

**ABSTRACT**

**TITLE OF THESIS:** **Hollywood Soldier: Intelligence Support for  
SOFTWARE Operations**

**STUDENT:** (b) (6), MSSI, 2010

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**THESIS COMMITTEE CHAIR:** (b) (6)

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Dr. Daniel T. Kuehl, National Defense University

This thesis set out to answer the following research question: To what extent can the intelligence community (IC) access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit (SVU) construct? The SVU is a concept developed by information warfare analyst, Chuck de Caro. De Caro defines SOFTWARE as the hostile use of global television to shape another society's will by changing its view of reality. De Caro's vision is that a SOFTWARE plans and operations cell be positioned within the Office of the Secretary of Defense, whose members are reservists with career long skills in television production, advertising and dissemination, and who can perform operationally. In short, the SVU would analyze and counter adversary multi-media propaganda.

This thesis concludes that the IC *cannot* easily access reserve and National Guard service members with mass media skills to analyze adversary propaganda in an SVU construct. This conclusion is based on the fact that the United States military's skills management systems do not track service member's "special skills" and unconventional civilian occupations. Therefore, to create an SVU, potential members would have to be

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canvassed for their media skills. Ultimately, the Human Resources system remains in the industrial age and continues to only look at job function specific skill sets.

To answer the research question, the author conducted a phenomenological study. Its objective was to understand people's perception and understanding of the feasibility of the SVU in contrast to other perspectives and fields of expertise. This research was deliberately qualitative, providing only descriptive data. Two areas of importance were highlighted by the analysis. First, it was determined that the personnel databases currently used by the United States military and IC are inadequate to find service members to support an SVU. The skills management systems do not document "special skills," or their proficiency levels. Second, there is an absence of a comprehensive training program on "television intelligence" for military service members. This lack of emphasis in this field is alarming because America's adversaries are becoming very adept at television and video production to propagate their ideological propaganda. Recommendations were made to address these conclusions, which included a complete overhaul of the present IC skills management procedures and databases, and the creation of a Center for Television Intelligence to train service members on the practices and techniques of analyzing and countering adversary propaganda via Global Television (GTV).

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**HOLLYWOOD SOLDIER:  
INTELLIGENCE SUPPORT FOR SOFTWARE OPERATIONS**

by

(b) (6)

Major, USA  
NDIC Class 2010

This thesis has been accepted by the faculty and administration of the National Intelligence University to satisfy a requirement for a Master of Science of Strategic Intelligence or Master of Science and Technology Intelligence degree. The student is responsible for its content. The views expressed do not reflect the official policy or position of the National Intelligence University, the Department of Defense, the U.S. Intelligence Community, or the U.S. Government. Acceptance of the thesis as meeting an academic requirement does not reflect an endorsement of the opinions, ideas, or information put forth. The thesis is not finished intelligence or finished policy. The validity, reliability, and relevance of the information contained have not been reviewed through intelligence or policy procedures and processes. The thesis has been classified in accordance with community standards. The thesis, in whole or in part, is not cleared for public release.

Unclassified thesis submitted to the faculty  
of the Joint Military Intelligence College  
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The views expressed in this paper are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government

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## DEDICATIONS

I dedicate this thesis to my wife (b) (6), who, after putting our one-year-old son to bed every night, unreservedly descended to my “man cave” and asked, “So, what am I proof reading tonight?” Also, to my son (b) (6) – whom despite my inabilities to play with him when he really wanted me to, had fun and became very good friends with “Sid the Science Kid,” and the gang from “Your Baby Can Read.”

This thesis is also dedicated to Chuck de Caro – one of the most influential people I have ever met. The knowledge you have shared with me will shape and guide my military career. Thank you for becoming my “mentor” while I pursued this academic endeavor.

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## CHAPTER 1

### INTRODUCTION

Prior to being an intelligence officer for twelve years, I worked in the media field for eight years as a reporter, radio announcer, assistant producer and scriptwriter. I understand the unique power of the media industry in conveying messages to the viewing public, and have often wondered why there is an absence of television intelligence (TVINT) analysis disciplines within the intelligence community (IC). TVINT is the collection and analysis of cinematic and televisive production attributes of video images.<sup>1</sup> The dearth of TVINT within the IC has been a strategic weakness because America's enemies have made information warfare their primary weapon.<sup>2</sup> Chuck de Caro, an information warfare analyst, asserted that this intelligence analysis gap cannot be easily remedied because the United States' active duty military does not train its intelligence soldiers and officers to analyze and deconstruct televisive production attributes and methods.<sup>3</sup> Such TVINT could be used to counter adversaries in information operations or kinetic regimes at the tactical, operational and strategic levels. The solution to this paucity, however, may lie in the reserve and National Guard service components.<sup>4</sup>

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<sup>1</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

<sup>2</sup> Chuck de Caro, interview by author, Washington, DC, January 10, 2010.

<sup>3</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 2.

<sup>4</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

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The United States' reserve and National Guard service components currently play a crucial role in the Iraq and Afghan wars. In 2008, the reserve and National Guard comprised approximately ten percent of the forces in Iraq, and twenty percent in Afghanistan.<sup>5</sup> These service members provide unique talents to the fight because they possess skills from their civilian occupations often not associated with active duty military occupation specialties (MOS).<sup>6</sup> One of those civilian skills is the ability to analyze television production attributes. United States active duty soldiers do not have these particular analytical skills as they do not conduct cinematic analysis for the purpose of television intelligence on a regular basis.

Chuck de Caro is the inspiration for this thesis. De Caro has spent most of his professional career advocating the use of the United States' reserve components to analyze and counter adversary propaganda. De Caro coined the phrase "SOFTWARE," and defined it as "the hostile use of global television to shape another society's will by changing its view of reality."<sup>7</sup> The Department of Defense (DoD) regards SOFTWARE as a new means of warfare, yet its goal is the same as traditional warfare – to constrain the enemy's will.<sup>8</sup> De Caro's writings showcase the inadequacies of the IC and the DoD, and

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<sup>5</sup> Michael Waterhouse and JoAnne O'Bryant, "National Guard Personnel and Deployments: Fact Sheet" *CRS Report for Congress* RS22451 (Washington, DC: Congressional Research Service, Library of Congress, January 17, 2008), CRS-3.

<sup>6</sup> Ellen Krenke, "McChrystal: Guard brings unique skills to Afghanistan," Official Homepage of the United States Army, December 9, 2009, <http://www.army.mil/-news/2009/12/09/31555-mcchrystal-guard-brings-unique-skills-to-afghanistan/> (accessed April 2, 2010).

<sup>7</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

<sup>8</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

provide practical and actionable solutions to aid in the war on global terrorism through information warfare.

One of de Caro's concepts is the SOFTWARE Virtual Unit (SVU). De Caro describes the SVU as a notional DoD unit that plans SOFTWARE operations in the Office of the Secretary of Defense (OSD). Its members would be reservists and guardsmen with career-long experience in television production, advertising and media dissemination. Its primary mission would be to support strategic information operations/counter-propaganda/ offensive media operations in the war against violent extremism.<sup>9</sup>

The primary topic of this thesis, therefore, is to examine the feasibility of de Caro's SVU concept to analyze adversary propaganda to provide intelligence support for SOFTWARE operations. Subtopics include: a) the composition of the SVU in terms of personnel and skills; b) the SVU's leadership; c) the psychological operations community's opinions and criticisms of the SVU concept; d) the practicality and viability of the military's personnel database in the tracking of reserve and National Guard members with civilian media occupations.

## RESEARCH QUESTION

The research question was: To what extent can the intelligence community (IC) access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SVU construct?

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<sup>9</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

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## JUSTIFICATION FOR RESEARCH

De Caro's cornerstone theory is that viewers' perceptions of the United States and its adversaries are determined to a great degree by those who can manipulate global television (GTV) and its content.<sup>10</sup> Whether these messages represent reality or not, or whether television organizations are purposeful in their manipulation or not, the end effect may be changes in the will and behaviors of various audiences.<sup>11</sup> Being adept on the new media battlefield can be more important than performance and success of conventional kinetic maneuvers because it is a force and combat multiplier with very little mortal risk to the propagandist.<sup>12</sup>

With so much benefit apparently achievable and so little to lose if done correctly, it is puzzling why the United States military and IC have not devoted more resources and talent to this kind of information operations, since its enemies have.<sup>13</sup> It is possible that the reason the United States is still fighting a war with the same enemy after eight years is that American military strength is not as powerful at winning the war of ideas.<sup>14</sup>

Osama bin Laden has approached the information environment as his main battle. Bin Laden's inclination toward information warfare is displayed in an intercepted letter to

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<sup>10</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 1.

<sup>11</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204-206.

<sup>12</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

<sup>13</sup> Chuck de Caro, interview by author, Washington, DC, December 8, 2009.

<sup>14</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

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Taliban chief Mullah Omar. Bin Laden stated that, “it is obvious that the media war in this century is one of the strongest methods of struggle. In fact, its ratio may reach 90% of the total preparation for battles.”<sup>15</sup> This key message revealed bin Laden’s strategic playbook. Moreover, the coordinated suicide attacks by al Qaeda on September 11, 2001, on America, were just one of bin Laden’s imaginative plays from his information warfare approach.<sup>16</sup>

Though al Qaeda’s military might is minimal, having never decisively won a battle against American forces at or above the platoon level, it has managed to maintain its reputation as a formidable opponent via terror at will.<sup>17</sup> Al Qaeda not only focuses its improvised explosive device (IED) attacks on soldiers, but also on media targets. According to Austin Bay’s *Washington Times* article, “al Qaeda’s Information War,” this is unfortunate because political change in Iraq and Afghanistan should be the larger story.<sup>18</sup> A political transformation in these countries would not only be historical, but would exemplify the downfall for insurgency. Only when these changing events have become regular, significant headlines, will al Qaeda become weaker.<sup>19</sup>

Interestingly, despite being aware of its adversary’s strategy, the United States only has three Army psychological operations (PSYOPS) groups/units, one Air Force Air National Guard unit, and one Army Information Operations Command unit to supply

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<sup>15</sup> Combating Terrorism Center, Department of Social Sciences, United States Military Academy, *Harmony and Disharmony: Exploiting al-Qa’ida’s Organizational Vulnerabilities* (West Point, NY: Combat Terrorism Center, 2006), 53.

<sup>16</sup> Chuck de Caro, “Killing al Q’aida” (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

<sup>17</sup> Austin Bay, “al Qaeda’s Information War,” *Washington Times*, July 14, 2005.

<sup>18</sup> Austin Bay, “al Qaeda’s Information War,” *Washington Times*, July 14, 2005.

<sup>19</sup> Austin Bay, “al Qaeda’s Information War,” *Washington Times*, July 14, 2005.

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analysis pertaining to information warfare. There is debate by senior leaders to focus more attention on the information fight (rather than on traditional, kinetic means), yet for some reason those intentions are never executed or not aimed at the media-centric war.<sup>20</sup> The DoD may manifest such hesitation because it is not aware of, or does not believe that, there is an adequate, available pool of potential candidates to create more units.<sup>21</sup> However, de Caro presents a strong case that the DoD already has a wealth of talent in the reserve and National Guard components.<sup>22</sup>

Using traditional kinetic “Cold War” strategies against a nimble, non-state actor that places 90 percent of its efforts in information warfare, is not ideal.<sup>23</sup> United States’ enemies have the upper hand in this battle space. Additionally, Bay stated that the United States’ successes in Iraq and Afghanistan hinge upon creating an environment where the Taliban and al Qaeda are viewed as detractors to stability and that organized government is the solution.<sup>24</sup> This can only be accomplished by reaching intended audiences through words, images, ideas, and actions.<sup>25</sup> However, the United States’ overall strategy in military conflicts continues to be comprised of traditional kinetic military maneuvers.<sup>26</sup>

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<sup>20</sup> Chuck de Caro, interview by author, Washington, DC, December 8, 2009.

<sup>21</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 1-3.

<sup>22</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 1-3.

<sup>23</sup> Combating Terrorism Center, Department of Social Sciences, United States Military Academy, *Harmony and Disharmony: Exploiting al-Qa’ida’s Organizational Vulnerabilities* (West Point, NY: Combat Terrorism Center, 2006), 53.

<sup>24</sup> Austin Bay, “al Qaeda’s Information War,” *Washington Times*, July 14, 2005.

<sup>25</sup> Chuck de Caro, “Killing al Q’aida” (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

<sup>26</sup> Chuck de Caro, “Killing al Q’aida” (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

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There are numerous, disheartening examples of where the IC and DoD have fallen short of conducting successful information operations in the past, while United States' enemies have excelled.<sup>27</sup> For example, during the Kosovo war, the North Atlantic Treaty Organization (NATO) did not coordinate information operations with maneuver units.<sup>28</sup> Thus, Serbian propaganda was conducted successfully with minimal resistance from NATO.<sup>29</sup> Radio and television broadcasts produced influence over the Serbs, reminding them repeatedly to not trust the outside world and to fear their Muslim neighbors.<sup>30</sup> NATO was never able to silence Serb propaganda throughout the Kosovo conflict.<sup>31</sup> Second, the 1994 Rwanda genocide was motivated and perpetuated by radio broadcasts that coordinated mass murders.<sup>32</sup> Commando Solo, an airborne platform primarily designed for PSYOPS, was not used to jam radio broadcasts because of officially permitted guidelines that dictated that jamming in this particular scenario would be an

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<sup>27</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204-206.

<sup>28</sup> Chuck de Caro, "Operationalizing SOFTWARE," in *Cyberwar 2.0: Myths, Mysteries and Reality*, eds. Alan D. Campden, Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 1998), 200.

<sup>29</sup> Brank Magas, "Along NATO's Road to War/Ruin," Solidarity US, <http://www.solidarity-us.org/taxonomy/term/69/0> (accessed May 28, 2010).

<sup>30</sup> Fred Coleman, "Propaganda War Stepped Up," *USA Today*, online ed., April 13, 1999, <http://www.usatoday.com/news/index/kosovo/koso282.htm> (accessed May 28, 2010).

<sup>31</sup> Mike Connor, "NATO Says It Shut Serb Radio To Silence Propaganda," *The New York Times*, online ed., October 21, 1997, <http://www.nytimes.com/1997/10/21/world/nato-says-it-shut-serb-radio-to-silence-propaganda.html?pagewanted=1> (accessed May 2, 2010).

<sup>32</sup> Anjan Sundram, "On visit to Rwanda, Sarkozy Admits 'Grave Error' in Genocide," *New York Times*, online ed., February 25, 2010, <http://www.nytimes.com/2010/02/26/world/europe/26france.htm> (accessed February 26, 2010).

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intrusion in another nation's political framework.<sup>33</sup> As a result of the international community's indecisiveness and lack of involvement, 800,000 Rwandans were exterminated.<sup>34</sup>

In all, where the United States military falters is in fighting battles of ideas, words, and images. De Caro presents a solution with the possibility that the United States has the resources and talent already in the reserves and National Guard. His solution is pragmatic; though, it may not be the definitive answer for the information warfare fight. Nonetheless, the IC should apply the necessary research, effort and time to find additional means of analyzing adversary propaganda for intelligence support for SOFTWARE operations. Creating SVUs for the purpose of analyzing adversary propaganda is a positive step in this direction, and requires little effort and resources. America's "Cold War" mentality and approaches to combating enemies have lost effectiveness in the Information Age.<sup>35</sup>

## HYPOTHESIS

My hypothesis was that the IC can access existing reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SVU context, to provide detailed and actionable intelligence to support SOFTWARE operations.

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<sup>33</sup> Peter Singer, "Winning the War of Words: Information Warfare in Afghanistan," *The Brookings Institution*, online ed., October 23, 2001, [http://www.brookings.edu/papers/2001/1023afghanistan\\_singer.aspx](http://www.brookings.edu/papers/2001/1023afghanistan_singer.aspx) (accessed January 27, 2010).

<sup>34</sup> Samantha Power, "Bystanders to Genocide," *The Atlantic Monthly*, online ed., September 2001, <http://www.mtholyoke.edu/acad/intrel/power.htm> (accessed May 28, 2010).

<sup>35</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

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## DEFINITIONS

This section will provide definitions for terms that are frequently used throughout this thesis. These definitions will provide the reader with a stronger understanding of the thesis as it relates to SOFTWARE and information operations.

**Cinematic Analysis:** is the analysis of television production attributes.<sup>36</sup>

**Competitive Intelligence:** is legally gathering, analyzing, and distributing intelligence about products, customers, services, competitors and any aspect of the environment needed to support executives and managers in making strategic decisions for an organization.<sup>37</sup> The analysis may also include, for example, examining newspaper articles, competitor's corporate publications, websites, patent filings, and trade show information.<sup>38</sup>

**Counterpropaganda:** are "activities to identify and counter adversary propaganda and expose adversary attempts to influence friendly populations and military forces situational understanding. They involve those efforts to negate, neutralize, diminish the effects of, or gain an advantage from foreign psychological operations or propaganda efforts."<sup>39</sup>

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<sup>36</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

<sup>37</sup> Stephen Haag, *Management Information Systems for the Information Age* (New York, NY: McGraw-Hill Ryerson, 2006), 30-47.

<sup>38</sup> Hedieh Nasheri, *Economic Espionage and Industrial Spying* (New York, NY: Cambridge University Press, 2005), 74.

<sup>39</sup> U.S. Air Force, Air Force Doctrine Documents 2-5, *Information Operations* (Washington DC: Department of the Air Force, 2005), 15.



**Global Television (GTV):** is the electronic dissemination of the motion picture via televisive means, including internet, broadcast television and all new media.<sup>40</sup>

**Industrial Espionage:** is the practice of collecting information on competitors by legal and illegal means. It may describe activities such as theft of trade secrets, bribery, blackmail and technological surveillance.<sup>41</sup>

**Influence Operations:** is the “employment of capabilities to affect behaviors, protect operations, communicate commander’s intent, and project accurate information to achieve desired effects across the cognitive domain.”<sup>42</sup>

**Information Operations (IO):** is “the integrated employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception and operations security, in concert with specified supporting and related capabilities, to influence, disrupt, corrupt or usurp adversarial human and automated decision making while protecting our own.”<sup>43</sup>

**Information Warfare:** are information operations conducted during a time of crisis or conflict to achieve or promote specific objectives over a specific adversary or adversaries; the theory of warfare in the information environment that guides the

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<sup>40</sup> Chuck de Caro, “Killing al Q’aida” (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

<sup>41</sup> Hedieh Nasheri, *Economic Espionage and Industrial Spying* (New York, NY: Cambridge University Press, 2005), 60-80.

<sup>42</sup> U.S. Air Force, Air Force Doctrine Documents 2-5, *Information Operations* (Washington DC: Department of the Air Force, 2005), 51.

<sup>43</sup> Joint Chief of Staff, Joint Publication 3-13, *Information Operations* (Washington DC: Government Printing Office, 2006), I-1.

application of information operations to produce specific battle space effects in support of commander's objectives.<sup>44</sup>

**Military Deception (MILDEC):** are the “actions executed to deliberately mislead adversary military decision makers as to friendly military capabilities, intentions, and operations, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly forces mission.”<sup>45</sup>

**Psychological Operations (PSYOPS):** are “planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator’s objectives.”<sup>46</sup>

**SOFTWAR:** is “the hostile use of global television (GTV) to shape another society’s will by changing its vision of reality.”<sup>47</sup> (See definition for Global Television)

**SOFTWAR Virtual Unit (SVU):** as conceived by Chuck de Caro, a notional Department of Defense unit that plans SOFTWAR operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Their primary mission would be to support strategic information operations/counter-propaganda/media operations in the war

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<sup>44</sup> U.S. Air Force, Air Force Doctrine Documents 2-5, *Information Operations* (Washington, DC: Department of the Air Force, 2005), 52.

<sup>45</sup> Joint Chief of Staff, Joint Publication 3-13, *Information Operations* (Washington DC: Joint Publications, 2006), II-2.

<sup>46</sup> Joint Chief of Staff, Joint Publication 3-13, *Information Operations* (Washington DC: Joint Publications, 2006), II-1.

<sup>47</sup> Chuck de Caro, “SOFTWAR,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

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against violent extremism. The SOFTWARE unit would be controlled by the Secretary of Defense and be under the operational control to relevant theater commanders during a crisis.<sup>48</sup>

**Strategic Communications:** are the focused United States Government (USG) efforts to understand and engage key audiences in order to create, strengthen or preserve conditions favorable for the advancement of USG interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all elements of national power.”<sup>49</sup>

**Target Audience:** an individual or group selected for influence.<sup>50</sup>

**Television Intelligence (TVINT):** the study of television and internet video programming/propaganda specifically produced by United States’ adversaries. TVINT strives to explain propaganda, who produced it, how it was made, and where it was produced. Ultimately, it provides insight on how to counter propaganda.<sup>51</sup>

## ASSUMPTIONS

The following assumptions were necessary to guide the direction of the research, to seek clarifications to certain assumptions, and to prevent wasted resources and time:

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<sup>48</sup> Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

<sup>49</sup> Joint Chief of Staff, Joint Publication 3-13, *Information Operations* (Washington DC: Joint Publications, 2006), GL-12.

<sup>50</sup> Joint Chief of Staff, Joint Publication 3-13, *Information Operations* (Washington DC: Joint Publications, 2006), GL-12.

<sup>51</sup> Chuck de Caro, “Killing al Q’aida” (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010).

- 1) If the SVU were actualized, it would be used for the analysis and countering of adversary propaganda. For the purposes of this thesis, however, I only pursued the former: analyzing adversary propaganda for the purpose of providing intelligence support for SOFTWAR operations.
- 2) There are sufficient reservists and National Guard personnel available to the IC whom have media related skills from their civilian occupations.
- 3) The SVU would be staffed predominately by media-skilled individuals.
- 4) The reservist leader of the SVU would be a television/movie director, a movie producer, a reality television creative advisor, an international marketing leader, or another person with requisite experience and a track record of success.

## **SCOPE**

This thesis investigated how the IC can access national guardsmen and reservists for the creation of the SOFTWAR Virtual Unit (SVU) for analyzing adversaries' propaganda. Although Chuck de Caro's concept of the SVU includes operations (countering adversaries' propaganda), this aspect was not included in the scope of the research. I felt that it was important to solely conduct research on SVU intelligence support requirements.

The scope of this thesis was bounded by two questions:

- 1) Does the military personnel database have civilian occupation information to discern people's media skills applicable to the SVU?
- 2) Does the psychological operations community see the value of creating an SVU?

The first question explored whether or not the military approach to Human Resource management was designed to find certain service members with specific media skills.

The second question was formulated to help determine what experts in the psychological operations community thought of the SVU concept.

## **UNIQUENESS**

This research is distinctive because Chuck de Caro is the only information warfare analyst to advocate the SVU, or any unit similar to it. Other than de Caro's original work, there has been no research to independently validate whether or not his concept could work, or to what degree the IC would need to change to support the SVU concept.

## **OVERVIEW**

Chapter 1 establishes the background to, and justification for, this thesis.

Chapter 2 is a conceptual framework of published and unpublished written documents relevant to this concept. The conceptual framework is divided into five separate categories relevant to the thesis' research, hypothesis and research question.

First, literature on SOFTWARE and the SVU are examined to establish a base of knowledge of these information warfare concepts. This portion entailed key innovative ideas from de Caro's unpublished book which focuses on defeating al Qaeda using

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SOFTWARE. It also includes different authors' views on information warfare, and how United States' adversaries have successfully integrated information operations as their primary weapon.

The second section studies "skills management systems" – databases used by organizations to help track and access their employees' varied and unique skills. An examination of skills management systems provided a more comprehensive understanding of their involvement in the workplace, their advantages and disadvantages, as well as suggestions for their adequate development and implementation.

Third, other than Chuck de Caro's published and unpublished written works, there appears to be an absence of literature on the SVU and/or any entity that currently conducts similar tasks as the SVU. Therefore, the author investigated correlations between the SVU and competitive intelligence. The civilian business world provided the relevant strategy of competitive intelligence as a way to showcase the benefits of analyzing enemies' strategies.

The fourth segment covers television production technical attributes to highlight the television traits that permeate adversary propaganda. De Caro argued that when the adversary films a sniper incident or improvised explosive device (IED) attack for propaganda use, he is making a movie that incorporates sophisticated Hollywood-like images and techniques. An SVU comprised of media skilled individuals would analyze these techniques. This portion relied heavily on the (b) (3) [REDACTED] [REDACTED] prominent television production textbooks, that address the factors of frame composition, arrangement, location choices, camera angles and points of view, and the editing techniques of cutting, sequencing, style and pacing.

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Fifth, the conceptual framework examines the documents and the presentation slides concerning the “Hollywood Media Staff Ride.” In February 2005, de Caro organized this staff ride. The members of the staff ride included representatives from the National Defense University, Joint Information Operation Warfare Center, and the Joint Forces Staff College Commandant and his aide. The purpose of the staff ride was to study “information warfare for profit” by observing how the highly successful Hollywood television show *JAG* was produced.

Chapter 3, the methodology, describes the processes and means for data collection and analysis. This chapter includes certain discovered limitations that hindered the study.

Chapter 4 discusses the findings of the research. Extensive notes from each interview (available at the Appendices) are summarized to showcase the key points of view or criticisms regarding the SVU concept. I looked for common themes in the participants’ descriptions of their experiences. To locate these themes, I followed John Creswell’s steps of identifying and grouping relevant statements.<sup>52</sup> Ultimately, this process merged the data to create a cohesive summary of what all the participants expected and experienced.

Chapter 5 begins with a review of the research question, hypothesis, and the findings discussed in chapter 4, and provides conclusions that are based on the interviews and the conceptual framework. This chapter closes with recommendations for further research.

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<sup>52</sup> J.W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Traditions* (Thousand Oaks, CA: Sage, 2006), 142-158.

## CHAPTER TWO

### CONCEPTUAL FRAMEWORK

This section reviews literature relating to the research question and hypothesis. The conceptual framework is divided into five sections. The first section examines literature pertaining to the focal elements of this research: the SVU; SOFTWARE; United States' adversaries' use of information warfare; the showcase of United States' missed opportunities in information operations. The second section studies "skills management systems" – databases used by organizations to help track and access their employees' varied and unique skills. Standard Installation/Division Personnel Reporting System (SIDPERS), the United States reserves and National Guard's system for tracking personnel knowledge, was found to be inadequate in Chuck de Caro's search for media skilled individuals for the purposes of experimenting with his SVU concept. An examination of skills management systems provides a more comprehensive understanding of their involvement in the workplace, their advantages and disadvantages, as well as suggestions for their adequate development and implementation. The third section covers the business practice of competitive intelligence – the system of "gathering and analyzing information about your competitors' activities and general business trends".<sup>53</sup> Within the context of this thesis, competitive intelligence offers a different perspective on the analysis of adversary propaganda. To complete this section, I reviewed articles from the Harvard Business Review, the Society of Competitive Intelligence Professionals (SCIP), as well as articles outlining the difference between

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<sup>53</sup> Larry Kahaner, *Competitive Intelligence* (New York, NY: Simon & Schuster, 1996), 16.



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competitive intelligence and industrial espionage. The fourth section focuses on literature relevant to the technical attributes of television production. It provides information on the specific media aspects that the SVU would analyze. The (b) (3) comprehensive handbook entitled, (b) (3), provides guidelines for IC analysts when analyzing adversary propaganda, and is referred to in this section. In addition to the handbook, I examined television industry textbooks. The fifth and final section pertains to the annotative documents of the “The Hollywood Media Staff Ride,” conducted in 2005. The staff ride members included personnel from the National Defense University, the Joint Information Operation Warfare College, as well as the Joint Forces Staff College Commandant. “The Hollywood Media Staff Ride” conducted an eight day study of how the television show *JAG* was produced. The purpose of the staff ride was to study “information warfare for profit” by observing how a highly successful Hollywood television show was produced. “Information warfare for profit” is the practice of analyzing the television target audience and producing entertainment for the audience’s needs. The staff ride’s mission was to determine whether the IC could apply Hollywood’s concept of “information warfare for profit” to “information warfare for national security.”

## SOFTWARE

This portion of the conceptual framework examines information from de Caro’s three published works, the two SVU experimental exercises, a draft copy of de Caro’s forthcoming book, as well as other authors’ perspectives on information warfare.

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De Caro is the President of the Sea Aerospace Ground Evaluation (SAGE) Corporation, a not-for-profit, tax-exempted, educational foundation designed to assist the United States government in transitioning to Information Age capabilities. SAGE also supports disaster assistance, rescue, recovery and regeneration around the globe. De Caro is also the founder and CEO of the AEROBUREAU Corporation. This team has designed, built and flown the world's first flying news-center in a four engine Lockheed Electra airliner. De Caro is also a former CNN Special Assignments correspondent who specialized in combat reporting from Nicaragua, Grenada, and Surinam. He has written front page stories for the *New York Daily News*, *Providence Journal Bulletin*, *Colorado Springs Gazette-Telegraph*, *New Orleans Courier* and *Army Times*. He has also written major stories for the *Atlantic Monthly*, *Washington Post*, *Defense News*, and *Air Progress*. He has been a technical advisor to television shows such as *Hard Copy*, *Sightings*, *Encounters*, *Quantum Leap*, *J.A.G.*, and *NCIS*. He is also an active member of the Screen Actors Guild. He served with the 20th Special Forces Group (Airborne), speaks Spanish and Italian, and is an experienced parachutist. Moreover, de Caro is a regular lecturer on Information Warfare at the National Defense University, and throughout the DoD officer education establishment. He is the author of the *SOFTWARE Handbook*, the *Gulf War Strategic Psychological Operations (TV) Study*, and contributing author for the books, *Cyberwar: Security, Strategy and Conflict in the Information Age*, *Cyberwar 2.0: Myths, Mysteries and Reality*, and *Cyberwar 3.0: Human Factors in Information Operations and Future Conflict*. His current work-in-progress is titled *Killing al Qaeda: Destruction of Radical Islam Via SOFTWARE*.

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In 1996, Chuck de Caro coined the term SOFTWARE in the first of his three published works available to the civilian market. The initial piece entitled “SOFTWARE” was featured in *Cyberwar: Security, Strategy and Conflict in the Information Age*. He defined the term SOFTWARE as “the hostile use of global television (GTV) to shape another society’s will by changing its view of reality.”<sup>54</sup> In this early piece he described the idiosyncrasies of the medium of television and of television news coverage. Using then current events, he warned how our adversaries used GTV to provide indication and warning and as a means of command and control warfare (C2W). Furthermore, he pointed out that United States’ enemies used television as a channel for denial and deception tactics. De Caro also stated that if the United States had implemented SOFTWARE, the outcome may have been different for the following failures:

During the United States build up to the first Gulf War, Saddam Hussein’s distributed televised propaganda caused riots in Jordan against the United States and its alliances. Hussein’s propagandist had direct access to the Jordanians via the Jordanian government run television systems. Even when CNN started airing Hussein’s propaganda after careful editing, it still caused demonstrations in Europe and the United States. The United States had not planned for an information war; therefore, Hussein was able to spread his lies without obstructions.<sup>55</sup> Hence, de Caro argued that if the United States had an SVU entity analyzing the adversary’s propaganda for intelligence support

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<sup>54</sup> Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 203.

<sup>55</sup> Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

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for SOFTWARE operations, this could have been avoided.<sup>56</sup> De Caro advocated that the SVU could have analyzed the adversary's propaganda to establish how to effectively counter their propaganda.<sup>57</sup> However, de Caro explained that this was never pursued because the United States military structure was antiquated and did not have the foresight to analyze adversary propaganda and then quickly counter it.<sup>58</sup>

Additionally, after Desert Storm, very few restrictions were imposed on Hussein. Hence, he was able to rebuild his forces and keep his followers in line through propaganda and fear. Hussein cleverly controlled all radio and television stations through the Ministry of Culture and Information (MCI), and perpetuated the belief that he had actually won Desert Storm.<sup>59</sup> De Caro postulated that there may have been a slim chance that a form of democracy could have been introduced to Iraq if the United States had mandated that Hussein not have control of the media in his region, and that Iraqis be able to espouse their opinions over their respective country's media.<sup>60</sup> De Caro stated that, if the IC had incorporated an entity like the SVU in the early 1990s to analyze Hussein's propaganda for the purpose of intelligence support for SOFTWARE operations, Hussein's power would have been diminished.<sup>61</sup> The United States had the resources and talent to analyze adversary propaganda for the purpose of intelligence support for SOFTWARE

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<sup>56</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

<sup>57</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

<sup>58</sup> Chuck de Caro, "Killing al Q'aida" (lecture, National Defense Intelligence College, Washington, DC, December 8, 2010), this issue is not further developed in this thesis.

<sup>59</sup> PsyWarrior, "Iraq's Psychological Warfare Campaign," PsyWarrior, <http://www.psywarrior.com/iraqprop.html> (accessed March 1, 2010).

<sup>60</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

<sup>61</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

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operations, but not the correct structure to organize it.<sup>62</sup> Therefore, the United States' information operation programs were working in dissonance without an overarching systematic approach.<sup>63</sup> Ultimately, De Caro asserted that America is not winning the Global War on Terrorism, because it is not yet organized to fight in the infosphere.<sup>64</sup>

The 1993 defeat of "Task Force Ranger" in the Battle of Mogadishu provided Somali tribal leaders the propaganda opportunity to showcase that the United States' military had no business being in their country.<sup>65</sup> The United States eventually withdrew from Somalia due to their tactical defeat, because of the media's continuous coverage of a United States Army Ranger's body being dragged through the streets of Mogadishu. Public pressure forced American policymakers to pull out.<sup>66</sup>

During the Bosnian war, Milosevic's propaganda was broadcast throughout the Balkans on Serbian state run television and radio stations. His propaganda operated without NATO imposed restrictions. This perpetuated the Orthodox Serbs' hatred towards Bosnian Muslims and Croats by misleading the Serbs that their acts were warranted because their "enemy" was trying to eradicate them. Both NATO's and the United States' response was to destroy some of the physical structures (television

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<sup>62</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

<sup>63</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 1.

<sup>64</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 1.

<sup>65</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 203.

<sup>66</sup> Major Clifford Day, USAF, *Critical Analysis On the Defeat of Task Force Ranger*, Master thesis (Montgomery, AL: Air Command and Staff College, 1997), 21.

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stations).<sup>67</sup> However, this was only a temporarily fix. NATO and the United States should have directly countered Milosevic's lies by showing images of the damage he was doing to Yugoslavia with his agenda of genocide.<sup>68</sup> De Caro asserted that America could have approached the information war in Bosnia more effectively if it had tasked the IC with analyzing the adversary's propaganda for intelligence support for SOFTWARE operations.<sup>69</sup> Analysts could have researched how messages were being disseminated via GTV.

De Caro used these examples to illustrate that America's enemies know how to use SOFTWARE, understand that we are vulnerable to SOFTWARE, and that our inability to master this new form of warfare encourages them to use it against us repeatedly. However, he stated that if America can harness GTV, that it will not only counter its adversaries' greatest weapon, but diminish its reliance on the use of lethal means.<sup>70</sup> GTV has this ability because it distorts and manipulates events by the "viewer's perception of images and sound" and is unconcerned with the truth.<sup>71</sup> Through careful editing by the propagandist, any message can become legitimate to the viewer.<sup>72</sup> For example,

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<sup>67</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

<sup>68</sup> Jeffrey Smith, "Serbs Get One Side of News," *Washington Post*, April 5, 1999, A-14.

<sup>69</sup> Chuck de Caro, interview by author, Washington, DC, November 5, 2009.

<sup>70</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

<sup>71</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 205.

<sup>72</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204

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Milosevic was never concerned about the truth because he did not have to compete against it. The truth only matters if it can reach its intended audience, and since Milosevic controlled the media, his propaganda was the truth. NATO could have used its airborne platforms to counter the propaganda, but it chose not to due to perceived legal parameters (e.g., infringing on another country's sovereignty). Consequently, Milosevic's propaganda reignited Serb national pride and ethnic fears by spreading the propaganda that the Muslims and Croats were planning to exterminate them.<sup>73</sup>

De Caro's first published work also described why SOFTWARE must become the fundamental principle of America's strategy. De Caro argued that if information warfare is the United States' enemies' primary weapon, then it must be their primary weapon also. Strategy based on kinetic means against an information warfare centric adversary does not work. America's adversaries have repeatedly used GTV to affect politics, and have consequently caused dramatic policy reversals. De Caro also claimed that the United States military, due to changes in recruitment after the end of the draft, is predominately filled with left-brain, linear thinkers that are set in their ways in regards to military strategy, thus relying on traditional combat techniques instead of information warfare.<sup>74</sup> According to de Caro, the DoD should create the SVU. He stated,

“What is needed is a very small, transparent, largely civilian SOFTWARE planning and operation cell in the Office of the Secretary of Defense, whose members are reservist with career long skills in TV production, advertising and dissemination and who can perform operationally. Their mission should be to study the effects of GTV on belligerent conflict, operations-other-than-war (including peacekeeping and peace enforcement), and war forms resulting from alliances

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<sup>73</sup> Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 204.

<sup>74</sup> Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 217.

between virtual nations and niche-competitors. Moreover, this SOFTWARE cell should develop doctrine for SOFTWARE politico-military operations. This doctrine should include both active and passive counter-measures to the effects of Global Television of Cyberwar tactics, Table of Organizations and Equipment for a strategic US information warfare/SOFTWARE unit, including unmanned aerial vehicles designed for real-time information gathering, processing, and dissemination. In short, their mission should be to develop methods to see through the ambiguities in the warning of a SOFTWARE campaign, to devise counter measures, and to implement them.”<sup>75</sup>

De Caro experimented with his concept of the SVU twice. Below are the documented results of creating an experimental SVU.

### **Vermont, 1996**

In 1996, after publishing his first article, “SOFTWARE,” de Caro was contracted by the DoD to determine the feasibility of a SOFTWARE Red Team in the Vermont Army and Air Force National Guard, for use in future national level war games. De Caro provided me his unpublished “Executive Summary on the Establishment of Information Warfare/SOFTWARE Operations Unit in the National Guard” in support of this thesis. This summary was approved by Colonel Bruce Lawler of the Vermont National Guard. The summary documented the exercise and described how de Caro was able to create a team from the Vermont National Guard to act as the opposition force (OPFOR) for a wargaming exercise. However, this OPFOR was different than the usual training enemy. This OPFOR was trained to conduct information-based operations to frustrate the Blue Force (U.S. Forces) national and Commander in Chief (CinC) level strategies during the exercises. Their operational structure combined civilian media and military skills to

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<sup>75</sup> Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age*, ed. Alan D. Campden, Douglas H. Dearth, and R. Thomas Goodden (Fairfax, VA: AFCEA International Press, 1996), 217.



produce new military operations in an information-rich environment - thus, the first introduction of the SVU. Surprisingly, even in the tiny demographics of the Vermont Air and Army Guard, sufficient personnel with the requisite skills were available to establish a SOFTWAR unit. De Caro also stated in this report that, with further training and funding, he could have developed this Red Team into one that could have actually developed its own propaganda for the information fight against the Blue Force.<sup>76</sup>

Due to the lack of an accurate personnel information database listing service members with “special skills” (e.g., SOFTWAR skills), a recruiting statement was circulated in an effort to find Guard personnel with media or marketing skills. Below is the recruiting statement that Colonel Bruce Lawlor of the Vermont National Guard emailed, faxed and/or mailed to every Vermont Guardsman:

“Recruiting Statement: The Vermont Guard is establishing a new unique unit which will create and use Information Age tactics in war games. We are seeking Guardsmen whose civilian occupations and expertise are not found in the conventional military arena. We are looking for enthusiastic, aggressive candidates who have expertise in the following areas: large scale telecommunications systems; computer hardware creation, manufacture and quality control; software creation and debugging; Internet utilization; satellite gateway operation; television systems operations; foreign area studies, cultural anthropology and languages; wargaming and military history. The ideal candidate would also have an aviation background, as well as broad experience and travel.”<sup>77</sup>

In early October 1996, de Caro commenced the screening process of those who answered the recruiting statement. He screened and categorized his potential candidates

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<sup>76</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWAR Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 1.

<sup>77</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWAR Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 1.

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by placing them in six person teams. They were then presented with a wargame scenario, and asked to use both their civilian and military skills to analyze the situation, and how they would propose to counter the adversary. Selection was based on reaction time, applicable knowledge towards the problem, and problem solving skills. Though individual thinking processes were paramount, it was essential that group dynamics were cohesive and goal oriented.<sup>78</sup>

Ultimately, de Caro found information warriors in the Vermont National Guard exercise/experiment. However, finding someone with a vision of how the SVU should be executed would be challenging. In a sense, de Caro was looking for a leader that had the foresight to manage and manipulate the information – an information warrior leader. He found, during the exercise, that among those who had the sought-after media and marketing skills, only a handful, like Colonel Bruce Lawler, had the overall concept of how to apply those ideas into a cohesive strategic information operation. De Caro realized that this type of leader was not readily found in the active forces because, “it is simply not possible to keep a virtuoso movie producer or the Vice President of a huge software company or a multi-lingual marketing genius in the active duty armed forces. It is possible, however, to have these people in the National Guard or Reserve structures by random happenstance.”<sup>79</sup> De Caro wanted a reservist from the civilian sector who had the vision and organizational skills to develop creative ideas and images to influence on a mass scale.

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<sup>78</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWAR Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 5.

<sup>79</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWAR Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 1.

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This need for unique creative leaders dictated the following special provisions:

- a) The skills needed for the SVU are real world civilian skills. Prime candidates for the SVU within the Vermont exercise were already using these skills on a daily basis in their jobs. Their on-going civilian experience indicated that the two-week and one weekend per month training requirement for National Guard and reserve service members in their respective military fields was unnecessary.<sup>80</sup> However, they would be extremely creative in their abilities to form and execute a SOFTWAR plan.<sup>81</sup>
- b) The Standard Installation/Division Personnel System (SIDPERS) was the Army's standard automated Soldier personnel information system. SIDPERS was supposed to provide service member's personal information to Commanders. This information allowed leaders to manage their people better both individually and collectively.<sup>82</sup> SIDPERS does not have current media professions in its system such as "Software Engineer" or "Systems Analyst." Therefore, if one was doing a search for service members with media skills, they would not get a complete pool of candidates. SIDPERS must be updated to include occupations that are associated with the information age.<sup>83</sup>
- c) A direct commissioning program must be created because the types of people that have the skills required for SOFTWAR operations will likely not join as privates. A possible

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<sup>80</sup> US Military, "Career Opportunities in the National Guard," US Military, <http://www.usmilitary.com/national-guard/> (accessed March 6, 2010).

<sup>81</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWAR Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 7.

<sup>82</sup> U.S. Army, Pamphlet 600-8-200, *SIDPERS Handbook for Commanders* (Washington, DC: Department of the Army, 1986), 2.

<sup>83</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWAR Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 1.

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solution is to adapt the Navy's Limited Duty Officer Program. Potential members of the SVU will want the prestige that comes with commissioned rank that their skills and experience deserve.<sup>84</sup>

d) Research should be conducted to determine ways of finding and hiring retirees that have SOFTWARE skills without affecting their retirement benefits. These are unique individuals in that they understand both the military and civilian worlds. In some respect, their experience would be much broader than someone who has only been a military careerist. The study's goal would be to determine how to modify existing hiring practices in order to help bring back retirees in support of SVUs.<sup>85</sup>

At the end of the Vermont exercise, de Caro noted other important observations:

- 1) The smaller and more diffused the adversary, the geometrically greater the difficulty for the United States in dealing effectively against it. Machine-age warfare, comprised of bombs and missiles, is useless against a lack of high value targets.<sup>86</sup>
- 2) Time is on the aggressor's side, because the United States National Command Authority's pyramidal organization takes far too long to react, thus allowing the adversary to get inside the Observe-Orient-Decide-Act (OODA) loop.<sup>87</sup>

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<sup>84</sup> Military, "Navy - Limited Duty Officer Appointment Process", Military, [http://www.military.com/MilitaryCareers/Content/0,14556,MPDC\\_Options\\_LDO\\_Navy,00.html](http://www.military.com/MilitaryCareers/Content/0,14556,MPDC_Options_LDO_Navy,00.html) (accessed 2 December 2009).

<sup>85</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWARE Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 1.

<sup>86</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWARE Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 5.

<sup>87</sup> Chuck de Caro, *Phase IV Report Contract DAHA43-96M-3000: Executive Summary on the Establishment of Information Warfare/SOFTWARE Operations Unit in the National Guard 1996*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluation, 1996), 6.

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De Caro concluded in this 1996 study that a United States information warfare adversary is diffused and has no real physical center of gravity. The United States military's current structure is not designed for this type of fight. Therefore, the enemy can bring the information fight to the United States and win by default. The United States military must add information warfare units to its structure in order to effectively and successfully address these issues.<sup>88</sup> De Caro stated that the SVU is the "quick fix" to this problem with minimal effort. The National Guard and the reserves have the needed skills to counter the adversary because their civilian personas are involved in high-tech, creative and marketing occupations. As proving ground for the Unified Combatant Commands, the teams would be composed to create information warfare OPFOR similar to the ones used in the Vermont National Guard wargames. These initial SVUs would simulate adversaries using information age technologies.<sup>89</sup>

Ultimately, the Vermont National Guard exercises affirmed de Caro's original thesis and warning that SOFTWARE, the hostile use of GTV to shape another society's will by changing its vision of reality, can be used against the United States, now and in the future. Furthermore, SOFTWARE is most effective when there is a blending of physical, technological, and cyber attack skills to create a kind of media event. This media event can subsequently be leveraged by perception attacks to directly affect the adversary's politics, and thus, cause the adversary's government to react to the perceived

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<sup>88</sup> Bruce Berkowitz, "Warfare in the Information Age," *Issues in Science and Technology Journal* (2008): 175-189.

<sup>89</sup> Bruce Berkowitz, "Warfare in the Information Age," *Issues in Science and Technology Journal* (2008): 175-189.

threat rather than the actual threat.<sup>90</sup>

### **Idaho, 2008**

In October 2008, de Caro coordinated with the Idaho National Guard leadership in an effort to create an SVU. De Caro was essentially replicating what he had done with the Vermont National Guard 12 years prior, in 1996. However, instead of creating an information warfare OPFOR that would fight the BLUFOR during exercises, the goal was modified to examine the feasibility and effectiveness of using National Guard personnel to conduct forensic cinematic, telegenic, and tele-technical analysis of al Qaeda visual media. In other words, de Caro sought to determine if the SVU could analyze adversary propaganda, and the television intelligence (TVINT) that could be garnered from it.<sup>91</sup>

De Caro provided an unpublished copy of his findings for this research. These findings were approved by Lieutenant Colonel Scott Kane of the Idaho National Guard. It articulated the activities completed in Idaho, and presented a subjective evaluation and lessons learned about: the TVINT information gained from the forensic analytic activities; the challenges inherent in such activities; and the feasibility of pursuing such activities on a larger scale. Furthermore, it presented a way ahead for creating an SVU organization with the aim of producing TVINT products. These, in turn, would aid in the

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<sup>90</sup> Ven Lambakis, James Kiras and Kristin Kolet, "Understanding "Asymmetric" Threats to the United States," *National Institute for Public Policy Journal* (2002): 6-60.

<sup>91</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 2.

creation of Television Countermeasures (TVCM) operations to negate or reduce the efficacy of threat video propaganda campaigns.<sup>92</sup>

In order to ascertain the viability of this visual media concept, de Caro structured a subscale SVU composed of handpicked personnel from the Idaho National Guard who had cinematic expertise through their civilian occupations. These occupations were predominately in the video, television, or film industries. The selected service members were instructed to recognize cinematic stylistic qualities within al Qaeda video products.<sup>93</sup>

The state of Idaho is not known as a media “Mecca” as in California, therefore it was a surprise to de Caro that several personnel working in the Visual Information section of the Joint Force Headquarters of the Idaho J6 (communication section) were able to identify most of the characteristics in the videos. After less than an hour of direction and guidance, the J6 soldiers, who chiefly worked on graphic design and still photography projects, nevertheless had sufficient technical knowledge of the cinematic arts to identify at least half of the specific items. They also found more data upon subsequent viewings.<sup>94</sup>

This study involving the Idaho National Guard in the creation of an SVU demonstrated the feasibility of de Caro’s concept of using talent already resident within the National Guard and reserve components for the purpose of analyzing adversary

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<sup>92</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 3.

<sup>93</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 3.

<sup>94</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 6.

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propaganda (and to produce Television Intelligence). An SVU can thus discover what traditional intelligence techniques of analysis cannot, and can use such information to gain tactical, operational and strategic advantages.<sup>95</sup> The crucial outcome of this exercise exemplified once again that selected reserve or Guard personnel require little or no training in terms of analyzing adversary propaganda - only direction and guidance. This opens the possibility of future units whose costs would be minimal and whose intelligence output could be done in near-real-time.<sup>96</sup>

### **Adversary Use of Global Television**

In 1998, de Caro published his second chapter entitled, “Operationalizing SOFTWARE” in *Cyberwar 2.0: Myths, Mysteries, and Reality*. He was prompted to write this piece after being invited to Bosnia by the United Nations Office of the High Representative (OHR) in 1997 to advise them on the possibilities of using SOFTWARE to help stabilize their situation. His observations and recommendations were that the OHR lacked the expertise to engage in effective television counter propaganda against several ethnic networks, especially against Serbian Radio-Television.<sup>97</sup> He noted that the OHR-funded Open Broadcast Network (OBN) poorly placed its transmitters on different frequencies across the country, making it difficult for their viewers to find it. It also had the stigma of being war-time media. OBN news was still based in Sarajevo, and its

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<sup>95</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 13.

<sup>96</sup> Chuck de Caro, *Report on Feasibility of a SOFTWARE Virtual Unit for Television Intelligence*, Executive summary (McLean, VA: Sea Aerospace Ground Evaluations, 2008), 4.

<sup>97</sup> Chuck de Caro, “Operationalizing SOFTWARE,” in *Cyberwar 2.0: Myths, Mysteries and Reality*, eds. Alan D. Campden, Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 1998), 200.



contents were dismissed by Serbs and Croats because OBN stations were first introduced during the recent war in downtown Sarajevo. More importantly, there were budget constraints and a lack of expertise to promote OBN. Hence, the population did not know where to find OBN and what type of programming it provided. The quality of the news programming was poor and unprofessional. Its news sequences were merely thirty minutes long. Ultimately, OBN had no counter programming effect.<sup>98</sup>

Conversely, the Serbs' media in Bosnia was very organized. They used the Serb television and radio stations as an effective military-political-media channel to infiltrate and influence policy making decisions in the region. Therefore, strategic communications efforts and OHR programs had no effective way of countering Serbian propaganda.

De Caro's solution was extensive, and entailed the concept of creating SOFTWARE units just like the ones recommended in his initial published work. He also added that the unit would be comprised of active duty and reserve members, retired officers, and civilians, but no further details on the SVU were provided.<sup>99</sup> De Caro concluded his article by focusing his attention on Iraq. It should be noted again that this article was written in 1998 while de Caro was still trying to influence military leaders to use SOFTWARE against Saddam Hussein. He proposed that it was pertinent to diminish Hussein's control over communications and then, to turn it against him. Hussein, like Milosevic, remained in power for so long because he had control over the home media

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<sup>98</sup> Chuck de Caro, "Operationalizing SOFTWARE," in *Cyberwar 2.0: Myths, Mysteries and Reality*, eds. Alan D. Campden, Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 1998), 200.

<sup>99</sup> Chuck de Caro, "Operationalizing SOFTWARE," in *Cyberwar 2.0: Myths, Mysteries and Reality*, ed. Alan D. Campden and Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 1998), 201.

that was also responsible for influencing public messaging. De Caro did not suggest destroying adversary communication systems, but rather, advocated that the military co-opt them. With their regional communications turned against them, adversary leadership would have to focus inward to control their regions. The U.N. would then control these television and radio receivers to influence the populace with their messages.<sup>100</sup>

De Caro's third chapter, "SOFTWARE & Grand Strategy: Liddell-Hart Updated," was published in *Cyberwar 3.0: Human Factors in Information Operations and Future Conflict* in 2000. In it, he scrutinized the United States' failures in the Bosnian war as it pertains to his idea of SOFTWARE. Ultimately, the United States and NATO did not incorporate SOFTWARE concepts correctly throughout peace-keeping operations. The Serbs had an overall advantage because the United States was still using an Industrial Age political and military framework/bureaucracy which had reduced effectiveness in an information era. Milosevic may have lost the war of attrition in the end, but he decisively won most of the information battles. He won these battles by attacking NATO's antiquated "war policy" through SOFTWARE efforts.<sup>101</sup>

De Caro further established in his article that the United States' and NATO's weaknesses in the realm of Information Operations are very apparent, even against an enemy with relatively poor technological capabilities. NATO policymakers and military leaders demonstrated that they did not understand the power of television and the internet

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<sup>100</sup> Chuck de Caro, "Operationalizing SOFTWARE," in *Cyberwar 2.0: Myths, Mysteries and Reality*, ed. Alan D. Campden and Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 1998), 202.

<sup>101</sup> Chuck de Caro, "SOFTWARE & Grand Strategy: Liddell-Hart Updated," in *Cyberwar 3.0: Human Factors Operations and Future Conflicts*, ed. Alan D. Campden and Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 2000), 87.

during the Balkan war. As de Caro explained, this was due to the United States military's unwillingness to change its structure to counter:

“information-based threats, especially in situations with asymmetrical, diffused opposition. Part of the answer to these problems is increased use of the broad, predominantly civilian-acquired skills available in the military Reserve Components. This vast pool of knowledge and experience could be of immediate direct use in Information Warfare. A team composed of such people could be used to simulate adversaries, giving regional commanders and their staffs experience against non-traditional foes.”<sup>102</sup>

### **Key Principles of SOFTWARE**

De Caro's current writing project, set to be published in 2012, is the book, *Killing al Qaeda: Destruction of Radical Islam Via SOFTWARE*. He has graciously provided a draft copy of it for this thesis. In this manuscript, he defined the six principles of SOFTWARE: Counterpropaganda, Counterprogramming, Saturation, Seduction, Special Means, and Integration.<sup>103</sup> The ideas presented in this book reach beyond those related to the creation of a SVU from the National Guard and reserve components. It outlined the structure, planning, politics and logistics to support the SVU.

De Caro used the term “AMOEBAs” (Aerobureau Matrix Organization for Effecting Behavioral Adjustments) to help describe the strategic organizational form of a SVU. This virtual unit is designed for military-political Strategic Communications, Information Warfare and Public Diplomacy (SCIWPD) operations globally. It is conceived as having a three part structure: 1) Membrane, which defines the parameters for participation in operations; 2) Protoplasm, for those designated members who perform

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<sup>102</sup> Chuck de Caro, “SOFTWARE & Grand Strategy: Liddell-Hart Updated,” in *Cyberwar 3.0: Human Factors Operations and Future Conflicts*, ed. Alan D. Campden and Douglas H. Dearth (Fairfax, VA: AFCEA International Press, 2000),87.

<sup>103</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 1.

functions for a given operation; 3) Nucleus, for the small group running the Observe, Orient, Direct and Act (OODA) loop.<sup>104</sup>

De Caro explained that al Qaeda already uses variations of SOFTWARE. Thus, the United States has misinterpreted the significance of the 9/11 attacks. It was not just a large scale terrorist attack; from the enemy's point of view, they were globally televised media events supporting a global marketing effort, the purpose of which was to advance the cause of radical Islam and gain a larger political market share within the *Ummah*.<sup>105</sup> The Arabic word, *Ummah*, means the collective body of Muslim believers, and is sometimes used in place of the phrase "community of believers."<sup>106</sup>

De Caro suggested that the United States can counter and defeat al Qaeda efforts, and lay the groundwork for the expansion of democracy, with two parallel initiatives:

- 1) Begging the opposition by exploiting the weaknesses of networked organizations.
- 2) Overwhelming the marketing effort with rolling, unending sets of "Information Tsunamis."<sup>107</sup>

De Caro's six fundamental SOFTWARE Principles for achieving these and other grand strategy goals of the United States are: Counterpropaganda, Counterprogramming, Seduction, Saturation, Special Means and Integration.

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<sup>104</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 1.

<sup>105</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 3.

<sup>106</sup> Olivier Roy, *Globalized Islam: The Search for a New Ummah* (New York, NY: Columbia University Press, 2006), 12-74.

<sup>107</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 4.

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- 1) Counterprogramming: The utilization of dissimilar programming with a higher telegenic “Q” factor and higher production values to deny ratings and shares to an opposing broadcaster.
- 2) Counterpropaganda: Direct counterpoints to enemy points of view, with better writing, logic and telegenics, designed to blunt or deny enemy propaganda effects on a given demographic.
- 3) Saturation: The utilization of large scale budgets to out-buy and out-broadcast an enemy, or co-opt broadcast, by a ratio of at least three to one.
- 4) Seduction: The utilization of commercial counter-demographic techniques to break the effectiveness of enemy or co-opted neutral broadcasts upon a specific demographic.
- 5) Special Means: The use of novelistic tactics and stratagems to break the enemy’s influence upon a given demographic.<sup>108</sup>
- 6) Integration: The careful coordination of all SOFTWARE methodologies so as to have the maximum impact upon all aspects of a target audience.<sup>109</sup>

### **How Adversaries Have Adopted SOFTWARE**

In addition to the adversary examples cited in de Caro’s previous works, Iran has adapted its military strategy to apparently directly apply de Caro’s principles of SOFTWARE. This connection between Iran and de Caro’s concepts is apparent in the language that Iran is using to describe its new approach. The Iranian government is

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<sup>108</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 5.

<sup>109</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 5.

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currently using the term “SOFTWARE” as a regular phrase when discussing its strategic communications in public.<sup>110</sup> Robert Worth, a *New York Times* reporter, documented how the Iranians have realized that their reliance on brute force to quell the country’s opposition movement after the disputed Presidential elections is not working. The Iranian government has created a new police unit to sweep the internet for dissident opinions. A company affiliated with the Revolutionary Guards acquired a majority share in the nation’s telecommunications monopoly in 2009, allowing the Iran’s Revolutionary Guard’s control of Iran’s land lines, internet providers, and two cell phone companies.<sup>111</sup> Worth explained that,

“Presently, there are plans for the Revolutionary Guards to open a news agency with print, photo and television elements. The Iranian government calls its new approach SOFTWARE, and its policymakers and military officers take it more seriously than a real military confrontation. This new strategy is the result of Iran’s perception that domestic ills are the result of Western cultural subversion and call for an equally vigorous response.”<sup>112</sup>

Iran’s supreme leader, Ayatollah Ali Khamenei, has been using de Caro’s coined phrase SOFTWARE in public since September 2009. He first used the term when he warned a group of artists and teachers that they were living in an “atmosphere of sedition” in which all cultural phenomena must be seen in the context of a vast battle between Iran and the West. He and other Iranian officials have used the word

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<sup>110</sup> Robert Worth, “Iran Expanding Effort to Stifle the Opposition,” *New York Times*, online ed., November 23, 2009, <http://www.iranfocus.com/en/iran-general/iran-expanding-effort-to-stifle-the-opposition-19117.html> (accessed March 8, 2010).

<sup>111</sup> Robert Worth, “Iran Expanding Effort to Stifle the Opposition,” *New York Times*, online ed., November 23, 2009, <http://www.iranfocus.com/en/iran-general/iran-expanding-effort-to-stifle-the-opposition-19117.html> (accessed March 8, 2010).

<sup>112</sup> Robert Worth, “Iran Expanding Effort to Stifle the Opposition,” *New York Times*, online ed., November 23, 2009, <http://www.iranfocus.com/en/iran-general/iran-expanding-effort-to-stifle-the-opposition-19117.html> (accessed March 8, 2010).

SOFTWARE “to describe how they will re-Islamize the educational system, purge secular influences and professors, and purify the media of western subversive ideas.”<sup>113</sup>

Iranian military officers are also adamantly campaigning for SOFTWARE. The Revolutionary Guards plan to start a news agency called “Atlas,” modeled after media outlets such as the BBC and The Associated Press. Other SOFTWARE measures already implemented are the formation of a 12-person unit to monitor the internet for “insults and the spreading of lies.” The government has also provided free home internet filtering software.<sup>114</sup>

According to Worth’s report, Ali Daraei, an official on Islamic Republic of Iran Broadcasting, revealed that 40 percent of Iranians have access to satellite television in their homes. This is an overall 100 percent increase from the previous year. Ali Daraei stated that, “the enemy no longer invests in the military to advance their goals, their primary investment is in the media war through satellite channels.”<sup>115</sup>

Since its introduction in the mid-90s, SOFTWARE has been shown to work, and has been adopted by United States adversaries. However, the United States government has yet to seriously consider or employ SOFTWARE for either operations or intelligence purposes.

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<sup>113</sup> Robert Worth, “Iran Expanding Effort to Stifle the Opposition,” *New York Times*, online ed., November 23, 2009, <http://www.iranfocus.com/en/iran-general/iran-expanding-effort-to-stifle-the-opposition-19117.html> (accessed March 8, 2010).

<sup>114</sup> Robert Worth, “Iran Expanding Effort to Stifle the Opposition,” *New York Times*, online ed., November 23, 2009, <http://www.iranfocus.com/en/iran-general/iran-expanding-effort-to-stifle-the-opposition-19117.html> (accessed March 8, 2010).

<sup>115</sup> Robert Worth, “Iran Expanding Effort to Stifle the Opposition,” *New York Times*, online ed., November 23, 2009, <http://www.iranfocus.com/en/iran-general/iran-expanding-effort-to-stifle-the-opposition-19117.html> (accessed March 8, 2010).

## SKILLS MANAGEMENT SYSTEMS FOR SPECIAL SKILLS

This portion of the conceptual framework discusses the importance to organizations of developing effective procedures for documenting and classifying employee knowledge, experience, and skills. Workers' mental dexterity is invaluable - aiding in company problem solving, creative development, and appropriate placement/advancement. The Standard Installation/Division Personnel Reporting System (SIDPERS) is the United States Army's database for personnel accounting (in both active and reserve components). SIDPERS was found to be inadequate in Chuck de Caro's search for media skilled individuals for the purposes of experimenting with his SVU concept. Therefore, an overview of skills management systems is required to more fully understand both their usefulness and complexities in the workplace.

Most businesses and corporations consider their "people," or employees, as their most valuable assets.<sup>116</sup> Each individual brings a vast scope of qualities to the workplace, including skills knowledge, training and education, work habits, motivational factors, language fluency, career aspirations, and both personal and professional experiences.<sup>117</sup> According to James Boomer's article in *Accounting Today*, "skills," "talent," and "knowledge" management can be described as:

"a process to embrace knowledge as a strategic asset to drive sustainable business advantage and promote a "one firm" approach to identify, capture, evaluate, enhance and share a firm's intellectual capital. In other words, it is your firm's system for capturing, managing, and re-using the knowledge that resides in

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<sup>116</sup> Jayanthi Ranjan, "Data Mining Personnel," *Computer, Networks and Communications Journal* (May 2008): 245.

<sup>117</sup> Erin White, "Theory and Practice: Skills Tracking Lets Firms Measure Bench Strength; Managers Discover Insiders With Right Stuff; Urgency as Boomers Retire," *Wall Street Journal*, February 13, 2006.



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electronic documents on your network, or, more important, the tacit knowledge that is in your employees' heads."<sup>118</sup>

To help track and access their team members' varied and unique skills, employers often use electronic "skills management systems" (or "skills databases"). A company's Human Resources department can use these databases to locate qualified, best "fitting" personnel already within their organization to fill available positions. By knowing what kind of abilities, experiences and career goals workers have, employers can also plan for future projects, knowing that they can "tap into" their staff's knowledge base. However, according to Howard Stevens, CEO of a sales performance research consulting firm, and author of the article, "Total Quality Management Now Applies to Managing Talent," "there is some belief among executives that companies consistently underutilize the talents of their people, leaving a significantly untapped talent reserve."<sup>119</sup>

### **Benefits of Skills Management Systems**

Stevens stated that, "putting the right people in the right jobs using measurable, predictable, and actionable skill sets is a key to organizational success."<sup>120</sup> It can even help managers decide which of their employees will work more effectively together on particular tasks and assignments, improving overall productivity.<sup>121</sup> Skills management systems are also favored for their ability to more properly assign employees to the most

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<sup>118</sup> James Boomer, "Finding out what knowledge management is – and isn't," *Accounting Today*, August 9-22, 2004, 22.

<sup>119</sup> Howard Stevens, "Total Quality Management Now Applies to Managing Talent," *The Journal for Quality and Participation* (2004): 17.

<sup>120</sup> Howard Stevens, "Total Quality Management Now Applies to Managing Talent," *The Journal for Quality and Participation* (2004): 17.

<sup>121</sup> Jayanthi Ranjan, "Data Mining Personnel," *Computer, Networks and Communications Journal* (2008): 245.

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suitable jobs in accordance with their “talents.” This may help avoid tasking employees with assignments that are either too simple or complex. Skills management systems can also determine what kind of specific training its employees lack, tailoring workshops for their (and the company’s) needs, instead of them being redundant and too general.<sup>122</sup>

Additionally, skills databases can assist Human Resources departments in their hiring processes by selecting qualified individuals already employed within the company. By providing a “complete inventory of strengths and weaknesses for all employees,” Human Resources can more adequately evaluate the quality of its staff’s roster.<sup>123</sup> Moreover, “internal recruitment/aligning” helps a company to avoid costs which otherwise would have been incurred by advertising job opportunities, and losing valuable work time, by sorting and auditing candidates’ applications, as well as conducting multiple interviews.<sup>124</sup> According to Erin White of the *Wall Street Journal*, the computer company Dell was seeking a sales executive to fill an important position in China, in 2005. Dell managers perused their talent database and found a sales leader within their company to fill the vacancy. This employee also manifested many of the desirable traits that Dell executives were searching for, including being adept at setting business goals, having leadership experience, and being familiar with the job location in question. White explains that “tapping into” skills databases to fill specific needs not only helps a company be more resourceful, as it did for Dell, but aids in employee career

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<sup>122</sup> Mathais Uslar and Norbert Gronau, “Integrating Knowledge Management and Human Resources via Skills Management,” *Journal of Universal Computer Science* (February 2007): 136.

<sup>123</sup> Howard Stevens, “Total Quality Management Now Applies to Managing Talent,” *The Journal for Quality and Participation* (2004):16.

<sup>124</sup> Mathais Uslar and Norbert Gronau, “Integrating Knowledge Management and Human Resources via Skills Management,” *Journal of Universal Computer Science* (February 2007): 135.

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development.<sup>125</sup> By explaining to staff members the importance of supplying information on their ability levels, employers perpetuate the notion that they are genuinely interested in their workers. Increased employee satisfaction may thus help “reduce unwanted turnover,” as well as preserve “top talent.”<sup>126</sup>

Another asset of skills management systems is that company problem/issue solving can be facilitated by including employees with sought after skills in decision making and brainstorming processes.<sup>127</sup> Yet, according to Peter Cappelli, a columnist for *Human Resources Executive Online*, only about two thirds of employers in the United States plan ahead for their “talent needs.” He explained that if a company fails to manage the skills set of its employees, it will be unprepared in the event that a problem or new project arises. A company must then “hunt around for a solution,” locate resources on the outside, and often struggle to find the best qualified people to help them out.<sup>128</sup>

### **Problems with Skills Management Systems**

Though skills management systems are undoubtedly useful, they are sometimes difficult to operationalize. Erin White of the *Wall Street Journal* stated the following limitations:

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<sup>125</sup> Erin White, “Theory and Practice: Skills Tracking Lets Firms Measure Bench Strength; Managers Discover Insiders With Right Stuff; Urgency as Boomers Retire,” *Wall Street Journal*, February 13, 2006.

<sup>126</sup> Howard Stevens, “Total Quality Management Now Applies to Managing Talent,” *The Journal for Quality and Participation* (2004):16.

<sup>127</sup> Mathais Uslar and Norbert Gronau, “Integrating Knowledge Management and Human Resources via Skills Management,” *Journal of Universal Computer Science* (February 2007): 135.

<sup>128</sup> Peter Cappelli, “The Challenge of Talent Management,” Human Resources Online, <http://www.hreonline.com/HRE/story.jsp?storyId=70640707> (accessed June 5, 2010).

“The software may identify employees whose skills and credentials suggest they are ready for management roles. But, it is harder for a program to gauge softer skills, such as whether an employee can manage other people. Although they have all the skills and training, how do you figure in the “gut-feeling” factor?”<sup>129</sup>

In another instance, White referred to a situation where a particular company encountered challenges in its implementation of a skills database. More particularly, the company lacked accountability measures (e.g., incentives) for employees to update their “profiles,” and those in leadership positions were too busy to pay attention to the quality control of the system. In essence:

“Employees were supposed to either enter their skills and proficiency levels, and managers were to review the reports. But, overworked supervisors mostly rubber-stamped employees’ accounts. People were also way overstating the amount of skills they had. As a result, the company didn’t recruit aggressively enough, ran short of key skills and had to hire consultants to complete important projects.”<sup>130</sup>

Overall, skills management systems are advantageous to those who employ them, but “only through accurate skills matching can an organization make the best use of its existing personnel and their potential.”<sup>131</sup>

### **Characteristics of an Ideal Skills Management System**

Stevens suggested that skills management systems follow a Total Quality Management (TQM) model, similar to that of the “Six Sigma” plan. Six Sigma is a “data-driven methodology for eliminating defects in organizations based on standards,

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<sup>129</sup> Erin White, “Theory and Practice: Skills Tracking Lets Firms Measure Bench Strength; Managers Discover Insiders With Right Stuff; Urgency as Boomers Retire,” *Wall Street Journal*, February 13, 2006.

<sup>130</sup> Erin White, “Theory and Practice: Skills Tracking Lets Firms Measure Bench Strength; Managers Discover Insiders With Right Stuff; Urgency as Boomers Retire,” *Wall Street Journal*, February 13, 2006.

<sup>131</sup> Howard Stevens, “Total Quality Management Now Applies to Managing Talent,” *The Journal for Quality and Participation* (2004):16.

measurements, and repeatable processes,” proven to be successful for companies worldwide in areas of productivity and cost management. The key requirement is the establishment of an accurate, systematic method of tracking and measuring skills.<sup>132</sup>

German knowledge management experts, Mathias Uslar and Norbert Gronau, provided a comprehensive outline for the development a of skills management systems in their article, “Integrating Knowledge Management and Human Resources via Skills Management.” Uslar and Gronau offered the following, detailed guidelines for ensuring talent management success at the organizational level:

Requirements regarding content

*Meaningful structuring of the data:* The skills management system must save data in a structured way so that employees can access it and enter information easily.

*Meaningful skills catalogue:* A skills “catalogue” must be carefully created and provided to all employees. Such a catalogue should include detailed descriptions of skills that are valuable to the company. The catalogue should also derive from modeled, company processes and not from job descriptions provided by the HR department (since information about day-to-day business could be omitted).

*Semantic match of skills catalogue:* The listed requirements in job vacancies should have the same categories as employees’ skills profiles.

*New competencies for the catalogue:* Employees should be allowed to submit new competency terms and categories for the overall skills catalogue.

*Necessity for a rating system:* In order for a skills management system to maximize its purposefulness, the level of an employee’s competencies/skills should be indicated using

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<sup>132</sup> Howard Stevens, “Total Quality Management Now Applies to Managing Talent,” *The Journal for Quality and Participation* (2004):15.

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a rating scale.

*Input of data:* To make certain that employees are honest when inputting their skills (and levels of expertise) into the data system, some form of audit must occur on a regular basis. The Human Resources department should create a job for whom the employee(s) in charge undertakes the supervisory role of monitoring the skills management system. Skills that are questionable, or those that need more in-depth explanations of experience (e.g., by supplying documentation of expertise; by providing references), may require attention to ensure the system's integrity.<sup>133</sup>

#### Requirements regarding technical factors

*Flexible update of the data:* Employees should be allowed to access and update their personal skills data at any time, from any place.

*Additional remarks:* Employees should provide the option to include additional comments on their areas of expertise if they feel the need to expand upon the catalogue's skill selection. This expanded information could then be searched for keywords.

*Ratings:* Employees should rate their skillfulness using a rating scale with at least five levels. An ordinal scale should also include an explanation (with examples) at each level to help employees accurately assess their skills.

*Data updates:* Employees' profiles and/or each of their inputted skills should contain a "time stamp" to indicate when the data was last updated. If data is outdated, the system's supervisory agent should contact the employee in question to assess whether the skills are

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<sup>133</sup> Mathais Uslar and Norbert Gronau, "Integrating Knowledge Management and Human Resources via Skills Management," *Journal of Universal Computer Science* (February 2007): 137.

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still relevant. Employees could also face having skills deleted from their profiles if a timely response to the inquiry does not occur.

*Complex search functions:* The system should provide a complex/advanced search function for skills.

*Simple operability and configuration:* The system will be used by both IT developers and company personnel alike. Therefore, it should offer a simple and comprehensible interface, which will require little or no training on its usage. This will apply to both to the data input and search processes.<sup>134</sup>

*System integration:* The skills management system should be integrated as effortlessly as possible into the company's environment, making it "user friendly."<sup>135</sup>

#### Requirements regarding organizational change

*Participation:* During the system's development and conception, all groups (e.g., the employees, the employers, and the system's developers) should be allowed to voice their opinions regarding their needs, and provide suggestions in regards to the system's framework. This may lead to an increased acceptance of and support for the project.

*System introduction:* The system should be developed with all parties in mind. A test or trial period for the system should occur before its official launch to ensure operability.

*Motivation for the care of the data:* The data quality is essential to the overall purpose of the system. Therefore, incentives should be created for employees to: 1) participate in

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<sup>134</sup> Mathais Uslar and Norbert Gronau, "Integrating Knowledge Management and Human Resources via Skills Management," *Journal of Universal Computer Science* (February 2007): 137.

<sup>135</sup> Mathais Uslar and Norbert Gronau, "Integrating Knowledge Management and Human Resources via Skills Management," *Journal of Universal Computer Science* (February 2007): 138.

the project; 2) ensure integrity of the data; 3) provide useful feedback on the system's functions.

*Frequency of using/updating the database:* Employees should not feel over-burdened to constantly update their information within the system. Employers could designate certain days of the year where employees would devote most or all of their time to managing their profiles.<sup>136</sup>

*Time investment:* Leaders must understand that skills management is a long-term, on-going, and continually evolving strategic measure for success within their company.<sup>137</sup>

The implementation of effective skills management systems can assist organizations in finding talent within their ranks. In contrast, the absence of an adequate skills management system can prevent organizations from creating teams to perform specific tasks. This was evident in de Caro's 1996 experiment with the SVU with the Vermont National Guard.

## COMPETITIVE INTELLIGENCE

There seems to be a lack of emphasis on literature pertaining to the SVU or any entity that analyzes adversarial video propaganda. Therefore, this thesis will examine

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<sup>136</sup> Mathais Uslar and Norbert Gronau, "Integrating Knowledge Management and Human Resources via Skills Management," *Journal of Universal Computer Science* (February 2007): 138.

<sup>137</sup> Mathais Uslar and Norbert Gronau, "Integrating Knowledge Management and Human Resources via Skills Management," *Journal of Universal Computer Science* (February 2007): 138.



the civilian business concept model of Competitive Intelligence (CI) as a way to examine the benefits of analyzing enemies' strategies.

Larry Kahaner, in his book, *Competitive Intelligence*, described competitive intelligence as the “systematic program for gathering and analyzing information about your competitors’ activities and general business trends.”<sup>138</sup> Kahaner wrote that, in 1996, only 7 percent of large American companies had their own competitive intelligence divisions.<sup>139</sup> In contrast, most major Japanese businesses have large divisions that conduct competitive intelligence. Kahaner referred to the Japanese car manufacturer Mitsubishi, and its use of competitive intelligence to emphasize his point:

“Mitsubishi has thirteen thousand employees in more than two hundred offices worldwide. They collect more than thirty thousand pieces of business and competitive information daily. This data is filtered, analyzed, and disseminated to companies within the Mitsubishi family to be used as ammunition in the ongoing global war against competitors.”<sup>140</sup>

Kahaner stated that the basic unit of any competitive intelligence system is its intelligence cycle. Kahaner claimed that most companies use the model employed by the Central Intelligence Agency (CIA).<sup>141</sup> The model’s four steps are:

- 1) Planning and Direction: Management will decide what intelligence is required.
- 2) Collection: Gathering of raw information from which intelligence will be produced. Sources include periodicals, annual reports, books, broadcasts, speeches and databases.

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<sup>138</sup> Larry Kahaner, *Competitive Intelligence* (New York, NY: Simon & Schuster, 1996), 16.

<sup>139</sup> Larry Kahaner, *Competitive Intelligence* (New York, NY: Simon & Schuster, 1996), 16.

<sup>140</sup> Larry Kahaner, *Competitive Intelligence* (New York, NY: Simon & Schuster, 1996), 17.

<sup>141</sup> Larry Kahaner, *Competitive Intelligence* (New York, NY: Simon & Schuster, 1996), 43.

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- 3) Analysis: Is the most difficult part of the cycle. Competitive intelligence analysts must look for patterns, and postulate different possible scenarios based on what has been learned.
- 4) Dissemination: Involves distributing the intelligence product to company members. During this step, analysts suggest possible courses of action.<sup>142</sup>

The Society of Competitive Intelligence Professionals (SCIP) is an organization for professionals in fields of marketing, advertising and private business. The organization, which consists of over 7000 members in 64 countries, posted the following definition of competitive intelligence on its website, which differs from Kahaner's definition:

“It is the process of monitoring the competitive environment. Competitive Intelligence enables senior managers in companies of all sizes to make informed decisions about marketing, research and development, investing tactics to long term business strategies. Effective Competitive Intelligence is a continuous process involving the legal and ethical collection of information, analysis that doesn't avoid unwelcomed conclusions, and controlled dissemination of actionable intelligence to decision makers.”<sup>143</sup>

Professor Jan Herring of the Academy of Competitive Intelligence in Cambridge, Massachusetts has won the Society of Competitive Intelligence Professionals (SCIP) highest award, the Meritorious Award for Competitive Intelligence.<sup>144</sup> Herring was also a former CIA intelligence officer, and relies on the basic intelligence process, “national security model,” as an intelligence cycle for competitive intelligence.

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<sup>142</sup> Larry Kahaner, *Competitive Intelligence* (New York, NY: Simon & Schuster, 1996), 43.

<sup>143</sup> Society of Competitive Intelligence Professionals, “What is CI,” Society of Competitive Intelligence Professionals, <http://www.scip.org/ci.html> (accessed May 4, 2010).

<sup>144</sup> Academy of Competitive Intelligence, “Faculty: Jan Herring,” Academy of Competitive Intelligence, <http://www.academyci.com/About/herring.html> (accessed June 3, 2010).

- 1) Planning and Direction: Identifying the intelligence topics and needs.
- 2) Create the Knowledge Base: Information processing and storage.
- 3) Collection: Intelligence collection and reporting.
- 4) Making the intelligence actionable and understandable: Analysis and production.
- 5) Dissemination: Disseminate the intelligence to intelligence users and decisions makers<sup>145</sup>

The “national security model” fits the SVU’s mission because the SVU concept strives to develop intelligence in support of SOFTWARE operations.<sup>146</sup>

Herring placed great emphasis on the analytical portion of his intelligence cycle. He defined intelligence analysis as “a step in the production of intelligence in which intelligence information is subjected to systematic examination in order to identify relevant facts, determine significant relationships, and derive key findings and conclusions.”<sup>147</sup> He derived this definition from his own experiences as a CIA intelligence officer, and by taking into account the definition of “intelligence analysis” by *Webster’s Dictionary*, as well as Leo Carl’s *CIA Insider’s Dictionary of U.S. and Foreign Intelligence, Counter-intelligence, and Tradecraft*.<sup>148</sup> *Webster’s Dictionary* defined intelligence analysis as “the critical examination of information to distinguish component

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<sup>145</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 13-16.

<sup>146</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 4.

<sup>147</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 13-16.

<sup>148</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 13-16.

parts and determine various interrelationships.”<sup>149</sup> Carl defined intelligence analysis using the official United States government definition: “a process in the production step of the intelligence cycle in which intelligence information is subjected to systematic examination in order to identify significant facts and derive conclusions there from.”<sup>150</sup> Herring explained that the difference between these two definitions is that the traditional dictionary begins with the whole, and in contrast, that competitive intelligence analysts begin with the parts.<sup>151</sup> This difference is very significant, as it requires a different analytical approach.<sup>152</sup> Intelligence support to a hypothetical SVU would be comprised of intelligence community talent. Therefore, it would also “begin with the parts” approach because the SVU and SOFTWARE operations would originate from the analysis of adversary propaganda, including the enemy’s target audience.

Herring also claimed that the major facet that differentiates competitive business intelligence from the IC is that competitive intelligence is intended to facilitate actions.<sup>153</sup> Herring explained that, as a CIA intelligence officer, he provided objective analytical input, and the policymakers decided whether or not they would act on his analysis.<sup>154</sup> On the other hand, in the business world, analysis does not just present assessments and

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<sup>149</sup> *Webster’s Dictionary*, 9th ed., s.v. “intelligence analysis.”

<sup>150</sup> Leo Carl, *CIA Insider’s Dictionary of U.S. and Foreign Intelligence, and Tradecraft* (Washington, DC: NIBC Press, 1996), 74.

<sup>151</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 14.

<sup>152</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 15.

<sup>153</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 14.

<sup>154</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 15.

findings - it demands that the recipients act on the intelligence.<sup>155</sup> Therefore, the intelligence cycle he recommended is intended to spur relevant actions and alternatives.<sup>156</sup> If the SVU were to adopt this framework, then the analysis would be more conducive to supporting intelligence for SOFTWARE operations.

Herring posited that, even if an organization has talented intelligence analysts, there would need to be an overarching organizational process to produce actionable intelligence.<sup>157</sup> Again, he referred to the “national security model.” If this process were properly institutionalized, it would “become a powerful source of intelligence-information for planning, strategizing, decision making, and operating the company competitively.”<sup>158</sup> Furthermore, a business that conducted competitive intelligence within the framework of the “national security model” would reap the benefits of “early warning” intelligence to keep leaders from being surprised by the competition.<sup>159</sup> Ultimately, Herring demonstrated that his preferred model, coupled with talented analysts, could produce actionable intelligence.

Moreover, Herring inferred in his article that the “analysis” step in the “national security model” is imperative for businesses that practice competitive intelligence, as it performs four essential tasks:

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<sup>155</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 15.

<sup>156</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 16.

<sup>157</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 16.

<sup>158</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 16.

<sup>159</sup> Jan Herring, “What is Intelligence Analysis?,” *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 16.

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- 1) It produces analytical intelligence for the decision maker;
- 2) It provides an objective outsider's perspective;
- 3) It guides collection, making it more efficient and effective;
- 4) It generates insightful understanding of ambiguous and ill-defined external developments relevant to the company's competitiveness and business success. Organizational processes within the context of competitive intelligence allow a business to adapt to changing external environments.<sup>160</sup>

These same benefits could be applied to the SVU as parameters of its capabilities.

These features could also be used as "selling points" to promote it.

Herring also described competitive intelligence analysis as the "brain" of the system, because it solves the problems that business leaders face.<sup>161</sup> When the answer is not collectible, analysis can:

- 1) Synthesize the bits and pieces of information collected about important external developments;
- 2) Identify key relationships, linking external developments with vital interests of the corporation;
- 3) Produce concise, understandable, and insightful intelligence designed to stimulate the appropriate managers to take action.<sup>162</sup>

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<sup>160</sup> Jan Herring, "What is Intelligence Analysis?," *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 13-16.

<sup>161</sup> Jan Herring, "What is Intelligence Analysis?," *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 13-16.

<sup>162</sup> Jan Herring, "What is Intelligence Analysis?," *Competitive Intelligence Magazine* 1, no. 2, July-September 1998, 13-16.

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These problem solving traits are reminiscent of de Caro's description of the SVU's benefits, duties and missions.<sup>163</sup>

Constantine Von Hoffman of the *Harvard Business Review* did not view competitive intelligence as a cyclical model like Kahaner and Herring. Instead, Von Hoffman explained that Competitive Intelligence can be viewed as both a process and a product.<sup>164</sup> Von Hoffman's article "Competitive Intelligence, 1999: A Primer" described the process as "the methodical acquisition, analysis and evaluation of information about competitors both known and potential."<sup>165</sup> An example of the "process" would be to have a casual conversation with a rival CEO at a business party or study a competitor's annual report that has been made public.<sup>166</sup>

Von Hoffman described the "product" as "useful information that enables managers to make informed decisions about everything from marketing and research and development to long term business strategies."<sup>167</sup> Von Hoffman further added that there is a clear delineation between "competitive intelligence" and "good competitive intelligence." She stated that "good competitive intelligence doesn't just provide data - it

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<sup>163</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 1-10.

<sup>164</sup> Constantine Von Hoffman, "Competitive Intelligence, 1999: A Primer," *Harvard Management Update/ Harvard Business Review*, 1999, 6.

<sup>165</sup> Constantine Von Hoffman, "Competitive Intelligence, 1999: A Primer," *Harvard Management Update/ Harvard Business Review*, 1999, 6.

<sup>166</sup> Constantine Von Hoffman, "Competitive Intelligence, 1999: A Primer," *Harvard Management Update/ Harvard Business Review*, 1999, 6.

<sup>167</sup> Constantine Von Hoffman, "Competitive Intelligence, 1999: A Primer," *Harvard Management Update/ Harvard Business Review*, 1999, 6.

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suggests a course of action or warns of a potential problem.”<sup>168</sup> An example of the “product” would be a competitor’s website that explains why its product is best for the customer and how its services are better than anyone else’s in the industry.<sup>169</sup>

Competitive intelligence strategies differ from those in the IC.<sup>170</sup> Whereas the civilian business industry follows civilian laws, the intelligence community, when collecting information on foreign entities, need not.<sup>171</sup> To some extent, a civilian business must be cautious because its competitive intelligence strategy may be construed as industrial espionage. Industrial espionage is the use of illegal means to gather information, such as breaking into a competitor’s office and stealing documents.<sup>172</sup>

Civilian businesses rely heavily upon the internet to gather information on their competition – a practice very similar to that which the IC uses when gathering information on adversary propaganda posted on the internet. The internet provides one of the richest sources of information for competitive intelligence analysts.<sup>173</sup> Most business analysts frequent their competitors’ websites for open source intelligence. However, according to Greg Lambert’s article, “Harnessing Free-Flowing Competitive Intelligence

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<sup>168</sup> Constantine Von Hoffman, “Competitive Intelligence, 1999: A Primer,” *Harvard Management Update/ Harvard Business Review*, 1999, 6.

<sup>169</sup> Greg Lambert, “Harnessing Free-Flowing Competitive Intelligence Through Social Media Sites,” *Law Practice: The Business of Practicing Law Journal*, Volume 35, Issue 7 (November/December 2009): 26-28.

<sup>170</sup> Greg Lambert, “Harnessing Free-Flowing Competitive Intelligence Through Social Media Sites,” *Law Practice: The Business of Practicing Law Journal*, Volume 35, Issue 7 (November/December 2009): 26-28.

<sup>171</sup> U.S. President, Executive Order 12333, “United States Intelligence Activities,” December 4, 1981, 1-3.

<sup>172</sup> Constantine Von Hoffman, “Competitive Intelligence, 1999: A Primer,” *Harvard Management Update/ Harvard Business Review*, 1999, 6.

<sup>173</sup> David Stauffer, “The Power of Competitive Intelligence,” *Harvard Management Update/ Harvard Business Review*, October 2003, 3.

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through Social Media Sites,” more competitive intelligence analysts are now running into obstacles when using the internet as their primary means. Lambert stated in his investigative article that “the information posted on traditional websites is so heavily filtered that it is ultimately of very little value.”<sup>174</sup> Hence, competitive intelligence analysts have begun using “Web 2.0” technologies.<sup>175</sup> “Web 2.0” is a term to describe websites that do not go through filtering before publication.<sup>176</sup> Examples of Web 2.0 sites are social networking sites such as FaceBook, YouTube, MySpace and Twitter.<sup>177</sup> Employees of companies are now posting opinions of their employers and their products on Web 2.0 websites. This medium expands abilities to find valuable information.<sup>178</sup> The task of participating in and analyzing Web 2.0 sites is consistent with one of the SVU’s approaches, yet it would also take it one step further than civilian oriented competitive intelligence analysis.<sup>179</sup> Ian Smith’s article, “Defensive Competitive Intelligence in a Web 2.0 Environment” presented a fictional scenario wherein an enthusiast of a company’s products created a FaceBook group to discuss and share

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<sup>174</sup> Greg Lambert, “Harnessing Free-Flowing Competitive Intelligence Through Social Media Sites,” *Law Practice: The Business of Practicing Law Journal*, Volume 35, Issue 7 (November/December 2009): 26-28.

<sup>175</sup> Greg Lambert, “Harnessing Free-Flowing Competitive Intelligence Through Social Media Sites,” *Law Practice: The Business of Practicing Law Journal*, Volume 35, Issue 7 (November/December 2009): 26.

<sup>176</sup> Tim O’Reilly, “What Is Web 2.0?,” Tim O’Reilly, <http://oreilly.com/web2/archive/what-is-web-20.html> (accessed May 5, 2010).

<sup>177</sup> Mary Madden and Susannah Fox, “Riding the Waves of Web 2.0,” Pew Internet and American Life Project, <http://www.pewinternet.org/Reports/2006/Riding-the-Waves-of-Web-20.aspx?r=1> (accessed May 5, 2010).

<sup>178</sup> Greg Lambert, “Harnessing Free-Flowing Competitive Intelligence Through Social Media Sites,” *Law Practice: The Business of Practicing Law Journal*, Volume 35, Issue 7 (November/December 2009): 26.

<sup>179</sup> Chuck de Caro, *Killing al Qaeda: The Destruction of Radical Islam Using SOFTWARE* (McLean, VA: Sea Aerospace Ground Evaluation, 2007), 1.

information. The discussion board presented an exchange amongst members regarding a product defect. The discussion thread further described how the product should be improved upon in the future. Smith recommended that the company “acknowledge that such a group exists and that it monitors the group’s activities. This entails joining the group.” In contrast, Smith also argued that it is ethically wrong to “participate in the discussion to give positive input using another identity.”<sup>180</sup>

Though the competitive intelligence arena’s rules are not applicable to the IC, there are aspects of competitive intelligence worth noting when analyzing an adversary’s/competitor’s propaganda. Though not well documented, there are many stories/examples of competitive intelligence analysis. The author interviewed three prominent professors of advertising and marketing about documented case studies on competitive intelligence. The subject matter experts were: Dr. (b) (6) of Texas Tech University, author of fourteen text books on advertising and marketing, and

(b) (6)  
Dr. (b) (6) of Southern Illinois University, author of three media textbooks and editor for the peer reviewed (b) (6); and Professor (b) (6) of Southern Illinois University, (b) (6)

These interviews are summarized in Chapter Four and are provided in their entirety in the Appendix section. All three professors stated that they have been made aware of anecdotal stories about competitive intelligence exploits, though such

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<sup>180</sup> Ian Smith, “Defensive Competitive Intelligence in a Web 2.0 Environment,” Intelligia, [http://intelligia.com/mediacenter/tools\\_for\\_thought/2009/04/30/defensive-competitive-intelligence-in-a-web-20-environment/](http://intelligia.com/mediacenter/tools_for_thought/2009/04/30/defensive-competitive-intelligence-in-a-web-20-environment/) (accessed May 5, 2010).

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stories were undocumented. Furthermore, all three affirmed that, if true, these stories would expose the “tradecraft” of competitive intelligence, making some companies fearful that their practices could be mistaken as industrial espionage. Andrew Crane, writer for the *Harvard Business Review*, and author of the article, “In the Company of Spies: When Competitive Intelligence Gathering Becomes Industrial Espionage,” described why there is a scarcity of competitive intelligence success stories.<sup>181</sup> He claimed that the victims of “good competitive intelligence” (or industrial espionage) do not want their failures to be portrayed in the public arena as it would make them look weak. Likewise, the company that benefits from its competitive intelligence wishes to continue with its “flow of information.” This can only happen if the “observed company” is oblivious. Crane aptly described this absence of success stories as “unsurprising, as the world of industrial espionage only rarely seems to make it into the public eye, and there is little incentive either for errant companies or those that have been the victim of intelligence breaches to make their problem public.”<sup>182</sup> Therefore, actual success stories are not published unless the media otherwise obtains them. What is, in fact, published is that almost every major company engages in some form of competitive intelligence activity. Moreover, the articles that do discuss the techniques of competitive intelligence focus on a myriad of different civilian marketing platforms such as product placement on supermarket shelves, release dates of product, and flaws in competitors’

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<sup>181</sup> Andrew Cane, “In the Company of Spies: When Competitive Intelligence Gathering Becomes Industrial Espionage,” *Harvard Business Review*, May 15, 2005, 2-4.

<sup>182</sup> Andrew Cane, “In the Company of Spies: When Competitive Intelligence Gathering Becomes Industrial Espionage,” *Harvard Business Review*, May 15, 2005, 2.

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products that can be exploited by propaganda.<sup>183</sup> According to (b) (6), (b) (6) and (b) (6) when analysts view television commercials or video propaganda on the internet, they are solely looking at the “message”.<sup>184</sup> They are typically not concerned with some of the technical aspects that the SVU would be looking for, such as: production value, the producers of the propaganda, and the type of equipment used to film and edit the propaganda.<sup>185</sup> There seems to be a divergence between what that the civilian market desires and what is pertinent to the IC.

### TECHNICAL ATTRIBUTES OF VIDEO PRODUCTION

The (b) (3) the DoD recognized the paucity of literature concerning the analysis of propaganda techniques, especially images. There was very little by way of IC writing on the tradecraft of video analysis. Hence, a co-sponsored project to fill in the gap in tradecraft literature, was undertaken in 2005. Under the umbrella of the (b) (3) the (b) (3) created the handbook (b) (3). This book/project brought together fourteen (b) (3) members, consisting of Hollywood directors, mass media professors, ambassadors, experts in Russian propaganda, and authors on the subject of propaganda. The focus of the book was to determine (b) (3)

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<sup>183</sup> Andrew Cane, “In the Company of Spies: When Competitive Intelligence Gathering Becomes Industrial Espionage,” *Harvard Business Review*, May 15, 2005, 2.

<sup>184</sup> (b) (6), interview by author, Alexandria, VA, May 8, 2010.

<sup>185</sup> (b) (6), interview by author, Alexandria, VA, May 6, 2010.

(b) (3) <sup>186</sup> (b) (3)

contains a detailed methodology of how to analyze and assess persuasive visual media. This is an innovative tool, especially for an intelligence analyst. An intelligence analyst within the IC is not only required to investigate the message of propaganda, but also technical attributes, as they sometimes reveal clues to adversary tactics, techniques and procedures.<sup>187</sup>

Analyzing technical attributes of television is a complex task, and it works best when using a variety of experts. The need for different perspectives from various fields is evident by examining (b) (3) co-authoring members.<sup>188</sup> The authors included: (b) (6)

[REDACTED]

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<sup>186</sup> (b) (3)

<sup>187</sup> (b) (3)

<sup>188</sup> (b) (3)



incorporates a (b) (3) with the mission of helping analysts become more visually literate of adversary propaganda.<sup>194</sup> This in turn allows the analyst to provide accurate analysis to decision makers to conduct information warfare operations.<sup>195</sup> The (b) (3) purpose, research statement, and mission are parallel to de Caro's argument for the need of the SVU.

The guiding criteria for the (b) (3) methodology overview entail:

- 1) Starting with simple categories and questions;
- 2) Addressing content, technical attributes, and why they are important;
- 3) Discerning key originator information and source authenticity to the extent possible;
- 4) Being highly oriented to United States national security and (b) (3);
- 5) Being flexible across a variety of topics, requirements, and experience levels;
- 6) Enabling comparative visual analysis over time;
- 7) Pushing analysts into new conceptual and analytical territory;
- 8) Positioning the Department of Defense (b) (3) to scale methodology.<sup>196</sup>

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<sup>194</sup>

(b) (3)

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(b) (3)

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(b) (3)

The (b) (3) proposed a methodology comprised of three stages.

They are:

- 1) Scan and Analyze: Is content-related. It asks the questions: (b) (3)  
  
This stage also examines what television production attributes are employed to enhance the message.
- 2) Classify and Compare: Concerned with establishing the (b) (3) of a video. It asks the questions: (b) (3)  
  
Discerning the key points of a video allows for creating a database of content, analysis and intelligence. This provides the IC with comparative data.
- 3) Synthesize and Up-frame: Concerned with answering the (b) (3) of the video, and its implications for national security. It also establishes the persuasiveness of the propaganda, and if it can cause the audience to act. This stage also focuses on discerning the propaganda and propagandist's intent, the target audience, the resources, and most importantly, the identity of the propagandist.<sup>197</sup>

An analyst is not required to engage in all three stages. If a video or image is simplistic in nature, then the analyst may only need to use one of the stages. More experienced analysts may not require all of the stages. Therefore, based on the analyst's

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<sup>197</sup> (b) (3)



experience, as well as the level of complexity of the image or video propaganda, the methodology may be used holistically or not.<sup>198</sup>

### **Key Television Production Attributes**

Understanding technical attributes as they pertain to adversary propaganda is imperative. De Caro argued that when the adversary films a sniper or IED attack for propaganda use, he is making a movie that incorporates sophisticated Hollywood-like images and techniques. The following examines certain technical attributes described in (b) (3). These attributes are also heavily relied upon in adversarial propaganda, primarily because of their manipulative values. Due to the range of artistic techniques present in current television production, this research only addresses the following factors: frame composition and arrangement, location choices, camera angles and points of view, and the editing techniques of cutting, sequencing, styling, and pacing.<sup>199</sup> I selected these techniques based on my experience in radio and television.

### **Composition, Camera Techniques, Shot Types, Positioning and Movement**

Composition is the art of deciding what will be captured by the camera and what will not. Simply put, it is the “what you shoot at” part of photography.<sup>200</sup> In terms of

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<sup>198</sup> (b) (3)

<sup>199</sup> The other key television production attributes include lighting, color, contrast, text and typeface, resolution, alteration and digitization, special effects, speech, music, and background noise. See Herbert Zettl, *Television Production Handbook* (New York, NY: Wadsworth Publishing, 1984) and (b) (3)

<sup>200</sup> James Booth, “Image Composition For Beginners,” *Connected Photographer Magazine*, online ed., May 2004, <http://www.connectedphotographer.com/issues/issue200411/00001426001.html> (accessed May 8, 2010).

video propaganda, what is presented to the viewer are conscious choices by the propagandist to reinforce a message.<sup>201</sup> Propagandists choose and arrange objects, people, and places in such a way that evokes emotion, and causes the viewer to have empathy for the propagandist's cause.<sup>202</sup> The (b) (3) provided an excellent fictional scenario to describe how composition can misleadingly construe the truth:

(b) (3)  
[Redacted]  
[Redacted]  
[Redacted]  
[Redacted]  
[Redacted]<sup>203</sup>

The (b) (3) also added that frame composition and location selection were a reflection of the propagandist's persona and the situation he or she may have been experiencing at the time of filming.<sup>204</sup> The (b) (3) suggested that if the adversary's propaganda was shot indoors, for example, that this may be indicative that the propagandist was (b) (3)  
[Redacted]<sup>205</sup> Conversely, if the adversary filmed propaganda outside in a public place, this may suggest (b) (3) status, and that the local populace supported what the propagandist was advocating.<sup>206</sup>

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<sup>201</sup> (b) (3)  
[Redacted]

<sup>202</sup> Herbert Zettl, *Television Production Handbook* (New York, NY: Wadsworth Publishing, 1984), 67-72.

<sup>203</sup> (b) (3)  
[Redacted]

<sup>204</sup> (b) (3)  
[Redacted]

<sup>205</sup> (b) (3)  
[Redacted]

The (b) (3) also proposed the consideration of the following questions when analyzing adversarial propaganda in regards to its frame composition:

(b) (3)  
[Redacted]  
[Redacted]  
[Redacted]  
[Redacted] 207

### Camera Angles and Points of View

Camera angles are typically executed in three essential angles: eye level (straight on angle), below eye level (low angle shots) and above eye level (high angle shots).<sup>208</sup> The angle of the camera influences the viewer and evokes certain reactions.<sup>209</sup> A common propagandist tool is to use the low angle shot to convey confidence and air of superiority over the audience.<sup>210</sup> Physically lowering the camera and shooting the actor beneath his or her eye level, so that the camera lens is tilted up, makes the actor seem larger.<sup>211</sup> In contrast, a high angle where the camera looks down at the subject conveys to the viewer that they are more powerful than the person in the video.<sup>212</sup> Therefore, as

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<sup>206</sup> (b) (3) [Redacted]  
[Redacted]

<sup>207</sup> (b) (3) [Redacted]  
[Redacted]

<sup>208</sup> Ralph Donald, Riley Maynard, and Thomas Spann, *Fundamentals of Television Production* (New York, NY: Pearson Education Incorporated, 2008), 94.

<sup>209</sup> Herbert Zettl, *Television Production Handbook* (New York, NY: Wadsworth Publishing, 1984), 105-122.

<sup>210</sup> (b) (3) [Redacted]  
[Redacted]

<sup>211</sup> Ralph Donald, Riley Maynard, and Thomas Spann, *Fundamentals of Television Production* (New York, NY: Pearson Education Incorporated, 2008), 94.

<sup>212</sup> (b) (3) [Redacted]  
[Redacted]

Professor Virginia Kidd of California State University aptly stated, the elevation of the camera (b) (3)

[REDACTED] <sup>213</sup>

Furthermore, the camera is able to do things that the human eye cannot do, such as using certain vantage points that skew and manipulate the real view. The (b) (3)

[REDACTED] pointed out in its literature that this camera technique (b) (3)

[REDACTED] <sup>214</sup> More importantly for the SVU is that it provides insight into the propagandist's belief system and what the propagandist wants his viewers to believe – this all based on camera angles. <sup>215</sup>

In addition, the propagandist's use of varying camera angles indicates his or her level of talent. <sup>216</sup> Someone with very little training or experience may shoot an entire propaganda piece with a straight angle shot, whereas someone with more experience, having attended cinematography school for example, may use myriad of angles and vantage points to elicit emotion and empathy. Being able to discern these traits may assist in indentifying the propagandist. <sup>217</sup>

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<sup>213</sup> Virginia Kidd, "To Shape and Direct the Audience's Point of View: Production Appeals," California State University, <http://www.csus.edu/indiv/k/kiddv/ProductionTechniques.htm> (accessed May 8, 2010).

<sup>214</sup> (b) (3)

<sup>215</sup> (b) (3)

<sup>216</sup> (b) (3)

<sup>217</sup> Eve Honthaner, *The Complete Film Production Handbook* (New York, NY: Focal Press, 2001), 37.

The (b) (3) suggested that intelligence analysts analyzing adversary propaganda pose the following questions in regards to camera angle usage:

(b) (3)  
[Redacted]  
[Redacted]  
[Redacted]  
[Redacted] 218  
[Redacted]

### Editing – Cuts, Sequencing, Styles, and Pace

Editing is a post-production process that begins when the camera stops filming. Very simply put, editing is an art form (and rarely a science) about the technique and practice of assembling shots into a coherent whole.<sup>219</sup> The editor/propagandist decides which parts of the raw footage will be shown in the propaganda.<sup>220</sup> By manipulating and editing segments of footage and integrating special effects and sound recordings, the adversary can change reality and warp the audiences' perception. Thus, the editor can change history to agree with their propaganda by simply keeping certain footage and discarding irrelevant scenes that do not support the message.<sup>221</sup>

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<sup>218</sup> (b) (3)  
[Redacted]

<sup>219</sup> Herbert Zettl, *Television Production Handbook* (Belmont, CA: Wadsworth Publishing Company, 1984), 308-327.

<sup>220</sup> (b) (3)  
[Redacted]

<sup>221</sup> (b) (3)  
[Redacted]

A sense of style and creativity also come into play with editing.<sup>222</sup> The way an editor edits may establish a particular style and pace that is only associated with that editor. Identifying these attributes can also aid in the identification of the propagandist. Some editors use an MTV style of editing, consisting of numerous short scenes strung together to energize the viewer.<sup>223</sup> However, if the message is complex and involves text, it is better to use slow transitions where longer periods of time remain with the same scene.<sup>224</sup> Recognizing editing style is important to the SVU as it provides the IC a means with which to track certain individuals that are never in front of the camera or that do not use credits at the end of their propaganda.

To find the (b) (3) of an editor, the (b) (3) proposed that analysts pose the following questions:

(b) (3)  
[Redacted]  
[Redacted]  
[Redacted]  
[Redacted]<sup>225</sup>

Furthermore, the (b) (3) developed a technical attributes analytical process that provides a framework to distinguish the most pertinent factors in television production in order, (b) (3)<sup>226</sup> The first step is

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<sup>222</sup> Herbert Zettl, *Television Production Handbook* (Belmont, CA: Wadsworth Publishing Company, 1984), 308-327.

<sup>223</sup> Ken Dancyer, *The Technique of Film and Video Editing* (New York, NY: Focal Press, 2006), 5-22.

<sup>224</sup> (b) (3)  
[Redacted]

<sup>225</sup> (b) (3)  
[Redacted]

<sup>226</sup> (b) (3)  
[Redacted]

to determine, (b) (3) <sup>227</sup> The intelligence analyst must use his or her discretion in determining relevancy. The (b) (3) <sup>227</sup> further suggested that analysts employ a (b) (3) approach when watching and interpreting videos. The initial step in the process entails watching the content in its entirety, then watching it without sound, then listening to the sound by itself, and then re-viewing several times. The second step requires the analyst to review the description of each attribute and to outline how they are employed for persuasive effect. The third step requires the analyst to decipher how the attributes are manifested in the propaganda, how they propagate its persuasiveness, and if the attributes reveal anything about the originator. The fourth and final step is the integration and culmination stage, in which the analyst determines how all of the technical attributes come together. Ultimately, the analyst must seek to find similarities with other videos.<sup>228</sup>

### THE HOLLYWOOD MEDIA STAFF RIDE

In February 2005, de Caro organized the Hollywood Media Staff Ride. The attendees included representatives from the National Defense University (NDU), the Joint Information Operations Warfare Center (JIOWC), and the Joint Forces Staff College Commandant and his Aide de Camp.<sup>229</sup> The purpose of the staff ride was to

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<sup>227</sup> (b) (3)

<sup>228</sup> (b) (3)

<sup>229</sup> Lieutenant Colonel (b) (6), "Hollywood Media Staff Ride," PowerPoint presentation for Lieutenant General Michael Dunn on key points of the Hollywood Media Staff Ride, February 2005.

study “information warfare for profit” by observing how a highly successful television show was made. “Information warfare for profit” is the practice of analyzing the television target audience and producing entertainment for the audience’s needs. The show in question was *JAG*, a legal drama by Belisarius Productions, that initially aired on NBC and then on CBS for ten years.<sup>230</sup> In total, 227 episodes were produced and viewed in over 100 countries. Reruns of *JAG* are still broadcast on the USA Network channel.<sup>231</sup>

The Hollywood Media Staff Ride’s mission was to determine whether the DoD information operations community could apply Hollywood’s concept of “information warfare for profit” to “information warfare for national security.”<sup>232</sup> Lieutenant Colonel (b) (6) documented the eight day trip in a PowerPoint presentation that encapsulated the pertinent points of the staff ride. He also wrote a letter to Lieutenant General Michael Dunn, then-President of NDU, explaining why the military needed to adopt the practices of Hollywood. The following highlights some of the key lessons learned in support of the implementation of the SVU.

The staff ride members had full access to the concept planning meetings for *JAG*.<sup>233</sup> A concept meeting occurs when all key members, including the director, assistant directors, and technical personnel, meet with the script writers and discuss the plots for upcoming shows. More importantly, the staff ride members had complete

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<sup>230</sup> Allison Weiner, “Naval Gazing, CBS’ *JAG* pulls rank, recruiting patriotic viewers,” *Entertainment Weekly*, online ed., November 9, 2001, <http://www.ew.com/ew/article/0,,253598,00.html> (accessed May 10, 2010).

<sup>231</sup> IMDB, “*JAG*,” IMDB, <http://www.imdb.com/title/tt0112022/> (accessed May 11, 2010).

<sup>232</sup> Lieutenant Colonel (b) (6), “Hollywood Media Staff Ride,” PowerPoint presentation for Lieutenant General Michael Dunn on key points of the Hollywood Media Staff Ride, February 2005.

<sup>233</sup> Lieutenant Colonel (b) (6), “Hollywood Media Staff Ride,” PowerPoint presentation for Lieutenant General Michael Dunn on key points of the Hollywood Media Staff Ride, February 2005.



access to the pre/mid/and post production meetings. During production meetings, the script is taken apart scene by scene in an effort to identify all of the associated items of each scene (e.g., props, locations, actors, costumes, special effects and visual effects).<sup>234</sup> Production meeting members also create schedules to dictate when and where individuals and items are required to be at.<sup>235</sup>

Five key lessons were learned from the staff ride, all of which advocated the SVU's immediate implementation. First, success in information warfare requires a general "increase in effort."<sup>236</sup> This increase in effort demands that the United States Government retire concepts designed for the Cold War, and adopt a plan for the global information environment. It also suggested that funding be raised to "recruit or leverage talent, buy time, produce or acquire product, and get the message into as many markets around the globe as it takes to succeed."<sup>237</sup> Hollywood is very successful because it invests "hundreds or thousands of people and multiple millions of dollars – per media channel, per product, per market niche, per desired effect."<sup>238</sup> Unfortunately, United States leaders do not place the same emphasis on money and talent as does Hollywood.

Second, it was argued that the United States' information warfare strategy must have access to the right kind of media talent. The DoD did not have a strong mass media

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<sup>234</sup> Herbert Zettl, *Television Production Handbook* (New York, NY: Wadsworth Publishing, 1984), 468-496.

<sup>235</sup> Herbert Zettl, *Television Production Handbook* (New York, NY: Wadsworth Publishing, 1984), 468-496.

<sup>236</sup> Lieutenant Colonel (b) (6), "Hollywood Media Staff Ride," PowerPoint presentation for Lieutenant General Michael Dunn on key points of the Hollywood Media Staff Ride, February 2005.

<sup>237</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: "Hollywood Media Staff Ride," April 11, 2005.

<sup>238</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: "Hollywood Media Staff Ride," April 11, 2005.

force on par with Hollywood. Hence, the United States could not conduct SOFTWARE efficiently as it does not “recruit, train, promote or retain the depth and breadth of vision, talent, and experience necessary to successfully compete in the global market-place of ideas via television – the most pervasive global media.”<sup>239</sup> Hollywood production studios understand that to produce a top-notch product, they must employ hundreds of qualified personnel. These talented individuals must be led by skilled producers with many years of television production experience. The letter stated that, “if we cannot or will not invest the necessary time and treasure to “grow our own,” the DoD must find ways to acquire or leverage this existing talent, rather than try to compete in the labor market for similar people.”<sup>240</sup> The letter suggested several ways to draw audio/video professionals into the military: a) create a reserve unit based in Hollywood with an SVU oriented mission; b) offer direct commissions of entertainment industry leaders; c) place media skilled individuals on a retainer and bring them into the SVU fold when needed.<sup>241</sup> Furthermore, most senior media executives could be directly commissioned as generals to ensure that they could amply represent their views with other senior leaders.<sup>242</sup>

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<sup>239</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

<sup>240</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

<sup>241</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

<sup>242</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

Third, the entertainment industry conducts detailed research of its target audiences so it can create products to fulfill viewer needs.<sup>243</sup> Hollywood production studios spend millions on marketing, research and public relations to be one step ahead of the viewing audience, to fulfill their entertainment desires, and to ensure one's message is noticed.<sup>244</sup> The DoD must remove burdensome bureaucracy and eliminate centralized controls so that United States information operations are more agile and can counter the adversary's propaganda at will.<sup>245</sup>

Fourth, there is a vast difference between the amount of funds invested by the entertainment industry for programming and marketing and how much is allocated by the United States Government for information operations. This disparity is evident when observing the budget for *JAG*. The members of the staff ride discovered that "*JAG* budgets \$3 million per episode. Twenty-two episodes per year equal approximately 17 hours of finished video product for around \$66 million dollars annually."<sup>246</sup>

Fifth, the DoD requires a team of officers educated "in the art and science of Information Operations and Influence to generate a bench of "Executive Producers" capable of envisioning a ten-year or more effort (strategic vision), plan the entire affair,

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<sup>243</sup> Global Market Research Information Network, "Entertainment Industry Market Research Report," Global Market Research Information Network, <http://www.electronics-ca.com/products/Entertainment-Industry-Market-Research-Report.html> (accessed May 10, 2010).

<sup>244</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: "Hollywood Media Staff Ride," April 11, 2005.

<sup>245</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: "Hollywood Media Staff Ride," April 11, 2005.

<sup>246</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: "Hollywood Media Staff Ride," April 11, 2005.

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and yet have the expertise to direct the finest details of execution if necessary.”<sup>247</sup>

Unfortunately, the Officer Education System does not train its officers to be able to produce or direct on the same level or caliber as a “Don Belisario” production. The DoD’s approach has predominantly focused on achieving tactical information operations effects by rapidly assembling and assigning units. If the Hollywood industry functioned this way, its products would be considered deficient and unsatisfactory.<sup>248</sup> The author of the letter therefore concluded that a Center for Strategic Information Studies should be established. The Center would conduct research on strategic communications, as well as develop curricula in the strategic uses of the information environment.<sup>249</sup>

In all, the Hollywood Media Staff Ride demonstrated that the weapon of television was not being utilized to its fullest potential by the DoD and the IC. This suggests that the SVU has the potential of becoming a part of America’s “arsenal” of weapons of television as described by Dr. Daniel T. Kuehl of the National Defense University.<sup>250</sup>

## GAPS IN THE CONCEPTUAL FRAMEWORK

This conceptual framework established, a) concepts of SOFTWARE and the SOFTWARE Virtual Unit; b) a possible model for skills managements systems for special

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<sup>247</sup> Lieutenant Colonel (b) (6), letter to Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

<sup>248</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

<sup>249</sup> Lieutenant Colonel (b) (6), letter for Lieutenant General Michael Dunn, subject: “Hollywood Media Staff Ride,” April 11, 2005.

<sup>250</sup> Using television as a “weapon” was first suggested by the late Edward R. Murrow in 1951.

skills; c) principles of competitive intelligence and how some civilian business' analytical tools can be applied to the SVU; d) technical attributes of video production that United States adversaries may use; e) the Hollywood Media Staff Ride conducted by NDU, JIOWC and the Joint Forces Staff College representatives that provided insight on how Hollywood performs information operations.

Though this conceptual framework highlighted different aspects pertaining to the research question, there remain gaps. Certain areas appeared to have had limited or no previous research for me to cite. My readings and interviews with three mass media professors confirmed that there is a lack of emphasis on documented case studies describing the analytical work of competitive intelligence analysts.

More importantly, there is a scarcity of opinions and perceptions of the SVU concept (or any entities similar to it). Other than the (b) (3) there appears to be no real consideration of the power of television (or video propaganda), much less how to directly counter and defeat it.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

This chapter describes the research design of this thesis, including the data collection and analysis processes, the reliability and validity controls for the research, and its limitations.

#### **RESEARCH DESIGN**

As described in Chapter 1, the focus of this thesis was to examine the extent of which the Intelligence Community (IC) could access and organize reserve and National Guard service members with mass media skills to analyze adversary propaganda. The hypothesis posited that the IC can access National Guard and reserve component service members to create SVUs to analyze adversary propaganda.

To explore the aforementioned topic, I conducted a phenomenological study to determine the feasibility of the SVU. The phenomenological analysis was executed by conducting a series of first-person and focus group interviews with individuals from human resources, information warfare, military education and psychological operations communities. The “phenomenon” in this case was the participants’ perceptions and understandings of various aspects that would determine the IC’s plausibility of creating the SVU.

## DATA COLLECTION METHODOLOGY

### Overview of the Phenomenological Method

This research was deliberately qualitative, providing only descriptive data.<sup>251</sup> In their textbook, *Principles in Research Design in the Social Sciences*, Lindsay Patterson and Frank Bechhofer explained that when research data is gathered from “interview material, on documentary evidence and on the results of a survey, our confidence in findings is likely to be greatly increased.”<sup>252</sup> Moreover, according to Elaine Hampton and Sylvia Peregrino in *Research for Mutual Understanding in Diverse Communities*, by providing sufficient descriptive data, “the reader will draw from the study important information that may inform other practices.”<sup>253</sup> Ultimately, I chose a phenomenological research method because the exploration of SOFTWARE and the SVU is in its infancy. There is minimal research conducted on these two topics, other than what de Caro has already written. Therefore, a phenomenological method allowed for more breadth and depth in the data mining process.

### Selection of Interview Participants

This phenomenological study identified participants that had knowledge in one the following four fields: a) SOFTWARE/propaganda/psychological operations; b) human resources; c) military education and; d) competitive intelligence. Fortunately, most

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<sup>251</sup> Clark Moustakas, *Phenomenological Research Methods* (Thousand Oaks, CA: Sage Publications, 1994), 1-22.

<sup>252</sup> Clark Moustakas, *Phenomenological Research Methods* (Thousand Oaks, CA: Sage Publications, 1994), 1-22.

<sup>253</sup> Elaine Hampton and Sylvia Peregrino, *Research for Mutual Understanding in Diverse Communities* (Dubuque, Iowa: Kendall/Hunt Publishing Company, 2007), 4.

participants were knowledgeable about other aspects in fields other than the one they had initially been selected for. For example, members of the psychological operations focus groups had ample experience with propaganda and human resources matters.

Furthermore, once the concept of the SVU was explained, even participants that did not have an information warfare background were able to provide opinions that were tailored to the topic of whether or not the SVU was feasible.

A complete list of participants/organizations interviewed for this thesis is shown below:

- Chuck de Caro, DoD consultant and creator of the SVU concept
- (b) (6) White Canvas Group
- 7th Psychological Operations Group (focus group), Moffett Air Force Base, CA
- 4th Psychological Operations Group (focus group), Fort Bragg, NC
- Colonel (b) (6), Chief of Reserves Manning Office, DIA
- (b) (6), Human Resources Specialist, DIA
- (b) (6)  
United States Army Intelligence Center of Excellence, Fort Huachuca, AZ
- (b) (6), Chief for Learning and Technical Division, Joint Military Intelligence Training Center, DIA
- Dr. (b) (6), Professor at Southern Illinois University and author of media related textbooks
- Professor (b) (6), Professor at Southern Illinois University and author of media related textbooks



- Dr. (b) (6), retired Professor at Texas Tech and author of media related textbooks

### **Research Procedures**

The interviews were relatively unstructured to enable the participants and I to work together to deliberate the plausibility of the SVU. Despite the informal nature of the interviews, some key questions/topics emerged and were addressed by each participant. In an effort to make the participants feel relaxed and free to express themselves about the subject matter, I used open ended questions. The interviewees discussed their daily activities, their scope of duties, and most importantly, their insights into how the SVU would be composed and how it would conduct analysis. Some of the participants' candid facial expressions in response to certain questions also led to the authenticating of the interview data - revelations that would have never surfaced through more traditional and impersonal research means, such as a questionnaire. The interviews almost always resulted in a monologue from the participant's perspective. I listened and took extensive field notes of the dialog. The field notes were then analyzed and summarized.

### **DATA ANALYSIS METHODOLOGY**

Paul Leedy and Jeanne Ellis Ormrod explained in their research handbook, *Practical Research, Planning and Design*, that, "the task during the data analysis is to

identify common themes in people’s description of their experiences.”<sup>254</sup> To find these themes, I followed John Creswell’s steps of identifying and grouping relevant statements, seeking multiple perspectives, and combining the information to create “an overall description of the phenomenon as people typically experience it.”<sup>255</sup>

Eleven different sources (individuals or groups) were utilized to help answer the thesis question and to test the hypothesis. The use of multiple sources of data (e.g., triangulation) aided in creating validity and reliability in the findings.<sup>256</sup> I sought convergence of ideas. Ideally, the individual facts/findings would all point to a single conclusion.<sup>257</sup>

### **Control for Bias**

I acknowledged that bias was present and could have influenced the findings of the research.<sup>258</sup> Some of the biases that were present are as follows:

- 1) Chuck de Caro has a vested interest in SOFTWARE, SVU, Television Intelligence (TVINT) and the value of Cinematic Analysis (CINAN), because he either coined these terms or created these concepts. Hence, the author was required to examine

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<sup>254</sup> Paul D. Leedy and Jeanne Ellis Ormrod, *Practical Research, Planning and Design*, 9th ed. (Upper Saddle River, NJ: Pearson Education, 2010), 142.

<sup>255</sup> J.W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Traditions* (Thousand Oaks, CA: Sage, 2006), 142-158.

<sup>256</sup> Frank Bechhofer and Lindsay Patterson, *Principles of Research Design in the Social Sciences* (New York, NY: Routledge, 2000), 58.

<sup>257</sup> Paul D. Leedy and Jeanne Ellis Ormrod, *Practical Research, Planning and Design*, 9th ed. (Upper Saddle River, NJ: Pearson Education, 2010), 141.

<sup>258</sup> Paul D. Leedy and Jeanne Ellis Ormrod, *Practical Research, Planning and Design*, 9th ed. (Upper Saddle River, NJ: Pearson Education, 2010), 216.

the data that de Caro provided with the understanding that the topic was of great significance to him.

- 2) The 4th Psychological Operations Group and the 7th Psychological Operations Group seldom work with civilian media skilled individuals. Therefore, they did not have much confidence in the idea of a SVU being comprised of media skilled individuals. They would rather staff the SVU with service members having completed four or more tours in Iraq and Afghanistan, anthropologists, and/or native speakers/linguists from the region of interest.
- 3) I was employed in the radio and television industry for eight years prior to entering military service. My media experience allowed me to fully understand and relate to de Caro's approach to information warfare, more so than individuals whom have not worked in both professions.

The measure employed to control the biases of de Caro, and the focus group participants from the psychological operations community, required me to meticulously scrutinize the types of questions I would ask to prompt discussions. The participants' answers were highly subject to be influenced by their level of education, occupations, or interests in the topic. Moreover, to control my personal biases towards de Caro's concept, I employed the research concept of "reflexivity."<sup>259</sup> "Reflexivity", according to Gretchen Rossman and Sharon Rallis' book, *Learning in the Field: An Introduction to Qualitative Research*, referred to introspection of one's identity in reference to the

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<sup>259</sup> Elaine Hampton and Sylvia Peregrino, *Research for Mutual Understanding in Diverse Communities* (Dubuque, Iowa: Kendall/Hunt Publishing Company, 2007), 69.

research they are conducting.<sup>260</sup> For example, just because I came from a media and military background, did not necessarily mean that I could not learn from the input and experience of others on the topic of information warfare.<sup>261</sup> I had to acknowledge the participants' areas of expertise and personal experiences. I was also cautious to fully consider and reflect the true meaning of their points of view.<sup>262</sup>

All of these measures ensured authenticity and accuracy in the interpretation of participants' input. The suspension of any preconceived notions was difficult, as I understood the importance and potential of information operations. However, it was imperative to allow the participants to voice their opinions unreservedly.

It should also be noted that de Caro is one of the two readers on this thesis' committee. He therefore had direct input on my writings in regards to the SVU before its submission, but did not influence the advancement of the conclusions.

## RESEARCH LIMITATIONS

Five factors contributed to the limitations of this study. First, due to severe weather conditions and airline cancellations, one of the scheduled in-person interviews in Los Angeles with Major (b) (6), Company Commander of the 306th Psychological Operations Company, was cancelled, without the possibility of rescheduling to a later date. Major (b) (6) was also willing to conduct an extensive tour

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<sup>260</sup> Gretchen Rossman and Sharon Rallis, *Learning in the Field: An Introduction to Qualitative Research* (Thousand Oaks, CA: Sage Publications, 1998), 26-112.

<sup>261</sup> Elaine Hampton and Sylvia Peregrino, *Research for Mutual Understanding in Diverse Communities* (Dubuque, Iowa: Kendall/Hunt Publishing Company, 2007), 69.

<sup>262</sup> Gretchen Rossman and Sharon Rallis, *Learning in the Field: An Introduction to Qualitative Research* (Thousand Oaks, CA: Sage Publications, 1998), 26-112.

of his unit's operations - a tour that would have added another perspective and additional insight to how psychological operation units conduct information warfare.

Second, de Caro is the original creator of the SVU. This was limiting to my research as no one else manifested the same level of knowledge as did he on this concept.

Third, de Caro had independently planned and scheduled an SVU experiment for late Summer 2010. The results of this test could not be included in the research, due to conflicting schedules. This research was therefore concluded prior to the planned SVU experiment.

Fourth, due to the time constraints surrounding this thesis, no alternative Human Resources management database experiments or actual "data-calls" producing persons with requisite skills were conducted.

Fifth, though there are many Human Resources sections within the IC, I only interviewed the Reserves Manning Office at the DIA and the DIA Human Resources Department for civilian employees.

## CHAPTER FOUR

### FINDINGS

This chapter discusses the results of my study. At the end of this chapter, there is a summary of common themes. Judgments formed from these findings will be discussed in Chapter Five: Conclusions and Recommendations.

**Chuck de Caro**  
**Creator of the SVU concept, President of Sea Aerospace Ground Evaluations,**  
**Chief Executive Officer of the AEROBUREAU Corporation,**  
**Information Warfare Analyst**

**Three telephone interviews conducted November 5, 2009, December 8, 2009, and February 1, 2010;**  
**Lecture on SOFTWARE conducted at the National Defense Intelligence College, December 8, 2009.**

**Edited transcripts at Appendices A, B, C, and D**

#### **Biography**

Chuck de Caro is the President of SEA AEROSPACE GROUND EVALUATIONS (SAGE) Corporation, a non-for-profit, tax-exempted, educational foundation designed to assist the United States government in transitioning to information age capabilities. De Caro is also the founder and Chief Executive Officer of the AEROBUREAU Corporation. This team has designed, built and flown the world's first flying news-center in a four engine Lockheed Electra airliner. De Caro is also a former CNN Special Assignments correspondent who specialized in combat reporting from Nicaragua, Grenada and Surinam. He has been a technical advisor to television shows such as *Hard Copy*, *Sightings*, *Encounters*, *Quantum Leap*, *JAG*, and *NCIS*. He is

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also an active member of the Screen Actors Guild. He served with the 20th Special Forces Group (Airborne), speaks Spanish and Italian, and is an experienced parachutist. Moreover, de Caro is a regular lecturer on information warfare at the National Defense University, and the National Defense Intelligence College. He is the author of the *SOFTWARE Handbook*, *Gulf War Strategic Psychological Operations (TV) Study*, and contributing author of the books, *Cyberwar: Security, Strategy and Conflict in the Information Age*, *Cyberwar 2.0: Myths, Mysteries and Reality*, and *Cyberwar 3.0: Human Factors in Information Operations and Future Conflict*. His current work-in-progress is entitled *Killing al Qaeda: Destruction of Radical Islam Via SOFTWARE*.

### **Summary**

The following summary recapitulates the three telephone interviews with Chuck de Caro that took place November 5, 2009, December 8, 2009, and February 1, 2010 respectively. It also reviews his class presentation as a guest speaker at the National Defense Intelligence College on December 8, 2009. The interviews are extensive and highly detailed because de Caro has lived a colorful life, and his style of conveying his concepts and thoughts are illustrative and thought provoking. Hence, my interviews with de Caro covered numerous topics associated with SOFTWARE, the SVU concept, information warfare and how strategic operations should be conducted, though not always in any particular order.

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## **SOFTWARE**

De Caro defined SOFTWARE as the hostile use of global television (GTV) to shape another society's will by changing its view of reality. He stated that the United States Government, military and intelligence community (IC) must adopt this concept because the nature of war is changing – a change, according to de Caro, caused by global television (GTV). De Caro used the term GTV to describe the electronic dissemination of motion pictures via “televise” means, including internet, broadcast television and all new media. GTV is powerful because it transfers information to video illiterates – most people believe anything that they view on television. Simply put, the best way to disseminate a message that everyone can understand is through the perception of images. Additionally, de Caro believed that the arrival of GTV has replaced the fine line between diplomacy and warfare, with a large gray zone where the wills of societies can be bent without necessarily resorting to full-scale warfare.

De Caro often referred to Osama bin Laden as an adversary that has approached the information frontier as his main battle. To prove his point, de Caro quoted an intercepted letter from bin Laden to Taliban chief Mullah Omar that stated that bin Laden is placing 90 percent of his effort on information warfare. De Caro argued that this key message revealed that America is fighting the wrong war with al Qaeda. He strongly suggested that the United States' refusal to adopt SOFTWARE as their main strategy may help explain why, after eight years of trying to kill bin Laden and al Qaeda, the United States military has failed. De Caro criticized the United States' insistence on using Cold War legacy systems and the backwards simplistic approach in fighting an asymmetric enemy who has adapted his operations to the infosphere. He stated that Bin Laden is a



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virtual guerilla whose area of operations is global and four dimensional. Thus, he fights on all elemental fronts - air, land, sea, and information. Bin Laden has also used GTV to greatly magnify the size and scope of his attacks and to create an international cult following based on the amplification of his alleged charisma.

De Caro also mentioned that the United States military operates in a transparent environment because anyone that has access to television uplink, microsat or direct broadcast satellite (DBS) has instantaneous global coverage. If our adversaries have instantaneous global coverage, they are thus a political entity as a result of their audience. GTV provides the emerging powers of low cost, high quality, real-time intelligence on most United States government operations. De Caro explained that our adversaries can discern most United States' military operations by watching television news channels and gathering information on the internet.

De Caro claimed that United States' adversaries are paying great attention to the technical attributes of television production. Hence, if the enemy's propaganda has elements of being produced by media skilled individuals, then the analysis of adversary propaganda must be conducted by analysts that are well versed in television production attributes. De Caro explained that the IC and active duty military do not have enough analysts skilled in this area. Therefore, the solution lies with National Guard and reserve service members who possess media analytical skills due to their civilian occupations in the media field.

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## **SOFTWARE Virtual Unit**

To propel his idea of adding the fourth dimension, the infosphere, to the United States' current military strategy, de Caro proposed the creation of the SOFTWARE Virtual Unit (SVU). De Caro explained that the SVU would be comprised of civilians and/or reservists with career long leadership skills in film and television production, multi-lingual software companies, and marketing and advertising. This team would plan and conduct information operations from the Office of the Secretary of Defense. Their mission would entail:

- 1) Researching how GTV could be used against adversaries of the United States;
- 2) Investigating how GTV could resolve conflicts that involve genocide;
- 3) Studying the impact of GTV on operations-other-than-war (OOTW), including peace keeping operations;
- 4) Examining how GTV could dissolve alliances between belligerent virtual nations;
- 5) Developing doctrine and contingency plans for SOFTWARE in political-military operations;
- 6) Implementing proactive counter propaganda measures that pertain to GTV;
- 7) Integrating Cyberwar methods into the United States military structure and strategies;

De Caro explained that members of the SVU will be selected based on the following criteria: media experience, personality, and "intellectual velocity". Media experience not only pertains to occupations relevant to the television and movie production industry, but also to those in the marketing, advertising, and software

development realms. De Caro stated that the “ideal” SVU member would be self organized - able to view a problem, analyze it, and come up with several solutions.

De Caro further described the SVU as being composed of three teams. Each team would have eight members for a total of twenty-four individuals. Furthermore, each team would have eight overlapping specialties: writer, cinema photographer, light technician, sound technician, editor, post production supervisor, dissemination executive and marketing executive. All three teams would analyze the same adversary propaganda for the purpose of intelligence support for SOFTWARE operations.

In addition, de Caro outlined SOFTWARE’s six principles that represent the methodical steps, tactics and fundamentals that the SVU would implement when fighting an adversary in the infosphere battleground:

Counterpropaganda: Assesses the adversary’s propaganda target audience; creates and disseminates propaganda to the same audience, by improving the technical attributes and telegenics so that the viewer can relate to it easier than the adversary’s propaganda.

Counterprogramming: The tactic of broadcasting the complete opposite of an adversary’s programming, with the goal of denying the adversary of market share.

Saturation: The utilization of large scale budgets to out-buy and out-broadcast an adversary. The adversary should be “out broadcasted” by a ratio of three to one.

Seduction: The utilization of commercial counter-demographic techniques to break the effectiveness of enemy broadcasts upon a specific demographic.

Special Means: The use of grey propaganda, black propaganda, novelistic tactics and stratagems to break the enemy's influence upon a given demographic.

Integration: The most important principle, according to de Caro. It implies the coordination of all SOFTWARE methodologies so as to have maximum impact on all aspects of a target audience. This is of tremendous importance to the United States because it currently has no integrated information warfare effort at the strategic level.

### **Experimenting with the SVU**

In 1996, de Caro was contracted by the DoD to determine the viability of a SOFTWARE Red Team in the Vermont Army and Air Force National Guard for use in future national level war games. His experimental SVU was thus trained to conduct information-based operations to fight the Blue Force (U.S. Forces) and frustrate the Commander in Chief (CinC) level strategies during the exercises. The operational structure of the SVU in this instance combined civilian media and military skills to produce new doctrinal concepts for military operations in an information-rich environment. The results were extremely successful. Surprisingly, even in the tiny demographics of the Vermont Air and Army Guard, sufficient personnel were available to establish a SOFTWARE unit that could analyze adversary propaganda. De Caro further explained that if he were given more time and funding for the experimental SVU exercises, that he could have developed his unit into one that could actually develop its own propaganda and counter-propaganda.

Moreover, in October 2008, de Caro coordinated with the Idaho National Guard leadership to create an SVU to examine the feasibility and effectiveness of using National

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Guard personnel to conduct forensic cinematic, telegenic, and tele-technical analyses of al Qaeda visual media. The outcomes of this study were also successful as de Caro was capable of finding service members with the requisite media skills and creative outlooks to analyze adversary propaganda. De Caro claimed that this second success presented a way ahead for creating an SVU organization with the aim of producing Television Intelligence (TVINT). TVINT is the process of discerning the technical attributes, messages, and propagandist goals of the GTV production. The other significant outcome of this exercise exemplified, once again, that the selected reserve and Guard personnel required little or no training in the analysis of adversary propaganda. They simply received direction and guidance from de Caro. De Caro strongly advocated that his successes in experimenting with his concept are indicative that SVU units could not only be cost effective, but also produce intelligence outputs in near real time. These SOFTWAR units, in turn, could aid in the creation of Television Countermeasures (TVCM) to negate or reduce the efficacy of threat video propaganda campaigns.

Ultimately, de Caro did find service members with media skills, or at least had the potential to learn the media skills, to analyze adversary propaganda. The next stage in de Caro's SVU research is to conduct the SVU exercise in another location to demonstrate, once again, that reservists and National Guard personnel indeed have the ability to analyze adversary propaganda to provide intelligence support for SOFTWAR operations.

### **Analyzing Adversary Propaganda**

On December 8, 2009, de Caro presented an unclassified brief at NDIC, demonstrating how poorly the United States military produces propaganda for public

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consumption, yet how well its adversaries understand and employ the technical attributes of film making. As examples to support his arguments, de Caro presented videos downloaded from the internet, which can be viewed on YouTube.com and BaghdadSniper.com. De Caro often refers to these videos in his presentations as they clearly demonstrate the United States military's inadequacies and its enemy's proficiencies in regards to SOFTWARE. These same videos were also used during the 2008 Idaho SVU experimental exercise.

The first film displayed was a "trophy video" from the United States Army's 25th Combat Aviation Battalion. In the helicopter strike video, the target action was always center of frame, center of cross hairs, and center of target. The quality was poor because the camera was shaking, and the images were often blurry. It also seemed to be void of emotion. In all, the footage was not designed for visceral effect - its main purpose was to document the event. The second film was another United States propaganda video, but this time featured an American sniper, that was either Special Forces, Navy Seal or Blackwater. Simply put, the footage presented a sniper shooting. Initially, the viewer did not know what the sniper was shooting at, as the footage was focused on the sniper rather than on the target. However, based on the audio, the viewer soon learned that the sniper was seeking leadership targets. The sniper was very methodical and undisturbed as he killed enemy personnel at an average range of 1000 meters. De Caro explained to the audience that since the video focused solely on the sniper for an entire hour, that he edited the tape so as to finally display the target. The video was not very exciting and generated no noticeable emotions from the viewer. Fundamentally, de Caro explained that the cinematic styles of both the Apache Helicopter strike video and the sniper video

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were poor propaganda tools. He further added that the camera was a by-product of the weapon, and that it was simply there to record.

In contrast to the aforementioned films, de Caro showed the audience a second set of videos produced by al Qaeda. The first one consisted of an amalgamation of several professionally filmed videos of improvised explosive device (IED) attacks on United States military vehicles. In this video, the transition from one IED to the next was flawless, because each attack was filmed in the same manner. The overall production was also bursting with color, and is fully lit as the targets are down-sun. The action was intimate and personal because the enemy cameraman was less than 150 meters from the IED explosion. The filming was steady as the camera was on a tripod. More importantly, though, the cameraman was experienced enough to point the camera to a vertical mark perpendicular to the line of travel of the target vehicle. The target vehicle, in turn, was always centered in the bottom third of the camera frame. De Caro stated that these production attributes coalesced to produce a professional piece of propaganda designed to elicit an emotion.

The second video was equally provocative and disturbing, as it displayed American soldiers being killed at close range. It was also highly alarming because in many instances the viewer could discern the victims' facial features. De Caro suggested that the snipers in the videos were merely 150 meters away, based on his assessment that "off the shelf" cameras have a maximum of 15 mechanical magnification power. De Caro also added that the snipers were more concerned about making a movie than killing American soldiers, as was evident by the attention to detail by the cameramen, and the fact that other nearby soldiers were not targeted. De Caro further pointed out that, unlike

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American snipers who seek targets in leadership positions, al Qaeda snipers search for the closest soldiers to their camera.

Overall, de Caro stated that these videos demonstrated that our adversaries are using kinetic operations to support their information warfare, whereas the United States military uses information warfare to support kinetic operations.

### **Key Points**

- SOFTWAR is the hostile use of global television to shape another society's will by changing its view of reality.
- The United States Government, military and IC must adopt SOFTWAR because the nature of war is changing due to global television (GTV). GTV is powerful, because it transfers information to video illiterates – a pertinent factor as most people believe anything that they view on television.
- The arrival of GTV can manipulate the wills of societies without necessarily resorting to full-scale warfare.
- United States' refusal to adopt SOFTWAR as their main strategy may help explain why it has failed at eliminating bin Laden and al Qaeda.
- Bin Laden has approached the information frontier as his main battle. He has used GTV to greatly magnify the size and scope of his attacks.
- The United States military must be doctrinally guided by an integrated information warfare plan with kinetic means in support, as opposed to the current plan where information warfare is in the background.



- The SVU mission would entail: researching how GTV could be used against adversaries; investigating how GTV could resolve conflicts that involve genocide; studying the impact of GTV on OOTW, including peace keeping operations; examining how GTV could dissolve alliances between belligerent virtual nations; developing doctrine and contingency plans for SOFTWAR in political-military operations; implementing proactive counter propaganda measures that pertain to GTV; integrating Cyberwar methods into the United States military structure and strategies.
- The SVU members would be selected based on media experience and personality.
- The SVU would be composed of three teams. Each team would have eight members for a total of twenty-four individuals. Furthermore, each team would have eight overlapping specialties: writer, cinema photographer, light technician, sound technician, editor, post production supervisor, dissemination executive and marketing executive. All three teams would analyze the same adversary propaganda for the purpose of intelligence support for SOFTWAR operations.
- De Caro successfully conducted an SVU experiment with the Vermont Army and Air Force National Guard, in 1996. The Vermont Air and Army Guard had sufficient, qualified personnel to establish a SOFTWAR unit that could analyze adversary propaganda.
- In 2008, de Caro created an SVU using Idaho National Guard personnel to conduct analyses of al Qaeda visual media. This experiment proved to be successful as de Caro was capable of finding service members with the requisite media skills and creative outlooks to analyze adversary propaganda. De Caro

claimed that this second success presented a way ahead for creating an SVU with the aim of producing Television Intelligence (TVINT).

- Al Qaeda is using kinetic operations to support its information warfare, whereas the United States military uses information warfare to support kinetic operations.

Full details of the interviews and lecture are located at the back of this thesis in Appendices A, B, C, and D.

(b) (6)

, White Canvas Group

**Interview, Alexandria, VA, December 8, 2009**

**Edited transcript at Appendix E**

### **Biography**

(b) (6) at White Canvas Group. His firm provides alternative and disruptive consulting services and innovative prototyping solutions to the government and private clients.<sup>263</sup> (b) (6) could not provide specific details on what he does in his profession due to the nature of his work, other than that he works mainly in online strategic communications. He stated, however, that there are several other business lines the company operates. The White Canvas Group's website, [www.WhiteCanvasGroup.com](http://www.WhiteCanvasGroup.com), provides very general descriptions of its mission. His company recently independently funded and conducted an intensive study of adversarial use of the internet, which received heavy accolades from senior United States' policy makers, members of Congress, and senior military leaders. Prior to joining White Canvas Group, (b) (6) was an Arabic linguist and counterterrorism analyst. He also served as an Arabic Cryptologic Technician Interpretive for the United States Navy. His views expressed here are his personal opinions, and in no way reflect official United States government or White Canvas Group company sentiment.

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<sup>263</sup> White Canvas Group, "White Canvas Group", White Canvas Group, <http://whitecanvasgroup.com/index.html> (accessed May 26, 2010)

## Summary

(b) (6) agreed with de Caro that there should be an element like the SVU to analyze adversary propaganda for intelligence support for SOFTWARE operations. He additionally concurred with de Caro in that the same individuals that analyze the adversary propaganda must be in charge of countering it. However, these were the only aspects regarding de Caro's concept with which (b) (6) agreed. The following summary primarily annotates (b) (6) issues with de Caro's concept and composition of the SVU.

(b) (6) experience with propaganda is extensive, though he could not reveal the specifics due to operational security (OPSEC). Additionally, (b) (6) stated that the majority of the online propaganda that he has analyzed was in the form of web 2.0. Web 2.0 websites allow for interactive information sharing. Examples of web 2.0 websites are web-based communities, social-networking sites, blogs, and video-sharing sites such as MySpace, YouTube, and Facebook. (b) (6) claimed that web 2.0 sites allow America's adversaries to interact with each other and act as channels for recruitment because they allow for potential recruits to converse with adversaries in online dialogues or through bulletin board-like websites.

(b) (6) perceived the SVU as being designed for strategic communication and information warfare at a level that he was not accustomed to. (b) (6) experience dictates that he would not surround himself solely with media skilled individuals to analyze adversarial online propaganda if they do not understand the language and culture. He would, however, rather work with linguists with marketing skills. (b) (6) placed more value on linguistics than any other skill. His extensive experience on the frontlines of information warfare has led him to believe that a message must be authentically and

literally understood (i.e., the target language in general, any regional language variations or language nuances/meanings, and the language's culture) before any further analytical work can be done. He therefore considered media skilled individuals in the SVU a luxury.

(b) (6) further stated that if the SVU conducted its mission within an operation cell in the Office of the Secretary of Defense, as suggested by de Caro, that it should be half comprised of linguists and half of media skilled individuals. If, however, the SVU were to function at a similar level as the one he has worked in, it should consist of linguists who speak one or more of the following: Arabic, French, Pashto, Urdu, Turkish, Farsi/Dari, Indonesian, German and Russian. It should also consist of an information technician (IT)/ security computer penetration tester; a video editor; a government manager, and an operations manager.

(b) (6) argued that most of the propaganda that is posted on the internet by United States' adversaries looks "low budget." He did not agree with de Caro that there is a pressing need for media skilled individuals to analyze adversary propaganda when its quality is predominately amateurish. He also deemed that those with media skills from the Hollywood industry would be repulsed at what they would see when analyzing adversarial propaganda, and that their inclination would be to overdo the production. He speculated that those who work in the media industry are accustomed to certain levels of feedback (e.g., ratings, market shares, product sales due to advertising). Feedback from intelligence analysis is not as prevalent. For example, when analysts in the intelligence field investigate adversarial propaganda for clues or emergent themes, and then present the analysis to their superiors or commanding officers, the analysts may or may not

receive feedback on the accuracy of their assessments. This may be due to the classification level of the information, and/or operation security (OPSEC).

(b) (6) suggested that most media skilled individuals were accustomed to being compensated at or around Hollywood pay standards, and that those types of pay scales were orders of magnitude higher than those in the IC or military.

(b) (6) stated that analyzing adversarial messages about America and its deployed forces should be just as important as finding information on tactics and high-valued individuals. He argued that by analyzing the adversary's messages, the United States could more effectively counter negative propaganda, which is at root of the jihadi appeal.

### **Key Points**

- The SVU positioned within the Office of the Secretary of Defense should be comprised of media skilled individuals and linguists with marketing skills. The eight key linguistic areas should include Arabic, French, Pashto, Urdu, Turkish, Farsi/Dari, Indonesian, German and Russian.
- Adversary propaganda must be authentically and literally understood before any analytical work can be done.
- Most online propaganda is in the form of web 2.0. Web 2.0 websites allow for interactive information sharing. Examples of web 2.0 websites are MySpace, YouTube, and Twitter. Web 2.0 sites allow America's adversaries to interact with each other. These sites also act as channels for recruitment because they

allow for potential recruits to converse with adversaries in online dialogues or through bulletin board-like websites.

- United States adversaries’ propaganda, posted on the internet, looks “low budget.”
- The analysis of adversary propaganda to discern what the adversary is saying and portraying about America and its deployed forces is extremely pertinent to information warfare. This type of analysis should not be overshadowed by analysis solely aimed at locating high valued individuals and other tactical information.

Full details of the interview are at the back of this thesis in Appendix E.

**7th Psychological Operations Group (7thPOG), Moffett Air Force Base, California,  
Focus Group, February 10, 2010**

**Focus Group Members:**

(b) (6);  
Lieutenant Colonel (b) (6), Deputy Commander for Operations;  
Major (b) (6), S3 Operations

**Edited transcript at Appendix F**

**Summary**

The focus group was comprised of the 7th Psychological Operations Group (7thPOG) key leaders: (b) (6); Lieutenant Colonel (b) (6) Deputy Commander for Operations; and Major (b) (6), S3 Operations.

The members of the focus group recognized the need for an entity like the SVU, because the United States' adversaries are using information warfare. They claimed that the SVU could further the development of information warfare strategies within the United States' military design.

However, the focus group disagreed with de Caro's composition of the SVU, suggesting that it be comprised of individuals having experience living amongst the target audience of the adversary's propaganda, native speakers of the target audience language, and anthropologists. The focus group members did not believe that media skilled individuals could analyze adversary propaganda as well as those that they recommended. In essence, they considered it imperative that analysts understand the language and customs of the adversary's target audience, and placed a higher value on discerning messages and cultural meanings than on television production attributes.



The focus group proposed that analysts performing analyses on adversary propaganda ask the following questions:

- 1) What is the adversary's message?
- 2) Who is the target audience?
- 3) What do they hope the target audience will do after viewing their propaganda?
- 4) Who sent the message?
- 5) What can we learn about the adversary?
- 6) How can we counter the adversary's message?

The focus group also played several videos for me that 7th Psychological Operations Group had produced for a Middle Eastern audience. The video productions were of high quality. The videos showcased actors from the region, carefully crafted editing, script with a clear message, as well as adequate lighting and background music. Based on my experience working in the radio and television industry, 7th Psychological Operations Group's videos were on par with production products from Hollywood.

The focus group further claimed that the reserves and National Guard service components did not have an abundance of media skilled individuals. Their logic for this assessment was that most creatively inclined, media skilled individuals do not gravitate towards the military lifestyle. Therefore, the focus group believed that the SVU cannot be comprised of reservists and guardsmen with media skilled occupations. In contrast, they did think that reservists and Guardsman could be trained to effectively employ these skills.

Moreover, the focus group asserted that to attract individuals with certain skills into the reserves or National Guard requires that recruiting campaigns customize their messages for the target demographic, as well as conduct the campaigns in areas where those demographics are heavily populated. Furthermore, a new reserve or National Guard unit would have to be established in the locale of the target demographic.

In all, the focus group did not have faith that the National Guard and reserve's databases were conducive to finding media skilled individuals. They claimed that the database's drop down window for selecting occupations did not list media occupations. They also added that it is not mandatory for service members to update their information in the database. Thus, the only time an administrator proactively registers a Soldier's information is when he or she initially enters military service.

### **Key Points**

- The SVU could further the development of information warfare strategies within the United States' military design.
- The SVU should include individuals that have lived amongst the adversary's propaganda target audience, native speakers of the target audience's language, and anthropologists. Media skilled individuals would not be adept at analyzing adversary propaganda as well as these individuals.
- 7th Psychological Operations Group's video productions are of high quality and are on par with production products from Hollywood.
- The reserves and National Guard service components do not have an abundance of individuals with media skilled occupations. Therefore, the SVU could not be

easily comprised of reservists and guardsmen with media skilled occupations.

However, reservists and Guardsman could be trained to effectively employ these skills.

- The National Guard and the reserve's databases do not track individuals with media skilled occupations or "special skills".
- The DoD must customize its reserves and National Guard recruiting campaigns to attract individuals with sought after skills. It must also conduct its campaigns in areas where desired demographics are abundantly found. Moreover, a new reserve or National Guard unit would have to be established in the locale of the target demographic.

Full details of the focus group are located at the back of this thesis in Appendix F.

**4th Psychological Operations Group (4th POG), Fort Bragg, North Carolina  
Focus Group, February 17, 2010**

**Focus Group Members:**

**Captain (b) (6), S2 Intelligence Officer;  
Sergeant First Class (b) (6), Detachment Non-Commissioned Officer;  
(b) (6), Strategic Studies Detachment Adviser**

**Edited transcript at Appendix G**

**Summary**

The focus group members' personal experience serving in Iraq and Afghanistan indicated that psychological and information operations were "force multipliers," and invaluable to the fight. They indicated that the SVU would help organize, guide and direct all psychological operations and information operations units within the military's structure. However, it disagreed with the concept that the SVU be comprised of reservists and National Guard personnel with mass media skills.

The focus group suggested that the SVU's staff include the following members: First, active duty service members having served multiple tours in Iraq and Afghanistan. Soldiers with extensive experience in these countries are cognizant of the cultural dynamics of war, and have first hand, direct experience on how their wars are fought. The focus group also emphasized that the SVU's active duty staff needn't be predominantly Officers. It also added that experienced soldiers, many of whom contemplate leaving the service because of exhausting, reoccurring deployments, could be retained if given the opportunity to work, state-side, for the SVU unit. Second, the focus group advocated that the SVU also have anthropologists on its team. Anthropologists' highly specialized knowledge of other cultures' beliefs and lifestyles, would help the SVU more accurately assess adversary propaganda, distinguish key

messages, avoid “mirror imaging”, and properly align counter propaganda to the target audience’s ways of thinking. Third, the focus group stated that the SVU should employ native speaker linguists from the locations of interest. Such individuals are imperative to the overall analysis of the verbiage and messages within propaganda.

In essence, the focus group asserted that media skilled individuals would be superfluous to propaganda analyses. It stressed that anyone could be taught media skills, to varying degrees. It did, nevertheless, agree that such skills would be useful in the creation of counter-propaganda.

Furthermore, when discussing the issue of the reserves’ and National Guards’ personnel databases, the focus group stated that their systems were out-dated, and did not include the option to enter a service member’s “special skills” (i.e., media skills). It also stated that service members were not required to provide their areas of knowledge - many choosing to ignore this section of their “profile” so as to avoid being selected for tasks associated with their skills.

The focus group also lacked confidence that there were sufficient members within the reserves and National Guard with mass media experience. In addition, it insisted that in order to attract them to and retain them within the service that they would have to be compensated at or above what their skills are paid in the civilian world.

### **Key Points**

- The SVU would benefit the IC by providing an overarching administration for information warfare at the strategic level.
- The SVU should be comprised of: active duty soldiers with multiple tours and experience in Iraq and Afghanistan, anthropologists, and native speaker linguists.

- Individuals with media skilled occupations are superfluous to the analysis of adversary propaganda. Any service member can be taught media skills, to varying degrees. However, media skills would be useful in the creation of counter-propaganda.
- The National Guard and the reserve's databases do not track individuals with media skilled occupations or "special skills".
- The DoD must customize its reserves and National Guard recruiting campaigns to attract individuals with sought after skills. It must also conduct its campaigns in areas where desired demographics are abundantly found. Moreover, a new reserve or National Guard unit would have to be established in the locale of the target demographic.

Full details of the focus group are located at the back of this thesis in Appendix G.

**Colonel (b) (6),  
Chief of Reserves Manning Office at the Defense Intelligence Agency**

**Interview, June 3, 2010**

**Edited transcript in Appendix H**

### **Summary**

Colonel (b) (6) remarked that each branch's reserve component had its own personnel database, and, that these databases did not annotate service member's "special skills."

Colonel (b) (6) also mentioned that it was not mandatory for service members to include their special skills in the databases, as per privacy regulations, and that many individuals opted to disregard submitting their unique talents so as to not be selected for tasks or deployments based on that knowledge. Colonel (b) (6) therefore suggested that the DoD, and the branches in question, seek out individuals with desired skills through advertisements on DoD-related websites, such as "Army Knowledge Online (AKO)".

Finally, Colonel (b) (6) stated that when searching for service members with special skills, that there should always be an emphasis on evaluating the validity and extent of one's skills. Third party involvement would be required in order to ensure reliability of the information. Ultimately, Colonel (b) (6) did not believe that the researcher's hypothesis would be supported by the content of the reserves' and National Guard's personnel databases.

### **Key Points**

- Each branch's reserve component has its respective personnel database.
- The reserves' and National Guard's databases do not annotate service members' "special skills."
- Service members are not required to reveal their special skills. Many avoid sharing such information so as to avoid being selected for tasks or deployments based on their knowledge.
- In order to locate personnel with special skills, the DoD can advertise via the internet on military-related websites.
- A third party should be involved to monitor and evaluate the accuracy of special skills entries in the database.
- The content of the reserves' and National Guard's personnel databases does not support the researcher's hypothesis.

Full details of the interview are located at the back of this thesis in Appendix H.



(b) (6)

## **Human Resources Specialist for the Human Resources Department at Defense Intelligence Agency**

**Interview, July 28, 2010**

### **Edited transcript at Appendix I**

#### **Summary**

(b) (6) stated that the Defense Intelligence Agency's Human Resources database did not annotate the skills and talents of its employees. She also claimed that it was not mandatory for employees to include their skills or talents.

(b) (6) explained that advertising must be conducted in an effort to find individuals with unique skills or talents. She further added that if a database were to be developed with the aim of tracking employees' skills, that there would also have to be an entity that audited the information.

#### **Key Points**

- The Defense Intelligence Agency's (DIA) Human Resources database (EZ HR) does not annotate the "special skills" of its employees.
- DIA's employees are not required to share their skills on EZ HR.
- The only way to locate employees with special skills within DIA is through advertising.
- An auditing system would be required to ensure the validity of inputted data if a "skills" database were to be developed.

Full details of the interview are located at the back of this thesis in Appendix I.

(b) (6)

**United States Army Intelligence Center of Excellence, Fort Huachuca, AZ**

**Telephone Interview, June 7, 2010**

**Edited transcript at Appendix J**

### **Summary**

(b) (6) indicated that television intelligence and cinematic analysis were not part of the United States Army Intelligence Center of Excellence in Fort Huachuca, Arizona's curriculum. She further stated that she was not aware of any such training within the military.

The United States Army Intelligence Center of Excellence is a component of United States Army Training and Doctrine Command (TRADOC). It is the U.S. Army's premiere educational institute to instruct military intelligence to the Army enlisted soldiers, warrant officers, and commissioned officers. Once an individual graduates from the Intelligence Center of Excellence, they become a member of the Military Intelligence Corps.

### **Key Points**

- Television intelligence and cinematic analysis are not taught at the United States Army Intelligence Center of Excellence in Fort Huachuca, Arizona.
- (b) (6) was not aware of any television intelligence and cinematic analysis training within the military.

Full details of the interview are located at the back of this thesis in Appendix J.

**(b) (6)**, Chief for Learning and Technical Division,  
Joint Military Intelligence Training Center (JMITC), Defense Intelligence Agency

**Interview, July 28, 2010**

**Edited transcript at Appendix K**

### **Summary**

**(b) (6)** indicated that television intelligence and cinematic analysis were not part of the Joint Military Intelligence Training Center (JMITC) curriculum. She further stated that she was not aware of any such training within the military. She also went through the JMITC's catalog of courses with me to ensure that there are no courses related to television intelligence.

JMITC provides intelligence training for DIA, the Unified Commands, the Military Services, Department of Defense components and other Federal agencies. Students can complete intelligence oriented courses at JMITC by in residence, mobile training teams (MTT), and JMITC adjunct instructor.

### **Key Points**

- Television intelligence and cinematic analysis are not taught at the Joint Military Intelligence College.
- **(b) (6)** was not aware of any television intelligence and cinematic analysis training within the military.

Full details of the interview are located at the back of this thesis in Appendix K.

Dr. (b) (6)  
Professor at Southern Illinois University and Radio Announcer for over 20 years

Telephone interview May 5, 2010

Edited transcripts at Appendix L

### Biography

From 1998 to 2004, Dr. (b) (6), was a professor of mine at Southern Illinois University (SIU) while I pursued a Bachelor and Master of Arts in radio and television. (b) (6)

(b) (6) also has more than 20 years of professional media experience as a radio announcer and producer, and has authored three books: (b) (6)

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### Summary

The telephone interview with (b) (6) was conducted May 5, 2010. Throughout the interview, (b) (6) relied on her radio announcer career experience to answer the questions pertaining to competitive intelligence analysis. She explained that most radio

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<sup>264</sup> Southern Illinois University, "(b) (6)," Southern Illinois University, (b) (6) (accessed May 13, 2010).

<sup>265</sup> (b) (6)  
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stations employed a salesperson or an intern to listen to competitor radio stations. The salespeople who worked at the same station as she routinely observed other radio stations' advertising campaigns for their clients. In an effort to "steal" competitors' clients, the station's salespeople created "spec ads," which were designed to attract potential advertising customers.

(b) (6) explained that she had never encountered publications that documented the successes of competitive intelligence analysts. This paucity of literature stemmed from two reasons: First, as someone who has worked in radio stations for over 20 years, she stated that the competition for clients between competing radio stations was fierce as there could be numerous radio stations in one major market. A typical major market also has many different genres of radio (adult contemporary, rock, talk, sports, worship, news and country). Therefore, most radio sales people conduct some form of competitive intelligence operations against a range of competitors. No one ever admits to these practices, because competitive intelligence strategies would be compromised. Second, (b) (6) stated that radio stations that have lost clients to competitors' competitive intelligence efforts wish to not advertise their failures to the public.

(b) (6) believed that one of the best ways to conduct competitive intelligence in the retail industry was to use a "secret shopper." In the context of competitive intelligence, a secret shopper is an individual hired by a business sent to a competitor's retail store to evaluate its employees, customer service, and business strategy.

(b) (6) further discussed that if she were conducting research about SOFTWARE and the SVU, that she would not have examined competitive intelligence. Though she acknowledged that the civilian business world provided the relevant strategy of

competitive intelligence as a way to showcase the benefits of analyzing enemies' strategies, she argued that it would have been more beneficial to research Middle Eastern media advertising campaigns. (b) (6) also suggested that this type of research would have provided insight into how Middle Eastern radio stations, television stations or marketing firms approach propaganda in their countries. She postulated that there was a possibility that United States' adversaries conducted propaganda in a similar fashion as businesses in the region. (b) (6) also proposed that I review the 2008 Obama campaign. Obama's propaganda team juxtaposed him in a very favorable light regardless of John McCain's political message or propaganda.

(b) (6) was undoubtedly intrigued by the SVU concept yet disagreed with de Caro's philosophy that the propaganda that the SVU would produce and disseminate be on par with Hollywood produced television shows. She believed that propaganda presented to United States' adversaries must look "low budget" and have no hint of its American based production. If viewers suspect its American origins, they may recognize it as propaganda and reject it.

### **Key Points**

- Radio stations use their sales force to conduct competitive intelligence analysis.
- The lack of literature on competitive intelligence "success stories" stems from two reasons: First, if successful competitive intelligence stories were published, then competitive intelligence strategies would be compromised. Second, radio stations that have lost clients to competitors' competitive intelligence efforts wish to not advertise their failures to the public.

- The best way to conduct competitive intelligence in the retail industry is to use a “secret shopper.”
- Propaganda presented to United States adversaries must look “low budget” and have no hint of its American based production. If viewers suspect its American origins, they may recognize it as propaganda and reject it.

Full details of the interview are located at the back of this thesis in Appendix L.

(b) (6)  
**Professor at Southern Illinois University, Chief Executive Officer of (b) (6)**  
**and author of two mass media textbooks**

**Telephone interview, May 8, 2010**  
**Email correspondence, May 11, 2010**

**Edited transcripts at Appendices M and N**

### **Biography**

From 1998 to 2004, Professor (b) (6) was a professor of mine at Southern Illinois University (SIU) while I pursued a Bachelor and Master of Arts in radio and television. (b) (6) taught media sales and management, and was the (b) (6).<sup>266</sup> Additionally, he has 25 years of real world and professional experience in the radio and television private sector. (b) (6) media career began with The Tribune Company in Chicago, and managed ABC and NBC network affiliates, as well as the Turner-Farrar Television Group. He is the business adviser to sixteen media companies worldwide, and was the producer and executive producer of over 50 television shows.<sup>267</sup> He is the author of (b) (6)

(b) (6).<sup>268</sup> (b) (6) is also the founder

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<sup>266</sup> Southern Illinois University, *Graduate Catalog 2007-2008, Mass Communications and Media Arts* (Carbondale, IL: Southern Illinois University, 2007), 270.

<sup>267</sup> (b) (6)

<sup>268</sup> Greenwood Publishing Group, "Civic Discourse in the Middle East and Digital Age Communications," Greenwood Publishing Group, <http://www.greenwood.com/catalog/AB4728.aspx> (accessed May 12, 2010).



and Chief Executive Officer of (b) (6)

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### Summary

The interview with (b) (6) was conducted in two parts. The first was conducted over the telephone on May 8, 2010, and the second via email correspondence on May 11, 2010. Email was used in the latter interview as (b) (6) wanted several days to ponder over some of the questions that were asked during the initial interview. (b) (6) also used the email interview format to elaborate on some of the answers he had provided during the first interview.

(b) (6) believed that the following three questions should be asked when analyzing a competitor's business strategy or advertising campaign: a) Does the competitor's advertising campaign work?; b) How does the competitor's advertising campaign affect another business' or product or services?; c) What should be done about this trend? (b) (6) also stated that businesses conduct competitive intelligence by researching product sales data. The most important factor when analyzing competitor's sales data is whether the numbers have greatly increased or fallen since the beginning of the advertising campaign. This increase or decrease can be depicted as a measure of market share. Market share is the percentage or proportion of the total available market or market segment that is being serviced by a company. According to (b) (6), there may be no need to conduct competitive intelligence analysis if the competition sales data numbers are significantly less than one's own. However, if the competition numbers are higher, then analyzing the

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<sup>269</sup> (b) (6)

competition's advertising may be required. In this scenario, the first response is most often a pricing response – lowering the price is frequently successful and always more cost-effective than market/audience/product research and resulting anti-competitor campaigns.

(b) (6) also advocated that all media campaigns, whether they are public relations, political, direct marketing or advertising, must choose between the affective message (emotional), or the cognitive message (factual). He also stressed that the two should never be mixed. For example, Mercedes-Benz relies on fact-based campaigns (safety and reliability), while GM Corvette advertising relies on emotional campaigns (drive a Corvette and get the “babe”).

Additionally, (b) (6) noted that he could not recall any documented success stories of a company's competitive intelligence analyses, though many anecdotal stories do circulate the private sector. Unfortunately, undocumented stories often change as they are passed on to other individuals. Such stories are proprietary, and the businesses that conduct competitive intelligence do not wish to reveal their tradecraft. As an instructor, (b) (6) teaches his students that advertising is very much a “copy-cat” business. For example, if Ford has a successful ad campaign in the Super Bowl then Chrysler Motors might say, “They used the Super Bowl this year, so let's use the Super Bowl next year!” (b) (6) explained that companies do not aspire to “counter competitor advertising,” but rather pursue product sales. In the auto business, for example, they introduce rebates or cash-back incentives.

(b) (6) ended the telephone and email correspondence by stating that my study of competitive intelligence analysis was not conducive to investigating the SOFTWARE and

SVU concepts. He therefore suggested researching others models such as political campaigns, public relations campaigns and/or direct marketing. He further recommended that I read the following books so as to focus on the models/industries that he felt were more pertinent to the research:

Frank W. Baker's *Political Campaigns and Political Advertising: A Media Literacy Guide*; Judith S. Trent's *Political Campaign Communication: Principles and Practices*  
Steven A. Sideman's *Posters, Propaganda, and Persuasion in Election Campaigns Around the World and Through History*; Henry Conserva's *Propaganda Techniques*  
Magedah Shabo's *Techniques of Propaganda and Persuasion*

### **Key Points**

- Competitive intelligence should be initiated by researching and analyzing product sales data (market shares). Competitive intelligence is not necessary if the competition's numbers are lower.
- There are no documented success stories of companies conducting competitive intelligence analysis on their competitors. Such stories are proprietary, and the businesses that conduct competitive intelligence do not want to reveal their tradecraft.

Full details of this interview and email correspondence are located at the back of this thesis in Appendices M and N.

**Dr. (b) (6)**  
**Retired Professor of Mass Media at Texas Tech and author of fourteen advertising and marketing textbooks**

**Telephone interview, May 6, 2010**

### **Biography**

Dr. (b) (6) is a retired mass media professor at Texas Tech University where he taught advertising media planning, integrated communications campaigns, administration of communications media, advertising management and account planning. He is also the author of fourteen text books on advertising and marketing, and the co-author of five mass media textbooks. Outside of academia he was a consultant for the (b) (6)

(b) (6) He also worked as a copywriter, media planner and buyer in the advertising industry.

### **Summary**

The telephone interview was conducted on May 6, 2010. (b) (6) explained that competitive intelligence conducted in civilian marketing and advertising sectors is done by inductive reasoning. He stated that competitive intelligence analysts working in the advertising and marketing industries must first look at the outcome and then trace back to strategies and objectives. Competitive intelligence analysis, therefore, must examine the competitor's advertising campaign and then assess the competitor's overall marketing strategy.

(b) (6) claimed that major companies like Proctor and Gamble, Post Cereal, and General Mills employ firms such as National Leading Advertisers (NLA) to track

their competitors' advertising campaigns. These advertising tracking firms provide their clients with a copy of the competitor's advertisement, where it was played, what time it was shown, and how many times a day it frequented the airwaves. However, advertising collecting firms do not conduct any analysis of the data. In other words, they do not answer the "so what?" questions that all intelligence analysts strive to answer.

(b) (6) discussed that major companies also conduct competitive intelligence to observe whether or not their competitors' advertising campaigns make disparaging remarks about their own company or product. This is evident in the resurgence of the marketing tactic, "comparative advertising," which compares a company's product with its competitor's. An example of this style of advertising is the advertising battle between Direct TV and Dish. The two media companies are continuously airing "comparative advertising" commercials about how their respective services exceed their competition.

It is noteworthy to mention that (b) (6) was a copywriter in Chicago before becoming a mass media professor. During that time, he noted that almost all major advertising companies researched their client's industry to discern what type of marketing campaign would succeed in the marketplace. Such research assists immensely in the process of "media buys" - the purchase of advertising space in a particular media venue. The media buy plan could be a mixture of print ads in newspapers, television commercials, billboards, and thirty second radio spots.

(b) (6) also claimed that most copywriters in advertising firms dislike using research in the development of their ads, and would rather rely upon their opinions/intuitions. He also stated that companies are not required to hire advertising

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collecting firms to conduct their competitive intelligence. A company may use a focus group, for example, as a way to generate feedback regarding their and their competitor's products. During a focus group session, members are encouraged to answer questions posed by a moderator, informally and freely.

Moreover, (b) (6) explained that certain words are associated with certain companies, for example, the word "cornflakes" with the Kellogg cereal company. All businesses must understand that certain words are often associated with certain well established companies. Caution should be used when using another company's known "words" or phrases so as to not confuse the consumer. In fact, (b) (6) stated that using another company's known words (or a variation of such words) may actually be counter-productive. If consumers hear or see the known words in a newer/altered context (as in a competitor's advertising) they may instead increase/reinforce their loyalty to the "bigger" company that introduced a particular product concept first.

(b) (6) also described how companies use competitive intelligence to determine when their competition anticipates introducing a new product, including the locations of their test markets. Once a company becomes aware of this information, they may try to sabotage the test market research process through various means. Possible tactics include: over saturating the test market with coupons to re-direct attention; greatly reducing the price of items that are similar to the test product; increasing the number of media buys in the test market to draw attention away from a competitor's advertising campaign.

(b) (6) posited that businesses conducting competitive intelligence were merely concerned with the message and not technical attributes. He also included that

“smart” businesses that conduct competitive intelligence do not publicize their exploits because it would eliminate further information from that resource. (b) (6) further warned that competitive intelligence can sometimes be perceived as industrial espionage, even if it is legally performed. He concluded by suggesting that to avoid legal nightmares, successful competitive intelligence exploits should never be published or spoken about in public forums.

### **Key Points**

- Competitive intelligence in the civilian marketing and advertising sectors is performed through inductive reasoning. The competitive intelligence analyst must first examine the competitor’s advertising campaign and then assess the competitor’s overall marketing strategy.
- Major companies hire advertising tracking firms to provide copies of competitors’ advertisements, a schedule of where they were played, the time at which they were shown, and how many times a day they were aired.
- Large North American companies also conduct competitive intelligence to observe whether or not their competitors’ advertising campaigns are making disparaging remarks about their company or products.
- Companies use competitive intelligence to determine when their competition anticipates introducing a new product, including the locations of their test markets. Once a company becomes aware of this information, it may try to sabotage the test market research process through various means. Possible tactics include: over saturating the test market with coupons to re-direct attention the

other company; greatly reducing the price of items that are similar to the test product; increasing the number of media buys in the test market to draw attention away from a competitor's advertising campaign.

- Businesses conducting competitive intelligence are only concerned with the message and not the technical attributes.
- There are no documented success stories on companies conducting competitive intelligence analysis on their competitors. Such stories are proprietary, and the businesses that conduct competitive intelligence do not want to reveal their tradecraft. Businesses that conduct competitive intelligence want to continue the flow of information about their competition, and publicizing their exploits would eliminate further information from that resource.
- Competitive intelligence can sometimes be perceived as industrial espionage, even if it is legally performed.

Full details of the interview are located at the back of this thesis in Appendix O.



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## OVERALL SUMMARY OF COMMON THEMES

Three common themes emerged from the findings, which helped to answer the research question. Each theme indicates an area of major concern to the IC, as outlined by the participants in their interviews. The themes identified from the data were:

- 1) Skills Management Systems' Inadequacies
- 2) Composition Requirements of the SVU
- 3) Television Intelligence (TVINT) Education

### **Skills Management Systems' Inadequacies**

First, all participants that provided comments regarding the IC's skills management system were unimpressed with its ability to track service members' civilian occupations and special skills. The participants generally stated that the personnel databases currently used by the United States military and IC are inadequate in the locating of service members to support an SVU. The skills management systems' software programs do not document "special skills," or proficiency levels of skills. Furthermore, participants explained that the skills management systems currently in place are "bottom driven," however, individuals are not required to share certain information (such as skills). This non-disclosure of personnel information is governed by the rules and regulations that protect the privacy of individuals. The participants also suggested that if database were ever to annotate service members' civilian occupations and special skills, that an auditing system would be required to ensure the validity of inputted data. Colonel (b) (6) [REDACTED], the Chief of Reserves Manning Office for the DIA was the most critical of all military skills management systems. He stated that the personnel databases

would not allow the IC to access Reserve and National Guard service members with media skills. In short, he stated that my hypothesis was incorrect and not feasible.

### **Composition Requirements of the SVU**

Second, the participants with backgrounds and experience in psychological operations, information warfare and propaganda all agreed with the importance of the SVU, and how it would provide an overarching administration for information warfare at the strategic level. Interestingly, however, they all disagreed with de Caro's composition of the SVU. In contrast to de Caro's conception of the SVU being composed of media skilled individuals, they strongly suggested that its members include anthropologists, native speaking linguists, and soldiers having served three or more tours in Iraq and Afghanistan. Overall, the participants viewed media skilled individuals as a luxury, as opposed to a necessity, for analyzing adversary propaganda.

### **Television Intelligence (TVINT) Education**

Third, de Caro and the participants in the education field established that there is absence of curricula aimed at teaching television intelligence and cinematic analysis for service members. Participants, such as de Caro and (b) (6) with information warfare expertise, stated that America's adversaries are very proficient in information warfare. De Caro indicates in several instances that the United States military and IC should include extensive TVINT training.

## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

This thesis sought to answer the following research question: To what extent can the intelligence community (IC) access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The research conducted for the thesis entailed a phenomenological study of Chuck de Caro's SVU concept, including a conceptual framework of related literature and suppositions, and interview responses. This chapter will discuss the final conclusions of this thesis, in conjunction with the three themes in Chapter Four's findings, and will include my suggestions for the IC, and their implications. Finally, it will provide recommendations for further study.

### CONCLUSIONS

#### **Theme #1: Skills Management Systems' Inadequacies**

The research findings of this thesis **do not** support the hypothesis, which states, "The intelligence community can access existing reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SVU context, to provide detailed and actionable intelligence to support SOFTWARE operations."

This conclusion is based on the fact that the United States military's skills management systems do not track service members' "special skills" and unconventional civilian occupations. The interviews with Colonel (b) (6) Chief of Reserves

Manning Office at DIA, and (b) (6) Human Resources Specialist for the Human Resources (HR) Department at DIA, presented findings that support this conclusion. Both of these HR subject matter experts are highly knowledgeable of the current skills management systems utilized by the DIA pertaining to their respective organizations. They state that the military personnel database and DIA's EZ HR database are not conducive to finding valuable skilled individuals, when the desired skills are not in the job description. The skills management systems for all military services are either lacking a system in which non-job-related skills can be documented, or are "bottom driven" by the individuals themselves. Subsequently, if the individual wishes to withhold information, then skills may remain undiscovered.

The HR system is hopelessly mired in the industrial age and continues to only look at job function specific skill sets. Therefore, the present skills management system in the DIA has no way to systematically discover, track or exploit other skills individuals may provide. Additionally, there is a lack of emphasis from the HR sections and/or third party entities to maintain, update and audit the databases. Therefore, the database's information could be flawed or deficient in valuable information.

I acknowledge de Caro's success in overcoming the shortcomings of the military's skills management systems. De Caro's solution consisted in contacting potential service members within the respective states of the SVU's exercises, by email, mail, fax and telephone. This approach, however, lacks practicality if the SVU were to be implemented on a large scale throughout the country. Moreover, sorting through and assessing applicants' occupational skills and proficiencies to determine their applicability to the SVU would be highly time-consuming and costly.

## **Theme #2: Composition Requirements of the SVU**

The SVU would benefit the IC as it would provide an overarching administration for information warfare at the strategic level. However, though de Caro's SVU exercise conducted with the Idaho National Guard demonstrated that military service members can conduct cinematic analysis, providing actionable television intelligence in support of SOFTWARE operations, I conclude that the SVU should not be composed solely of media skilled individuals. Based upon the findings from the interviews with (b) (6) and the psychological operations community focus groups, I conclude that an alternative SVU composition would have a stronger consideration and understanding of the target audiences' culture, values, and language. The three specific types of people that must work alongside media skilled individuals in the analysis of adversary propaganda are: anthropologists, native speaking linguists, and service members having served multiple tours in the areas under examination.

### *Anthropologists*

Anthropologists are valued for their knowledge of other countries'/peoples' cultures, including their norms, customs, lifestyles, and their religious and political beliefs. The psychological operations community already utilizes the anthropological skills of professionals in their analyses and countering of adversary propaganda. Anthropologists' education and experience can assist in discerning the indistinctive aspects of cultures. Anthropologists could therefore help the SVU team more accurately identify key cultural themes and messages within the propaganda – aspects that may be overlooked by individuals' incomplete awareness of a particular target audience's

mindset. In short, anthropologists embedded within the SVU would accurately assess adversary propaganda, distinguish key messages, avoid “mirror imaging”, and properly align counter propaganda to the target audience’s ways of thinking.

### *Native Speaking Linguists*

The information warfare message must be literally and authentically understood before any analytical work can be done. The SVU linguists should be proficient in either Arabic, French, Pashto, Urdu, Turkish, Farsi/Dari, Indonesian, German or Russian. Every language has many varying linguistic forms. Native speaking linguists know how to engage in culturally appropriate conversations, and understand how to authenticate their messages to others. These skills would allow the SVU team to analyze adversary propaganda in terms of its target language’s regional variations, its varied nuances/meanings, and its context-based linguistic social significances.

### *Service Members with Multiple Deployment Experiences*

Service members with extensive experience serving in Iraq and Afghanistan, for example, are well aware of the cultural dynamics of war. They also understand how the Iraqi and Afghani populaces perceive America’s presence within their country. Preferably, these service members would have experience working with local government officials, thus enabling them to comprehend political implications in the region. What is paramount is experience, therefore, the service members staffing the SVU could be of any rank. Furthermore, some of the United States military’s most experienced service members contemplate leaving the military because of recurring

deployments. Given the opportunity to work, state-side, for the SVU unit, these service members (and their valuable experience) might be retained.

### **Theme #3: Television Intelligence (TVINT) Education**

De Caro, (b) (6) and the psychological operations community focus groups all stated that America's adversaries are very proficient in information warfare. Furthermore, the Hollywood Media Staff Ride indicated that the military could potentially capitalize on certain media skills to assist in the analyzing and countering of adversary propaganda. However, based on the interviews with personnel from the Joint Military Intelligence Training Center and the United States Army's Intelligence Center of Excellence, there is an absence of curricula aimed at teaching television intelligence. Unless these topics are added to the appropriate curricula, service members will continue to be ignorant of the power of GTV, while America's adversaries continue to excel and adapt in the information fight.

## **RECOMMENDATIONS**

I recommend that the military services overhaul and transform their HR skills management systems to be able to discover, manage, and exploit the special skills that its members already possess. The recommended skills management system would allow HR divisions to conduct searches for necessitated skills. The skills management system database would be "universal" in that all service members, regardless of their service branch, would access, and be featured in one overarching database. Moreover, the

recommended HR system and process would no longer be “bottom-fed,” because providing information would be mandatory under the regulation of leadership and third party auditors. Rules and regulations would thus have to be amended to allow representatives to collect such information. The third party auditors would also examine all inputted data to verify the validity of the claimed skills. The overall goal: to reveal the IC’s unrecognized assets.

I also recommend that the DoD establishes a Center for Television Intelligence. The center would train service members in the art of analyzing adversary image and video propaganda, as well as how to counter adversarial messages. The curriculum would be composed of courses in scriptwriting, editing, cinematography, production planning, post production procedures, marketing and advertising. The center would establish a strong working relationship with the entertainment industry so that service members could reap the benefits of on-the-job-training (OJT) while working on a media production.

## **IMPLICATIONS**

The following section assesses the implications of changing the IC’s current skills management system so that it may discover, manage and exploit the special skills of its members. It will also address the implications of retaining its current practices.



### **Consequences of Retaining Current Skills Management Practices**

Keeping the present IC skills management system indicates that HR divisions' work procedures and daily operations would remain undisrupted. Maintaining the "status quo" also helps to avoid the usually incurred financial burdens with organizational change. However, there is also a significant cost associated with the continuation of the current IC skills management system. In accordance with the system's deficiencies, the IC would be required to fund costly advertising and defer staff attention from daily duties to interview candidates each time a "special skill" was sought.

Furthermore, the IC and DoD may avoid out-sourcing its talent needs by accessing its present pool of service members and government employees. If the recommended skills database was fruitful in its pursuit of locating "special skilled" individuals, then SVU-like entities may not be required to contract high paying, Hollywood talent for their missions.

Presently, the IC is not capitalizing on the full knowledge spectrum of its members. The DoD is not just losing out on the potential usefulness of its members' talents, but also the unique and innovative national security strategies that could be provided by SVU-like entities if personnel "special skills" were known and fully exploited. The SVU and other ground-breaking units cannot be actualized without the proper "search engines" to bring them to life.

### **Implications of Adopting a New Skills Management System**

Though I only interviewed representatives from the Reserves Manning Office and the Human Resources Department at DIA, I assess that my recommended skills

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management system would create more “jointness” across the military services, especially if the system unified all branches within its database. Special units could also be composed of members’ multiple skills and talents, regardless of which branch they belonged to. I posit that if de Caro’s search for media skills had involved the type of aforementioned database, that his teams would have been more representative of the talents across the services.

Nevertheless, overhauling the current skills management system would definitely present obstacles and adversity. First, it would require re-inputting all of the data from previous systems, across all service branches, into the new, combined database. The new database would have to be relevant to all of the branches’ “idiosyncrasies” and practices. The database would also be highly complex in its software design, thus requiring the DoD to employ several, highly qualified and experienced Information Technicians, and possibly include the involvement of large software development corporations.

Furthermore, the information provided by service members would require routine monitoring for its accuracy and authenticity. Senior leadership would be directly involved in this time consuming process, regardless if third party entities were also employed to audit the information. Additionally, senior leadership would have to demand cooperation from their subordinates to proactively help collect data, and to motivate those under their own leadership to regularly update their profiles. More importantly, the laws and regulations regarding the privacy of service members would have to be amended or changed to permit leadership to gather personal data, critical in creating units such as the SVU.

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### **Implications: SVU's Influence on Denial and Deception Strategies**

I am a student of the Denial and Deception Advance Studies Program (DDASP) at the National Defense Intelligence College, and would be remiss if I did not refer to the implications of the SVU regarding denial and deception (D&D) in this thesis.

If Chuck de Caro's SVU concept were implemented as he envisions, opportunities for D&D would also be available. Part of the SVU mission would be to detect United States adversaries' use of D&D tactics via global television (GTV), including grey and black propaganda, and then immediately engage in appropriate SOFTWARE responses. De Caro's countering strategies also involve the integrated use of white, grey and black propaganda. Ultimately, the SVU's creation of D&D products would far exceed the quality and influence of adversarial propaganda because of its ability to utilize America's extensive mass media infrastructures, and the multi-talented individuals who operate within them.

### **RECOMMENDATIONS FOR FURTHER RESEARCH**

First, the United States military and IC do not provide training in the elements of cinematic analysis (CINAN) and television intelligence (TVINT). The adversary's use of SOFTWARE and Global Television in information warfare pursuits indicates that the United States military and IC should train and educate its leaders in SOFTWARE through extensive curriculum programs in these areas. I recommend that additional research be conducted to establish the viability of developing such unique educational opportunities, as well as to determine who the students of such programs should be.

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Second, de Caro presents a strong argument for the SVU to be composed of reservists and National Guard personnel with media skills to analyze adversary propaganda. The SVU exercise conducted with the Idaho National Guard in 2008 demonstrated that military service members can conduct cinematic analysis, providing actionable television intelligence in support of SOFTWARE operations. However, based on my conclusion that the SVU be comprised not only of personnel with media skilled occupations, but also anthropologists, native speaking linguists, and active duty service members with extensive deployment experience in Iraq and Afghanistan, I suggest that further research be conducted on the development of this new SVU composition.

Third, the SVU concept is derived from the television production industry – a very different structure than the United States military. The television industry is a “maximally flattened” industry, in that each of its sections (i.e., lighting, sound, script writing or marketing) are relatively small in comparison to military staff sections. The television industry can afford to keep individual sections small because the few employees that they do have are extremely talented, have considerable experience, and are solely dedicated to the development of a single production. This type of structure is also very different from a J2 (intelligence) structure. The J2’s mission is to provide intelligence support to military operations, including indications and warning. To conduct its mission, the J2 infrastructure needs units/representatives/liasons. Since the SVU is an intelligence apparatus, it cannot exclusively plan and operate within a cell in the Office of the Secretary of Defense. It would require a larger staff - more than the 24 members originally recommended by de Caro. For the SVU to be an integrated and

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useful component in the IC, its presence would, as with intelligence, be required in every Unified Combatant Command.

Additionally, the SVU should adopt the military's joint J2 and J3 model, in which the J2 and J3 work with and support each other. Whereas the J2 focuses on intelligence, the J3 plans and directs operations. De Caro and (b) (6) repeatedly insisted that for the SVU to be productive, both analyses and counter-propaganda operations be conducted within the same cell. However, for the SVU to successfully partner with the present military model, separate "SVU J2" and "SVU J3" elements would be required in each Unified Combatant Command. This would allow the intelligence sections of the SVU to focus on analyzing adversary propaganda, while also utilizing the other intelligence discipline's (i.e., HUMINT, SIGINT, IMINT and MASINT) resources to verify and audit their assessments. The SVU's J2 analyses would then be submitted to the SVU J3's operators to produce counter propaganda. This traditional process of conducting military operations will necessitate that two separate entities exist within the SVU model: one that is solely responsible for cinematic analysis and television intelligence, and the other for conducting aggressive SOFTWARE operations.

I therefore recommend that further research be performed to determine whether the SVU should adhere to a military staff design and structure, or to the "maximally flattened" Hollywood staff model.

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## APPENDIX A

**Chuck de Caro**  
**Creator of the SVU concept, President of Sea Aerospace Ground Evaluations,**  
**Chief Executive Officer of the AEROBUREAU Corporation,**  
**Information Warfare Analyst**

**Telephone interview, November 5, 2009**

(b) (6) Hello, may I speak to Mr. Chuck de Caro?

**de Caro:** You are speaking to him, who is this?

(b) (6) : Sir, I am (b) (6) - a student of Professor (b) (6) at the National Defense Intelligence College. My thesis research concerns your concept of the SOFTWARE Virtual Unit (SVU). I would greatly appreciate it if I could ask you questions concerning SOFTWARE and the SVU. Would that be alright? I would like to add your opinions to my thesis findings?

**de Caro:** Yes, and what is your thesis question?

(b) (6) To what extent can the intelligence community (IC) access reserve and National Guard service members with mass media skills to analyze adversary propaganda?

**de Caro:** Alright, but what do you think your research is going to reveal? What is your hypothesis?

(b) (6) First, that the reserve and National Guard components have numerous service members with media skills from their civilian occupations. Second, that the Army personnel database for reservists and Guardsmen does not annotate service members' media skills. Third, that the intelligence community can access reserve and National Guard service members with mass media skills to analyze adversary propaganda.

**de Caro:** I have a feel and understanding for your thesis and I like it.

(b) (6) : Sir, I am glad, because I would like to call you periodically for the next six months and conduct quick interviews whenever I have questions. Is that alright with you?

**de Caro:** Yes, so start asking your questions.

(b) (6) Sir, I have read your articles, but I want to hear it in your own words: What is SOFTWARE?

**de Caro:** SOFTWARE is the hostile use of global television to shape another society's will by changing its view of reality. The United States Government, military and intelligence community has to change the way they do business, and quickly, because the very nature of war is changing. Global Television is the catalyst for this change. This change is occurring because of global real television (GTV).

(b) (6) What is GTV?

**de Caro:** GTV is a term to convey cinema, motion picture, television any type of social network on the net - YouTube, SlideShare, MySpace. It can also be your iPod, satellite television, terrestrial television, videotape, and CDs. Always remember - anything that can be used to show or broadcast an image is GTV. GTV is so powerful because most of the world is video illiterate. GTV provides the means to transfer information through images. Images can also elicit visceral emotion that is not always possible with text. Some things are better explained with pictures and not words. You need to read Alvin Toffler's book *War and Anti-War*.

(b) (6) Why do I need to read *War and Anti-War*? Will it help my literature review for my thesis?

**de Caro:** Maybe, but more importantly you need to read it for your own professional development. That book will emphasize that the arrival of GTV has replaced the fine line between diplomacy and warfare with a large gray zone, where the wills of societies can be bent without necessarily resorting to full-scale warfare. Do you get it? We do not have to go to war all the time if just adopted SOFTWARE as our primary weapon. Also, Toffler stated that nations make war the way they make money. We need to use this philosophy when we study bin Laden. Do you see where I am coming from? Do you see the correlation?



(b) (6) No I do not. You are going to have to spell it out for me.

**de Caro:** Osama bin Laden worked in the finance section for a construction business. He understood how to move and hide money from the tax man. He also understands the concepts of joint ventures, teaming, subcontracting, and prime contracting. So, when bin Laden wants to conduct a terrorist attack outside of the Middle East he can organize it via internet using the skills he gained as a CFO by out sourcing. But instead of outsourcing for a construction company, he is outsourcing to conduct his terrorist acts. Bin Laden could be anywhere, maybe in Afghanistan or Pakistan, but he is planning far away from the actual terrorist attack. He is pulling the terrorists via the internet from anywhere in the world. The explosives and weapons could also be brought in from a different location. The money to finance his operations could come from some place else. Once the terrorist act is conducted, the public perception is that al Qaeda is everywhere and powerful. So, since al Qaeda information operations are global then our information operations must be global too. I also think the coordinated suicide attacks by al Qaeda on 9/11 were not just an attack on America, but part of his information warfare approach. The attack was the most powerful propaganda that the U.S. has recently witnessed.

(b) (6) Why so much emphasis on SOFTWARE? Based on my readings you suggest that information warfare should be our primary weapon and kinetic means should be in support of it. Why?

**de Caro:** Because that is how our enemy fights. If bin Laden's primary weapon is information warfare then our primary weapon needs to be information warfare. Osama bin Laden has made the information frontier his main battle. As an intelligence officer you should already be cognizant about the intercepted message from bin Laden to Taliban chief Mullah Omar that says "it is obvious that the media war in this century is one of the strongest methods of struggle. In fact, its ratio may reach 90% of the total preparation for battles." This is the enemy's strategic playbook. Bin Laden also has mastered the art of manipulating the media in that "if it bleeds it leads." He uses the internet to demonstrate, distribute, and disperse intelligence and command functions. The crazy thing is that media makes him bigger than what he really is. He is using IEDs against our guys, which is really sub-tactical, but his use of GTV greatly magnifies the size and scope of his attacks. Al Jazeera makes matters worst by magnifying whatever alleged charisma he has to international cult status. It's surprising because he does not have the telegenic look. However, maybe it is the telegenic look for the Middle East.

(b) (6) What do you mean by telegenic?

**de Caro:** Who would you rather look at on BayWatch? Pamela Anderson or cattle?

(b) (6) Pamela Anderson.

**de Caro:** So now we can begin our lesson on telegenics. Those who are in the business of selling a message must adhere to telegenics. It could be about selling a product, idea,

message or certain angle of the news, but that propagandist better understand and have telegenics. Remember, GTV is about images and if you want to sell something than that image needs to be pleasing to look at. In the GTV context telegenics is having a physical appearance and presenting personal qualities that are generally judged appealing to television viewers, in other words are well-suited to be on television as a propagandist. Are you familiar with the 1960 televised Kennedy/Nixon Presidential debates?

(b) (6) Yes, but let's talk about it concerning telegenics.

**de Caro:** During the 1960 televised Kennedy/Nixon Presidential debates it was evident that Kennedy was made to be on television and Nixon had a face for radio. Nixon's makeup made him look old and pasty. He had dark circles under his eyes from not sleeping and had a fever from a knee infection. In contrast, his opponent, Kennedy, had a natural telegenic quality. Even though Nixon answered the questions a little bit better than Kennedy, most television viewers thought that Kennedy won by a landslide because of his telegenic quality. Physically, Kennedy was the epitome of what Americans think a president should look like. He was young, tall, tanned, elegant, and wore a well fitted suit. He belonged on television because he looked comfortable and relaxed as though the debate was no great feat, and to have a discussion on live television and radio suited him. But it was a different story for radio listeners. The people who listened to the "Great Debate" on their radio thought Kennedy had lost. Most radio listeners said that Nixon sounded persuasive, convincing and knew how to deal with Soviet diplomacy and federal

(b) (6) Sir, let's talk about the SVU. Please describe the SVU and its purpose.

**de Caro:** The SVU is comprised of civilian/reservists whose members have career long skills in film production, managing a multi-lingual software company, television directors, marketing and advertising CEOs. They would plan and conduct information operations from the Office of the Secretary of Defense. Their mission would be multi-faceted and it could encompass how GTV could be used against our adversaries. They would investigate how GTV could resolve conflicts. They would also study the impact of GTV on operations-other-than-war (OOTW) - that would definitely include peace keeping operations like we did in Bosnia. With the increase of non-state actors, GTV could be used to dissolve alliances that we deem dangerous. The SVU would also develop doctrine and contingencies plans for SOFTWARE in political-military operations, develop proactive counter propaganda measures, aggressively push to integrate Cyberwar methods into our archaic and near obsolete military structure and strategies, and strive to include a TO&E for a strategic communications/ information warfare/ SOFTWARE unit.

(b) (6) Now let's talk about the analytical abilities of the SVU.

**de Caro:** I have already proven that we can do that. The operational part needs to get some backing at the political level to try it. I have living human beings that I can point to that can do that.

(b) (6) Well, my thesis is about the SVU's ability to provide intelligence support for SOFTWAR operations. Professor (b) (6) told me that you experimented with the SVU concept in 1996 in Vermont and 2008 in Idaho. Can you describe what happened with both experiments?

**de Caro:** As you noted, the first time was in 1996 when I was contracted by the Department of Defense to determine the feasibility of a SOFTWAR Red Team in the Vermont Army and Air Force National Guard for use in future national level war games. Essentially, we created a team from the Vermont National Guard to be the OPFOR. However, this OPFOR was different than the usual OPFOR. This one would be trained to conduct information-based operations to frustrate the BLUFOR national and Combatant Command level strategies during the exercises. A success of this exercise for me was that we combined civilian media and military skills to produce new doctrinal concepts for military operations in the infosphere. What is really amazing is that Vermont is not the media "Mecca" like Hollywood, but it did not matter, because even in the tiny demographics of the Vermont Air and Army Guard, I was able to find sufficient personnel available to establish a SOFTWAR unit that could analyze adversary propaganda. And with further training, money and time I could have developed that unit to develop their own propaganda for the information fight against the BLUFOR.

(b) (6) So is this documented? I would like to use it in my literature review.

**de Caro:** Yes, I will send it to you. It is an executive summary of the exercise. Let's talk about the Idaho exercise. In October 2008, I coordinated with the Idaho National Guard leadership to create the SVU again. The goal this time was to examine the feasibility of using National Guard personnel to conduct forensic cinematic, telegenic, and tele-technical analysis of al Qaeda visual media. I wanted to prove that the SVU could analyze adversary propaganda, and produce television intelligence that could be garnered from it. The exercise was a success again. So I have proven twice that the SVU can be used for analytical purposes. Why don't you pursue the operational side of it?

**(b) (6)** If I did further research beyond this thesis on SOFTWARE, I would pursue the operational side of SOFTWARE, but this paper needs to be done before that one.

**de Caro:** That is absolutely correct. Did Professor **(b) (6)** talk to you about the Hollywood Media Staff ride? You go interview him on the Hollywood Media Staff Ride and how it affected his understanding of information warfare. The guys that can analyze the adversary's cinematography and productions products can do the same thing on the offensive, cause they have just done the analysis of who, what, where and how. Those same people that have done the analysis, can also counter the adversary's propaganda. You do not need two sets of people. Like me, I invented cinematic analysis and television intelligence. The analyst is the operator.

(b) (6) Alright, I do not know what the “Hollywood Media Staff Ride” is, but I will ask Professor (b) (6) about it. Could you describe scenarios where the United States missed their opportunity to use SOFTWARE, or could have used an entity like the SVU?

**de Caro:** The United States has had many missed opportunities and I discuss some of these in the CyberWar series, which you should reread again. During the United States’ build up to the first Gulf War, Saddam Hussein distributed televised propaganda against our build up and the possibility of war. This propaganda caused riots in Jordan against the United States and its alliances. Hussein’s propagandist had direct access to the Jordanians via the Jordanian government run television systems. CNN was still relatively new then and started airing Hussein’s propaganda. They did edit the propaganda, but it still caused demonstrations in Europe and the United States. The United States had not planned for Hussein’s information war. Hussein was able to disseminate his propaganda quite easily, because we were not preventing him. But, if we had had an entity like the SVU that analyzed adversary propaganda for intelligence support for SOFTWARE operations, this could have been avoided. The SVU, coupled with a proactive information warfare strategy, could have analyzed the adversary’s propaganda to establish how to effectively counter their propaganda. However, this was never done because the United States military structure is antiquated and does not have the foresight to analyze adversary propaganda and then quickly counter it.

(b) (6) : Do you have some more examples or scenarios?

**de Caro:** Yes, of course. After Desert Storm, we missed another opportunity because we could have imposed restrictions on Hussein that would have affected his information operations. Hussein was able to rebuild his forces and keep his followers in line through propaganda and fear. If we had had a military structure with analysts analyzing that propaganda, Hussein's power would have likely been diminished. But instead, Hussein was left unchecked. Hussein aggressively controlled all radio and television stations through the Ministry of Culture and Information, and perpetuated the belief that Hussein had won Desert Storm. There could have been democracy in Iraq if the United States had demanded that Hussein not have control of the media in his country. This would have allowed the Iraqis the ability to voice their opinions over their own television and radio stations. We could have helped them, but we are not organized enough for that mission. You need to remember as you write this thesis that the United States was not winning the Global War on Terrorism then, and it is not winning it now because it is not yet organized to fight in the infosphere. Our present information operations programs are working in dissonance without an overarching systematic approach. This has allowed our enemies to bring the information fight to us instead of us bringing it to them. There needs to be an entity like the SVU that analyzes adversary propaganda for the purpose of intelligence support for SOFTWARE operations.

**(b) (6)** Do you have any more examples, stories or scenarios that emphasize the need for an entity like the SVU to analyze adversary propaganda?



**De Caro:** Again, I talk about this in the *CyberWar* book series. As you know from reading that series, I was invited to Bosnia by the United Nations Office of the High Representative in 1997 to advise them on the possibilities of using SOFTWARE to help stabilize their situation. Therefore, I am well versed in the propaganda campaign that Milosevic conducted during the conflict. Milosevic's propaganda was broadcasted throughout the Balkans on Serbian state run television and radio stations. NATO did not impose restrictions upon Milosevic. The propaganda was effective and increased the Serbs' hatred towards Muslims and Croats by lying to the Serbs that violence was permissible because their so-called 'enemy' was trying to kill them. NATO and the United States finally reacted, but they reacted the wrong way. NATO and the United States destroyed some television stations, but this only served as a temporarily fix. What they should have done was counter Milosevic's propaganda by showing images of the genocide he was conducting. Just like in Iraq, we could have approached this the right way. We could have had our intelligence community analyzing the adversary's propaganda for intelligence support for SOFTWARE operations. Our analysts could have researched how messages were being disseminated via GTV, studied the television traits, and then counter with an effective propaganda campaign. But we failed again. An entity like the SVU could have helped organized that mission. We have the resources. We have the talent. We just have the wrong structure and organization.

(b) (6) Thank you for this interview. I will still call you if I have more questions.

**de Caro:** Alright goodbye.

## APPENDIX B

**Chuck de Caro**

**Creator of the SVU concept, President of Sea Aerospace Ground Evaluations,  
Chief Executive Officer of the AEROBUREAU Corporation,  
Information Warfare Analyst**

**Lecture on SOFTWARE conducted at the National Defense Intelligence College on  
December 8, 2009.**

**De Caro:** I am Chuck de Caro. How did I get here? I got into information warfare the hard way. I first attended the Air Force Academy and then I ended up in the Army as a Special Forces soldier. After my military career, I went to work for CNN, when they first started, as the first special assignment correspondence reporter. I noticed at the age of 33 years old that I could push around the government. Think about the arrogance of that. How is that possible? CNN was the only global news network and I controlled the pixels. I had the ability to control society's will through images. The first time I went to Nicaragua, the rebel organization had organized a meeting for me with their leader "Commander Zero." However, NBC reporter, Bonnie Anderson, told the powers that be that I was working for the CIA. That could have gotten me killed. But her plan worked. I was about to be road blocked from doing my interview but I told the rebel logistician that you don't get NBC here but you do get CNN, and if I do not get my exclusive interview, I will up link my story about your secret location, that I had previously promised that I would not reveal. So I got to do my interview.

[Audience laughter]

The next time I was in South America. I wanted to do an interview with the President of Costa Rica. I called up the secretary and I told her I was Chuck de Caro

from CNN. The next thing I know the phone is passed to the President of Costa Rica and he tells me to come over for tea. I interview him for an hour, but he interviewed me for two hours on television. The interview was about television and information, because this President understood about the power of television and the images it presents to the masses. Remember this was in 1983, but he still understood the power of CNN. He knew I had power and what he wanted he did not have: The power of information and images.

So, then I realized that I was hybrid, a former soldier that understood the power of media and how it could affect information warfare. Chuck de Caro by himself is nothing, CNN by itself is nothing, but Chuck de Caro working for CNN is something. Let's play the video. This is something I did for the NSA about five years ago.

[VIDEO STARTS]

Note: This video can be found and viewed on YouTube at the following URL:

<http://www.youtube.com/watch?v=KlkLufUU-iI>

“Hello. I am Chuck de Caro. The Department of Defense has asked me to open your primary course on information warfare by walking you through some out-of-the-box ideas. The Clausewitzian view of “war is the extension of politics that uses the controlled application of violence to constrain the enemy to accomplish our will” reflected the technology of the early 19th century, but the arrival of global real-time television has replaced the fine line between diplomacy and warfare with a large gray zone, where the wills of societies can be bent without necessarily resorting to full-scale warfare.

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I call this new kind of warfare SOFTWARE and define it as the hostile use of global television to shape another society's will by changing its view of reality. SOFTWARE may help explain why, after three years of trying to root out Osama bin Laden, the United States has taken Afghanistan and Iraq, created global counterterrorist links, spent hundreds of billions of dollars, but the al-Qaeda attacks are still coming.

Why? The likely cause is the United States insistence on using Cold War legacy systems and even more archaic thinking in dealing with an asymmetric enemy who has totally adapted himself and his operations to the infosphere. He is, in effect, a virtual guerilla whose area of operations is global and four dimensional: air, land, sea, and information. Thus, this stateless millionaire has been able to conduct a new kind of guerilla war on a global scale, with attacks against American interests from the Middle East to the once sacrosanct shores of the United States itself. Bin Laden has demonstrated, distributed, and dispersed intelligence and command functions by simply using the ubiquitous internet. He has also used global television to greatly magnify the size and scope of his attacks and create a kind of international cult following based on the amplification of his alleged charisma. America has inadvertently worsened the situation by attacking only visible tactical targets from the Philippines to Afghanistan to Iraq. This conventional doctrine is like the inept mechanic who fixes an engine warning light by cutting the wires to the light. The same mentality applies to simply killing or capturing terrorists. The problem is in the engine, and the engine here is the virtual body politic that supports bin Laden through contributions of money, personnel, intelligence, operational assistance, and political support. And this virtual body politic is hiding within the larger Islamic culture of some 1.65 billion people. What is needed is a four-dimensional military that

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operates equally well on land, sea, air, and the infosphere - a force that is doctrinally guided by an integrated information warfare plan with kinetic adjuncts, not the current kinetic plan with IW adjuncts.

I'm Chuck de Caro. Thank you for your time. Duty calls. Learn your lessons well.

Good luck.”

[VIDEO ENDS]

**de Caro:** Okay, can you bring the slides up please? This brief will remain completely unclassified for simplicity sake. 35 years ago, the military made me memorize this and it has stuck with me. Everybody say it out loud.

**Audience:** “Victory smiles upon those who anticipate the changes and the character of war, not upon those who wait until after those changes have occurred.”

**de Caro:** It is my belief people, we've been at this fight for eight years, because the enemy has adapted and we're just “kind of” getting around to it. Our bureaucracy is precluding us from moving quickly and lethally against al Qaeda.

**de Caro:** Next Slide. Sun Tzu states, “To win 100 victories in battles is not the acme of skill...To subdue the enemy without fighting is the acme of skill.” For those of you who share my Italian ethnicity, you know very well the efficacy of the horse's head in the bed. That is an example of defeating the enemy without having to fight. Global Television has changed everything, GTV is cinema, television, internet social network sites like

YouTube, MySpace, even your iPod is GTV. It is anything that shows an image. But GTV has changed the nature of war.

Next slide.

I call this new kind of war, SOFTWARE, and I define it as the hostile use of global television to shape another society's will by changing its view of reality. Everybody understands? Yes? I am glad you understand.

And so have the Iranians. You can see how the Iranians stole my idea of SOFTWARE in a November 24th article in the New York Times by Robert Worth, entitled "Iran Expanding Effort to Stifle the Opposition." The Iranians use the term SOFTWARE and they are using SOFTWARE techniques against their own people. Obviously, they are reading my articles and using them. It is strange how the United States Government, which has been letting me teach groups of people such as yourself for 17 years, and the concept of SOFTWARE has made some inroads, which is somewhat fine, but the Iranians who have gotten desperate take it to another level and are using the term SOFTWARE and are effectively using SOFTWARE techniques against their own people. Go figure, the Iranians get it. That victory smiles upon those who anticipate the changes and the character of war, not upon those who wait until after those changes have occurred. This is living proof that SOFTWARE works. Remember, SOFTWARE, is the hostile use of global television to shape another society's will by changing its view of reality.

Next slide.

Hey! It's my buddy Osama bin Laden that I am going to watch die some day. Bin Laden knows SOFTWARE. Look what he said in a captured document. How many people have

seen this before? We're eight years into this fight, and only four people besides me know this. Let's all read it together and see how the enemy's thinking, shall we? Together.

**Audience:** "It is obvious that the media war in this century is one of the strongest methods. In fact, its ratio may reach 90 percent of the total preparation for battles."

**de Caro:** Now, this is sort of like reading *Mein Kampf* in 1923, and knowing what Hitler's going to do. But instead you decide to ignore it and Hitler has his way with Russia, Poland and Jews. Look, this is what the enemy is doing. He is using 90 percent of effort and resources on SOFTWARE. We are not spending 90 percent of our budget on SOFTWARE. How many combat veterans are here? Raise your hands. Do you want to do two or three more tours, or do you get it done the right way so you do not have to go back there? In your intelligence briefs, wouldn't you want to know the enemy's Tactics, techniques and Procedures (TTP)? Well, here it is. That is the TTP at the strategic level and it is coming from the old man. They are doing a media marketing war and that is not the way we do war, and that is why we are still at war after eight years. And, we are reacting to bin Laden's way of war in a "Cold War" approach. How many tours have you done?

[de Caro points to an Army Major]

**First unknown Army Officer in the audience:** Two

[de Caro points to another Army Major]

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**Second unknown Army Officer in the Audience:** Three

[de Caro points to another Army Major]

**Third unknown Army Officer in the audience:** Four

**de Caro:** Four tours! No wonder you're bald. Congratulations. Well done. After four tours where is the first place that you saw this intercepted captured message?

**Third unknown Army Officer in the audience:** Here.

**de Caro:** Why aren't we organized to kill this enemy the way this enemy is fighting?

This is sort of like saying, "Hey, the enemy is going to fight us using U-boats in Operation Drumbeat so let's build some more Sherman tanks."

[Audience laughter]

Next Slide.

The reason why television is so powerful is because television transfers information to video illiterates through the perception of images and sound rather than hard fact. Video illiterates are idiots who believe what ever comes off the tube. Well, in varying degrees they do believe whatever they see on television. When I say television, that means the electronic motion pictured distributed, that could mean internet, cell phones, black berries, podcasts, just pick one. But remember, it is not about the technology, it is about the quality of the message. All this new technology is just new ways to distribute the



message. Think about it, do you think Tiger's wife Elin looks any different on your iPod than on the television set? No. What matters is the product that is being shown, the image that is shown on screen. Not the technology. It is the perception of images that matters.

Next slide.

These are the television traits that can affect your perception without propaganda entering the picture. They are: B-Roll, Shorthand Feedback, Political Throw Weight, and Quality Roulette. I'll talk about each one of them so you have a general understanding. B-Roll consists of the pretty pictures that are used while the interviewer is talking about a topic. And television is dependent on pretty pictures. Why? Because we are all predators. And as predators we depend on 95 percent on what we see. Everything from mating to life and death reactions is based on visual. Television is a way to directly go to our senses. Video is the universal language, not English. Because, a smile is a smile. I want everyone in this room to read something about neurolinguistic programming after this class. Think of why Buster Keaton and Charlie Chaplin, two silent film actors, were popular around the world. Because they were emoting visually. They communicated with the expressions on their faces. Neurolinguistic programming. I also want everyone here to read the book *The Survival of the Prettiest* by Dr. Nancy Etcoff. Guys, when you read this you will realize that you are stupid as your sister says you are. How many females here have brothers? Have you ever asked your brother, "What do you see in her?" You are shaking your head up and down. Hey, the PAO officer even has the mother gene, your body language is saying, "son you are so stupid." The reason women say that to their brothers is that they are not hard wired to react like men do. In this great

book, Nancy Etcoff talks by the visual cues that attract men. Men are more visual than women. Men, if you were in a dark cave with Pamela Anderson would you still be attracted to her? Would you know to select her? No you would not. Now, television is the means to transfer that visual. It's perception over reality. The B-Roll is naturally seductive, because editors always pick the best B-Roll – the most appealing to the viewer. Once the B-Roll is established then you're back into the story from that. Remember, think Pamela Anderson. The next television trait is short hand feedback. Television can transfer an incredible amount of information in a very short amount of time. Everyone look around the room for four seconds and take in all the details of the room. One, two, three, four. Stop. Major (b) (6) describe to us the sound of my voice, the ambience of the room, the lighting, the humming in the background, what is on the blackboard and what is on the walls. You will have to describe vividly in the same accuracy and details that you just experienced. You only have four seconds. Go!

(b) (6) There are fluorescent lights above, humming is coming from machinery in the corner, the walls are off white and the...

**de Caro:** Stop! It is impossible. Now, can you see why television is a really important medium and I can use it to beat people over the head with it? The problem is that without television, to recall an event like this class, is that you might be able to recall everything that went on in the class if you are 100 percent awake, alert and taking notes. But if you are dozing off, forget it. And if you are falling asleep while I am talking I will end your career. I promise. Look over there, a Navy guy who thinks I am serious.

[Audience laughter]

Let's look at this from a different perspective, when I say OJ, Tiger, Monica, and Watergate you know what I am talking about because these are huge news stories that have been reduced down to a word or two. So, when I say Tiger you are not seeing the word Tiger, but you are seeing that face in a Nike golf cap. These are visuals that are memorable. However, when the OJ Simpson trial was going on and if you watched everything concerning OJ including three hours that focused on the bloody bodies, and the person next to you only watched a small news clip, the image in your head is going to be different than the person next to you, when I say the word OJ. So when you are in your bunker and you turn to your fellow soldier and say, "Did you see that thing on CNN?" you better make sure you both saw the same program at the same time or you and the person are going to have messed up conversation. The third trait is political throwaway, which pertains to the aspect that anything you watch on television changes your mind, maybe a little, maybe a lot. But the more you see it the more memorable it is. The fourth trait is quality roulette, which means whatever news you have available you show it if you do not have anything better to show. Let me use an example to demonstrate my point. Who knows what *scrod* is? The Navy officer in the back row, what do you think *scrod* is?

**Navy Officer:** A fish.

**de Caro:** What kind of fish?

**Navy Officer:** A shitty fish.

[Audience laughter]

**de Caro:** Yes, a shitty fish. It is a term that New Englanders call a fish that is a bottom feeder and you eat it when it is the only fish that you have caught. You dress it up with lemon juice and little parsley for cosmetics and voilà, you have scrod. Well guess what, the news is the same way. The news is whatever we can get our hands on, we dress it up and air it. Now that we know these traits lets use the scenario of a horrible car crash. Your station wants to air the story but you have no great B-Roll so you show a picture of the aftermath in a graphic while a handsome anchorman recounts the events. This story would not really get your attention because it lacks great B-Roll. But what if for some reason you have the horrible accident filmed with high quality film, with cleverly place edits and the balanced lighting brings out all the colors. You see the lady's eyeballs pop out of her head as her head goes through the glass and then her hair catches fire, and the car blows up. That is more visceral than a graphic next to an anchorman. The point I am trying to make is that quality counts. The script does not matter, because we remember images. So when we look at the television traits of B-roll, shorthand feedback, political throw weight, and quality roulette, there is a strong possibility for reality displacement. Now let's use the example of the events surrounding Rodney King to demonstrate this point even further. The video that captured the cops beating Rodney King what shot by George Holliday. Holliday was awoken by a police helicopter that was hovering over the officers arresting Rodney King. While Holliday is filming the incident the helicopter above has white and blue lights that flash intermitted that provide almost a strobe-like

effect on the ground. Holliday's camera did not have a directional microphone so the audio could not be captured. Also, the helicopter above drowned out any conversation between King and the arresting officers. Forty-five minutes had transpired between the time the police had pulled over King and then placed him in the squad car. However, Holliday only shot 9 minutes. And the footage you see over and over again is less than one minute. On television news you only see the best B-roll of the incident. There is footage of Rodney King taking a swing at the officers but it is not used because it is a lousy video. It is lousy because Holliday is moving the tripod of his camera to get a better angle, at the same instance that King attempts to punch the officers. Therefore, all you see repeatedly concerning the Rodney King incident is King getting beaten because it is the best b-roll. And that image sticks in your head, not what the anchorman says about the video. Now let's use the example of the show *COPS*. There is no outrage when a white cop beats up black criminal because there is a beginning, middle and end. On *COPS* it is professionally filmed, the viewer knows why the person is being arrested and if the cop has to be violent then there is a valid reason that is captured on film. Again, there is a beginning, middle and end.

Next slide.

Let's use the context of a news organization to go over why budget drives coverage. Television is expensive. To put on the news you have to pay talent, cameramen, editors, directors, have access to a studio, and all the other expenses that are associated with getting the news out the door. So, most respective news organizations are constantly wondering "how much budget are we going to need to cover this story?" Budget affects the quality and the coverage of certain news stories. For example, when the Bosnian war

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broke out most of the reporters were British, because they were closer to the action, and Britain has more stringers than us. Stringers are not as expensive as a regular newscaster. If I were still with CNN with 30 years of experience and CNN wanted me to cover a story at a hotspot it would cost them \$3000 a day.

**Unknown Army Officer in the audience:** No, that is crazy.

**de Caro:** What do you mean no? I have 30 years of experience. Do you know how much lawyers make? \$350 an hour. That is for a run of the mill average lawyer. And, if you get a lawyer that is in downtown Washington DC, it is \$3000 an hour. So let's get back to my lesson, \$3000 a day for me, and \$2000 a day for my camera crew that belongs to a union. Concerning union members, after eight hours, time and a half. After twelve hours, it is double time, after fourteen hours it is golden time and its triple time. News happens after nine to five. So news coverage is expensive. I know cameramen who make more money than anchors at CNN. So if you don't have the money you end up with stringers. A stringer usually will provide CNN a fully produced story for \$2000. But what happens is then every news channel is using the same stringer's footage. One stringer's film on three different news networks, which means three times the political throw away. A stringer's footage of a tiny little fire fight shown on three different networks can now seem like full blown out war. To someone well versed in television, it will be obvious that it is stringer, but to the average person they will assume that situation is almost omnipresent because it is everywhere on all the stations. Remember, this is not

spin, this is not propaganda, it is the audience's lack of knowledge of how television works. We need to take a break soon. So let's move on to the next slide.

The United States military must be able to operate in a transparent environment, because any television uplink means instantaneous global coverage. Therefore, every military operation automatically becomes a MIL-POL operation. An uplink is the size of this podium. The moment you turn on that uplink you are a superpower. We live in a fish bowl. The United States military can no longer just do military operations, only military-political operations otherwise known as MIL-POL. The reason being is that GTV captures almost everything, so our military is now documented and broadcasted, so now that military action now becomes political. So with that in mind, why is the United States government, military, and intelligence community planning in a Napoleonic fashion? The enemy does not. The enemy has embraced information warfare and you'll see that after the break.

[Note: de Caro and audience take a break]

**de Caro:** Please take your seats. Any comments?

**Unknown Army Officer in the audience:** In your definition of SOFTWAR, that it is the hostile use of global television to shape another society's will by changing its view of reality, what do you mean by "hostile" and your definition of propaganda in the context of SOFTWAR?

**de Caro:** "Hostile" means that we must act with a purpose and aggressively. Propaganda refers to the use of three different types of propaganda, white, grey and black. White

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propaganda is the McDonald's commercial: source is identified, the product is identified. Therefore, the commercials you see on television are white propaganda. It could also be public relations promotions, those are white propaganda also. It is the most common kind of propaganda that we experience on a daily basis. Grey propaganda is propaganda where we, as the viewer, do not know the source or author. A major use of grey propaganda is political ads. Black propaganda is when I am pretending to be you. Black propaganda is identified as being from one source or author, but it is really from someone else. The beauty of black propaganda is that it is "pro you," but you do not realize it is black propaganda aimed against you. Remember, propaganda is less evil than dropping bombs on people. You all must understand that it is not a pretty world out there. We beat the bad guys using fire against fire. We are that way, we do covert operations. Our first spymaster was George Washington.

Next slide.

Remember, Osama bin Laden states that the media war in this century is one of the strongest methods. In fact, its ratio may reach 90 percent of the total preparation for battles. We have not caught up with him. I am now going to show you some American propaganda and some al Qaeda propaganda. The American propaganda is not very official. The first video is known as a "Hooah" or "Trophy" video. This video is from the U.S. Army's 25th Combat Aviation Battalion. We could also call this a helicopter strike video. These kinds of videos are usually shown to service members after their tour of duty, or maybe during a celebratory gathering or at a Hail and Farewell. After this we will watch an al Qaeda strike video so we can analyze the differences. Overall we need

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to conduct CINAN on the adversary's propaganda so we can gather the TVINT so we can counter the adversary's propaganda. Please play the video.

[U.S. Army's 25th Combat Aviation Battalion trophy video is played]

**de Caro:** Now watch how al Qaeda does a strike video.

[al Qaeda IED strike video depicts United States military vehicle attack by IEDs]

**de Caro:** Before we go any further with our analysis of these videos I want to go over two of my terms: TVINT which stands for Television Intelligence and CINAN which stands for Cinematic Analysis. What we are going to do for the next little while is TVINT and CINAN. In this case, how it is put together is more important than what you see. Well done, CINAN will provide intelligence from television, the TVINT. Now, the difference between these videos demonstrates why al Qaeda is winning the propaganda war, and why we are not. The United States' trophy video provides no context, the music in the background is Tchaikovsky's 1812 Overture which had to do with Russians beating the French. That makes absolutely no sense in this trophy video. The music does not help with the message. It is filmed far away and the viewer does not feel connected with the images. It is very stark because it is void of vivid colors. In the helicopter strike video, the target action is always center of frame, center of cross hairs, and center of target. The resultant cinematic quality of the video product is very poor, because it is produced from soft-edged Forward Looking Infra Red (FLIR) video, making the framing and composition quality highly variable and fuzzy. Moreover, the entire video is merely

a byproduct of the weapons system, shot from very long range. The quality is diminished further by the needs of the cueing software of the HELLFIRE missile or the 30mm cannon. Thus, the entire video appears to be surreal, flat, non-interactive and impersonal in nature. It has very little visceral effect on the viewer. This is poor propaganda. The reason being is that the camera is slave to the weapon. Everybody together say out loud “the camera is slave to the weapon.”

**Audience:** “The camera is slave to the weapon.”

**de Caro:** The camera is slave to the weapon and that fits our model of how we fight. And, this also fits our doctrine where the information supports the weapon. In contrast, al Qaeda’s doctrine is the complete opposite and it is representative in the al Qaeda strike video. There are three audiences this video is targeting. The first is to provide succor for their own fighters; second is to market their ideas to a target demographic to get more recruits; third is to erode the will of the enemy. Now, with further analysis we can find even more TVINT. Let’s watch it again.

[al Qaeda IED strike video is played again]

**de Caro:** The sun is always behind the camera so the subject is well lit and has vibrant colors. This video depicts a series of IED attacks, and all of the attacks are at the bottom one third of the frame from one attack to the next. The attacks are not center of screen like in the United States’ trophy video. The reason the action is at the bottom one third of

the screen is that al Qaeda wants to capture the explosion in the rest of the frame. By capturing the explosion the viewer gets to experience the vehicle and bodies being thrown into the air by the powerful explosion and that makes great television. The explosion has visceral propaganda effect. That in turn makes this propaganda more effective. Even the music adds to the effectiveness of the propaganda. The background music is Islamic chanting that I am surmising it is about fighting the infidel. This music has more relevance to the message than Tchaikovsky's 1812 Overture that is used in the American trophy video. With further analysis of the al Qaeda video we always see a center spike when the explosion occurs. Prior to the explosion there is three seconds of the vehicle moving up the road and then the explosion. Each IED attack that is captured has a beginning, middle and end - the beginning being the vehicle moving up the road, the middle being the explosion, and the end is the vehicle and bodies going up into the air then falling to the ground with the flames and smoke engulfing them. The camera distance is relevant to note also. In urban areas, the camera is 50 to 70 meters away from the attack. In the countryside the distance is 150 to 200 meters from the attack. All of the attacks are filmed the same way. Based on our analysis, we can assess that they plan these attacks to create a collage video for propaganda purposes. The enemy is paying great attention to the technical attributes of television production. Therefore, if we are to be proficient in CINAN of our enemies' propaganda, then our analyst and officers need to be proficient in television production. Unfortunately, we do not train our active duty soldiers and officers in television production. Hence, from this short analysis we can discern that the weapon is slave to camera. This is indicative of how the enemy fights: kinetics support information warfare. The enemy is using kinetics to create information

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for the camera. Very different from the way we fight. Our enemies are more concerned about making the movie than the target they are attacking. For example, in the attack that we are viewing right now the enemy is targeting a vehicle carrying porta-potties. There's no military rationale to this attack. However, there is tremendous amount of military-political value to this action when it is filmed and used as propaganda. Before we proceed with the next video I want take a moment to address our ground commanders. Gentlemen, based from the analysis that we just did, I showed some key tactics that may save your life and your troops' lives. First, the soldiers in your convoys should focus 90 percent of their attention towards the sun, because almost all the videos we just analyzed were shot with the sun at the back of the cameraman. This optimal use of natural lighting illuminates your convoy while it moves up the road. In contrast, the enemy would not be "down-sun," because then your convoy would be silhouetted and that would make lousy video. Second, whoever your vehicle lookout or convoy lookout is should focus their attention no more than 300 meters out from the road. Third, tall buildings near or elevated road signs near the road present vantage points for the enemy. Using the up-sun rule the objects will be around 10 meters from the road, and if they are taller they can be further from the road. Try imagining a 45 degree cone in front of your convoy. And, if your soldiers ever find any video tapes, digital cameras or CDs they should be examined for television production techniques.

Have you ever thought, too, that maybe the reason they film this stuff is because if they do not capture it, they do not get paid? If that is the case, then if an opportunity does not present itself to be filmed, then maybe the attack will not occur.

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Alright, let's move on and play the next set of videos. The first one is a United States military sniper video. These guys are either former Special Forces or Navy Seal types and possibly Blackwater.

[U.S. sniper video is shown, and the camera is focused on the sniper firing on the enemy on foot and in vehicles]

**de Caro:** I will provide commentary while this video is being played. In United States military our snipers work in pairs. One soldier fires the weapon and the other is the spotter. In this video, the camera is focused on the shooter and not the target. The only way we know he is shooting is from the exchange of conversation between the shooter and the spotter about the target and how far away the targets are. Based on the conversation, the targets are 800 meters to 1000 meters away. In the audio, the spotter is seeking targets that could be construed as leadership. When the American sniper team turns the camera towards the target we realize that he is shooting at a vehicle over 800 meters away. Now let's watch the al Qaeda sniper video.

[al Qaeda sniper video is shown; it depicts American soldiers being shot and their bodies going limp and falling to the ground]

**de Caro:** That's a pretty graphic video. As you have just witnessed, the sniper is killing soldiers at a very close range of 150 meters. The reason I say 150 meters is because video cameras only have a magnification of 10 to 15 power. They shoot and film so

close to manifest a visceral reaction in the viewer. The sniper is more concerned about making a movie than the target because they do not go after leadership. Instead they go after the closest target, because the closer target will be captured better by the camera. What is really bold is that the sniper uses tracer rounds. An American sniper would never use tracer rounds because this would give away their position. There are other targets the al Qaeda sniper could go after but they do not take the follow up shot. The main concern here is to make a movie. The camera is taped to the sniper rifle. We know this because each time the weapon is fired the video shakes. And just like the IED strike videos, the targets are down sun and well lit. This is an information operation using tactical devices for strategic level purposes. This video is done by someone who has worked in a newsroom, due to where the logos and text are located. This person understands the technical attributes of television production. Remember, anything that is tactical and captured on video and then disseminated becomes strategic because the images are experienced by a broader audience which now makes the event political. Next slide.

These are the six principles of SOFTWAR. This has been designed to kill the adversary's marketing campaign.

The first principle is counterpropaganda. You first have to assess the adversary's propaganda target audience. Then you must create and disseminate propaganda to the same audience but by improving the technical attributes and telegenics so that the viewer can relate to it easier than the adversary's propaganda. If you are targeting men who like NFL, then you would not hire Betty White to be your spokesperson and you would not get the producer from *The View* to put it together. The propaganda the United States

disseminates must always have better writing and logic. It should also be designed to contradict or block the adversary's propaganda intended effects on their target audience.

The second principle is counterprogramming. It is the tactic of broadcasting the complete opposite of an adversary's programming, with the ultimate goal of denying the adversary of ratings and shares. Let's use an example to demonstrate how to implement it. If you owned a lousy television station and your evening news had the lowest share in the market, then your television station should air something completely opposite. Like the counterpropaganda principle, you have to know the target audience. Let's say it is men 18 to 25, then you would play *BayWatch*, or a game of soccer. This technique draws viewers away from the adversary's message without having to use propaganda.

The third principle is saturation, which is the utilization of large scale budgets to out-buy and out-broadcast an adversary. The adversary should be "out broadcasted" by a ratio of at least three to one. If your competition spends one dollar you spend three.

The fourth principle is seduction. Seduction is using commercial means to make your competitor programming less desirable to their target demographic, such as hiring your competition's anchorman or an Al Jazeera reporter that is very popular with the populace. This act alone takes away their ability to reach a demographic.

The fifth principle is special means. It is the use of grey propaganda, black propaganda, novelistic tactics and stratagems to break the enemy's influence upon a given demographic.

The sixth principle is integration. This is the most important principle, as it is the coordination of all SOFTWARE methodologies so as to have maximum impact on all aspects of a target audience. This is of tremendous importance to the United States

because it currently has no integrated information warfare effort at the strategic level.

Ladies and gentlemen thank you for having me. It is always pleasure for me to speak at the National Defense Intelligence College.



## APPENDIX C

**Chuck de Caro**  
**Creator of the SVU concept, President of Sea Aerospace Ground Evaluations,**  
**Chief Executive Officer of the AEROBUREAU Corporation,**  
**Information Warfare Analyst**

**Telephone interview, January 10, 2010**

(b) (6) Hello Mr. de Caro, it is (b) (6), do you have a moment?

**de Caro:** Sure, what are your questions?

(b) (6) Concerning the SVU, I understand you want to find reservists and National Guard members with media skills to fill its positions. However, what specific media skills do you need to analyze adversary propaganda for intelligence purposes?

**de Caro:** I once read an article about two Arctic explorers who were looking for a third member of the next Arctic expedition. There were several people that were interested in being that third person. The two Arctic explorers took one of the fellows that wanted to be the third person to a bar for a drink. After a couple of drinks the pair quickly came to the conclusion that he would be the perfect fit for their team. (b) (6) what I am trying to express to you is that you will know in your gut who is the right person for the SVU. Your gut will tell you. The people that are selected for the SVU will be chosen based on personality and resume. Ideally, the SVU would benefit from people with a Machiavellian outlook when approaching information warfare. So, how do you discern which individuals would be best suited for the SVU? You will know when you get there.

These individuals have “intellectual velocity” - they are very intelligence, quick and fast.  
Do you know Reginald Jones?

(b) (6) No.

**de Caro:** In World War Two, Reginald Jones was an English physicist and scientific military intelligence expert. His daily mission was to figure out how to defend Britain from air attacks. His greatest success was solving the problem of the German bombing system “Knickebein.” Jones had discerned that the Germans were using a pair of radio beams to guide where to release their bombs. The Nazi bombers flew at parallel azimuths along one of the beams. However, when their equipment on board had indicated that they were near the intersection of the second beam that emanated from the ground with the first beam, the bombs were released. Thus, the British built jammers that would manipulate the trajectory of the beams so that there was never an accurate intersection. Subsequently, the bombs would land in an open countryside. Later on, after the war, Jones stated that the only reason he was very good at figuring out the Nazi’s strategies and then developing a means to counter them was because he was a practical joker in college. Yes, he had the technical expertise, but he also understood human nature. There are a lot of intelligent people, but do they have the personality to relate to how people think? More importantly, do they have the ability to combine their technical skills with their creativity to solve a problem? The SVU needs people that have that type of mix.

(b) (6) Yes, I understand that the SVU needs a certain type of individual that you describe as having “intellectual velocity,” the right kind of personality that understands human nature and the resume of experience. But, there must be certain skills and specific job experiences needed to analyze adversary propaganda for intelligence purposes. Please tell me what these specific skills are.

**de Caro:** Ideally, you want someone who is a Hollywood executive producer of television or movies, like a Don Belisario who produces *JAG* and *NCIS*. Someone who can direct, operate a camera, can write script, can edit raw footage into a masterful piece of propaganda and hopefully lead people who are creatively inclined. You do not want someone that is an expert at one particular thing and that is it. However, in the machine industrial age you needed individuals that were profoundly educated. But in the information age you want someone who is broadly and profoundly educated.

(b) (6) : Then the members of the SVU are not exclusively skill driven. Hypothetically, let’s say I am tasked to find the individuals to be part of the SVU to analyze adversary propaganda for the purpose of providing relevant intelligence. Would it be accurate to state that the people I would be considering to be part of this unit would not have to specifically be from the media arena?

**de Caro:** Yes. The individuals do not have to be solely from the media. These individuals need to have a very broad skill set. For example, the individual is a Hollywood cameraman, writer, editor, who speaks another language and is a practical

joker. In other words, he is a master of one or two trades and jack for all the rest. Did Professor (b) (6) give you the documents pertaining to the “Hollywood Media Staff Ride”?

(b) (6) Yes. But please tell me in your own words the purpose of the “Hollywood Media Staff Ride.”

**de Caro:** I organized the “Hollywood Media Staff Ride” that took place in February 2005. The members of the staff ride included representatives from National Defense University, Joint Information Operations Warfare Center, and the Joint Forces Staff College Commandant. The purpose of the staff ride was to study “information warfare for profit” by observing how a highly successful Hollywood television show was produced. Hollywood is excellent at “information warfare for profit,” which is the practice of analyzing the television target audience and producing entertainment for the audience’s needs. Though that was the purpose, the ultimate mission was to determine whether the IC could apply Hollywood’s concept of “information warfare for profit” to “information warfare for national security.” The staff ride demonstrated that the military and IC need to copy the practices of Hollywood, if they are to be better at analyzing adversary propaganda for intelligence purposes and producing strategic intelligence on a global level.

(b) (6) : What exactly happen during the “Hollywood Media Staff Ride”?

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**de Caro:** I am friends with Don Belisario, the producer of *JAG* and *NCIS*. He is a former Marine and was very helpful to our staff ride. He allowed us full access to the concept of planning meetings for *JAG*, also the pre-production, mid-production and post production meetings. Plus, we were also privy to other events, like the sound stage and on-location shoots, the dailies and film editing sessions, and we witnessed workshops on marketing concepts and strategies. Additionally, we sat in on meetings with producers, directors, writers and public relations personnel. Don Belisario would also sit down with us and share what it takes to produce a television show that has been produced for ten years. As you read through the document, keep in mind that the people that are at the top of the hierarchy are the creative executive producers. They write the storylines and the best ones, like Don Belisario, do it on regular basis for a decade. That is a very broad set of skills. They are rare and that is why they make such huge fortunes. Some of these representative individuals are Don Belisario, Aaron Spelling, and Philip DeGuere. These gentlemen epitomize the ability to be proficient in many different tasks in Hollywood television production.

(b) (6) I clearly understand your argument that the ideal individual would be a Hollywood creative executive producer that has the ability to be proficient in many different media oriented skills. However, when you conducted the exercise in 1996 in Vermont and in 2008 in Idaho to experiment with the possibility of creating SVUs to conduct intelligence support for SOFTWARE operations, you did not find those types of individuals. You did not find individuals that are on par with Don Belisario, Aaron Spelling, and Philip DeGuere.

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**de Caro:** The issue that you are not acknowledging is that the individuals that are comparable to a Don Belisario, Aaron Spelling, and Philip DeGuere are not young men. However, as I was conducting my experiment to create SVUs in Vermont and Idaho for the purpose of analyzing adversary propaganda for intelligence support, I found the young versions of Don Belisario, Aaron Spelling, and Philip DeGuere who had the ability to learn the media skills to analyze adversary propaganda. Remember, it is a combination of intelligence, personality and “intellectual velocity”, and I found those people in droves in Vermont and Idaho. The next stage in experimenting with the SVU is to conduct the exercise in California to draw out what other skills are already embedded in our reservist and National Guard service members that can be used to analyze adversary propaganda and counter it.

**(b) (6)** A portion of my literature review entails the articles you wrote for the *CYBERWAR* book series and the executive summaries of the Vermont and Idaho SVU exercises. You state in the literature that I reviewed, that the SVU would be comprised of reservist and National Guard service members that have civilian occupations in the media field. Is that still the case?

**de Caro:** When I use the term “media” to establish the individual that would comprise the SVU, it also encompasses satellite uplink operator, media buyer or marketing executive. There are lots of other media jobs outside of the traditional ones that we usually associate the media to.

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(b) (6) I am glad we are having this discussion to delve into the details of the SVU, because you do not explain the SVU concept to this degree in your literature. How many teams of SVUs would you want to make from the National Guard and reserve?

**de Caro:** Three teams of eight people, which is a total of twenty-four people. Each team would have eight primary skill sets within each team. All three teams would be analyzing the same adversary propaganda for the purpose of intelligence support for SOFTWARE operations. In a sense it is Hollywood in reverse, and what I mean by that is when you have a production you first send out the first draft of a script, which is known as the white version, to all the different departments to have an opportunity to send back notes concerning changes to the script that should be made. The departments include sound, costume design, lighting, technical adviser, actors and the other writers. Some of the “notes” they send back simply say there is a typo here or maybe it is more complex and the costume design department complains that the costumes must be done in a different era than what is stipulated in the script. All of these proposed changes, the notes, are sent back to the creative executive producer. The executive producer then decides which proposed changes will be made and which will not. So, now there is an improved copy of the script, it is sent out again, except this time it is no longer known as the white copy, it is now known as the blue copy and that one is sent to all of the departments for additional changes. So the order of iteration is white, blue, yellow, pink, and green, hence it is an iterative process. But the changes do not end there. The end user, such as Paramount, CBS, NBC or ABC, have their input also. Therefore if we are

to analyze the adversary's propaganda for intelligence support for SOFTWARE operations then we have to do this process backwards.

(b) (6) You mention eight primary skills that would be in each of these teams. What are these eight primary skills?

**de Caro:** Each team would have eight overlapping specialties, such as writer, cinema photographer, lighting, sound, edit, post production, dissemination and marketing. Each team sits in its own separate room and analyzes the adversary propaganda with the goal of providing intelligence support for SOFTWARE operations. The process would entail each respective team watching the adversary propaganda numerous times, all the while making "notes." These "notes" are shared with each iteration of viewing the adversary propaganda. Once all three teams are done analyzing the adversary propaganda, there is a meeting with all of the members participating. The teams would exchange and discuss their findings. By allowing these intelligent creative types to discuss their analysis with each other you get some very valuable TVINT. Once the analysis has been complete, the twenty four members can go back their respective teams and develop the information warfare strategy to counter the adversary propaganda. Remember, I told you before in our previous discussion that the person that analyzes the adversary's propaganda must be the same person that counters the adversary's propaganda.

(b) (6) I have been interviewing a gentleman by the name of (b) (6) of the White Canvas Group, a firm that analyzes propaganda for their clients. When I told him



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of your concept of the SVU, he thought it was a brilliant idea and long overdue. However, he disagreed with the idea of having predominately media skill oriented individuals in the SVU. He argued that the SVU should be predominately composed of linguists, one computer security expert, one IT fellow who would create webpages and low budget videos to post on YouTube, and one manager to look over the whole team. He claims the fight is only on the internet, and that the product does not have to be on par with what is produced in Hollywood. What do you think about his argument?

**de Caro:** The skills that I am focusing on are cinematic. Linguists are a subset of the SVU if we need them. The linguist could even be a part of the actual SVU if they understood the cinematic genre. Better still would be an anthropologist that understood television. However, if they only know anthropology then the only role I see the anthropologist playing is briefing the SVU on the culture of the enemy and how they think, so we can appeal to foreign target audience. Please remember that the Machiavellian mindset is more important than linguistic skills for analyzing adversary propaganda.

(b) (6) It is getting late. I want to thank you for another great interview.

**de Caro:** It was my pleasure. Have a good night.

(b) (6) Good night.

## APPENDIX D

**Chuck de Caro**  
**Creator of the SVU concept, President of Sea Aerospace Ground Evaluations,**  
**Chief Executive Officer of the AEROBUREAU Corporation,**  
**Information Warfare Analyst**

**Telephone interview, February 1, 2010**

(b) (6) Hello Mr. de Caro, it's (b) (6), do you have a moment? I only have one question.

**de Caro:** Yes, of course I do. What is your question?

(b) (6) You have been writing articles on SOFTWARE and presenting lectures for over twenty years. Why hasn't the United States military, government, and intelligence community adopted your approach and concepts of information warfare?

**de Caro:** The real reason is that there is no draft. President Nixon knew that the draft made him unpopular, so to get reelected he needed to get rid of the draft. The draft was very unpopular, but it was also very effective. The draft is the reason we have won almost every war. Please remember that when the United States drafted people, it was getting an accurate cross section of the knowledge that runs the culture and the economy. During the Vietnam conflict, the United States military was predominately drafting men at the age of 28; during World War Two, the United States military was predominately drafting men at the age of 35. At the age of 35 you enter the service with life experiences that encompass how things work outside of the military as well as in the civilian work

force. The active duty military does not have the knowledge of civilian skills like they used to during World War Two, but they do have those types of individuals in the reserves and National Guard. That is why I am very biased toward the reserves and the National Guard concerning information warfare. There is another benefit to the draft. Once an American has served, even if it is for only two years, that American will never be the same, because that American will know what it costs to be a “defendee” because that American knows what it means to be a defender. Presently, we have a polarized world within our country. In our republic there are fewer and fewer Americans that have defended this country. However, those who decide to serve as an active duty service member have no idea what civilian life is like, so they lack those civilians skills that we desperately need in information warfare. Why do you think I am so proficient at information warfare?

(b) (6) You have worked on both sides of the “fence.” You were a Special Forces soldier and you were a CNN Special Correspondence Reporter - those are vastly different occupations that provided you with a breadth of knowledge that most Americans lack.

**de Caro:** Yes, exactly, and it is not a “fence.” I am a citizen, and that is what citizens do.

(b) (6) : Mr. de Caro, I appreciate your assistance. I have learned a lot from you. Thank you for your patience and sharing your knowledge.

**de Caro:** You are welcome. Good night.

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## APPENDIX E

(b) (6)

[REDACTED], White Canvas Group

Interview, Alexandria, VA, December 8, 2009

(b) (6) : Hello (b) (6), thank you for meeting with me.

(b) (6) : You're welcome, please call me (b) (6).

(b) (6) Please call me (b) (6). As I said on the phone the other day, the reason I wanted to meet with you is because Professor (b) (6) of the National Defense Intelligence College informed me that I should talk to you concerning my thesis. He was very impressed by a briefing you had done on adversarial propaganda on the internet. Since this is your profession, do you mind if I ask you questions that pertain to your field? Your answers would be very beneficial to my findings in my thesis. Your answers would be added to my findings in my thesis.

(b) (6) : Sure, What is your thesis about?

(b) (6) : My research question is to examine the extent of which the intelligence community can access reserve and National Guard service members with mass media skills to analyze adversary propaganda. The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase "SOFTWARE," and defines it as "the hostile use of global television to shape

another nation's will by changing its view of reality." One of de Caro's concepts is the SOFTWARE Virtual Unit. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-propaganda/media operations in the war against violent extremism. The primary topic of this thesis, therefore, is the feasibility of de Caro's SVU concept to provide intelligence support for SOFTWARE operations.

(b) (6) I like the overall concept of the SVU, however I have some questions about the composition of the SVU, but I like the idea and think your research question is relevant.

(b) (6) : First, I would like to establish what the White Canvas Group is, the firm that you work for.

(b) (6) Our organization provides alternative and disruptive strategy consulting services to the government and private clients. Ultimately, we mesh digital know-how, new technologies, creative solutions, and industry contacts to make conventional practices more efficient. We have a website at [www.whitecanvasgroup.com](http://www.whitecanvasgroup.com), where you can get a better understanding of what we do. I am (b) (6) and deal mainly with the Internet and Strategic Communications. We have other core capabilities as well.

(b) (6) You mentioned that you liked the overall concept of the SVU but said you did not like the composition of it. Why don't you like Mr. de Caro's composition of the SVU of using reservist and National Guard service members with media skills to analyze adversary propaganda?

(b) (6) Before I answer that, I want to make clear that his idea of the SVU makes complete sense at the strategic level. The composition makes sense if the SVU is focused on high-end strategic communications and certain aspects such as television ads, movies, radio spots etc. However, I usually do not work at that level, I am more at the tactical level. The internet is my realm and one has to analyze the media at the adversary's level; the same playing field the adversary is on. Now, what would the SVU product look like upon completion? Does it look like it is high end, like it came out of Hollywood or will it look low budget?

(b) (6) : Due to the members that would be in the SVU it would be capable of producing counter propaganda and strategic communications that could be categorized as low end or high end.

(b) (6) My first issue is that our current adversary, being al Qaeda and ideologically like-minded groups, use the internet predominately to disseminate their propaganda. Their stuff is gritty, in your face, and designed to illicit an emotional response; mainly anger. Now, they may understand the technical attributes of television production but by no means is it anywhere near Hollywood standards. I would label it as low budget.

Effective counter propaganda should be on the same level. If the counter-narrative has the appearance as though it were produced within the United States, then al Qaeda and certain Middle Eastern regions would reject it flat out. Therefore, I do not think you need high-end media skilled individuals to produce low budget counter-narrative products. To some extent, to use media skilled individuals is overkill. Hollywood types will want to overdo it, which may damage its authenticity.

(b) (6) That may be true, but my focus is on analyzing the adversary propaganda for intelligence for SOFTWARE operations, not the actual operation of developing the propaganda or strategic communications.

(b) (6) Right, but the individuals who analyze propaganda should be the same people that counter the propaganda. Professional media types won't understand the language, culture or religion. In my opinion, such research should entail analyzing adversarial propaganda and how best to counter it. To me that would make more sense.

(b) (6) I acknowledge your opinion, but this thesis will focus only on analyzing adversary propaganda for intelligence support for SOFTWARE operations. What other aspects of the SVU do you take issue with?

(b) (6) At the strategic level, using reservist and National Guard service members with mass media skills to be the members of the SVU could work. I would add some other skill sets to it to round it out though. However, if the SVU concept were introduced at

the internet based al Qaeda level, where one has to analyze adversary propaganda on the internet and then quickly counter it, then the composition of the unit would change. I propose that such a unit should be composed of eight linguists that speak Arabic, French, Pashto, Urdu, Turkish, Farsi/Dari, Indonesian, German and Russian; an information technician (IT)/ security computer penetration tester; a non-linear video editor, a government manager, and an operations manager.

**(b) (6)** : Where are the media skill-oriented individuals?

**(b) (6)** You would not necessarily need those skills for analyzing and countering propaganda on the internet, per se. Remember the internet is the domain the adversary is working in. You need to have linguists who thoroughly understand strategic communications/PSYOPS and general internet marketing and branding. If the mission is to analyze aspects of a video or photo, such as what camera lens was used, angles, backdrops etc. then having specialized media types makes sense. However, I view that as a luxury.

**(b) (6)** Who conducts the analysis in your composition of the SVU if it were only focusing on analyzing adversary propaganda on the internet?

**(b) (6)** The linguists conduct the analysis, and the linguists are also the operators. I want to stress that those who analyze adversary propaganda for intelligence purposes should also be the operators. For as long as I can remember, linguists have been kept out



of the analysis quotient. Translating a language like Arabic is more than just turning it into English; there is tone, dialect, slang, hidden meaning, and so forth. You have to really know the subject matter and author to get the most accurate translation.

(b) (6) Let's play the "what if game." If you were in charge of putting the SVU team together for the mission of analyzing adversary propaganda for intelligence support for SOFTWAR operations then what would the team look like?

(b) (6) What would be my parameters? What kind of resources?

(b) (6) Well let me read you a passage out of de Caro's article, "SOFTWAR" in the book *CyberWar*. That may answer those questions:

"What is needed is a very transparent, largely civilian SOFTWAR planning and operation cell in the Office of the Secretary of Defense, whose members are reservist with career long skills in TV production, advertising and dissemination and who can perform operationally. Their mission should be to study the effects of GTV on belligerent conflict, operations-other-than-war (including peacekeeping and peace enforcement), and war forms resulting from alliances between virtual nations and niche-competitors. Moreover, this SOFTWAR cell should develop doctrine for SOFTWAR politico-military operations. This doctrine should include both active and passive counter-measures to the effects of Global Television of Cyberwar tactics, Table of Organizations and Equipment for a strategic US information warfare/SOFTWAR unit, including unmanned aerial vehicles designed for real-time information gathering, processing, and dissemination. In short their mission should be to develop methods to see through the ambiguities in warning of SOFTWAR campaign, to devise counter measures, and to implement them."<sup>270</sup>

(b) (6) Based off that section you just read, I would suggest that half of the SVU be media skilled individuals and the other half would consist of linguists with the cultural

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<sup>270</sup> Chuck de Caro, "SOFTWAR," in *Cyberwar: Security, Strategy, and Conflict in the Information Age* (Fairfax, VA: AFCEA International Press, 1996), 203.

knowledge of the target audience. Having Open Source Intelligence resources are critically important, as well.

(b) (6) There is a lot of adversary propaganda on the internet. What specific propaganda are you talking about on the internet?

(b) (6) The places where ideas and messages are being disseminated and exchanged are websites that adhere to web 2.0 principles. What I mean by web 2.0, are websites such as web-based communities, social-networking sites, blogs, and video-sharing sites. Some examples are MySpace, YouTube, and Facebook. These sites allow our adversaries to interact with their fellow adversaries. These sites also provide a means to recruit because they allow for potential recruits to converse with adversaries in online dialogue or through bulletin board-like websites. The adversary spreads the most vile and malicious disinformation about the United States. Some is so vile that it is hard to even discuss; we are talking about rape, torture, murder, you name it, but propagated in such a heinous way to make us look evil. They do this to encourage others, to allow others to see killing us as a humane act that will, as they see it, preserve Islam.

(b) (6) : How would you counter it?

(b) (6) Well, I can't really go into detailed strategy, but the best way one should keep in mind when countering any propaganda or bad press on the internet is to adhere to the "3 day rule." If there is an event or issue that is producing a lot of traffic online, then you

only have about a three day window to counter. I mention the three day window rule because that event or issue is going to receive the most searches, hits and levels of interest during a three day period. It is my experience that it wanes after three days and does not have the same level of relevancy. Timeliness is pertinent. Other than that, I'd prefer not to get into specifics.

**(b) (6)**: If timeliness is pertinent in the information war on the internet, specifically web 2.0 sites, then this team would have to be operating almost 24/7.

**(b) (6)** Yes and the unit I just described would be getting advice and direction from de Caro's SVU. Therefore, de Caro's SVU would have to be constantly working also. The unit that I would propose at my level and at de Caro's level could not be called up and brought in to analyze adversarial propaganda, and then quickly come up with a plan based on the analysis to counter the adversary propaganda. There would not be time for that. There would be too many egos involved and bureaucracy would get in the way. They would have to be a group of individuals that worked together on a daily basis. It would be a full time job.

**(b) (6)**: Do you see any other issues with de Caro's SVU concept concerning analyzing adversary propaganda for intelligence support for SOFTWARE operations?

**(b) (6)** Like I said before, his idea is long overdue, but I have several more issues with it now that we have been talking for awhile. First, I do not think media-skilled

individuals would be intrigued by this type of work, especially if they are from Hollywood. Well, I think they'd be intrigued, but I am not sure how they would deal with the subject matter, especially the War on Terror; Hollywood types aren't exactly lining up to join the military. Some of the material is so gruesome, I fear many couldn't stomach it. That being said, some of the propaganda used by the enemy that I have seen in our own research came from Hollywood in the first place; either statements of actors or narratives of the movies themselves. Take Brian De Palma's *Redacted* movie for example, where scenes were used by internet jihadists to incite anger and to recruit others.

Second, they are also used to productions with very high budgets. They would be analyzing adversary propaganda that is predominately low budget in a language and context they do not understand. Furthermore, if the goal is to find great talent in Hollywood and somehow entice them into the reserves and National Guard for the purpose of being members of the SVU, then I do not think we will be able to compensate them for what they are use to. I am speculating that individuals who are successful in the media world are used to Hollywood pay standards.

Third, I am assuming that all of these media types would meet here in Washington, DC to analyze the adversary propaganda and then figure out how to counter it. I do not think you are going to get those types of individuals from the west coast to move to Washington, DC to analyze adversary propaganda on a daily basis.

Fourth, they would have to have clearances to analyze adversarial propaganda. I am guessing that most media types do not have type of clearance nor be willing to subject themselves to the restrictions.

Fifth, I am speculating, but I would tend to believe that media types are used to a lot of feedback on their work. If the public likes their product, they buy it. In analytical work, you do not get feedback right away...if at all. It's in many ways a thankless job, but has to be kept that way for security reasons.

(b) (6) So, what you mean is that when intelligence analysts analyze adversary propaganda for clues, and then they present their analysis to their superiors, the analysts may or may not receive feedback on the accuracy of their analysis? Is this because of the classification level, or operation security (OPSEC)?

(b) (6) Yes, but mainly due to the level of bureaucracy. But to be more precise, linguists will do the initial analysis, which is treated more like simple translation. This will then go to the analyst, who may or may not be savvy about the specific topic. Due to this, some of the message gets lost.

(b) (6) What other suggestions can you recommend for the SVU or comments about its feasibility?

(b) (6) When I was in the military and elsewhere, it was very rare to analyze the documents and videos for the purpose of finding out what messages they were disseminating about us, in particular. I understand the importance of finding the location of enemy personnel, their tactics and plans, of course, but it is also important to find out how the enemy is using urban legends and conspiracy theories against us to recruit and

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sow dissent. Al Qaeda is conducting an information war against us, therefore our analysis needs to also focus on the messages that criticize and misconstrue our presence in the Middle East and our policies in general. Their propaganda incites young insurgents to attack Soldiers in Afghanistan and Iraq. It also encourages terrorist actions in the United States. I believe our analysts should be analyzing adversary propaganda for the purpose of discerning what the enemy is saying about America, Americans, our policies, and our deployed Soldiers, then in turn, counter their malignant narrative so that their messages are negated. This approach is more relevant to Information Warfare.

(b) (6) : Thank you for this meeting. Can I call you if I have any other questions?

(b) (6) Yes, I enjoyed the discussion.

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## APPENDIX F

### **7th Psychological Operations Group (7thPOG), Moffett Air Force Base, California,**

#### **Focus Group, February 10, 2010**

##### **Focus Group Members:**

**(b) (6)** ;  
**Lieutenant Colonel (b) (6)**, Deputy Commander for Operations;  
**Major (b) (6)**, S3 Operations

**(b) (6)** : Thank you for meeting with me. As I mentioned in my email, I am a student at the National Defense Intelligence College. Part of the requirement at the college is to write an academic thesis. My research question is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase “SOFTWARE” and defines it as “the hostile use of global television to shape another society’s will by changing its view of reality.” One of de Caro’s concepts is the SOFTWARE Virtual Unit. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-propaganda/media operations in the war against violent extremism. The primary topic of my thesis, therefore, is the feasibility of de Caro’s SVU concept. The purpose of this focus group is to gather your opinions, perspectives, criticisms and advice concerning my academic thesis so that I may add them into my findings section of my thesis.

**Focus Group Member:** Could you please explain some more specifics on the SVU before we start?

(b) (6) Yes, of course. I'll read to you de Caro's explanation of the SVU in his article, "SOFTWARE," published in the book, *CyberWar*:

"What is needed is a very transparent, largely civilian SOFTWARE planning and operation cell in the Office of the Secretary of Defense, whose members are reservists with career long skills in TV production, advertising and dissemination and who can perform operationally. Their mission should be to study the effects of GTV on belligerent conflicts, operations-other-than-war (including peacekeeping and peace enforcement), and war forms resulting from alliances between virtual nations and niche-competitors. Moreover, this SOFTWARE cell should develop doctrine for SOFTWARE politico-military operations. This doctrine should include both active and passive counter-measures to the effects of Global Television of Cyberwar tactics, Table of Organizations and Equipment for a strategic US information warfare/SOFTWARE unit, including unmanned aerial vehicles designed for real-time information gathering, processing, and dissemination. In short their mission should be to develop methods to see through the ambiguities in warning of SOFTWARE campaigns, to devise counter measures, and to implement them."<sup>271</sup>

**Focus Group Member:** I already have a problem with it. There is no need to have the SVU staffed with individuals from the mass media industry. Those types of skills are easily replicated. We can train any of our service members to learn television production skills. We have trained our soldiers how to film, edit, direct and conduct post production procedures. The premise of your thesis and what you just read to us presents the idea that individuals with media skills are unique and are the only ones capable of analyzing adversary propaganda. I disagree with that approach. If the SVU is to ever come to fruition it should be manned by individuals that understand the customs and cultures of the region from which the adversary propaganda came from. I think the type of

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<sup>271</sup> Chuck de Caro, "SOFTWARE," in *Cyberwar: Security, Strategy, and Conflict in the Information Age* (Fairfax, VA: AFCEA International Press, 1996), 204.



individuals that should be in the SVU to analyze adversary propaganda would be anthropologists that have studied the region in question, or native speakers from the region we are concerned about. Those individuals with the experiences and skills I just described are much more valuable to analyze adversary propaganda than individuals from the media industry.

**(b) (6)**: You mentioned that you have trained your soldiers to film, edit, direct and conduct post production procedures. Though my thesis is about the analytical portion of the SVU mission, I know it would be difficult to have one of your soldiers analyze a piece of adversary propaganda for me to demonstrate their proficiency. But maybe you could show me some of your video productions, ones that 7th Psychological Operations Group has produced that were made for a certain target audiences in a certain region.

**Focus Group Member:** That is fine. I will show you several of them.

[Note: I viewed several videos that 7th Psychological Operations Group had produced. These videos were of very high quality, featured actors from the region in question, had carefully crafted editing and adequate lighting and background music]

**(b) (6)**: I have taken note of your concerns with the composition of the SVU. I acknowledge that you think that the SVU should be manned by anthropologists or native speakers from the regions we are concerned about. But, if we were to pursue de Caro's

concept of the SVU of manning it with individuals that have work experience in the media field, do you think this is plausible or feasible?

**Focus Group Member:** No, I do not because I do not see a lot of those types of individuals in the reserves. The reason we do not see those types of individuals is because media skilled individuals do not necessarily gravitate towards the military. I think if an individual likes the television industry and has the media skills, then they are going to be working in that industry. So, I do not think this team can be made solely from reservists a National Guardsmen with civilian occupations in the media field. However, it could be made from reservists and Guardsmen that show the potential to learn media skills. But please take into account, as I said before, it is not hard to train someone to learn how to operate a camera, develop a script, edit raw video and the other skills one needs to make a video. I do not have a television background and I can do it.

**(b) (6)** Maybe there are individuals in the reserves and guard with media skills, but they do not advertise it. Does the database for the reserves annotate those skills or those types of occupations?

**Focus Group Member:** No it does not. It is not one of the options in the drop down window when selecting a civilian occupation. Also, it is not mandatory for soldiers to update the database. The data is usually entered when the soldier first enters the service, after that it is up to the soldier to update it.

(b) (6) Let's change directions in this discussion. We've established what you think about the composition of the SVU. What about its ability to analyze adversary propaganda for the purpose of intelligence support for SOFTWARE operations?

**Focus Group Member:** Your question brings us back to composition again. To analyze adversary propaganda correctly the individuals must be able to understand the language and customs of the region in which the adversary is targeting. Once that is done you can bring in the media skilled individuals to counter the propaganda, but they would be getting guidance and advice from those that understand the target audience. I do not see media skilled individuals that lack cultural knowledge of the target audience and linguistic skills as effective analysts of adversary propaganda.

(b) (6) What should an analyst be looking for when analyzing adversary propaganda for the purpose of intelligence support for SOFTWARE operations?

**Focus Group Member:** The analyst needs to be asking the following questions:

- 1) What is the adversary's message?
- 2) Who is the target audience?
- 3) What do they hope the target audience will do after viewing their propaganda?
- 4) Who sent the message?
- 5) What can we learn about the adversary?
- 6) How can we counter the adversary's message?

(b) (6) So, could having skills in television production assist in answering those questions?

**Focus Group Member:** Yes, for some of those questions. But, media skilled individuals would need someone with linguistic and cultural skills just to discern the message. I would like to add something before you ask another question. I think you should place your effort in finding those valuable individuals that have experience living in those regions and valuable linguistic skills, instead of devoting your research in creating an SVU that is comprised of media skilled individuals for the purpose of analyzing adversary propaganda.

(b) (6) Your point is well made. You stated before that media skilled individuals are not in the reserves or guard. But how about the individuals that you think the SVU should be comprised of, such as people that have lived in the region in question, or are native speakers of key languages, or are anthropologist - are they in the reserves or guard?

**Focus Group Member:** Not likely.

(b) (6) : Then how would you go about getting people that have lived in the region in question, or are native speakers of key languages, or are anthropologist or even media skilled individuals into reserve and guard units?

**Focus Group Member:** The Department of Defense would have to do a recruiting campaign in areas of the United States that have been deemed to have high populations of the individuals they are seeking. However, it would also mean that a new reserve or National Guard unit would have to be established where most of the individuals are coming from that the Department of Defense is specifically looking for.

**(b) (6)**: Do you have any other comments you would like to make?

**Focus Group Member:** I do see a need for this entity, because there is not enough focus on information warfare. It is possible that this unit would provide the influence to make the information warfare fight on par with the kinetic fight. Our enemies have adapted to the information age. In some respects, they place more emphasis on information warfare than we do.

**(b) (6)**: Thank you for your candor and sharing your thoughts on my thesis. I appreciate it.

## APPENDIX G

### **4th Psychological Operations Group (4th POG), Fort Bragg, North Carolina,**

**Focus Group, February 17, 2010**

**Focus Group Members:**

**Captain (b) (6), S2 Intelligence Officer;**

**Sergeant First Class (b) (6), Detachment Non-Commissioned Officer;**

**(b) (6), Strategic Studies Detachment Adviser**

(b) (6) Thank you for meeting with me. As I mentioned in my email and phone calls, I am a student at the National Defense Intelligence College, pursuing a Master of Science in Strategic Intelligence. Part of the requirement at the college is to write an academic thesis. My research question is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase "SOFTWARE" and defines it as "the hostile use of global television to shape another society's will by changing its view of reality." One of de Caro's concepts is the SOFTWARE Virtual Unit - also known as the SVU. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-propaganda/media operations in the war against violent extremism. The primary topic of my thesis, therefore, is the feasibility of de Caro's SVU concept. The purpose of this

focus group is to gather your opinions, perspectives, criticisms and advice concerning my academic thesis, so that I may add them to the findings section of my thesis.

**Focus Group Member:** Has de Caro written about this SVU? Is there a documented explanation about it?

(b) (6) Yes there is. I brought his first article that he wrote in 1996 for your perusal. It is entitled “SOFTWARE” and it was published in the *CyberWar* book series. It provides more detail than my own explanation of the SVU.

“What is needed is a very transparent, largely civilian SOFTWARE planning and operation cell in the Office of the Secretary of Defense, whose members are reservists with career long skills in TV production, advertising and dissemination and who can perform operationally. Their mission should be to study the effects of GTV on belligerent conflicts, operations-other-than-war (including peacekeeping and peace enforcement), and war forms resulting from alliances between virtual nations and niche-competitors. Moreover, this SOFTWARE cell should develop doctrine for SOFTWARE politico-military operations. This doctrine should include both active and passive counter-measures to the effects of Global Television of Cyberwar tactics, Table of Organizations and Equipment for a strategic US information warfare/SOFTWARE unit, including unmanned aerial vehicles designed for real-time information gathering, processing, and dissemination. In short their mission should be to develop methods to see through the ambiguities in warning of SOFTWARE campaigns, to devise counter measures, and to implement them.”<sup>272</sup>

**Focus Group Member:** Are any of the SVU elements at the tactical level, because, we predominately work at the tactical level.

(b) (6) Do you see a need for the SVU?

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<sup>272</sup>Chuck de Caro, “SOFTWARE,” in *Cyberwar: Security, Strategy, and Conflict in the Information Age* (Fairfax, VA: AFCEA International Press, 1996), 204.

**Focus Group Member:** I see a need for the SVU at the strategic level to assist in organizing the psychological operations and information operations efforts at the operational and tactical level. There is a benefit of having an overarching entity that provides guidance and direction. I do not like the idea that the SVU is comprised of reservists and National Guard service members with media skills. Instead, it should be comprised of three different types of individuals, other than media skilled individuals. First, it should be comprised of active duty service members who have had four or more tours of duty in Iraq or Afghanistan. Rank would not matter, just the fact that they have been to the region and understand the issues that the front line soldier faces on a daily basis. Having been to Iraq and Afghanistan, I've seen how effective psychological operations and information warfare is, it is a force multiplier when it is effectively used, and it is invaluable. Those are the types of soldiers that should be directing the SVU because they have been the customer of information warfare and know what is needed to win these wars. Furthermore, some of these service members are leaving the military because they are tired of doing back to back tours. Instead of losing that experience, let's keep these individuals state side so they do not have to deploy again, but they can still serve our country by leading the SVU. Again, it does not have to be officer driven, it can be non-commissioned officers that have done four or more tours. Having those individuals on the SVU's staff would add credibility to the entity.

Second, there should also be anthropologist types that understand the culture of Afghanistan and Iraq or what ever region we are focused on. These individuals would ensure that when we are analyzing the adversary's propaganda that we are not over looking key messages due to mirror imaging. When analyzing adversary propaganda it is



important that analysts not allow their America-centric views skew their analysis. The anthropologists would be people that could audit our SVU analysis to ensure that it is in line with how the propagandist and target audience thinks. Also, the anthropologist would assist the analyst in countering the propaganda. Therefore, the counter propaganda is more relevant to the target audience because it is in tune with the cultures and customs in the respective regions. Ideally, those that analyze the adversary's propaganda should be the same people that counter it.

Third, the SVU needs to have linguists that are native speakers of Afghanistan and Iraq. Also, the mix of linguists needs to cover all the different languages and dialects that permeate throughout Afghanistan and Iraq. Before any analysis can be done, the verbal and textual message must be understood. There can be no substantial analysis until this step is done.

**(b) (6)**: Do you see any need for reservists and National Guard service members with media skills from their civilian occupations in the composition of the SVU?

**Focus Group Member:** No. I view the media skilled people as surplus. They would be good to have when analyzing the adversary's propaganda, but they would not be essential. They would be able to pick out the technical television attributes better than most individuals, but I think you could train reservists and guard personnel to be observant for those aspects, and eventually be proficient at it. Now, in terms of countering the propaganda, yes, they would be an asset. However, with all of the new software that one can now buy off the shelf, most computer literate individuals can make

their own video propaganda. I don't think it is necessary to be going after media skilled individuals. Instead, your research should have focused on locating the individuals I mentioned before. Those skills are more valuable and scarce.

(b) (6) I have annotated your views on the idea of using media skilled individuals for the SVU to analyze adversary propaganda. But, let's continue, for a moment, to discuss de Caro's concept of manning the SVU with individuals that have work experience in the media field. Do you think that is plausible or feasible?

**Focus Group Member:** I think it would be very difficult for several reasons. First, the database to find such individuals in the military is out-of-date. The database is not designed to find people with special skills. Furthermore, it is optional for service members to update their profile. If a service member does not want to list their civilian occupation, then they do not have to. Some people do not fill out that section because it could mean that they are selected for tasks that require their skills.

Second, I have not met a lot of service members with media skilled occupations in the military. You meet service members who are firefighters, policemen, government employees, but not actual individuals who are in the media.

Third, reservists and Guardsmen who happen to be in the media field probably get paid more in their civilian careers than they do in the military. If we are to bring them on full time, we could not pay them what they are accustomed to in their full time civilian occupations.

(b) (6) : What should an analyst be looking for when analyzing adversary propaganda for the purpose of intelligence support for SOFTWARE operations?

**Focus Group Member:** Understanding the message is key, and that is where the linguists and anthropologists come into play – they help discern the target audience, the goal of the propaganda, and if it is effective.

(b) (6) How do we get individuals with special skills to join the reserves or National Guard? The special skills could be media related, or related to anthropology or linguistics. Maybe some of these individuals grew up in the regions of interest and now live in the United States. How does the Department of Defense attract those individuals to the reserves or National Guard?

**Focus Group Members:** The Department of Defense would have to provide incentives. Those incentives could come in the form of monetary bonuses and elevated salaries that are comparable to the civilian market.

(b) (6) : Thank you for your opinions Do you have any other comments you would like to make?

**Focus Group Member:** No, but we have your email address if we have anything else to add.

## APPENDIX H

**Colonel (b) (6)**  
**Chief of Reserves Manning Office, Defense Intelligence Agency**

**Interview, June 3, 2010**

(b) (6) Sir, thank you for meeting with me.

(b) (6) : Major (b) (6), what can I do for you?

(b) (6) Sir, I am a student at the National Defense Intelligence College, located here at the Defense Intelligence Agency. Part of the requirement of the program is to write a thesis. My thesis questions is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase “SOFTWARE” and defines it as “the hostile use of global television to shape another society’s will by changing its view of reality.” One of de Caro’s concepts is the SOFTWARE Virtual Unit, also known as the SVU. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-propaganda/media operations in the war against violent extremism. The primary topic of

my thesis, therefore, is the feasibility of de Caro's SVU concept. Sir, may I ask you questions concerning my thesis research to be used in the findings section of my thesis?

(b) (6) Yes, you may. This is a very interesting topic.

(b) (6) : Sir, within your office you have representatives from the Army, Navy, Air Force and Marines. I am assuming that each military branch has their own database for its service members. Do these databases share information regarding service members? What I mean is, could I use an Army database to find information on Navy personnel?

(b) (6) No. Each service has its own computer database program.

(b) (6) : Sir, my thesis concerns the ability to access service members with special skills, such as media skills. Can the databases find service members with special skills?

(b) (6) : No.

(b) (6) : Sir, is it mandatory for service members to update their profiles about their civilian occupations?

(b) (6) : No, and that pertains to privacy issues. Some service members are concerned that if they reveal their occupation or special talents that they might be tasked for a tasker.

(b) (6) : Sir, how would I find someone with special skills, or with an occupation in the media field within the services?

(b) (6) You could place an ad like the Army sometimes does on AKO.

(b) (6) Sir, if the Department of Defense ever made a database that depicted its civilian occupations and special skills, what would your suggestions be regarding the database?

(b) (6) : Concerning your thesis, you would want to know how proficient an individual's media skills are. For example, someone could say they are cameraman, but how proficient are they as a cameraman? Evaluating talents and skills is very subjective. There would have to be a third party involved that audits the skills and talents. The third party would also ensure that the individuals do, indeed, have the occupations that they claim.

(b) (6) : Sir, my thesis question is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SVU construct? In your opinion, is this feasible?

(b) (6) : No. The databases do not allow for this.

(b) (6) : Sir; thank you for this interview.

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## APPENDIX I

(b) (6)

**Human Resources Specialist, Human Resources Department,  
Defense Intelligence Agency**

**Interview, July 28, 2010**

(b) (6) : Ma'am, thank you for meeting with me.

(b) (6) I understand you want to talk to me about the databases we use to track personnel in DIA?

(b) (6) : Ma'am, you are correct. I am a student here at the National Defense Intelligence College. Part of the requirement of the program is to write a thesis. My thesis questions is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase "SOFTWARE" and defines it as "the hostile use of global television to shape another society's will by changing its view of reality." One of de Caro's concepts is the SOFTWARE Virtual Unit, also known as the SVU. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-

propaganda/media operations in the war against violent extremism. The primary topic of my thesis, therefore, is the feasibility of de Caro's SVU concept. Ma'am, may I ask you questions concerning my thesis research? Your answers will be used in the findings section of my thesis.

(b) (6) Yes, and if your questions concern the DIA EZ HR database, I will easily answer your questions.

(b) (6) : Ma'am, can you use the EZ HR database program to find individuals in the DIA that have special skills, such as media skills?

(b) (6) : No. The EZ HR database is not designed to find special skills of employees.

(b) (6) Ma'am, is it mandatory for employees to update their profiles concerning any skills that may be considered valuable?

(b) (6) No.

(b) (6) : Ma'am, how would I find someone with special skills in the media field within the government's agencies?

(b) (6) : You would have to advertise.



(b) (6) : Ma'am, if DIA ever made a database that depicted its employees' skills, what would your suggestions be in regards to the database?

(b) (6) : Someone would have to ensure that the individuals have the skills that they claim, including their proficiency levels in those skills.

(b) (6) : Ma'am, thank you for this interview.

## APPENDIX J

(b) (6)

**United States Army Intelligence Center of Excellence, Fort Huachuca, AZ**

**Telephone Interview, June 7, 2010**

(b) (6) Ma'am, it's (b) (6), I sent you an email the other day about my thesis and some questions I wanted to ask you. Is this an appropriate time for us to talk?

(b) (6) Yes, but could you refresh my memory about your thesis and what kind of information you need from me?

(b) (6) : Yes, of course. I am student at the National Defense Intelligence College, Washington, DC. Part of the requirement of the program is to write a thesis. My thesis questions is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase "SOFTWARE" and defines it as "the hostile use of global television to shape another society's will by changing its view of reality." One of de Caro's concepts is the SOFTWARE Virtual Unit. Also known as the SVU. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-

propaganda/media operations in the war against violent extremism. The primary topic of my thesis, therefore, is the feasibility of de Caro's SVU concept. Your answers will be used in the findings section of my thesis.

**(b) (6)**: Alright, what did you want to ask me?

**(b) (6)**: Does the Intelligence Center at Fort Huachuca teach any courses in cinematic analysis or television intelligence?

**(b) (6)** Please explain those two terms?

**(b) (6)**: I will define both these terms using Chuck de Caro's definitions. Cinematic Analysis is the analysis of television production attributes. Television Intelligence is the study of television and internet video programming/propaganda specifically produced by United States' adversaries. TVINT strives to explain propaganda, who produced it, how it was made, and where it was produced. Ultimately, it provides insight on how to counter propaganda.

**(b) (6)**: No, we do not teach any of those types of courses.

**(b) (6)**: Are you aware of any type cinematic analysis or television intelligence course or extensive training in this field that is conducted at any other military base or institution?

(b) (6): I am not aware of any other military base or institution that teaches those types of courses to service members.

(b) (6): Does the Intelligence Center at Fort Huachuca have a catalog of courses that potential students can see what courses are offered?

(b) (6): Not a hard copy but we list the courses on Intelligence Knowledge Network (IKN). As long as you can access your Army Knowledge Online (AKO) you can access Intelligence Knowledge Network (IKN).

(b) (6): Ma'am, thank you for answering my questions.

## APPENDIX K

(b) (6)

**Chief for Learning and Technical Division, Joint Military Intelligence College (JMIC), Defense Intelligence Agency**

**Interview, July 28, 2010**

(b) (6) : Ma'am thank you for meeting with me.

(b) (6) : No problem, what can I do for you?

(b) (6) : Ma'am, I am student here at the National Defense Intelligence College. Part of the requirement of the program is to write a thesis. My thesis questions is: To what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda in a SOFTWARE Virtual Unit construct? The inspiration for my thesis stems from an information warfare analyst by the name of Chuck de Caro. De Caro has coined the phrase "SOFTWARE" and defines it as "the hostile use of global television to shape another society's will by changing its view of reality." One of de Caro's concepts is the SVU. The SVU is the focal point of my research. De Caro describes the SVU as a DoD unit that plans SOFTWARE operations in the OSD. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-propaganda/media operations in the war against violent extremism. The primary topic of my thesis, therefore, is the feasibility of

de Caro's SVU concept. Ma'am, may I ask you questions concerning my thesis research? Your answers will be used in the findings section of my thesis.

(b) (6) Yes, and what are your specific questions?

(b) (6) Does JMIC teach television intelligence or cinematic analysis?

(b) (6) : What is your definition of both of those terms?

(b) (6) : I will define both of these terms using Chuck de Caro's definitions. CINAN is the analysis of television production attributes. TVINT is the study of video propaganda specifically produced by United States' adversaries. TVINT strives to explain propaganda, who produced it, how it was made, and where it was produced.

(b) (6) : No, we do not teach a course like that at JMIC. Here is a copy of our catalog of courses for you to have, so that you know what we do teach here.

(b) (6) : Are you aware if the military teaches its service members cinematic analysis or television intelligence at any of its schools or bases?

(b) (6) : No, I am not aware of any such training for our service members.

(b) (6) : Ma'am thank you for your answers and the copy of JMIC's catalog of courses.

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## APPENDIX L

**Dr. (b) (6)**  
**Professor and author, Southern Illinois University**

**Telephone Interview, May 5, 2010**

(b) (6) : Hello Dr. (b) (6) I sent the questions concerning my thesis to your email inbox. Did you get a chance to go over them?

(b) (6) : Yes, I did. But I want you to explain to me again what your research is about.

(b) (6) Yes, of course. My research question is to what extent can the intelligence community access reserve and National Guard service members with mass media skills to analyze adversary propaganda? I want to add your opinions and advice to the findings section of my thesis.

(b) (6) Ok. What does that mean? Explain your research question better and fill in the details.

(b) (6) : No problem. The inspiration for my thesis stems from an information warfare analyst by the name Chuck de Caro. De Caro has coined the phrase “SOFTWARE” and defines it as “the hostile use of global television to shape another nation’s will by changing its view of reality.” One of de Caro’s concepts is the SOFTWARE Virtual Unit. The SVU is the focal point of my research. De Caro describes the SVU as a Department of Defense unit that plans SOFTWARE operations in the Office of the Secretary of

Defense. Its members are reservists with career long skills in television production, advertising and media dissemination. Its primary mission is to support strategic information operations/counter-propaganda/media operations in the war against violent extremism. The primary topic of this thesis, therefore, is the feasibility of de Caro's SVU concept.

**(b) (6)**: Alright, but you want to discuss competitive intelligence. How does competitive intelligence tie into this SVU? I do not see the correlation.

**(b) (6)** There is not a wealth of information on an entity like the SVU because there is nothing out there that is similar to it. Therefore, it provides a challenge when researching the benefits a unit like this could provide with its analysis. Ideally, I would like to examine some case studies on a unit like the SVU, but since there is no military unit like this, I cannot. I am presuming that the civilian business world provides the relevant strategy of competitive intelligence as a way to showcase the benefits of analyzing enemies' strategies.

**(b) (6)**: I got it. I think you should look at the Middle East media market instead, more specifically Middle Eastern media advertising campaigns. If you really want to understand the benefits of analyzing your competitor's propaganda, why not look at the Middle East and at the same time get a feel for how marketing is done in the Middle East and what kind of commercial propaganda works on Middle Easterners. Ultimately, I think this type of relevant research would provide your thesis with insight as to how



Middle Eastern radio stations, television stations or marketing firms approach propaganda in their countries. There is a possibility that the United States' present enemies in the Middle East conduct their propaganda the same way the media market conducts advertising campaigns in their respective regions. I think you should also be looking at how President Obama ran his campaign in 2008. His PR and campaign team were able to market Obama in a positive light to American voters no matter what John McCain's political message or propaganda was.

(b) (6) You make some good points, but I am going to stick with my competitive intelligence approach and see how it pans out.

(b) (6) Okay, but before you start asking your standard questions that were in the email, tell me what type of propaganda this SVU would create. Well, what I really mean is what's the quality and style? Does it look professional or does it look like a freshman threw it together. In other words will it look low budget? Or will look like the United States military did it?

(b) (6) It could be any of those styles or forms you mentioned. It would really depend upon the adversary and the circumstances that surround the issues.

(b) (6) : I would strongly suggest that any propaganda that is produced in the United States looks low budget and has no hint of its American based production. If viewers suspect its American origin, they may recognize it as propaganda and reject it.

(b) (6) : How do businesses analyze their competitors' advertising/propaganda?

(b) (6) I will answer this question based on my experience working in radio as an announcer and the work I have done with sales staff putting advertising campaigns together. It has been my experience that radio stations use their own sales staff or an intern to conduct competitive intelligence and the analysis of the data they collected. They listen to other radio stations and what commercials they are playing. They make a list of the clients buying air time on competitors' airwaves. Then, the sales team, in conjunction with an announcer, creates a better ad to show to the potential client. You should already know that this is a "spec ad" because you took (b) (6) class. Ultimately, the goal is to steal that client away from the competing radio stations and keep them loyal to our station. It is really fierce in the radio advertising world because there is so much competition for advertising dollars in a major market. In the market I am in right now, we compete against all types of genres of radio, such as rock, alternative, talk, news, sports, R&B, and country.

(b) (6) Alright, but when your fellow sales people are analyzing the competitor's radio station ads, are they looking for style, technical attributes or message?

(b) (6) It is primarily message. Technical attributes are not factors in the analysis.

(b) (6) : Can you name some success stories where a business analyzed a competitor's advertising campaign and in turn assisted in countering the competitor's advertising?

(b) (6) No, and I do not think you would find those types of stories published either. First, no salesperson will reveal how he got his information on another radio station, because if he loses that source information, it may affect his sales commissions. Secondly, looking at it from the victim's point of view, the target of well done CI is usually embarrassed that they unwillingly provided information to their competitor. This fact alone makes them look weak; this weakness could also cause consumers to perceive their product as inferior to the competitor that conducted competitive intelligence.

(b) (6) So since you cannot recall a radio success story where a radio station analyzed a competitor's advertising campaign and in turn assisted in countering the competing radio station's advertising, then how about a story outside of the radio world?

(b) (6) : No, but I would like to add that the "secret shopper" tactic is effective in the retail world as a form of CI. A "secret shopper" is someone hired by a business to pretend they are a customer that is shopping at a competitor's retail store. As a customer they can gather info about its employees, customer service, and possibly their business strategy.

(b) (6) Thank you for time, candor and participation. Your answers are helpful. Have a good day.

## APPENDIX M

(b) (6)

**Professor, Southern Illinois University**

**Telephone Interview, May 8, 2010**

(b) (6) : Hello Professor (b) (6), I sent questions concerning my thesis to your email address (b) (6) edu.siu. I want to add your opinions to the findings section of my thesis.

Did you get a chance to look them over?

(b) (6) No, I did not because I no longer use that email address. But let's conduct this interview anyway and if I cannot answer your questions right away, I will answer them in an email. What's your first question?

(b) (6) : How do businesses analyze their competitions' advertising/propaganda?

(b) (6) I want to answer that question after I read your email. My answer will be in an email reply.

(b) (6) My next question is associated with this first one but I will ask it anyway so that you are familiar with all of the questions. When businesses are conducting competitive intelligence, are they looking for style, technical attributes or message?

(b) (6) Again, I want to answer that question later, after I read your email.

(b) (6) : Can you name some success stories where a business analyzed a competitor's advertising campaign and in turn assisted in countering the competitor's advertising?

(b) (6) Yes, but not off the top of my head. I want few days to think about it.

(b) (6) Are these stories documented? Are they in a book or article? I want to add these success stories in my literature review.

(b) (6) Highly unlikely, there is not much data in that area that I have come across, in terms of scholarly work or peer reviewed publications. Because that really is proprietary information and it is one of the trade secrets that businesses do not want to reveal. But I will read your email and I will think about your questions for a few days and then answer them in an email.

(b) (6) : Thank you, I look forward to your email.

(b) (6) Your welcome, but why did you select me for this interview?

(b) (6) You were my instructor when I was an undergraduate and graduate student at SIU and you taught me about media sales, advertising and how to manage a radio or television station. Your classes made an impression on me and I remember them.

## APPENDIX N

(b) (6)

**Professor, Southern Illinois University**

**Email reply to questions, May 11, 2010**

From: (b) (6)

Sent: Tue 5/11/2010 11:20 AM

To: (b) (6)

Subject: Re: Professor (b) (6), former student, requesting phone interview

Hi (b) (6)

I had some time today, so I put down a few thoughts for you to consider.

(b) (6) asks:

1. How do businesses analyze their competitors' advertising/propaganda? Are they looking for style, technical attributes or message?

(b) (6): (b) (6) in a free market, competitive economy, the answer to this question is reasonably straightforward. Usually, the first question about a competitor's advertising is, "Does it work?" Then the second question is, "How does it affect our business or product?" And, of course, the third question is, "What can/should we do about this trend?"

The answer to question #1 is found by researching product sales data. Simply, are the competitor's product sales up? As you know, this is most often a measure (%) of market share.

Similarly, the answer to question #2 is established by researching one's own product sales data. Are our product sales down?

If the answer to questions #1 or #2 is NO, then analyzing the competition's advertising is not necessary.

If the answer to questions #1 is YES and the answer to question #2 is NO, a commercial business normally takes little or no action in the short term.

If the answer to questions #1 or #2 is YES, then analyzing the competition's advertising may be required. However, in this scenario the first response is most often a pricing response – lowering the price is frequently successful and always more cost-effective than market/audience/product research and resulting anti-competitor campaigns.

About “style or message” question...

All media campaigns (public relations, political, direct marketing or advertising) must choose between the affective message (emotional) or the cognitive message (factual).

The two should never be mixed. *Mercedes-Benz* relies on fact-based campaigns (safety and reliability), while *GM Corvette* advertising relies on emotional campaigns (drive a *Corvette* and get the “babe”).

(b) (6) asks:

2. Can you name some success stories where a business analyzed a competitor's advertising campaign and in turn assisted in countering the competitor's advertising?

(b) (6), success stories are too numerous to name. But remember, advertising is very much a “copy-cat” business. For example, if *Ford* has a successful ad campaign in the Super Bowl, then *Chrysler Motors* might say, “They used the Super Bowl this year, so

let's use the Super Bowl next year!" Companies do not really try to "counter the competitor's advertising." They go after product sales. For example, in the auto business they introduce rebate or cash-back incentives.

Here is an important point for you to consider, I don't think the advertising model is right for you, right for your thesis. You might consider other models, such as Political Campaigns and/or Public Relations Campaigns and/or Direct Marketing.

(b) (6) asks:

3. Can you recommend articles or books that specifically cover analyzing competitor's advertising strategies? (Literature Review)

*Political Campaigns and Political Advertising: A Media Literacy Guide* by Frank W. Baker (2009)

*Political Campaign Communication: Principles and Practices (Communication, Media, and Politics)* by Judith S. Trent (2007)

*Posters, Propaganda, and Persuasion in Election Campaigns Around the World and Through History* by Steven A. Seidman (2008)

*Propaganda Techniques* by Henry T. Conserva (2003)

*Techniques of Propaganda and Persuasion* by Magedah E. Shabo (2008)



## APPENDIX O

**Dr. (b) (6)**  
**Author of fourteen advertising and marketing textbooks**

**Telephone Interview, May 6, 2010**

(b) (6) Hello Dr. (b) (6), I sent you an email concerning the questions I was going to ask during this telephone interview? Did you get a chance to go over them? And is this a good time to talk? I want to add your opinions to the findings section of my thesis. By the way, you sound like you're outside.

(b) (6) Well, I am pulling weeds in my backyard while walking up a hillside and I just turned 67, but this a good time to talk as any. So ask your questions.

(b) (6) How do businesses analyze their competitions' advertising/propaganda?

(b) (6) I am going to answer these questions of yours from the context of when I was working at an advertising firm as a copywriter. Competitive intelligence done in the civilian marketing and advertising sector is done by inductive reasoning. You are working backwards and what I mean by that is that you are looking at the outcome and trying to trace it back to what the strategy and the objective were. Therefore, you have to study the competitor's advertising campaign, the public relation piece, the contest they are running, and then you deliberate and decide what their objectives were. You may not be aware of this, but most major companies will hire other professional commercial companies to conduct their competitive intelligence analysis. There was a firm when I

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was a copywriter in advertising called National Leading Advertisers, commonly known as NLA, that if you hired their services, they would collect all of your competition's advertisements. Once a firm like NLA would produce the data, the company that hired them would have to analyze all the data and discern what their competitors were trying to do with their advertising campaign. By the way, NLA and the company that is hiring them are very cognizant of any statement by their competitors that could be considered as a disparaging claim against their company. Interestingly, a form of marketing called "comparative marketing" is coming back in style. This type of advertising compares a company's product with its competitor's. Take for example Direct TV and Dish. Those two companies are always airing commercials about how their respective service is better than the competition. Another example is the Ford company running ads that depict drivers that own and drive a Chevy and are then asked to drive a Ford for a day. The customer turns to the camera while driving the Ford and says this car has a sunroof whereas my Chevy did not. A commercial like this would be viewed by Chevy and NLA to see if there are any disparaging remarks made by their competitor's ads that can be refuted or do not have facts to support their claim. Amazingly, most advertising firms do a lot of research on the markets and how companies are performing in a particular industry. Managers of companies that are responsible for the "media buy" plan in their companies use competitive intelligence analysis a lot too. The term "media buys" pertains to the purchase of advertising space in a media venue. The "media buy" plan could have a mixture of print ads in newspapers, television commercials, billboards, or radio 30 second spots. Unfortunately, the individuals in advertising firms that write and produce advertisements for clients do not like using competitive intelligence analysis. It

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has been my experience that these individuals rely on their own opinions and decide what they think the audience wants to hear. So the research is primarily used by those who work in ‘media buys.’ For myself, I have found competitive intelligence on my competitor to be very useful whether I was the scriptwriter or I was in charge of ‘media buys.’ Also you can get your information yourself by conducting focus groups. For example, let’s say your company sells laundry detergent. You then bring in a group of ten or twelve people and ask them what they like about your detergent and how it compares to the competition.

**(b) (6)**: Can you name some success stories where a business analyzed a competitor's advertising campaign and in turn assisted in countering the competitor's advertising?

**(b) (6)** Yes, of course, but these stories have never been published, however I do recall them. When I was a young man I was working in Chicago for an advertising firm and one of our accounts was Kellogg. I soon learned working with the Kellogg company that the general public associates the word ‘cornflakes’ with Kellogg. Therefore, when someone hears the word ‘cornflakes’ they think of Kellogg. Kellogg had many competitors but its biggest is Post. And Post had developed their own cornflakes cereal. They could have simply called the cereal ‘Post Cornflakes,’ but instead they called it ‘Post Toasties Cornflakes’ so that the public knew that the cereal belonged to Post and was not just another cornflake cereal that belong to Kellogg. The word ‘Post’ and ‘Toasties’ differentiated it enough from the name ‘Kellogg’s Cornflakes’ that the buying public knew that the cereal belonged to Post. Where this story gets interesting is that

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Kellogg's other big competitor is General Mills. By the way the Big G that you see on the front of General Mills' cereal boxes stands for "Goodness Folks." General Mills has Wheaties and Cheerios, and you should know that Cheerios has the highest sales figures than any other cold cereal. Well we soon learned through word of mouth that the senior leadership at General Mills did not think they could have a complete line unless they had cornflakes in their product mix. So they came out with a brand called "Country Cornflakes." And like all General Mills' cereals, there was a Big G in the corner of the cereal box to signify that this cereal was made by General Mills. They had a very clever campaign where they used the characters from Grant Wood's painting "American Gothic." If you don't know, this 1930 painting shows a stern looking old farmer standing beside an old woman. The man is holding a pitchfork which symbolizes hard labor. Well, in the commercial the old man and old woman are standing in front of a sheep barn and they sing a little ditty about the new "Country Cornflakes." It was a great ad, however, when I would go to parties and my friends that knew I did the advertising for Kellogg, would come up to me and would tell me that they loved the new Kellogg "Country Cornflake" commercial that was produced with the figures from American Gothic. Hence, the public thought that the General Mill's commercial promoting "Country Cornflakes" was promoting "Kellogg's Cornflakes." As a result of that mistake by General Mills, "Kellogg's Cornflakes" sales went up by 20 percent. Kellogg had inadvertently reaped the benefit of their competitor's advertising campaign. And this all stems from people associating the word "cornflakes" with Kellogg. Furthermore, when the viewers heard the phrase "new cornflake" they thought that Kellogg had created a newer and better version of Kellogg Cornflakes but in a country style. That mistake by

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General Mills told me that they had not done competitive intelligence analysis on Kellogg.

Let me tell you another story. The world's biggest advertiser of consumer foods is Proctor and Gamble. When Proctor and Gamble brings a product to the national stage it does not let go of that product and markets that product effectively with a multi-million dollar advertising campaign. Proctor and Gamble's marketing campaigns are so effective that it diminishes the sales of its competitors. Competitors of Proctor and Gamble cannot match their advertising budget. Therefore, when Proctor and Gamble is testing and researching a new product, the competitors are out there in force at Proctor and Gamble test markets, trying to mess up the test, so there is no valuable data for Proctor and Gamble to collect. This makes it very difficult for Proctor and Gamble to make a decision of whether to mass produce the product when their test market data is skewed by the competition. With that in mind, let's get to the heart of the story. Proctor and Gamble has Scope mouthwash and their competitor Listerine has Listerine mouthwash. Proctor and Gamble came out with a new variation of Scope mouthwash and tried to test it out in Wichita, Kansas and Fort Wayne, Indiana. All the while, Listerine was conducting competitive intelligence on Proctor and Gamble and learned about this new variation of Scope and the test markets. Listerine decides they would go to the same test markets and mess up the research by introducing a new mouthwash called ListerMint. Listerine's tactic was to conduct an aggressive marketing campaign in the test markets by disseminating a huge number of coupons to the general public in the test markets and reduce the price of their Listerine mouthwashes in order to skew Proctor and Gamble's

research. Proctor and Gamble's sales for the new variation of scope in the test markets were low due to Listerine's campaign. Subsequently, Proctor and Gamble increased sales in the test markets by offering coupons and reducing their prices also. In the end, Proctor and Gamble's test market research for their new variation of Scope was a failure, because there was no clear factor as to why people were buying a certain mouthwash over another. Proctor and Gamble did not know if the test market was buying a certain mouthwash because of the coupons, pricing, advertising or for the quality of the product. As a result of the inconclusive research findings, Proctor and Gamble did not introduce the new Scope variation. What I learned from this scenario is that the best way to fight a big competitor like Proctor and Gamble is to conduct a strong marketing campaign when the larger competitor is introducing a new product so they can not establish a foothold in the marketplace.

(b) (6) When businesses are conducting competitive intelligence, are they looking for style, technical attributes or message?

(b) (6) Businesses conducting competitive intelligence are only concerned with the message and not the technical attributes.

(b) (6) These are great stories, but are they documented anywhere? Are they in a book, peer reviewed journal or article? I want to add these success stories in my literature review.

(b) (6) : No they are not recorded in any literature format that I know of.

(b) (6) : Are there any success stories documented?

(b) (6) : No, because smart businesses that conduct competitive intelligence want to continue the flow of information, and publicizing their exploits would eliminate further information from that resource. Think about it, why would anyone divulge their competitive intelligence strategy to the public, or for that matter in print. That would be like committing business suicide by revealing your trade craft. Also, competitive intelligence can sometimes be perceived as industrial espionage, even if it is legally performed. Therefore, to avoid legal nightmares, competitive intelligence exploits do not get published or boasted about in public forums.

(b) (6) : Is there anything else you would like to add?

(b) (6) : Yes, you would be interested in this one because you are in the military. When I worked on the (b) (6) account we had to create different commercials for Spanish speaking Americans. People from Mexico, Central and South America and Cuba all speak different types of Spanish. We needed actors that spoke each of the language variations or dialects. We knew that we had to approach the (b) (6) with various versions of Spanish because we had done our research on our target market. (b) (6)

(b) (6)

(b) (6) [REDACTED]  
[REDACTED]  
[REDACTED]

(b) (6) : Thank you Dr. (b) (6), you provided a lot of insight on my research.

(b) (6) : Think about what I said and if you have more question please call me and maybe next time I will not be pulling weeds.



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