Examining the Effectiveness of SWET and the Sons of SWET in OIF

A Monograph

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AY 06-07

REPORT DOCUMENTATION PAGE

1. REPORT DATE (DD-MM-YYYY) 07-05-2007	2. REPORT TYPE AMSP Monograph	3. DATES COVERED (From - To) July 2006 – May 2007

4. TITLE AND SUBTITLE
Examining the Effectiveness of SWET and the Sons of SWET in OIF

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
MAJOR Dawson A. Plummer (U.S. Army)

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Advanced Military Studies Program
5 Buckner Avenue
Fort Leavenworth, KS 66027-2134

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Command and General Staff College
1 Reynolds Avenue
Fort Leavenworth, KS 66027

10. SPONSOR/MONITOR'S ACRONYM(S)
CGSC

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution is Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT
After the United States (U.S.) Coalition forces invaded Iraq, the transition to stability operations has been difficult for the U.S. Coalition forces. One method used by the 1st Cavalry Division, in 2004, was to develop logical lines of operations that provided units with methods and guidance to accomplish key tasks in the stability operations phase. Under the essential services line of operations a concept that was implemented to help win the hearts and minds of the local Iraqi population was the sewage, water, electricity, and trash program also known as SWET. SWET became known as the primary focus for not only rebuilding and improving key infrastructure, but was perceived as the solution to winning the peace in Iraq. The SWET metrics program was adopted by follow-on units and executed all over Iraq. The SWET metrics were constantly monitored by higher headquarters and were even utilized to predict the level of pacification and acceptance of the local population. The purpose of this monograph is to determine how effective SWET was when being utilized during counterinsurgency operations in Iraq. This monograph will prove that the SWET concept alone is not the ideal frame work for all of Iraq. In addition, SWET and the sons of SWET concepts are not enough to determine stability, dislodge insurgents from a population, address the underlying causes of an insurgency, or win the support of a local population. Finally, SWET is a concept which must be used with other counterinsurgency doctrine in order to win over the local population.

15. SUBJECT TERMS
SWET, Sewage Water Electricity Trash Programs, Iraq Infrastructure Rebuilding, Iraq Essential Services, Hamlet Evaluation System, Counter Revolutionary Development System, OIF

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON Kevin C.M. Benson, COL, US Army
a. REPORT UNCLASS	b. ABSTRACT UNCLASS	c. THIS PAGE UNCLASS	UNLIMITED	50	19b. TELEPHONE NUMBER (include area code) 913-758-3302

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

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Title of Monograph: Examining the Effectiveness of SWET and the Sons of SWET in OIF

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Abstract

EXAMINING THE EFFECTIVENESS OF SWET AND THE SONS OF SWET IN OIF
by MAJ Dawson A. Plummer, US Army, 46 pages.

After the United States (U.S.) Coalition forces invaded Iraq, the transition to stability operations has been difficult for the U.S. Coalition forces. One method used by the 1st Cavalry Division, in 2004, was to develop logical lines of operations that provided units with methods and guidance to accomplish key tasks in the stability operations phase. Under the essential services line of operations a concept that was implemented to help win the hearts and minds of the local Iraqi population was the sewage, water, electricity, and trash program also known as SWET. SWET became known as the primary focus for not only rebuilding and improving key infrastructure, but was perceived as the solution to winning the peace in Iraq. The SWET metrics program was adopted by follow-on units and executed all over Iraq. The SWET metrics were constantly monitored by higher headquarters and were even utilized to predict the level of pacification and acceptance of the local population.

The purpose of this monograph is to determine how effective SWET was when being utilized during counterinsurgency operations in Iraq. This will be accomplished by conducting a historical comparison with a similar infrastructure rebuilding program in Vietnam, examining the different modifications made to SWET by follow-on units, and identifying the Iraqi local population opinions within each province concerning how they were affected by the U.S. Coalition forces execution of full spectrum operations.

This monograph will prove that the SWET concept alone is not the ideal frame work for all of Iraq. In addition, SWET and the sons of SWET concepts are not enough to determine stability, dislodge insurgents from a population, address the underlying causes of an insurgency, or win the support of a local population. Finally, SWET is a concept which must be used with other counterinsurgency doctrine in order to win over the local population.

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CHAPTER ONE

INTRODUCTION

In the fall of 2003, the 1st Cavalry Division was alerted to deploy to Iraq in the spring of
2004. This division leadership knew that they were going to face a number of significant
challenges in Iraq. Also during this time, the United States (U.S.) Coalition forces had already
been fighting a very effective and well established Iraqi insurgency. While collecting information
and learning from U.S. Coalition forces already in theater, the 1st Cavalry Division prepared for
deployment. The division asked the basic question that any counterinsurgent must answer: What
are the underlying issues and effects fueling the insurgency? The division leadership understood
that a major aspect of counterinsurgency doctrine, outlined by David Galula, was that the local
population support is a key component for the insurgent and counterinsurgent to win the war.

> If the insurgent manages to dissociate the population from the counterinsurgent,
> to control it physically, to get its active support, he will win the war because, in
> the final analysis, the exercise of political power depends on the tacit or explicit
> agreement of the population or, at worst, on its submissiveness.[1]

The 1st Cavalry Division's plan focused on the population, which would also help reinforce the
legitimacy of the new Iraqi government.

When the 1st Cavalry Division arrived in Iraq, it came with a plan that started with
winning the support of the local population in their assigned area of operations. The campaign
plan outlined by the 1st Cavalry Division Commander, Major General Chiarelli in his article
"Winning the Peace," provided five integrated conceptual lines of operations which led to an
overall goal of defeating the insurgency. These lines of operations were initially perceived as

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[1]David Galula, *Counterinsurgency Warfare; Theory and Practice* (New York: NY: Praeger,
1964), 22. (David Galula was a French military officer who experienced several years of guerrilla warfare
and wrote about his observations, concepts, and ideas during the 1950s and 1960s. Galula's book discusses
the development of counterinsurgency and revolutionary warfare and its effects on conventional military
forces.)

being equal; however, the line of essential services started to receive a greater amount of attention and over time became known as a "first among equals."[2]

Within the essential services line of operation, the division staff developed a concept called SWET (sewage, water, electricity, and trash) that was aimed at improving the quality of life for the Iraqi people. The division prepared for several months on how to implement and monitor these metrics. The division leadership sent Soldiers to water treatment plants, sewage plants, and electrical power plants around the Fort Hood and greater Texas area. The intent was for Soldiers to acquire knowledge and experience in constructing, repairing, and monitoring basic infrastructure systems for a small city.

The 1st Cavalry Division's Brigade Combat Teams now had a battlespace with a clear direction and focus which was on rebuilding, repairing, and eventually monitoring the essential service infrastructure in Iraq. According to the U.S. Army Engineer School, by the end of 2004, SWET building had been one of the initial main efforts in hopes of rebuilding and stabilizing the entire country of Iraq. The U.S. Army Engineer School also recommended that the coalition engineering battalions organize their staffs to have a company grade officer assigned to each SWET metric and become the lead expert in that particular area. By early 2004, the 1st Cavalry Division believed that they found what major problems plagued the Iraqi people and possibly why many were so displeased with the new Iraqi government. Many Iraqi neighborhoods had little to no functioning drainage systems, no potable drinking water, continual electrical blackouts, no evidence of trash collection, high unemployment, and a genuine mistrust of the newly formed Iraqi government.

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[2]Peter W. Chiarelli, "Winning the Peace: The Requirement for Full-Spectrum Operations," *Military Review* 85, no. 4 (July-August 2005): 5, 10.

Proponents perceived that in the process of restoring a neighborhood's essential services, the local populace needed to be empowered to assist in rebuilding as well. It was important to teach the Iraqi's how to maintain the improvements to their infrastructure so the U.S. Coalition engineers could eventually be replaced. An expected secondary effect from empowering the Iraqi civilians to assist in reconstruction efforts was the reduction in unemployment which would in turn stimulate the economy and reduce the number of people that could possibly be recruited by insurgents that were constantly attacking U.S. Coalition forces. As essential services projects were being completed, another long-term effect that was expected to occur was an increase in the quality of life for the Iraqi people. Proponents also believed that the Iraqi people would be very appreciative of the repairs in their neighborhood and in turn would start to support the new Iraqi government, and assist U.S. Coalition forces in finding insurgents who desired to attack key infrastructure and essential service systems. By late 2004, the U.S. Army Engineer School published a SWET infrastructure reconnaissance handbook for commanders and engineers serving in Iraq and Afghanistan.

The Multi National Forces Iraq (MNFI) Command perceived that the Iraqi civilians all over the country wanted and needed these basic essential services restored or even created. MNFI distributed funds to divisions and finally to battalions to start the rebuilding process. Most projects were identified by line battalions along with some Iraqi district and city engineers who already had the knowledge of existing infrastructure services, but lacked the funds and man power to build or repair it. The U.S. Coalition maneuver brigade and battalion commanders directed their operations to disrupt the enemy, and non-kinetic SWET operation to focus on the local population. The overall strategy was that the insurgents and terrorists would be defeated conventionally, and the unconventional support to the enemy from the local population would in turn be eliminated as well.

Despite all these efforts, the Iraqi insurgency grew in strength instead of weakening.

A careful analysis of the physical and human dimensions of the environment is a good starting point for an analysis of an insurgency. An assessment of topography and transportation-communications systems can reveal a good deal about the potential or actual effectiveness of the forms of violence used by insurgents, particularly guerrilla warfare, whereas a careful look at demography, social groups, the economy, and the political culture and political system will shed light on the causes underlying insurgencies.[3]

This quotation by Bard O'Neill reveals a major flaw in the U.S. strategy in fighting the counterinsurgency war in Iraq. The U.S. military, as well as other U.S. government organizations, overemphasized SWET metrics that may not necessarily address the more important needs of the Iraqi population. The focus became more on metrics instead of concentrating on seeking out the underlying conditions that fueled the insurgency.

The 1st Cavalry Division was correct in focusing on the Iraq population in order to counter the insurgent support, but the essential service line of operations now appears to be over emphasized by follow-on divisions and organizations. The SWET concept seems to be the primary focus of many military and government organizations. The SWET concept alone is not enough to determine stability, dislodge insurgents from a population, or win the support of a local population. In other words, the SWET concept does not appear to directly address the underlying causes of the insurgency.

This monograph analyzes the SWET concept and assesses its contributions and shortfalls during its execution in the counterinsurgency war being fought in Iraq. The results of this assessment will reveal that the SWET concept alone is not the ideal solution to winning a war in the Iraqi counterinsurgency environment. A comparison between SWET and a similar program utilized during the U.S. war in Vietnam, and was later found to be ineffective, will be examined

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[3]Bard E. O'Neill, *Insurgency and Terrorism: Inside Modern Revolutionary Warfare* (Washington, DC: Brassey's, 1990), 66. (Bard O'Neill was a former U.S. Air Force officer and is currently a professor at the National War College. He was also a consultant for the Department of Homeland Security concerning terrorist attacks on the U.S. Dr. O'Neill is considered to be an expert on insurgency operations.)

to see if similar mistakes are currently being made in Iraq. In addition, an examination of some

unit leaders who served in Iraq and found that hybrids of SWET, called the "sons of SWET,"

were necessary because SWET alone did not address other major issues in their provinces will be

conducted. Lastly, a review of the U.S. Joint Warfare Analysis Center's summer 2006 survey of a

portion of the local population in each Iraqi province will also reveal that many of the higher

priority needs and concerns of these residents were not being addressed or met by the of the U.S.

Coalition forces or the new Iraqi government.

The concept of SWET is actually not new to the U.S. military stability and support

operations that had been conducted in the past. Historical examples of programs which monitored

the essential services of a local population in order to win their hearts and minds could be found

during the war in Vietnam. Although there may be many differences between the U.S. war in

Vietnam and the war currently being fought in Iraq, there are actually several important

similarities which should not be ignored. The Vietnam system that was used to monitor and

evaluate essential services was known as the Hamlet Evaluation System (HES). The HES was

implemented in 1967 in South Vietnam. U.S. forces utilized this "computerized reporting system

to judge the progress in the rural construction program."[4] Approximately 252 U.S. district and

Government of the Republic of Vietnam (GRVN) advisors monitored and provided their own

personal monthly assessment concerning the positive or negative progression of several hamlets

in their district. This program was still not used in conjunction with any human terrain team type

programs (which will be discussed in chapter two), and still could not reduce the Vietcong

sympathizers or directly address the primary needs of many of the local hamlets.[5] After the

failures and shortfalls were identified with HES, it was not until HES was revised to HES70 and

used in conjunction with the Civil Operations and Revolutionary Development Support (CORDS)

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[4]Maurice Roush, "The Hamlet Evaluation System," *Military Review* (September 1969): 48.
[5]Guenter Lewy, *America in Vietnam* (New York, NY: Oxford University Press, 1978), 192.

program near the end of 1970 did positive affects start to take place within the local Vietnamese populations.[6] This monograph will examine the similarities and differences of SWET versus HES to determine if the possibility may exist that if HES failed in Vietnam then SWET could do the same as well in Iraq.

The sons of SWET had been created by commanders and staffs that initially executed SWET in their area of operations. These leaders later realized that the original SWET metrics were not achieving the desired effects in their area of operations and needed to be changed. This monograph will show that SWET might initially appear to work in some areas but not work in others due to the varying level of enemy influence, culture, religion, city modernization, social economic status, and conditions of essential services before the war. In addition, the flaws in identifying follow-on units' methods of conducting stability and support operations, in which SWET needed to be modified, will prove that the essential services line of operations was indeed overemphasized. If commanders are utilizing logical lines of operations similar to what Major General Chiarelli had, then it should have included a line similar to conducting security operations. The question, why was SWET modified to include security, could be raised. The adjustments made by commanders on the ground, in some provinces, may have had a quick positive direct effect and yielded a perception that a province's city was stable. However, within six months to a year later that same province became a terrorist and insurgent strong hold after the U.S. Coalition forces moved to a new location or redeployed. From late 2004 and beyond, it appears that SWET alone might not address other major underlying issues in many provinces, thus the necessity to add other metrics. Also, there may have been ineffective methods used to find out what the local populations actually needed.

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[6]Some major revisions that upgraded HES to HES70 were the improvements in data collection, integration with the CORDS program, metrics that were tailored to unique provinces, quicker computer report processing, and a quicker output of results to commanders.

Finally, the results of the U.S. Joint Warfare Analysis Center's summer of 2006 survey of some of the local population in Iraq will reveal that the majority of their higher priority needs and concerns were not being addressed or met by the U.S. Coalition forces or the Iraqi government. The Joint Warfare Analysis Center had been attempting to understand the human dimension of the local population within Iraq. Before 2005, many reports that were sent up to U.S. government agencies were primarily based off of what "outsiders" thought or perceived as the needs and wants of the Iraqi people. These outsiders were deemed as anyone who was not part of the Iraqi local population; this included U.S. Coalition Soldiers, government contractors and surveyors, Iraqi government officials that were previously exiled and returned to Iraq, and corrupt Iraq provincial government officials who intended to extort infrastructure rebuilding money for themselves.

Similar to the reporting systems utilized in Iraq, the U.S. war in Vietnam also had a reporting system, to be discussed in chapter two, which was conducted by people who were not part of the local population. During the 1960's, the U.S. military moved from an advisory role for the South Vietnamese to an aggressive conventional combatant role as the war developed. The reporting system developed by the U.S. military increased in importance, but not in accuracy, as the Vietcong increased their insurgent presence in the South. Due to the North Vietnamese Army and Chinese military recognizing the potential for the Vietcong's success against U.S. and South Vietnamese troops, they started to equip them with more modern weapons by 1965. During this year, the Vietcong had accumulated a large number of supporters throughout the local population in South Vietnam, and these areas would eventually become safe havens. The Vietcong became very efficient at ambushing and killing South Vietnamese and U.S. military Soldiers and then hiding back into the local population. Thus, the war among the people became the new battleground for both sides.

CHAPTER TWO

U.S. MILITARY VIETNAM COUNTER INSURGENCY

> Their (the insurgent) greatest advantage is the ability to hide among the people. These amoral and often barbaric enemies survive by their wits, constantly adapting to the situation. Defeating them requires counterinsurgents to develop the ability to learn and adapt rapidly and continuously.[7]

> Department of the Army, *Counterinsurgency*

This quotation from FM 3-24 emphasizes the fact that the counterinsurgent must be able to develop flexible plans and strategy to adapt to a changing environment. Just as security operations must adapt as the enemy adapts, so must stability operations adapt to the different dynamics of local populations. The U.S. experience in the Vietnam War offers several historical lessons which could be useful in Iraq today in the area of stability and support operations. A number of programs in Vietnam were supposedly designed to help fight a war of counterinsurgency. Two major programs that were utilized with varying success were the Civil Operations and Revolutionary Development Support (CORDS) program and the Hamlet Evaluation System (HES). CORDS addressed intelligence collection among the local population in small towns and hamlets, and HES addressed the status of a local hamlet's rural infrastructure improvement and construction program. The HES program shares many similarities with SWET. Some of the application problems that had been experienced with HES, before its revision in 1970, may shed light on problems that exist today with SWET. Likewise, HES70 combined with CORDS may also provide insight into how SWET could be more effective if it is combined with a program similar to CORDS.

The SWET program utilized by the U.S. Coalition forces, during 2004, operated under one of O'Neill's counterinsurgency principles, modified by Major General Chiarelli when he

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[7]Department of the Army, Field Manual 3-24, *Counterinsurgency* (Washington, DC: Government Printing Office, 2006), 1-28.

stated that "improving the quality of life for a local population is key to winning the counterinsurgency."[8] The HES program utilized during the Vietnam War also attempted to improve the local population's living conditions, and determines if an area was favorable or unfavorable toward the U.S. and South Vietnamese government.[9] This program was started in South Vietnam from 1965 to 1971, and focused on rebuilding and constructing basic infrastructure such as: homes, schools, police stations, government administration buildings, military bases, power plants, drainage systems, and clean water. Coalition Soldiers and government contractors, under the execution of SWET, are currently rebuilding homes, schools, sewage systems, bridges, electrical power plants, police buildings, government buildings, military bases, and filtering clean drinking water for the local Iraqi population. In addition, proponents of both systems perceived that one could determine if a province is stable or unstable by how well infrastructure rebuilding efforts went.

Similar to SWET, the HES program enabled U.S. forces to use a "computerized reporting system to judge the progress in the rural construction program."[10] This system attempted to measure pacification at the hamlet level, and gave a detailed evaluation at the end of every month to identify problem areas for government or management attention. By 1969, approximately 9,000 monthly reports were made by the U.S. Military Assistance Command, Vietnam, district senior advisors.[11] The HES program became a fully automated data processing procedure where it would evaluate all non Viet Cong (VC) hamlets, and there were 13,000 non VC controlled hamlets that had been in existence since 1970. The HES program utilized standard multiple choice forms that were completed by district advisors, and then read by a computer which had been designed to process, tabulate, and conduct an analysis of reported information. Every month

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[8]Chiarelli, 6.
[9]O'Neill, 71.
[10]Jeffery Race, *War Comes to Long An: Revolutionary Conflict in a Vietnamese Province,* (Berkeley and Los Angeles, CA: University of California Press, 1972), 214.
[11]Ibid., 215-216.

large amounts of data had been processed and transcribed utilizing a required key punching card.

After any necessary corrections had been made and incorporated, the computer updated the 10

million character master file, and then stored it on magnetic tape. The end result is an average of

90,000 pages or reports were generated by the computer from the file. By 1969, the HES program

was being utilized in nearly one fourth of the 2,320 villages and several thousand sub villages.

Proponents perceived that the HES program provided local commanders with information

that could possibly assist them in evaluating the efficiency or effectiveness of their units and

determine a reasonable starting point for allocating resources. The commander also believed by

referencing the results from an HES report that major pacification trends and problem areas in a

particular hamlet within a district could be identified. The commander also thought he could

determine if he should focus more Soldiers in a particular hamlet or provide more infrastructure

support by the HES report.

The HES program had a design similar to a grade school report card. The measure of

effectiveness was based on the assumption that the nine security and nine development factor

indicators had a direct correlation to winning the hearts and minds of the local population while

simultaneously rooting out the VC. These factors were as follows:

> Security: Village Guerrilla Unit, External Forces, Military Incidents
> Affecting Hamlets, Hamlet Infrastructure, Village Infrastructure, Activities
> Affecting Hamlets, Hamlet Defense Plan and Organization, Friendly External
> Force Assistance, Internal Security Activities.

> Development: GRVN Local Management, Census Grievance Program,
> Information-Psychological Operations Activities, Medical Services and
> Sanitation, Education, Welfare, Self-Help Activity, Public Works, Economic
> Improvement Programs.[12]

Approximately 252 U.S. district and GRVN advisors monitored and provided their own

personal monthly assessment concerning the positive or negative progression of several hamlets

in their district. These district advisors used the HES program six level grading scale (A, B, C, D,

E, VC) to rank a hamlet's rating in nine security and nine development factors; all of which were

equally rated categories. A typical evaluation of VC and GRVN management for a particular

hamlet evaluation would look like the following (by 1970):

A. Entire party apparatus appears to be eliminated, effective elected hamlet governing

body, all officials fully resident.

B. All normal party apparatus neutralized; adjacent hamlets may have active VC

infrastructure, complete managerial group fully resident, elected hamlet chief, external support

such as revolutionary development cadre.

C. Most Communist Party apparatus identified, some village-level agents still operating;

local managerial groups mostly resident at night, appointed or elected.

D. Top leaders of hamlet VC infrastructure neutralized; hamlet undercover agents still

operative; some local participation in management, officials not resident at night.

E. Underground by day; free to intimidate by night; Officials appointed, marginally

effective, nonresident.

VC. Viet Cong controlled, no rating.[13]

Each letter would then be assigned a value from five down to one; Hamlets under VC

control would automatically receive a rating of zero with no further evaluation. If a hamlet's

rating overall average fell in between a certain range, then the letter associated within that range

would be reported.

A major problem that existed with the design and implementation of the HES program

was that the "HES results would be over a month old before a commander on the ground would

have an opportunity to see it."[14] The fact that the HES program could not provide accurate or

timely information concerning VC or GRVN population growth led to other problems that had

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[12]Ibid., 216.
[13]Ibid., 215.
[14]Ibid.

been developed but overlooked in certain hamlets. Other problems that developed due to flaws within the HES program were the choice of developmental factors, the method of weighting and grading the developmental factors, not being utilized in conjunction with other information and intelligence gathering systems, and the inability to recognize major disconnects and grievances between the U.S. military forces and the local populations.

The nine security and nine developmental factors were chosen based upon intelligence information collected during the U.S. advisory period of 1960 and finalized in 1964. There was no system in place to review these factors to verify if they were still relevant for all or only specific hamlets, until 1970. At first glance, it would appear that most of these factors directly addressed the local hamlet populace concerns of security, economic, and social reform, but many hamlets were already infested with VC and a caste system which made it difficult for the local population to embrace the U.S. military or GRVN. After reviewing the grading system, a few questions concerning the design of this program would be: Why are their only nine indicators for each topic? Can there be more under one topic than another or must they be symmetric? Why did these factors have an equal weighting? Are these factors truly important to the local Vietnamese people or are they only important to the GRVN?

The equal weighting of the of security and development factors presented problems for district advisors who attempted to accurately determine the stability of a hamlet. The nine factor indicators for security and nine indicators for development might appear to keep the HES evaluation portion simplistic and balanced in topics for proportional grade assignments. However, some short falls can be immediately recognized. For example, a hamlet that rated very high in developmental programs could still rate fairly low in security programs, and its overall grade could be a B or possibly a low A. This could generate a report that would create an overall false impression of a hamlet that could cause military commanders and government officials to overlook serious threats presented by the VC. These threats could then in turn jeopardize a hamlet's overall stability and local population's confidence in government programs. Also the

HES program did not allow for cross checking data comparisons with other hamlets in that particular district.

There were a number of other readily recognizable shortfalls with equally weighing factors. Under the security topic, the friendly external force assistance indicator might not necessarily be as important as having a village guerrilla unit within a hamlet or province that is remote. This also may have presented some difficulty for friendly forces to quickly arrive and react to any enemy threatening a local population. Under the development topic, it appears that sanitation might not be as important to hamlets that have not previously had a modern sewage system or electricity. These hamlets were also located in remote or isolated areas and the local populations have not expressed a desire or need for such technology. The education topic when compared to the medical services topic also reveals some disparity for some hamlets that are more modernized and hospitals are within a reasonable distance, the possibility exists that they might focus more on schooling for their children. Because of the major culture differences that existed between hamlets, social class levels, and levels of modernization, it should have been obvious to hamlet district advisors that the weighting of indicator factors should not be equal but varied based on individual hamlet characteristics. Similar culture dynamics also exist today in Iraq. The different provinces in Iraq have a wide range of culture differences not only in the areas of social class and modernization, but in religion, and education as well. Any program which attempts to evaluate and hold all provinces up to a single standard is destined for failure.

Since the HES program was not conducted with another program that made direct contact and interacted with the local population on a daily basis, the majority of information collected could not be considered reliable due to the absence of the local populace input. Therefore, the methods of data collection, interpretation, processing, and redistribution of results within the HES program were faulty. Because of this flow, proponents revised the program into HES70.

Disconnects between the local Vietnamese population and the U.S. military became evident in the mid 1960's. These disconnects occurred primarily by alienating the local

population through displeasing actions conducted by the U.S. military. The U.S. military's

obsession with enemy body count appeared to put more emphasis on kinetic operations. In many

cases, some kinetic operations created resentment among some local populations and caused them

to join or support the VC. One costly kinetic operation which had questionable negative

consequences for the U.S. military during the 1960's was the harassment and interdiction fire

program (H&I). The H&I program was supposed to suppress and periodically maintain indirect

fire on known or suspected enemy unit locations, but in some instances it created more

resentment among the local population. Efforts to attack enemy supply routes, command and

control locations, and disrupt movement with indirect fire were periodically executed with no

ground observer. It was later found that approximately 65 percent of these indirect fire missions

were unobserved by U.S. military forces. It was the effects of some of these unobserved fire

missions which also helped to create a negative perception of distrust toward the U.S. Forces and

the South Vietnamese Government, by the local populations that had been affected.

> Some independent field observers reported that a number of unobserved
> fire missions "caused needless casualties and harassment of people who could be
> won over rather than hurting the Viet Cong." A few years later another
> independent researcher stated that: "the damage which was perceived as
> unintelligleble and unpredictable was apt to create in the population a belief in
> the government's (and U.S. Military's) incompetence and destructiveness making
> it appear contemptible as well as hateful."[15]

Another kinetic operation the U.S military had was the policy of meeting the enemy head

on and destroying them regardless of location. This policy caused some hamlets to be completely

destroyed because of signs of enemy activity, even activities as small as sniper fire. A lack of

trust between the local population and the U.S. military with the GRVN continued to feed the VC

insurgency. Interaction with the hamlets' local populations, identifying their needs, and

addressing them directly is what the HES program was intended for but unable to directly

accomplish. The HES program was too generic and lacked the ability to address unique

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[15]Lewy, 100.

grievances or issues from several different Vietnamese populations. The lack of confidence in the GRVN and fear of U.S. military kinetic operations complemented by minimal understanding of various hamlet cultural and unique characteristics, continued to hurt counterinsurgency efforts utilizing the HES program.

Before its revision, the HES program was never able to fully monitor or identify the need for economic land reform, or properly estimate hamlet security, as previously mentioned. The incorrect use of HES data also caused misinterpretations and mistakes to be made when using it to predict the enemy's motives, plans, strategy, and assisted in creating an overall false impression that the North Vietnamese Army (NVA) or VC could never mount a large scale attack which had been seen during the Tet offensive. Several revisions had been made to the HES program in 1970 to correct many of its shortfalls in an attempt to make it more objective, and increase the accuracy of information on enemy activity and work in conjunction with other information collection programs.

One program that the U.S. military instituted in Vietnam that could have possibly helped win the hearts and minds of the Vietnamese people, if its support had not later been withdrawn, was the CORDS program. The CORDS program had been developed by a combined effort of the South Vietnamese government and Military Assistance Command, Vietnam (MACV). The U.S. military and the South Vietnamese Army were fighting a war on two fronts, the first was against the North Vietnamese Regular Army and the second was against the Vietcong. Because the U.S. military did not fully grasp the importance of understanding Vietnamese culture, the initial counterinsurgency efforts were primarily ineffective.[16]

The CORDS program attempted to couple direct kinetic operations with intelligence collection that had been primarily aimed at winning the hearts and minds of the South

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[16]Jacob Kipp, "The Human Terrain System a CORDS for the 21st Century," *Military Review* 86, no. 5 (September-October 2006): 8, 10.

Vietnamese civilian population. CORDS used a principle of basic counterinsurgency doctrine that attempted to win the active support of the local population which in turn would enable them to utilize the population for intelligence collection on the Vietcong. The goal of this particular strategy was that the insurgents would lose support along with their safe havens which had been well established in South Vietnam during the early 1960's.

The CORDS program was a combined civilian and military organization that would focus on developing rural support and development for the South Vietnamese population. CORDS became an integral part of the MACV chain of command which operated under and through the Chief of Staff as a regular staff element to the field commands. In addition, the Corps level commands had CORDS staffs which were arranged in similar fashion as well. Ideally, the provinces which had CORDS teams would also have a military province senior advisor with small or large staffs, approximately five to ten, depending on the size, location, and characteristics of the provinces. Within CORDS, there was a staff for each program within pacification and development: refugee, public safety, community development, territorial security, plans, policy and programs, report and analysis, and management support. The CORDS program attempted to bridge the gap between military and civilian leadership that not only consolidated PSYOPs and intelligence collection, but allowed for the interaction between the local population leadership within the provinces as well. "By 1970 there were over 6400 military and 800 civilians assigned under CORDS, and had been involved in assisting their Vietnamese civilian and military counterparts on programs as well as general management and advisory support."[17] Once non-kinetic operations started, the CORDS program was then able to start

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[17]United States Congress, Senate, Committee on Foreign Relations, *Civil Operations and Rural Development Support Program*: Hearing before the Committee on Foreign Relations, 91st Cong., 2nd sess., 17-20 February and 3, 4, 17, 19 March 1970. Available from http://homepage.ntlworld.com/jksonc/docs/ phoenix-scfr-1970-appx.html; Internet; accessed on 15 March 2007.

collecting human intelligence from the local population in exchange for developing social and economic programs.

Through CORDS, the need to stimulate the economies of local provinces was finally noticed. The land reform program was initiated by the U.S. and South Vietnamese government in an attempt to simulate the economy of the local populations. If the counterinsurgency force won the support of the population through long lasting economic improvements, these improvements could also become the catalyst for other positive factors such as establishing legitimacy of the government and occupying forces. Historical data from the Vietnam era did actually prove that "where CORDS was effectively implemented, enemy activity declined sharply."[18] The initial effectiveness of the CORDS program at one point even gained the attention of the North Vietnamese leadership. "In memoirs and records opened in the aftermath of the conflict, North Vietnamese leaders repeatedly express their concern about the effectiveness of the CORDS program in impeding both their operational and subversion campaigns."[19]

During this time, the HES program was undergoing its revision to HES70. Near the end of 1970, the new HES70 program had been integrated within the CORDS system and had become a major resource for the staffs at all levels. By 1971, both programs were on the verge of being discontinued. After a review of the results of the two programs during their most productive years, 1970 to 1971, it was found that the HES and CORDS programs were actually very effective, when implemented together.[20] One could only theorize what the possible degrees of success could have been produced if these programs were combined and started a few years earlier in the war.

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[18]Jacob Kipp, "The Human Terrain System a CORDS for the 21st Century," *Military Review* 86, no. 5 (September-October 2006): 10.
[19]Ibid., 11.
[20]Ibid.

There is still criticism concerning CORDS where it was perceived that "it was started too late and stopped too early," and did not utilize the large expanse of U.S. cultural and social country analysis that existed back in home country (also known as Reach Back Capability).[21] These short falls left the CORDS program primarily to the systems and tools created by the advisory teams who had been in charge of analysis, data extraction, interpretation, and storage during the war in Vietnam. If an external evaluation system was in place to review the effectiveness of these programs annually or biannually, then perhaps these programs would not have been canceled but continued through the remainder of the war.

The initial lessons learned from executing the HES programs during the war in Vietnam continue to validate basic counterinsurgent doctrine. In order to win the support of a local population, one must establish security, separate the insurgent from the local population, and address the needs and wants of the local population. In order to find what a local population wants or needs, the counterinsurgent must interact with the people by living among the people for an extended period of time. Overtime, the counterinsurgent will develop an understanding of the local population's culture, likes, dislikes, and establish a level of trust. This interaction was lacking in Vietnam under the HES program. For most hamlets, the primary interaction with the government and U.S. military was done through a single HES district advisor that was assigned to collect information on a particular hamlet. In most cases, the district advisor's interaction was very minimal because they did not live in their assigned hamlet, rarely talked or interacted with the local population, and mainly reported on what they saw or believed was happening from their point of view instead of consulting with the local population. Other hamlets that were fortunate enough to have police and military patrol their area found that these operations were only conducted during daylight hours and returned to their fixed remote fortified installations at night.

> While American large units prowled around to thwart enemy main force
> units, the pacification of the countryside became a sideshow. After American

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[21]Ibid.

troops had cleared an area of enemy main force units, Vietnamese troops, police and pacification cadres were supposed to move in to root out the VC infrastructure and provide permanent security and development help to the hamlets. Unfortunately, this plan was rarely implemented. Not enough ARVN and paramilitary forces were available for this assignment and, where and when available, they usually settled into fixed installations from which they ventured out only during daylight hours.[22]

The following are key points concerning the HES and CORDS programs that can be taken from the Vietnam War. The HES program was unable to adapt to a changing environment due to the fixed factor indicators and grading system. The lack of accurate data collection by HES district advisors created numerous false impressions concerning a hamlet's actual status in the areas of pacification and stability. The HES program also lacked the ability to effectively interact with the local population and identified the need for security and other metrics that were important to them. After the HES program revision and combination with CORDS, reporting became more accurate and the overall system became more effective. The CORDS staffs and provincial teams became one of the main components to making the HES program more effective. Once the CORDS program became part of the MACV chain of command, more attention was placed on stability operations and addressing the needs of the local population.

If the program was used today, it probably would have been known as SWET. Both programs were initially used as cookie cutter solutions for different population locations. Commander's used both to predict stability and level of enemy activity, and some proponents viewed the HES program and SWET the most important program to win hearts and minds. If the SWET program is truly similar to the HES program, then the same negative outcomes will occur unless revisions or modifications are made to meet the short falls previously mentioned. In the next chapter, a review of unit actions in Iraq will highlight how commanders implemented SWET. U.S. Coalition commanders in different provinces found that the one size fits all metric of

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[22]Lewy, 100.

SWET did not work as expected. Their answer to the short falls in SWET became several

variations of SWET.

CHAPTER THREE

THE SONS OF SWET AND THEIR EFFECTIVENESS

An examination of the experiences of some U.S. units which previously served in Iraq,

provides interesting insights into the application of the SWET concept. As units conducted

stability operations, many commanders in different provinces found that the one size fits all

metric of SWET did not work as expected. These units faced difficult local conditions that

required unique responses. These commanders created the "sons of SWET" because the SWET

concept could not be used as a cookie cutter solution. Faced with security challenges many also

did not view SWET as "the first among equals" that as a stand alone program could win the war

of counterinsurgency in Iraq.

Although the SWET acronym was not widely circulated until after the summer of 2004,

many units had been conducting some form of SWET informally. The 2nd Battalion 4th (2/4)

Marine Regiment utilized their own version of SWET in Ramadi, a city within the Al Anbar

province, from March 2004 to September 2004.[23] The 2/4 Marines came into Iraq ready to fight a

war of counterinsurgency and knew the importance of winning the support of the population. The

Marine offensive operational plan consisted of a very heavy focus on security of the local

population as the primary concern. Marine stability operations consisted of training the Iraqi

military and police forces, assisting in the establishment of local government, and assisting in the

restoration of electricity.

The 2/4 Marines' area of operations in Ramadi was a more Sunni dominated region with

three different population group characteristics. The first group was the Sunni tribes which had

the largest percentage of the local population. The second group was the former Ba'thist regime

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[23]Center for Army Lessons Learned. *Seven Months in Ar Ramadi: Observations from: 2d Battalion, 4th Marines.* A summary of Observations from OIF 04-06. Fort Leavenworth, KS: Government Printing Office, 9 January 2006. Source for this reference is classified as "For Official Use Only," and can be accessed on the 3rd floor of the CARL Library (for pages 21-24 of this monograph).

population which also included ex-military, police, and former politicians, and it was this group that became primarily responsible for insurgency attacks against the U.S. Coalition forces and the new Iraqi government. The third group was the foreign fighters which came from many different Muslim countries around the Middle East; it was this group that made up the majority of external terrorist organizations which fought against the U.S. Coalition forces.

Security became the main priority for the 2/4 Marines in Al Anbar due to a large amount of insurgent activity. These insurgents that the 2/4 Marines had been fighting were actually veteran soldiers of the former Iraqi Army. These former Iraqi Army soldiers were well trained in military tactics and continued to recruit and train young men to fight the 2/4 Marines throughout Al Anbar and primarily in its capital of Ramadi.

> [V]eteran Iraqi officers are recruiting young local men and instructing them on attack procedures against U.S. forces. Two captured fighters said a former military officer drilled them about one assault plan using a "sand table," a platform with miniature dirt terrain that replicated the ambush site.[24]

The 2/4 Marines realized that the enemy was more than just a suicidal terrorist, and that they were facing an extremely intelligent, rational, and resourceful enemy. Due to the high number of Marine casualties and the number of daily attacks, this enemy dynamic caused Ramadi and the rest of the Al Anbar province to be known as the place of "the most deadly combat fighting . . . since the war in Iraq began."[25] The 2/4 Marines determined that this enemy must be rooted out of the cities before any stability operations could take place and increase their security combat operations.

The 2/4 Marines also attempted to win the support of the Sunni tribes. The 2/4 Marines met with sheik and elder tribe leaders in an effort to prevent any continued local support of the insurgents and terrorist organizations. After a series of attacks started to target local women and

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[24]Gregg Zoroya, If Ramadi Falls 'Province Goes to Hell,' *USA Today*, 12 July 2004, Section News 4a.
[25]Ibid.

children, it was determined that the jihadist terrorist and insurgent attacks not only threatened the 2/4 Marines, but the local population as well. The 2/4 Marines' objective then became "establish a secure local environment for the indigenous population so they could pursue normalcy."[26] In order to achieve a secure local environment, the 2/4 Marines attempted to separate the insurgents and terrorists from the local population. This separation was very difficult for the 2/4 Marines to accomplish due to the strength of a well establishment insurgent network support relationship with the local population. The 2/4 Marines continually faced difficulties during offensive operations to neutralize the enemy and minimize collateral damage to the local Sunni population due to this well established support relationship.

Although security was the main effort, the 2/4 Marines coordinated with tribal leaders and took note of basic infrastructure that might need to be monitored or repaired. The 2/4 Marines had patrol bases near the local population in order to better protect and interact with them. As the 2/4 Marines interacted with locals seeking information on the enemy, they listened to grievances which were a primarily concerned with electricity restoration, medical care, and rebuilding of schools for their children. The 2/4 Marines also conducted their own local assessment of essential services as well as other programs needed to produce normalcy. The 2/4 Marines local assessment found that electricity in the city remained unreliable, had frequent power outages, and directly affected the restoration of the local economy. To address medical care, the 2/4 Marines focused on Ramadi's very large hospital which provided regional care as well. Also, the 2/4 Marines found that many people were unemployed along with an even greater number of children who were on the streets and not in school.[27] These observations made by 2/4 Marines placed rebuilding of schools as a major concern.

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[26]Department of the Army, 1-27.
[27]Bing West and Owen West, "Return to Fallujah: City of Discontent." Education for Peace in Iraq Center (September 2005): 2. Available from http://www.epic-usa.org/Default.aspx?tabid=1868; Internet; accessed on 24 April 2007.

The opportunity to listen to grievances gave the 2/4 Marines insight into which essential services metrics should be the highest in priority, in order to help establish some degree of normalcy for the local population. The 2/4 Marines determined that some essential service projects were still difficult to start, repair, or finish due to the number of enemy attacks on the infrastructure. The 2/4 Marines realized that no large essential service project could be continued without security being well established in that area.

When the SWET concept was officially adopted by Multi National Corps Command and pushed down to other units, the 2/4 Marines in Ramadi found that their plans to execute essential services rebuilding efforts were more effective. For the 2/4 Marines, SWET was not a useful "cookie cutter" program nor did the commanders consider it as a stand alone program. The 2/4 Marines did not use SWET in its original form because it did not address the unique dynamics of what the local population truly needed in their area. In addition, the 2/4 Marines recognized that security must be established first before major essential services repair programs are started.

The experience of the Stryker Brigade Combat Team of the 3rd Brigade 2nd Infantry Division (3/2 SBCT) was similar to the 2/4 Marines. 3/2 SBCT faced a well trained insurgency which constantly attacked U.S. Coalition forces and undermine the establishment of the new Iraqi government.[28] 3/2 SBCT arrived in Iraq on November 2003 and was initially assigned to Samarra and later Mosul. This unit also found out that the local populations within different cities and provinces had their own unique dynamic. The essential services priorities among the populations of Mosul and Samarra were vastly different, and the interactions the unit had experienced with the local populations were different as well.

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[28]Center for Army Lessons Learned. *Initial Impressions Report Operations in Mosul, Iraq: Stryker Brigade Combat Team 1, 3rd Brigade, 2nd Infantry*. Fort Leavenworth, KS: Government Printing Office, 21 December 2004. Source for this reference is classified as "For Official Use Only," and can be accessed on the 3rd floor of the CARL Library (for pages 24-26 of this monograph).

The 3/2 SBCT was prepared to fight a counterinsurgency war and attempted to interact with the local populations while initiating the SWET programs within Samarra. The 3/2 SBCT's own assessment found this primarily Sunni dominated province to be fairly modernized, but had some moderate to extensive damage to the sewage and electricity infrastructure. It was also difficult for the 3/2 SBCT Soldiers to initiate SWET first, and the unit found that "the problem was keeping the local population from looting a site as you were working on it. They did not see the overall good for everyone; they saw what they could do for themselves." [29] Like the 2/4 Marines, 3/2 SBCT faced a significant insurgent threat and the unit actually ceased essential services rebuilding operations until security in those particular areas became more effective. The 3/2 SBCT leadership still continued to interact with the local mayor, sheiks, and tribal elders in an attempt to sway the local population support in their favor. The promises of restoring electricity and sewage systems were made and even started by the 3/2 SBCT after they believed they had the local leadership support. However, the anti-U.S. Coalition sentiment and insurgent support was firmly rooted within the local population and once again forced 3/2 SBCT to stop most of their essential services tasks. In Samarra 3/2 SBCT placed more emphasis on security for the local population and training of local Iraqi Security Force (ISF) personnel instead of essential services.

During the winter of 2004, the 3/2 SBCT conducted a relief in place with 101st Airborne Division in the city of Mosul. Their mission was to conduct stability operations. Similar to Samarra, the leadership of the 3/2 SBCT interacted with the local leadership in an attempt to win their support as well as the people they represented. The local population also appeared to be more supportive of their leadership and started to support the actions of the U.S. Coalition forces. The 3/2 SBCT then decided to make a prioritized list of key infrastructure that the local Iraqis considered important, while simultaneously conducting security operations. Although the water

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[29]Survey prepared by MAJ Dawson Plummer and approved (#0702) by the Quality Assurance Office, CGSC, Fort Leavenworth, KS, target audience CGSC students who served in Iraq from 2003-2006, December 2006, See Appendix A, The Effectiveness of SWET in Iraq.

systems were in poor condition, the local population's priorities started with their desire to have the children go back to school, so an effort was made to rebuild and eventually open some of the local schools. The Soldiers also focused on clothing, toys, food, and trash pick-up around areas that the local Iraqi mayor wanted, especially parks and soccer fields. Water system repair and restoration eventually followed months later.[30]

Even though the 3/2 SBCT adjusted and executed a variation of SWET that worked well in one location, they found that it needed to be adjusted again because it did not produce similar results in another location. The unit adjusted SWET because of the different levels of enemy activity and the different needs of the local populations. In Samarra, 3/2 SBCT focused most of their resources on security. In Mosul where the security situation was much improved, the unit could focus more energy on restarting essential services. The differences in how 3/2 SBCT was received by the local populations showed the level of ease or difficulty the unit was going to face when attempts were made to win their support.

Similar to the 3/2 SBCT, the 3rd Squadron 3rd Cavalry Regiment (3/3 Cavalry) faced different levels of enemy activity across its area of operations.[31] The 3/3 Cavalry arrived in south Baghdad during the month of March 2005. The SWET concept was well known by this time, but it was not used by 3/3 Cavalry. Due to a number of unique dynamics concerning the local population's sense of individual self interest and their inability to choose between the insurgent and counterinsurgent, 3/3 Cavalry was not adequately resourced to defeat the enemy.

Before 3/3 Cavalry deployed to Iraq, approximately 60 percent of the unit had already been to Iraq and had knowledge of the language and culture. The area of south Baghdad was primarily Sunni and infested with insurgent activity. The local people within this area had a very

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[30]Ibid.
[31]Ross Brown, "Commander's Assessment: South Baghdad," *Military Review* 86, no. 1 (January-February 2007): 4. This source is used throughout pages 28 and 29 of this monograph. (LTC Ross Brown was the commander of the U.S. Army's 3rd Squadron 3rd Cavalry Regiment from 2004 to 2006.)

neutral attitude toward the Iraqi government, the ISF, the Coalition forces, and the insurgents. The 3/3 Cavalry did not utilize SWET because it was determined that gifts, money, construction projects, and other perks made a minimal impression on the local population and did not sway them to the Iraqi government or U.S. Coalition side. As a result, the only projects that were initially executed were restoring clean water, improving roads, and building a soccer field. The reason behind building a soccer field was done with the intent to win the younger generation in the near future. The remaining project money was then used for future 3/3 Cavalry missions first and the Iraqi local population second.

The greatest difficulty during 3/3 Cavalry's deployment was trying to get the local population to partner with the ISF and U.S. Coalition. The local population appeared to get along with whoever was operating in their area because they were still undecided as to who was going to win; they did not want to risk joining the losing side. Because of this neutral attitude from the local population, 3/3 Cavalry determined that the Iraqi's would probably allow the insurgents to move in if the ISF or the U.S. forces were not in the area twenty-four hours a day. Initially, it was the local population's attitude of not wanting to choose sides that caused many essential service programs like SWET not to be executed, since no support from them was received for these efforts. The 3/3 Cavalry knew that interaction with the local population would be the ideal way to establish security, gain intelligence on the enemy, and win their support. The majority of 3/3 Cavalry moved from their large Forward Operating Base (FOB) to smaller patrol bases scattered throughout their area of operations. As 3/3 Cavalry operated out of more patrol bases, eventually the enemy lines of communications became disrupted. In addition, enemy mortar fire decreased while interaction and security among the local population increased.

The 3/3 Cavalry's lines of operation were combat operations, ISF operations, information operations, and civil-military operations. The 3/3 Cavalry recognized the fact that all of their LOOs must be executed simultaneously in order to achieve the positive effects necessary to win on the battlefield. All LOOs had equal attention when executed unless one progressed faster than

the others. For example, near the later half of 3/3 Cavalry's rotation when they finally started to achieve sustainable military success, their focus shifted to more emphasis on civil-military projects within the local population.

Similar to 3/3 Cavalry's experiences, the 3rd Squadron 2nd Cavalry Regiment (3/2 Cavalry) did not use SWET because the unit did not believe it was the correct model for their situations that existed in Al Kut, Al Najaf, Diwaniyah, and Baghdad.[32] The unit arrived in Iraq in May 2003 and stayed until July 2004. For three out of four cities that the unit was assigned to, their mission was similar to the units they replaced: separate the insurgents from the population and destroy enemy influence in the area. After examining the local environmental dynamics for each of his assigned cities, the squadron commander saw the SWET program's repair and restoration tasks only as shaping operations which did not pertain to any of his areas of operations.

In Najaf and Al Kut, the 3/2 Cavalry found that there was no time to start any reconstruction projects due to the primary mission of separating the insurgents from the local population. This mission brought offensive operations against insurgents and militias along with providing security to the local population. Both of these cities had a moderate level of enemy activity which would attempt to fight Soldiers on a fairly frequent basis. The leadership viewed SWET as a shaping operation for a battlefield with well established security and minimal enemy influence. In addition, the 3/2 Cavalry also did not utilize the logical lines of operation concept, but merely listed and prioritized their key tasks from the commander's intent from the operations order. Their top priority was security followed by control and isolation of the population from

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[32]Colonel Robert Burns, Telephone interview by author, 27 March 2007. This source is used throughout pages 28 and 29 of this monograph. (COL Burns was the commander of the U.S. Army 3rd Squadron 2nd Cavalry Regiment from 2003-2005, and was in Iraq with his unit from May 2003 to June 2004. COL Burns is an armor officer currently instructing students at the School of Advanced Military Studies)

insurgency, human intelligence collection, and providing assistance with establishing legitimacy of the new Iraqi government.

When the 3/2 Cavalry conducted stability operations, it was in the city of Diwaniyah. The initial primary focus was on the destruction of the militias who were attempting to destabilize the local population's environment and acceptance of coalition forces. This unit also started stability operations and began to improve essential services. This unit did not use SWET for essential services, but focused on electricity, improvised explosive device (IED) street clean up, and construction projects focusing on rebuilding schools and businesses. The unit selected these tasks based on an assessment of the city. Not only did the unit determine that water and sewage was not a major problem for this area, but trash pick up was only implemented for force protection and not for health reasons as an essential service.

When the 3/2 Cavalry arrived in Baghdad, their primary focus was on security and the defeat of the militias. Counterinsurgency doctrine outlines that winning the support of the local population is key to winning the war. This unit found that the majority of the local populations throughout all four cities were extremely supportive of the U.S. Coalition force. This supportive relationship would later become very helpful to the 3/2 Cavalry when they needed to interact with the population, gather intelligence, and prioritize rebuilding of essential services that were important to the local populations. The SWET concept was not a relevant focus for any of the four areas that the 3/2 Cavalry had been assigned to in Iraq. Stability operations were not conducted in Diwaniyah until security had been established, and the local population was able to present their prioritized essential services problems to the unit.

The different versions of SWET developed by commanders and Soldiers recognized early that certain metrics needed to be included due to the changing enemy dynamic, living conditions, and cultural aspects in the separate areas of operations. These units represent a small sample of unit experiences in Iraq since 2003. However, the units reflect clear trends. Below is a list of the

Sons of SWET that were presented or discussed in the form of speeches, emails, and after action

reports from several unit leaders and organizations that previously served in Iraq.

SWET: Sewage, Water, Electricity, Trash.

SWET-F: Sewage, Water, Electricity, Trash, Fuel.

SWET-MS: Sewage, Water, Electricity, Trash, Medical, Security.

SWET-T: Sewage, Water, Electricity, Trash, Transportation.

SWET-TM: Sewage, Water, Electricity, Trash, Transportation, Medical.

SWET-TS: Sewage, Water, Electricity, Trash, Medical, Transportation, Security.

SWEAT: Sewage, Water, Electricity, Academics, Trash.

SWEAT-TEM: Sewage, Water, Electricity, Academics, Trash, Transportation,

Employment, Medical.

SWEAT-EMS: Sewage, Water, Electricity, Academics, Trash, Employment, Medical,

Security.

SWEAT-TS: Sewage, Water, Electricity, Academics, Trash, Transportation, Security.

SWEAT-TEMS: Sewage, Water, Electricity, Academics, Trash, Transportation,

Employment, Medical, Security.[33]

These findings would suggest that the SWET concept is not a solution that will work for

all areas of Iraq. It cannot be utilized as a stand alone pre-packaged plan to defeat the insurgency

or win the support of the local population on its own. In order to win a local population over to

the counterinsurgent, security must be the highest priority. Once a unit establishes security, then it

can start to address the local grievances. There are many facets needed to win a war of

counterinsurgency, and the repair of essential services plays only a small role in achieving the

overall strategy. Every province in Iraq is unique as well as every city within it. The level of

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[33]Dawson Plummer, research notes from SAMS briefings by Lieutenant Colonel John Nagl, Brigadier General Tony Cucolo, Joint Warfare Analysis Center representative Dr. Kevin Sweeney, October 2006-February 2007.

insurgent or terrorist support varies along with culture, religion, city modernization, and

economic status. The key for the counterinsurgent is to understand these unique conditions and

needs. The correct way to find out what would be important or beneficial for the Iraqi people

living in different locations would be to ask them. A study by the Joint Warfare Analysis Center

goes a long way to assist commanders operating in Iraq in this effort.

CHAPTER FOUR

A SURVEY OF THE IRAQI PEOPLE

Research conducted by the Joint Warfare Analysis Center compiled polling data in all

eighteen provinces of Iraq. These polling results collected by the Joint Warfare Analysis Center

for the U.S. Department of Defense attempted to extract data from the core population

demographic in each province.[34] Due to the amount of Iraqi people who participated, this survey

provides a small snap shot of this country's demographics and opinions. The Joint Warfare

Analysis Center continues to conduct monthly polling surveys and attempts to collect data on the

Iraqi populace in order to verify or disprove theories or trends that were brought forth by the U.S.

government agencies as well as other institutions working in Iraq. This Joint Warfare Analysis

Center study is important to counterinsurgency efforts in Iraq because it can provide another point

of view on how the local population views the insurgents, foreign terrorists, militias, the new

Iraqi government, and U.S. Coalition forces. This survey can also help to identify positive or

negative trends that have developed from past actions or events which may help or hurt current

and future U.S. Coalition efforts. In addition, this survey provides additional evidence that not all

the SWET metrics are important for every province and identifies which individual metric is the

most or least important by province as well. Correlations can also be determined concerning the

relationship between essential services and level of insurgent, terrorist, or sectarian attacks. An

analysis of survey results will provide local commanders more information to help them

understand what is important to the local population and possibly which needs should be

addressed first.

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[34]Kevin Sweeny, provided the data from the Joint Warfare Analysis Survey for the months of August and September 2006. This survey was conducted for the MNF-I commanders to provide them with civilian Iraqi perspectives concerning essential services, quality of life, security, and opinion of the Iraqi government performance. This survey can be accessed with Dr. Sweeny at the Joint Warfare Analysis Center. This survey was conducted in all eighteen provinces of Iraq. This reference was used throughout all of chapter four, pages 33-38, of this monograph. This reference has currently not been classified.

The first section of questions will examine those areas pertaining to essential services and primarily how each SWET metric is viewed. The second set of questions will examine other needs that were important to the Iraqi population but not covered by SWET. Correlations will be drawn concerning the possible relationships between essential services, security, and levels of violence in Iraq.

The first question addressed sewage disposal systems and how well or poorly they were working in a neighborhood. For proponents of SWET, the results of this question are fairly disappointing. Since SWET was started in 2004, two years later, one finds that the majority of the people surveyed within the eighteen provinces of Iraq still have minimal to no sewage disposal systems working well in their neighborhood. Sewage was listed as the first metric in SWET and was a major focus for rebuilding efforts by the U.S. Coalition. The possibility exists that the focus could have either been in the wrong areas or that there is still a large amount of work to be done in Iraq. In some provinces that have a working sewage system, insurgent activity and sectarian violence is still continuing. For example, the Baghdad province actually has the highest percentage of working sewage systems, but also had the highest number of sectarian and insurgent attacks.

The second question addressed the ability to get clean drinking water. The U.S. Coalition leadership came to the conclusion, due to the visual presence of polluted waters, streams, treatment facilities, and lack of running water to houses, that obtaining clean water was considered as a high priority, just like sewage. Proponents of SWET believed that the majority of the Iraqi country would want clean water to drink and clean with. Major rebuilding and construction of water networks throughout Iraq had been started. The Joint Warfare Analysis Center polled all Iraqi provinces concerning clean water and revealed some very interesting results. The majority of the provinces can get clean water either some or most of the time. Only the provinces of Basrah, Maysan, and Muthana appear to have some difficulty obtaining clean water. The majority of their results range in the lower half, from true some of the time to never.

Additionally, Basrah also had one of the lowest levels of violence while Maysan and Muthana were just a little higher. Since it appears that only one-sixth of the Iraqi provinces have some difficulty in obtaining clean water, then it could also be assumed that changing or improving the water system might not be as beneficial to all of Iraq as initially perceived. Although clean water is needed for survival, any major improvements to production and distribution will more than likely not shift the balance of power between the insurgent and counterinsurgent in Iraq because a large majority of the population is able to get clean water.

The same assumptions that the U.S. Coalition forces made concerning water at the beginning of the war were also made concerning electricity. The next question addressed the level of improvement, during a one month span, of electricity in Iraqi household's. At the start of the occupation of Iraq by the U.S. Coalition forces, the increase in demand for electricity was overwhelming. The number of satellite television, radio, phone, and other electronic utilities imported from western nations has placed a new and unforeseen strain on the electrical power grids throughout Iraq. In the survey, only the provinces of Dohuk and parts of Diyala have stated that electricity has either improved or stayed the same. The remaining provinces have all reported that electricity has worsened in their neighborhood. The majority of Iraqi people surveyed also stated that they receive between one to six hours of electricity from their local electrical grid and then have to revert to their personal generators. The survey also reveals that some parts of Kirkuk, Irbil, Najaf, Baghdad, and Ninewa have been able to receive six to twelve hours of electricity. However, due to the increased number of towns and cities receiving electricity, an increase in expectation has now developed concerning the availability of electricity. If the possibility existed that the U.S. Coalition forces could provide electricity to every province and every home by tomorrow would this mean that the insurgency and sectarian violence would end? This question has actually already been answered. According to a more detailed Joint Warfare Analysis Center survey, there are some portions of Baghdad, Najaf, and Ninewa that have received twenty-four hours of electricity a day for several weeks with minor interruptions, but the insurgency and

sectarian violence still had been continuing in these same areas, according to the results found under level of violence. Sustainment or improvement in the flow of electricity might help with the establishment of the legitimacy of the Iraqi government, but it does not directly address the recurring sectarian violence between the Shia and Sunni or the insurgent activities in the urbanized cities.

The question of trash collection in local neighborhoods also provided a very interesting insight with the progress that had been made within Iraq during the past two years. The metric of trash has been a major focal point since 2004, but it is still a problem in Iraq. The provinces of Baghdad, Najaf, and Sulaymania all appear to show some positive progress in the area of trash collection, ranging from trash collection occurring from always to some of the time. The remaining provinces report a majority of trash collection occurring not very often to never. Trash pickup, according to the winning the peace article, was supposed to provide jobs, clean up streets, and cause the Iraqi local population to stop supporting the insurgency. If this theme was reversed in such a way that the smaller amount of trash seen on the street is in directly related to a decrease in the level of violence, then this could not possibly be a viable statement and is only indirectly linked to basic counterinsurgency doctrine. According to MNF-I, from the summer of 2006 to the end of December 2006, sectarian violence in Baghdad alone increased to an average of 500 to 600 civilian deaths a month.[35] If the needs of the people are to be addressed, then trash disposal is still not the highest priority for the Iraqi people. Clean streets have helped MNF-I Soldiers when patrolling streets since insurgents use to cover roadside bombs with trash, but trash removal only indirectly helps establish governmental legitimacy.

Although fuel was not part of the SWET metrics previously mentioned, it is actually indirectly connected since many urban areas of Iraq utilize generators for electricity. The next question addressed the ability to obtain fuel for transportation and electric generators. In an

attempt to determine the availability of gasoline within different provinces, the survey results found that the median of the Iraqi population throughout all provinces often have difficulty obtaining fuel. A large percentage of the Iraqi economy depends on oil production and distribution, but the refinement capabilities are definitely lacking. Many Iraqi refinement plants were either operating inefficiently with outdated technology or were not functioning at all. Efforts had been made by U.S. Coalition forces to improve refinement facilities, however; even if the level of fuel production, refinement, trade, and distribution had been at a maximum, the war between the insurgent and counterinsurgent would more than likely still occur.[36] An increase in fuel production and refinement does have some correlation with an increase in jobs, vehicle sales, and fuel for home generators, but this would still not root out the insurgency in Iraq due to the on going struggle for control of the country's resources between the Sunni, Shia, Kurds, and acceptance of the new government leadership.

Similar to fuel, the importance of medical care was brought about by units that utilized one of the Sons of SWET. The next question attempted to determine the amount and access to medical care for the Iraqi people. Initial survey results appeared to be fairly positive in most provinces. The provinces with more modern and larger populations had been the ones benefiting the most concerning medical care. The provinces of Babyl, Wasit, and Qadisiyah, which have smaller populations along with minimal insurgent activity, all still seem to have difficulty receiving medical care. The results for these three provinces varied from occurring not very often to never. The Iraqi people appreciate medical care because it is an important part of survival. The establishment of medical programs throughout the country might possibly help to win the "fence

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[35]U.S. Department of State, Bureau of Near Eastern Affairs, Weekly Reports from August to December 2006, Available from http://www.state.gov/p/nea; Internet; accessed on 24 April 2007.
    [36]Ibid.

sitters" as mentioned by General Chiarelli, but it would only concern those who need or have

utilized the medical system in the past.[37] Many Iraqi's who live in remote villages have depended

on small town doctors, neighbors, or family. The larger and more urbanized areas such as the

Baghdad province value professional medical treatment and are very grateful when it is effective

in treating their loved ones. According to a survey conducted from a pool of U.S. military

Soldiers returning from Iraq, some actually found that Iraqi civilians will freely give information

concerning insurgent activity after receiving effective medical care. Medical care, which was not

part of the original SWET metrics, is still an important metric to the Iraqi population and for the

counterinsurgent to win their support, but it was not the most important.

Unlike all of the previous questions mentioned, the question of, "in your opinion, who is

responsible for providing security in your community or town," probably has the most influence

in the counterinsurgency environment. For this particular question there was a fairly substantial

list of categories that the Iraqi people, who were surveyed, could choose from or add. The

overwhelming majority across all provinces stated that the Iraqi police force was primarily

responsible for security. The second category that was chosen was their neighbors which were

closely followed by people in their tribe. MNFI was either last or close to being last in almost all

provinces. This survey does not necessarily infer that the local police are effective, but it does

show who the local population see the most. Additionally, a possible attitude shift from the past

where people used to be very distrustful and are now trustful of the police could prove to be very

positive for the Iraqi government. Regardless, the insurgency and sectarian violence have

continued in Iraq primarily because past security measures implemented from 2004 to 2006 have

not been able to prevent the majority of attacks, and the enemy insurgents have still been

receiving support from members of local populations.

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[37]Chiarelli, 7.

A key concept in fighting a war of counterinsurgency is to determine the needs of the people. These questions of, "What is the 1st important issue for your town, community, and Iraqi" all pertain to determining the needs of the local population of Iraq.[38] These questions all yielded similar answers, at the top of the list was security and electricity. The provinces which reported an increase in the level of attacks, under level of violence question, also chose security first and electricity second, while more modern provinces with a lower level of attacks had electricity first and security second. In addition, medical care, fuel, education, and jobs also rated higher than the remaining SWET metrics. These questions solidify the reasons why SWET alone cannot win the war of counterinsurgency.

This survey has identified trends which should not be ignored. A positive relationship between the counterinsurgent and the local population is one of the primary keys to winning the war. Even though the Iraqi people were fairly receptive to the infrastructure rebuilding programs, the priorities chosen by the U.S. Coalition forces are not in sequence with what the Iraqi people believed was important to them. If the U.S. Coalition intends to win the peace in Iraqi, then they must address the needs of the people in order of their priorities. Security and electricity are the primary concern of the Iraqi people in all provinces. By taking these two factors into consideration, the U.S. Coalition forces should make security for the local population the "first among equals," and then address the essential services in order of importance unique to the local populations within each city or province. Since only one SWET metric, electricity, was at the top concerning importance for all provinces, this survey also reinforces the fact that SWET cannot be used as a stand alone program or be executed as a one-size-fits-all concept for all provinces.

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[38]Kevin Sweeny, Joint Warfare Analysis Survey, Question #12.

CHAPTER FIVE

CONCLUSION

> The locals have to win their own war. Nothing is as important in counterinsurgency as to understand that, eventually, local forces have to beat their own insurgents. In the Army's most recent experiences in counterinsurgency, local forces bore the weight of the war, either ultimately losing (as in Vietnam) or winning after reforms admitted the guerrillas into a political process (El Salvador).[39]

> Robert Killebrew, "Winning Wars"

This quotation by Colonel (Retired) Robert B. Killebrew reinforces the fact that in a war of counterinsurgency it is the local population which must eventually step up and help win the war in their own country. The SWET essential services program did have a direct effect on the local populations wherever it was executed, but the effects and outcomes that were expected to be produced versus what actually occurred were very different. By focusing on the building, repairing, and monitoring of a few essential services throughout all Iraqi provinces, SWET was supposed to win the support of the Iraqi local population. It has now been determined that SWET cannot complete the counterinsurgency tasks necessary to win the support of the local population. Through the historical examples of the HES program in Vietnam, the experience of some U.S. units returning from Iraq, and the analysis of the Joint Warfare Analysis Center survey, all prove that SWET alone is not the ideal solution to winning the counterinsurgency war in Iraq.

The similarities of the HES program and SWET proved that just as the HES program needed another program to provide an effective form of human interaction with the local population, so does SWET. The initial design of the HES program in Vietnam could not effectively determine what essential services needed to be monitored, built, or maintained since it was unable to accurately find what the local population actually needed or wanted in their

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[39]Robert Killebrew, "Winning Wars," *Army Magazine,* April 2005, 30.

particular hamlet. The minimal human interaction between the district advisors and the local populations added to the inaccurate information recorded in the areas of hamlet security, development priorities, status, and local grievances. The revision of the HES program to HES70 and its integration with CORDS started to have some positive outcomes that were previously expected to occur with the original program.

Another similarity of the HES program and SWET was that they both had fixed metrics and factors. These metrics and factors were expected to be a type of "cookie cutter solution" that would standardize priorities and evaluations as well as set the conditions to produce positive results in all the hamlets or provinces where they had been executed. Since neither the HES nor SWET program was initially designed to adapt to a changing environment, both programs ignored the environmental and cultural dynamics of individual provinces, cities, or hamlets.

The experiences of a number of units in Iraq demonstrate both the prioritization of the essential services line of operation and the need to tailor SWET to local conditions. The units were in agreement concerning the importance of conducting security operations first before starting the building or repairing of essential services. Essential services projects were limited by the security environment. Additionally, because the SWET metrics were limited to four priorities, many times units found that these metrics were not similar to needs of the local population. When SWET was introduced by higher headquarters and sent down to unit level, some units saw no reason to change their metrics and programs because what they had in place was already working effectively. Other units found that since SWET was unable to adapt to the many changes that occurred in a counterinsurgency environment, the concept was not utilized at all. Through the interaction with the local populations in their area of operations, these units were also able to determine which tasks or metrics were the most important to their local populations and which metrics should be resourced first.

The Joint Warfare Analysis survey provided another important viewpoint from the Iraqi local population perspective. Since the war of counterinsurgency being fought in Iraq is to be won

through winning the support of the local population, it is important to find out what they think about the U.S. Coalition progress in SWET essential services programs, security, and the Iraqi government. The Joint Warfare Analysis Center survey revealed that for all provinces in Iraq, the sewage, water, and trash pick up were not rated very high in importance or priority. Only the electricity metric was viewed as one of the two most important priorities across all provinces. Through additional analysis, it was also determined that some provinces, where metrics such as electricity might be working effectively, still had an insurgency or some form of sectarian violence. Several other metrics, to include sewage, water, and trash, could also make this same connection in at least one or more provinces. This result in particular, actually distances the possibility of any linear relationship between SWET and its ability to decrease insurgent, terrorist, or sectarian activity.

The Iraqi people viewed security as being one of the highest priorities for their country. FM 3-24 states, "Ultimate success in COIN is gained by protecting the populace."[40] This statement reiterates the importance of why security of the population is viewed as one of the highest priorities for the Iraqi people and helps to prioritize the combat operational tasks conducted by the counterinsurgent. If the local population does not feel that counterinsurgent forces are keeping them safe, then they will find other ways to secure themselves. This is another reason why there had been a number of different answers, by the local population, concerning who conducted security in their area.

The Iraqi government will still be around after the U.S. Coalition forces leave, however the Iraqi Government's longevity will depend on the level of legitimacy that will have been achieved before the forces leave. It is here where the SWET metrics can assist with helping the Iraqi government establish legitimacy among the local population. If the local population can see their infrastructure being rebuilt or designed by local citizens representing the government, then

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[40]Department of the Army, 1-27.

this will help indirectly with establishing legitimacy and demonstrate that fact that there is care and concern for the local population by the government.

In conclusion, the analysis of this monograph results in several recommendations. First, as FM 3-24 highlights, units should set security of the local population as the "first among equals" in a COIN environment. Without security as a foundation, the effectiveness of other programs is limited. Second, in order for SWET to be effective, it must first have an ability to take on modifications through the sons of SWET. In other words, units must adapt SWET to the needs of the local population; a country-wide "cookie cutter" template is likely to be ineffective. Commanders should also use SWET in conjunction with human interaction teams for intelligence collection and assessment of the local population's grievances. Likewise, commanders should execute SWET with other programs, such as the establishment of the local government and training of host nation security forces. In this way, commanders can utilize SWET in a secondary role as a battlefield enabler designed to help the host nation government establish legitimacy.

APPENDIX A
THE EFFECTIVENESS OF SWET IN IRAQ

Survey #0702, December 2006, 100 surveys sent, 35 responses.

Hello, I am an Army Officer attending the School of Advanced Military Studies. I am conducting an anonymous survey from anyone who has been to Iraq (civilian and military) to find out how effective SWET (Sewage, Water, Electricity, Trash) was in several Iraqi provinces. In addition how well did these metrics work in determining a province's stability? This survey has 6 section questions and should take approximately 2-3 min to complete. Your input is greatly appreciated. This survey is voluntary and the information collected will be confidential. Responding to this survey implies consent to use the information.

1. Which Province(s) did you operate in Iraq, how long were you there, and did your unit(s) utilize some form of SWET. (Check all that apply)

	Province Operated In	Less Than 6 Months	More Than 6 Months	Some form of SWET was used	Some form of SWET was not used
Al Anbar					
Al Basrah					
Al Muthanna					
Al Qadisiyah					
An Najaf					
Arbil					
As Sulaymaniyah					
At Ta'mim					
Babil					
Baghdad					
Dahuk					
Dhi Qar					
Diyala					
Karabala					
Maysan					
Ninawa					
Salah ad Din					
Wasit					

2. Did your unit use a modified version of SWET, such as SWET-T, SWEAT, SWEAT-TS, etc?

YES	NO	Don't know

3. If you answered yes to question 2, what was the new metric used in place of SWET (please write out what each letter stands for)? Otherwise go to question 4.

4. Was SWET or the modified version your unit used effective in determining stability of your province?

YES   NO   Don't know

5. If you answered yes or no in question 4, please briefly explain why.

6. How did the Iraqi people in your area of operation respond to the SWET operations? Also, do you have any additional comments that you would like to make concerning the SWET concept?

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