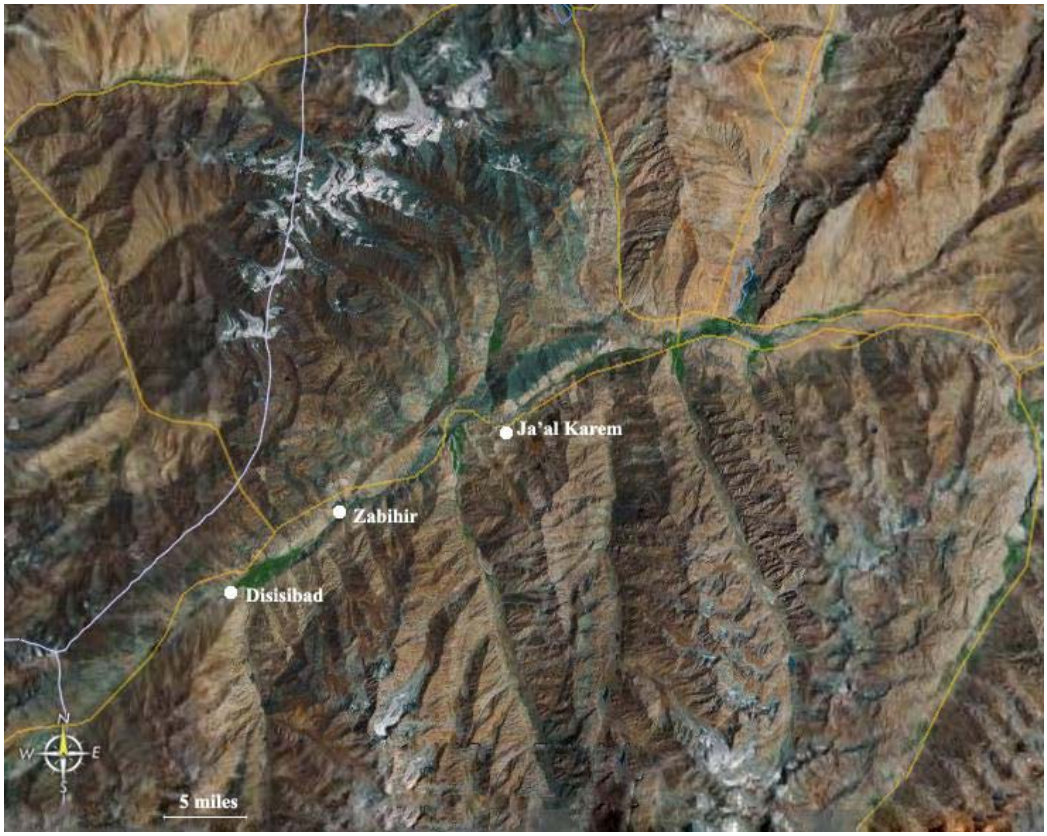
Picture 7
IJAT Plant after Bombing
Date Obtained: 04.30.06 Time: 1400
Scale: 1 in. = 60 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

TASK 2:* *Determine Farah location at a specific time

Satellite Imagery - Parvan

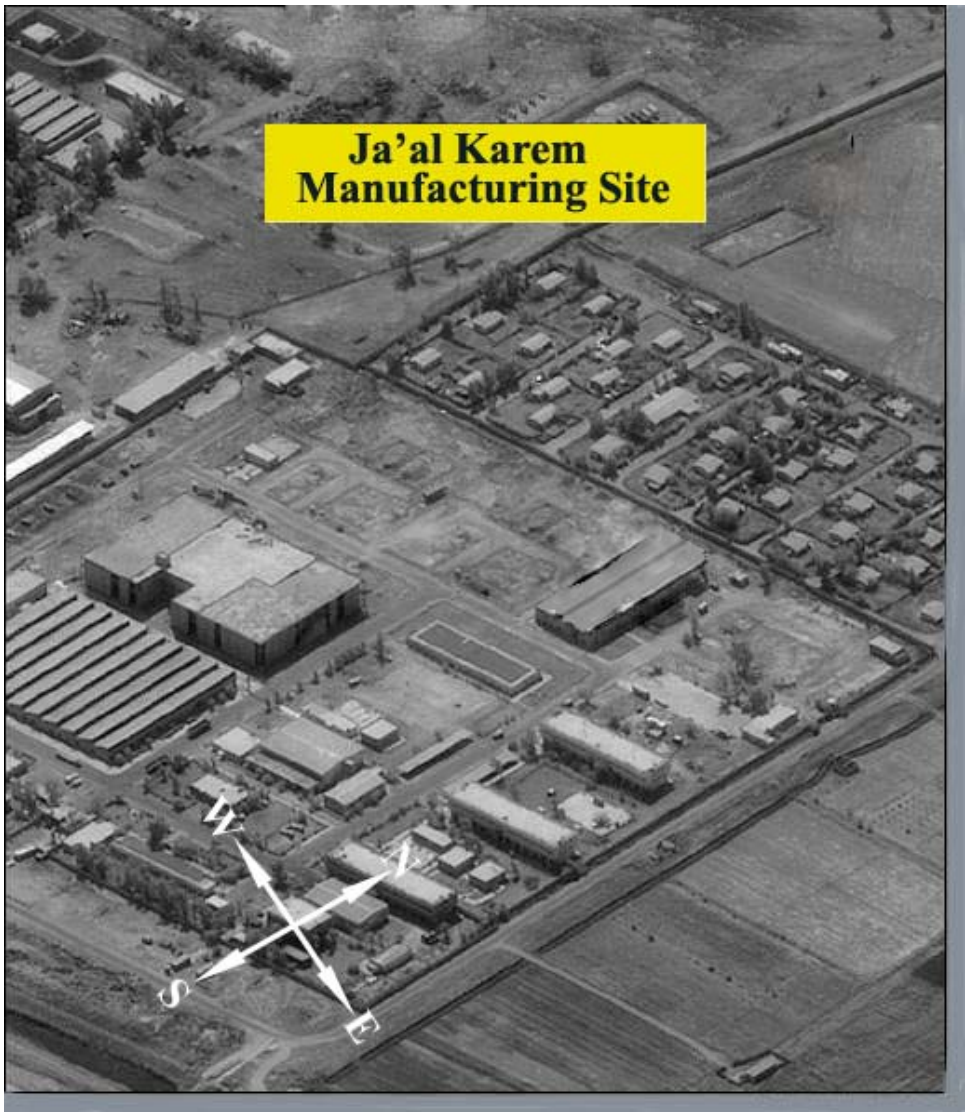
Recent intelligence suggests that, for the past 2 days, Farah has been seen at a manufacturing compound located on top of a mountain in Ja'al Karem. The compound is accessible by dirt roads, but does not have direct access.



Picture 8
Province of Parvan
Date Obtained: 5.25.06 Time: 1130
Scale: 1 in. = 5 miles

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Ja'al Karem Manufacturing Site

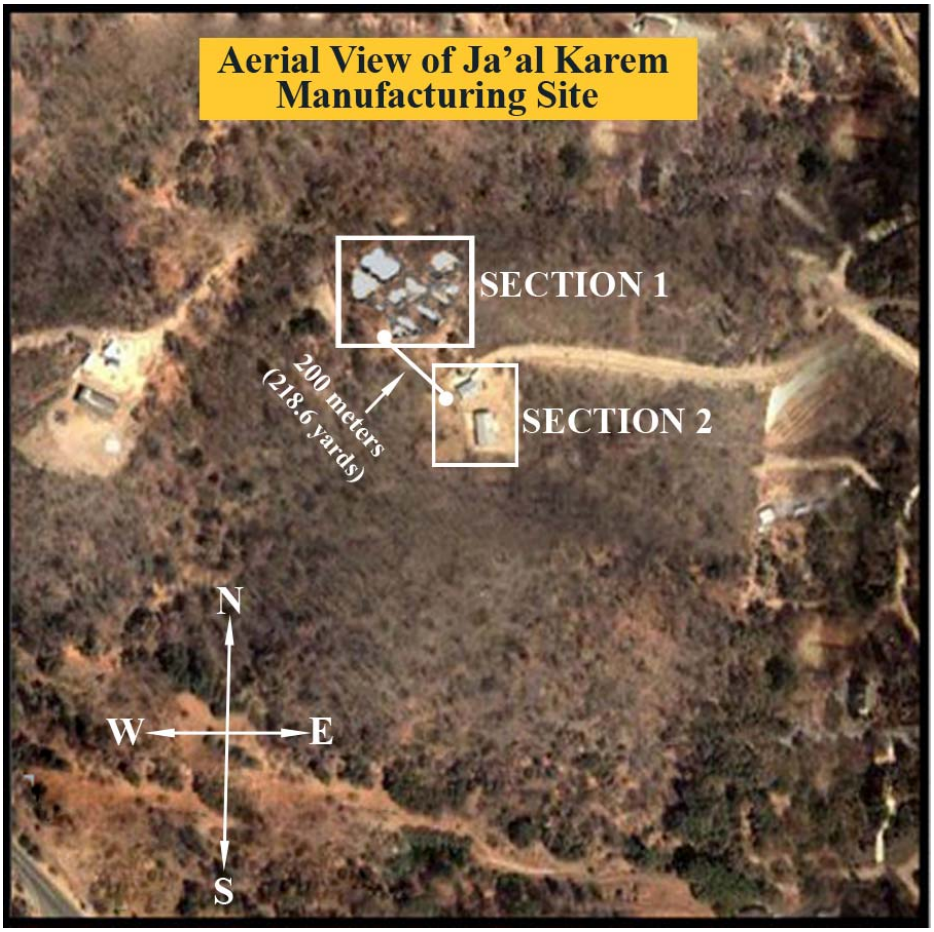


Picture 9
Ja'al Karem Manufacturing Site
Date Obtained: 5.25.06 Time: 1200
Scale: 1 in. = 500 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Ja'al Karem Site

Additional intelligence indicates the compound is divided into two distinct sections. Section 1 has many industrial buildings and offices. Section 2 is located approximately 200 m southeast of the first and houses one factory and one office building.



Picture 10

Aerial of Ja'al Karem Manufacturing Site – Sections 1 & 2

Date Obtained: 5.25.06 Time: 1230

Scale: 1 in. = 655 ft (200 m)

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Ja'al Karem

Yesterday, Farah was seen entering a large building with a flat roofline in the western sector of Ja'al Karem's Section 1. The building is thought to consist of offices and research labs.

Picture 12
Closeup Aerial of Ja'al Karem Manufacturing Site – Sections 1 & 2

Date Obtained: 5.25.06 Time: 1234

Scale: 1 in. = 655 ft (200 m)

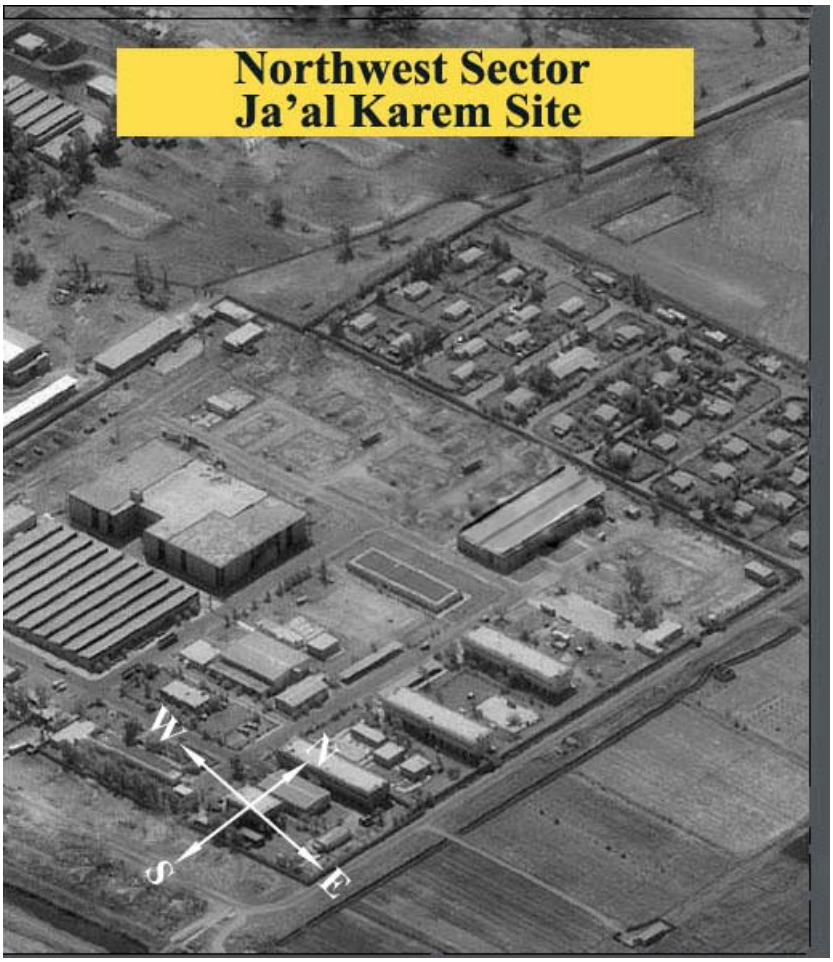
		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Parvan Manufacturing Site

Picture 13
Parvan Manufacturing Site
Date Obtained: 5.25.06 Time: 1300
Scale: 1 in. = 164 ft (50 m)

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Section 1 of Ja'al Karem



Picture 14
Section 1 of Ja'al Karem Manufacturing Site

Date Obtained: 5.25.06 Time: 1300

Scale: 1 in. = 300 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

TASK 3*: *Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces

Satellite Imagery – UAV Aerial View, Section 1

Picture 17
UAV Aerial View of Ja'al Karem - Section 1
Date Obtained: 5.26.06 Time: 1321
Scale: 1 in. = 300 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Front View of the Small Multi-leveled Building, Section 1

Picture 18
Front View of the Small Multi-leveled Building, Ja'al Karem – Section 1
Date Obtained: 5.26.06 Time: 1326
Scale: 1 in. = 12.5 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Back View of the Small Multi-leveled Building, Section 1

Picture 19
Back View of the Small Multi-leveled Building, Ja'al Karem - Section 1
Date Obtained: 5.26.06 Time: 1328
Scale: 1 in. = 12.5 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – North View of the Small Multi-leveled Building, Section 1

Picture 20
North View of the Small Multi-leveled Building, Ja'al Karem - Section 1
Date Obtained: 5.26.06 Time: 1332
Scale: 1 in. = 12.5 ft

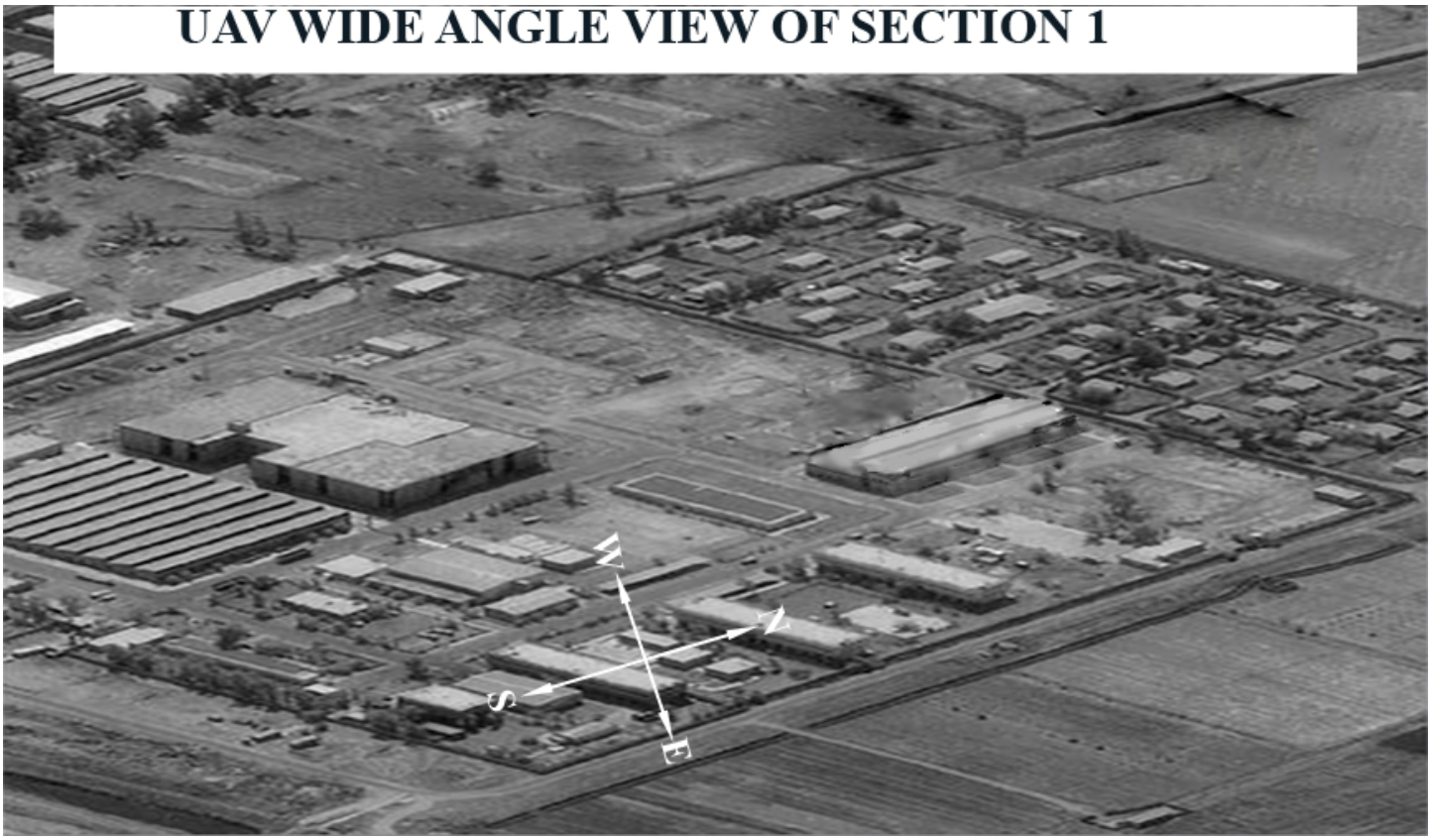
		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – South View of the Small Multi-leveled Building, Section 1

Picture 21
South View of the Small Multi-leveled Building, Ja'al Karem - Section 1
Date Obtained: 5.26.06 Time: 1334
Scale: 1 in. = 12.5 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

UAV Wide Angle View of Ja'al Karem, Section 1

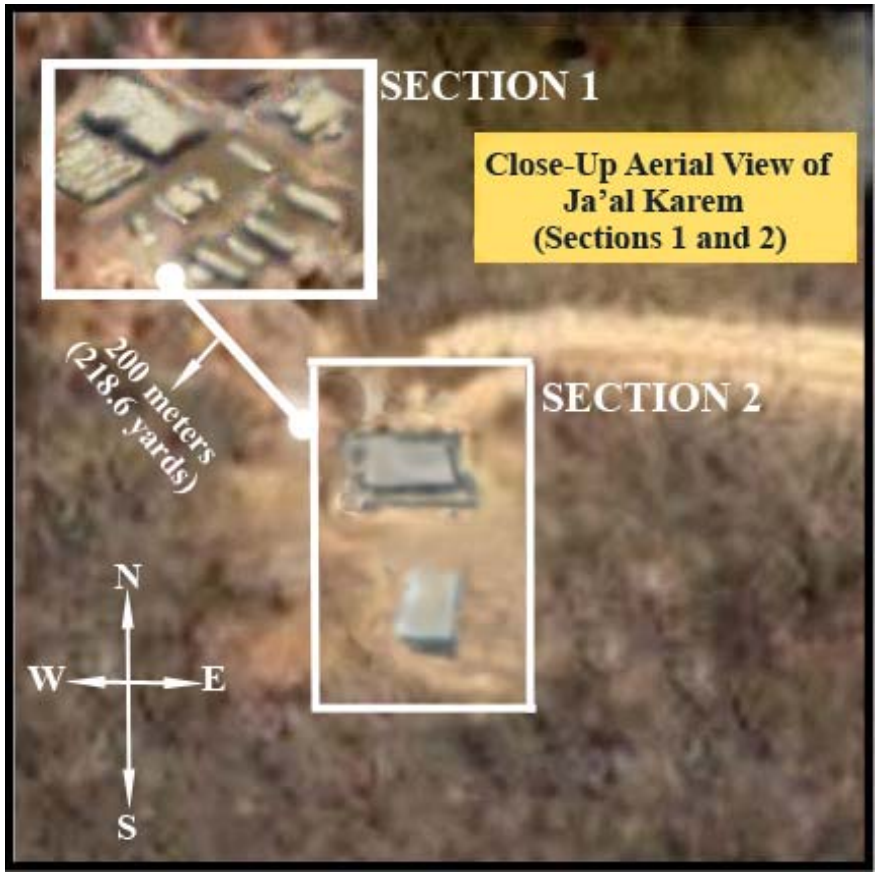


Picture 22
Wide Angle View of Ja'al Karem - Section 1
Date Obtained: 5.26.06 Time: 1346
Scale: 1 in. = 300 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

TASK 4*: *Analyze new and existing intelligence to determine Farah's location at a specific time

Satellite Imagery – Closeup Aerial View of Ja'al Karem



Picture 26

Closeup Aerial View of Ja'al Karem (Sections 1 and 2)

Date Obtained: 5.26.06 Time: 1648

Scale : 1 in. = 655 ft (200 m)

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

TASK 5:* *Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces

Satellite Imagery – Wide Angle Overhead Aerial View of Section 2

Wide Angle Overhead Aerial View of Ja'al Kar
(Section 2)

Picture 27:
Wide Angle Overhead Aerial View of Ja'al Karem – Section 2

Date Obtained: 5.26.06 Time: 1650

Scale: 1 in. = 100 ft (30 m)

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Front View, Smaller Building, Section 2

Picture 28
Front View, Smaller Building, Section 2 – Ja'al Karem
Date Obtained: 5.26.06 Time: 1655
Scale: 1 in. = 10 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Back View, Smaller Building, Section 2

Picture 29
Back View, Smaller Building, Section 2 – Ja'al Karem
Date Obtained: 5.26.06 Time: 1657
Scale: 1 in. = 10 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – North View, Smaller Building, Section 2

Picture 30
North View, Smaller Building, Section 2 – Ja'al Karem
Date Obtained: 5.26.06 Time: 1700
Scale: 1 in. = 10 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – South View, Smaller Building, Section 2

Picture 31
South View, Smaller Building, Section 2 – Ja'al Karem
Date Obtained: 5.26.06 Time: 1703
Scale: 1 in. = 10 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Satellite Imagery – Closeup Aerial View, Smaller Building, Section 2

Close Up Aerial View Smaller Building, Section 2

Picture 32
Closeup Aerial View, Smaller Building, Section 2 – Ja'al Karem
Date Obtained: 5.26.06 Time: 1707
Scale: 1 in. = 60 ft

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

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APPENDIX D

***Special Operations Reconnaissance Scenario*:**

Intelligence Analysis & Mission Planning

ADDITIONAL INTELLIGENCE INFORMATION

- ***Image Intelligence***
- ***Open Source***
- ***Map Imagery***
- ***Signal Intelligence***

(1) Additional Intelligence is broken down by task and provided to the intelligence expert at the beginning of each task.

(2) All previous task intelligence can be used in future tasks.

TASK 1**: **Determine if Farah has an association with al-Qaeda

Image Intelligence – Musab Ramzi bin al-Shibh

An image of Musab Ramzi bin al-Shibh is obtained. Bin al-Shibh is the son of one of the past top leaders of al-Qaeda. He has been displaying some suspicious behavior in the last 2 weeks which has alerted U.S. authorities.

Picture 2
Musab Ramzi bin al-Shibh
March 2005

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always			
	Some	*		
	Never			

Image Intelligence – Muhammad Uday al-Zarqawi

This is an image of Muhammad Uday al-Zarqawi who is the brother of an extremely well known figure in al-Qaeda. Surveillance suggests that al-Zarqawi and bin al-Shibh have been seen meeting together at a museum complex. It is not clear whether or not the two are involved with al-Qaeda. The two have not taken part in terrorist activity prior to this incident, but both have familial connections to the organization.

Picture 3
Muhammad Uday al-Zarqawi
February 2005

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always			
	Some		*	
	Never			

Open Source - News Report

U.S. Troops Capture an al-Qaeda Bodyguard

Reuters

26 May 2007

Himalaba, Afghanistan

U.S. troops have captured Mufala Omasa, a bodyguard to several high ranking al-Qaeda officials. Information provided by local villagers supportive of the coalition forces led to the arrest yesterday. Through his close contact with key al-Qaeda members, Omasa is believed to have detailed knowledge of the terrorist infrastructure. “This is a real break-through for us,” said LT Ron Palmer, Commander of the 3rd Infantry Division, who led the early morning raid.

The raid began at 4 a.m. on a small farm in the village of Himalaba. The farm, owned by Abdul Amar, the cousin of a high ranking al-Qaeda official, has been under observation for suspicious activity for several weeks. A search of the farmhouse resulted in the confiscation of small arms, materials for IED’s, and anti-American propaganda.

Other materials found in the farmhouse included several letters addressed to the name “Achmed Jumala”. This name has not been identified before as a link to terrorist behavior. However, officials are now looking into records involving this name or similar names. The letters involve vague plans for violent activity against Americans as well as sympathy for the al-Qaeda regime. The letters have been confiscated and will be further investigated.

Information leading to the capture was gained by decoding al-Qaeda’s simple encryption technique. The current technique is to use simple map overlays to identify true locations, dates, and times. Omasa was taken to an Army detention center where he will be interrogated.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Open Source – News Report

Top Al-Qaeda Leader, Abdul Latif, Captured in Pakistan

Reuters

25 January 2006

A suspected top al-Qaeda official, Abdul Latif, has been detained by authorities in Pakistan for suspicion of orchestrating several terrorist attacks, including the 2004 bombings in Madrid, Spain. Latif, also known as Muhammad Ja'al Kabar, will possibly be handed over to the U.S. for trial. U.S. law enforcement officials declined to comment.

For several months, Latif has been thought to be actively involved in terror training camps throughout Afghanistan. His alleged expertise is in the production of chemical weapons and the use of poisons. While U.S. officials refused to comment on his capture, they did note that he was "a suspect of high interest."

Latif relocated to Afghanistan 10 years ago. Over the past year, his movements have been traced to England, Spain, Syria, and Iraq. He has been connected with several al-Qaeda supporters such as Hamed Jumaa Farid (also known as Abu Rana).

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

Map Imagery – Ballistic Missile Facilities

Picture 5
Ballistic Missile Facilities
(Marked in Red)
April 2006

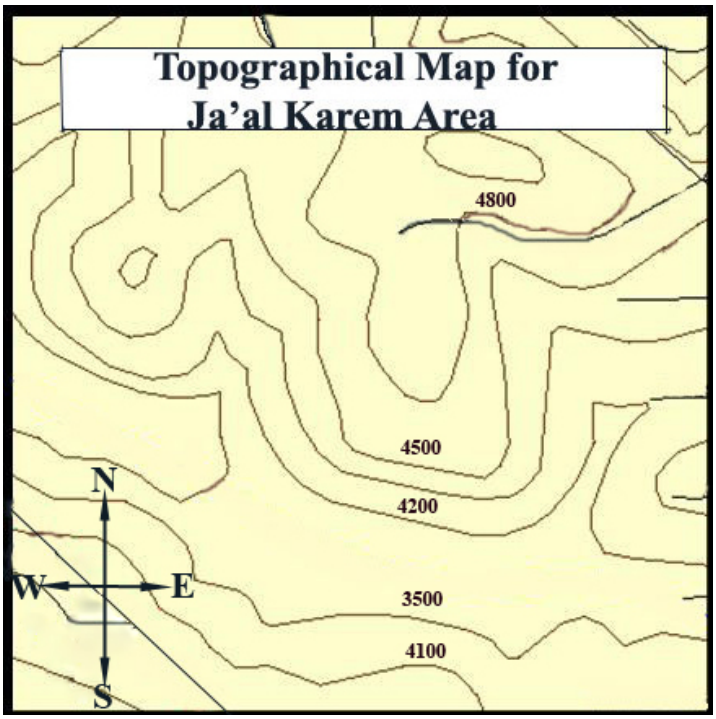
Open Source – Disisabad Demographic Information – World Demographic Database

- Disisabad is in the mountainous province of Parvan, 300 miles west of the Pakistan border.
- Parvan is approximately 9,584 sq. km.
- The population of Parvan is estimated to be about 919,000, the majority of whom are Sunni.
- The population of Disisbad is estimated to be about 45,000 people.
- The population of Zabihir and Ja'al Karem is approximately 3,560 and 8,650, respectively.
- 89% of the population speaks the Brahui language and 10% speak Balochi.
- The climate is arid – hot in the summer and cold in the winter. Most rainfall occurs in the winter.
- The terrain is mountainous with valleys and one main river.
- The economy is based on agriculture and livestock farming.

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always		*	
	Some			
	Never			

TASK 2: ***Determine Farah location at a specific time***

Open Source – Topographical Map of Ja'al Karem



Picture 11
Topography of Ja'al Karem Manufacturing Site

April 2006

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always	*		
	Some			
	Never			

TASK 3: ***Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces***

NO OTHER

ADDITIONAL INTELLIGENCE INFORMATION FOR TASK 3

TASK 4*: *Analyze new and existing intelligence to determine Farah's location at a specific time

Signal Intelligence: Tapped Phone Conversation between Al Faja and Al Fayad

The following conversation was recorded by a primary source. The individuals speaking are Haja Al Fayad and Mohammad Al Faja.

Al Fayad: I need to know where the meeting will be.

Al Faja: I'll keep this short.

Al Fayad: Go on.

Al Faja: 6 p.m.

Al Fayad: Yes, I know. How do I get there?

Al Faja: It's the northernmost building Section 2, across from the mechanical shop.

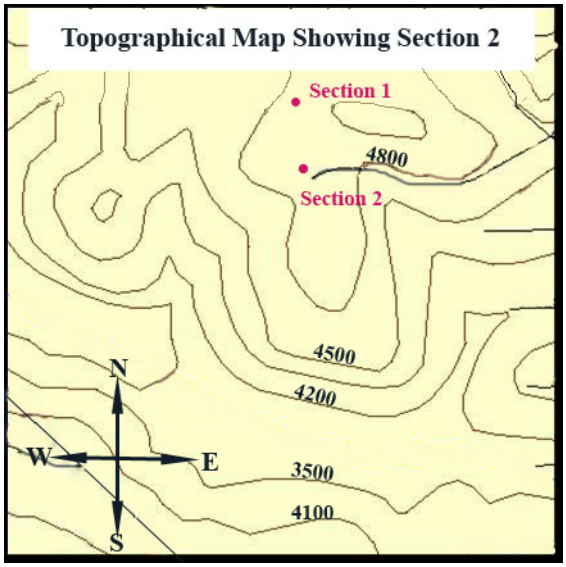
Al Fayad: Yes.

[Call Ended]

		Reliability of Information		
		High	Medium	Low
Source Reliability & Past Performance	Always			
	Some			
	Never			*

TASK 5: ***Determine optimum reconnaissance locations for two SEAL teams (4 men per team) to collect data if Farah is betraying the coalition forces***

Open Source – Topographical Map of Ja'al Karem



Picture 33
Topographical Map of Ja'al Karem
April 2006

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APPENDIX E
SPECIAL OPERATIONS RECONNAISSANCE SCENARIO INSTRUCTION

After hearing all the instructions you will begin a team problem solving task. The task is based on the Special Operations Reconnaissance (SOR) scenario. Essentially, you will be working as a team to complete both "Intelligence Analysis" and "Mission Planning" portions of the scenario. There is also a "Mission Execution" portion, but this will not be addressed today. You will be collecting reconnaissance information from a number of different categories, for example, Image Intelligence, Human Intelligence, and Open Source.

Each of you will receive the same packet of general background and mission information. Each of you will randomly receive unique information regarding the scenario. One of you will receive only Human Intelligence, one of you will receive Satellite Intelligence, and one of you will receive Additional Intelligence, which is all other forms of intelligence not indicated in the first two categories. You must share this information and solve each task accordingly. Not every category of unique information exists for each task, so there will be times when some team members have information to share and others will not.

There are five tasks that comprise this scenario. You will be given a total of 2 hr and 50 min to complete the SOR. However, you will only have a certain amount of time to complete each task. You will have 30 min to read the first part, then 60 min to collaborate with your team and complete the task, 5 min to read the second part and then 25 min to complete the second task, 10 min to complete the third task, 5 min to read the fourth part and then 25 min to complete the fourth task, and 10 min to complete the fifth task. When your time has expired for each task, you will be notified by an experimenter. On the answer sheet provided, write out your answers as instructed in the scenario. You must have your final answer for each task written down by the time each task ends. Take note that each piece of intelligence information is accompanied by a reliability matrix indicating the reliability of the information itself and the reliability of the source based on past performance. Be sure to pay close attention to these matrices as they will aid you in solving each task.

The date is 26 May 2006. Local intelligence indicates that an al-Qaeda element is reforming in the town of Disisabad in Eastern Afghanistan. This group may be attempting to strike a deal with a local, coalition supported warlord, Denkapsa Farah.

Based on the intelligence provided, work together as quickly and accurately as possible as a team to:

(1) Determine if Farah has allegiance with al-Qaeda (Task 1 --- 1 hr and 30 min).
(2) Determine Farah location at a specific time (Task 2 --- 30 min).
(3) Determine optimum location for two SEAL reconnaissance team to collect photographic data if Farah is betraying the coalition forces (Task 3 --- 10 min).
(4) Analyze new and existing intelligence to determine Farah's location at a specific time (Task 4 --- 40 min).
(5) Determine optimum location for two SEAL reconnaissance team to collect photographic data if Farah is betraying the coalition forces (Task 5 --- 10 min).

At the end of the study, we will discuss any feedback you may have regarding the scenario. If you have any questions during, feel free to ask at any time.

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3100 Technology Parkway, Orlando, FL 32862
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DTIC (1)
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