



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**AN ANALYSIS OF THE REQUIREMENTS
AND POTENTIAL OPPORTUNITIES
FOR THE FUTURE EDUCATION
OF LAW ENFORCEMENT INTELLIGENCE ANALYSTS**

by

Prioleau Green

March 2008

Thesis Advisor:
Second Reader:

Glen Woodbury
John Smith

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE March 2008	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE An Analysis of the Requirements and Potential Opportunities for the Future Education of Law Enforcement Intelligence Analysts		5. FUNDING NUMBERS	
6. AUTHOR(S) Prioleau Green		8. PERFORMING ORGANIZATION REPORT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.	
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited		12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) The absence of law enforcement intelligence analysis programs in academia has created a serious gap in the Nation's ability to effectively protect itself from the terrorist threat. Academic institutions that teach analysis are primarily focused on foreign or national intelligence. Academia must begin addressing the need to educate law enforcement intelligence analysts Through an examination of current intelligence analyst programs, surveys of law enforcement intelligence analysts, and research of U.S. and foreign law enforcement intelligence analyst programs, this thesis will explore how law enforcement analyst organizations and academia should provide law enforcement analyst instruction. Each chapter addresses a different component of the challenge in the education and training law enforcement analysts. This thesis also provides recommendations for future law enforcement analyst instruction.			
14. SUBJECT TERMS academia, law enforcement, intelligence analyst instruction		15. NUMBER OF PAGES 171	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**AN ANALYSIS OF THE REQUIREMENTS AND POTENTIAL
OPPORTUNITIES FOR THE FUTURE EDUCATION OF
LAW ENFORCEMENT INTELLIGENCE ANALYSTS**

Prioleau Green
Deputy Chief, Cleveland Division of Police
B.A., Cleveland State University, 1976
M.B.A, Cleveland State University, 1993

Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL
March 2008**

Author: Prioleau Green

Approved by: Glen Woodbury
Thesis Advisor

John Smith
Second Reader

Harold A. Trinkunas, Ph.D.
Chairman, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

The absence of law enforcement intelligence analysis programs in academia has created a serious gap in the Nation's ability to effectively protect itself from the terrorist threat. Academic institutions that teach analysis are primarily focused on foreign or national intelligence. Academia must begin addressing the need to educate law enforcement intelligence analysts.

Through an examination of current intelligence analyst programs, surveys of law enforcement intelligence analysts, and research of U.S. and foreign law enforcement intelligence analyst programs, this thesis will explore how law enforcement analyst organizations and academia should provide law enforcement analyst instruction. Each chapter addresses a different component of the challenge in the education and training law enforcement analysts. This thesis also provides recommendations for future law enforcement analyst instruction.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
	A. PROBLEM STATEMENT	1
	B. RESEARCH QUESTION	2
	C. ARGUMENT.....	2
	D. RESEARCH SIGNIFICANCE.....	4
	E. THESIS METHODOLOGY	4
	F. RECOMMENDATIONS AND CONCLUSIONS.....	6
II.	WHAT IS INTELLIGENCE ANALYSIS?	7
	A. INTELLIGENCE DEFINED.....	7
	B. INTELLIGENCE ANALYSIS	10
	C. FOREIGN OR NATIONAL INTELLIGENCE	14
	D. MILITARY INTELLIGENCE.....	18
	E. BUSINESS (COMPETITIVE INTELLIGENCE).....	23
	F. LAW ENFORCEMENT INTELLIGENCE.....	25
	G. SUMMARY	31
III.	CURRENT STATE OF LAW ENFORCEMENT INTELLIGENCE ANALYSIS	33
	A. INTELLIGENCE ANALYSIS AT LARGE.....	33
	B. LAW ENFORCMENT INTELLIGENCE ANALYSIS.....	34
	C. SUMMARY	41
IV.	ANTICIPATED TRENDS IN CRIMINALITY AND TERRORISM	43
	A DEMOGRAPHIC TRENDS	43
	B. GLOBALIZATION	44
	C. SUMMARY	46
V.	COLLEGIATE CURRICULUM REVIEW.....	47
	A. CERTIFICATE PROGRAMS	47
	B. CERTIFICATE PROGRAM SUMMARY	54
	C. UNDERGRADUATE PROGRAMS	55
	D. UNDERGRADUATE PROGRAM SUMMARY	71
	E. GRADUATE PROGRAMS	72
	F. GRADUATE PROGRAM SUMMARY	80
	G. SUMMARY	80
VI.	REVIEW OF ANALYST TRAINING IN FOREIGN NATIONS	81
	A. TURKEY	81
	B. CANADA	83
	C. UNITED KINGDOM.....	86
	D. SUMMARY	90
VII.	ANALYST SURVEY DEVELOPMENT AND RESULTS.....	93
	A. SURVEY METHODOLOGY RATIONALE.....	93

B.	ANALYST SURVEY RESULTS.....	105
C.	SURVEY RESPONSE ANALYSIS.....	118
D.	SUMMARY	121
VIII.	RECOMMENDATIONS.....	123
A.	NATIONAL LAW ENFORCEMENT ANALYST STANDARDS	123
B.	WHY COLLEGES SHOULD TRAIN LAW ENFORCEMENT ANALYSTS	127
1.	Philosophy of Education.....	127
2.	Analyst Training	128
C.	SUMMARY	130
IX.	CONCLUSION	131
A.	SUMMARY OF FINDINGS	131
1.	Law Enforcement Analyst Organizations	131
2.	Analyst Personality Traits.....	132
3.	Analyst Training	133
B.	FUTURE OF LAW ENFORCEMENT INTELLIGENCE ANALYSIS	135
	BIBLIOGRAPHY	141
	INITIAL DISTRIBUTION LIST	155

LIST OF FIGURES

Figure 1.	The Five Worlds of the Intelligence Analyst.....	11
Figure 2.	A Hypothetical J-2 Subordinate Organizational Structure.	20
Figure 3.	Intelligence Process	22
Figure 4.	The Intelligence Process	27
Figure 5.	Isolated Crime and Intelligence Analysis Model	35
Figure 6.	History Courses.....	106
Figure 7.	Social Science Courses	107
Figure 8.	Quantitative Courses.....	108
Figure 9.	Languages	109
Figure 10.	Religions	110
Figure 11.	Philosophies	111
Figure 12.	Geography Courses.....	112
Figure 13.	Most Helpful Courses	113
Figure 14.	Helpful Courses and Topics.....	114
Figure 15.	Importance of Internship.....	115
Figure 16.	Mental Processes Instruction During Training	116
Figure 17.	Value of Mental Processes Instruction	117

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	Types of History Courses.....	106
Table 2.	Types of Social Science Courses	107
Table 3.	Types of Quantitative Courses.....	108
Table 4.	Types of Languages	109
Table 5.	Types of Religions	110
Table 6.	Types of Philosophies	111
Table 7.	Types of Geography Courses.....	112
Table 8.	Most Helpful Courses	113
Table 9.	Helpful Courses and Topics.....	114
Table 10.	Importance of Internship.....	115
Table 11.	Mental Processes Instruction During Training	116
Table 12.	Value of Mental Processes Instruction	117

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

Writing this thesis was a learning experience for me. I knew something about the field of law enforcement intelligence analysis before I started it. However, I learned much about the field while completing the thesis. The thesis process was demanding upon me professionally and privately. I am grateful for the help of many people in completing my thesis.

DeNise, my wife, was a source of support in handling many of the daily family demands that I could not address while working on the thesis. Without her help, I could not have completed the project.

Lieutenant Leona Siggia, my assistant and friend, was a great help. She handled most of the administrative functions of my office. This allowed me to devote more time to researching and writing the thesis.

Chief Michael McGrath allowed me the opportunity to attend the Naval Post Graduate School. He also allowed me to miss meetings while I prepared assignments and addressed writing the thesis.

Dr. Karen Groth from Notre Dame College provided me with insight on developing the thesis survey. Her efforts saved me a lot of research on how to develop a survey.

Analyst Mark Grimshaw from the UK helped me obtain invaluable UK information on law enforcement intelligence analysis. He also put me in contact with Kate Pearce from the National Policing Improvement Agency (NPIA) in the UK.

Karen Pearce is Head of Analysis at NPIA and she supplemented the information I received from Mark. Her input was invaluable.

Linda Jane Young, a lecturer on criminal intelligence at Charles Sturt University, was helpful in providing me with information on law enforcement intelligence analyst training.

Susan McClure, a supervisory intelligence analyst at the Cleveland Office of the FBI, helped review my thesis survey. She provided input on the survey questions.

The International Association of Law Enforcement Intelligence Analysts (IALEIA) was a tremendous asset. IALEIA arranged for its U.S. members to take my thesis survey.

I also want to thank both the analysts from Canada and the Turkish National Police representatives who helped me obtain hard to find information on law enforcement intelligence analyst training in those countries.

Finally, I want to thank my advisors: Glen Woodbury and John Smith. They provided direction and support for my thesis.

I. INTRODUCTION

A. PROBLEM STATEMENT

There are a myriad of problems in the intelligence community in the United States. The problems range from the collection of information to the dissemination of intelligence and to its analysis. Analysis is a key component of the intelligence cycle and, unfortunately, law enforcement has not fully grasped its importance. Due to complaints of civil rights groups over the last decades, law enforcement has limited its domestic collection of information and the manner in which it conducts domestic intelligence analysis. For example, a number of cities prohibited law enforcement from having intelligence units. As a result, many police managers were unacquainted and, therefore unable to appreciate the use of intelligence and analysis in police work. The high violent crime rates of the 1980s and early 1990s caused law enforcement to focus on reducing or preventing crime. Intelligence and analysis was less important. The lack of awareness in many metropolitan police departments as to the importance of intelligence and analysis was coupled with a lack of properly educated and trained law enforcement intelligence analysts. In part, the paucity of qualified personnel was due to most colleges and universities, that taught intelligence analysis, focused on foreign, national or business intelligence. Foreign intelligence in this thesis refers to the collection and analysis of information involving national security on foreign governments, individuals, and groups. National intelligence in this thesis means the integrated collection and analysis of information involving foreign, military, and domestic intelligence to address national security in the U.S. Non-federal law enforcement analysis was, and is, seldom addressed. Law enforcement intelligence analysis is crucial in thwarting terrorist acts. This is because many criminal acts, such as money laundering, smuggling, narcotic sales, etc., are used to finance terrorism. Since law enforcement plays a major role in thwarting terrorist attacks, the absence of law enforcement intelligence analysis programs in academia has created a serious gap in the Nation's ability to effectively protect itself from the terrorist threat.

B. RESEARCH QUESTION

Given the current deficiencies in law enforcement intelligence analysis, how can colleges and universities, through their curriculum and relationships with law enforcement, best educate new law enforcement intelligence analysts?

C. ARGUMENT

Academia must begin addressing the need to educate law enforcement intelligence analysts. Academia currently focuses on the needs of the foreign intelligence community at the expense of law enforcement. Colleges need either to develop more law enforcement analytical courses to accompany their foreign intelligence analyst courses, or academia should designate intelligence analyst programs exclusively for law enforcement.

Academic institutions that teach analysis are primarily focused on foreign or national intelligence. While there are similarities between law enforcement analysis and foreign analysis, law enforcement analysis requires some different instruction. Policy makers who affect information collection and analysis for the Intelligence Community (IC) have different concerns than prosecutors or police management who set requirements for law enforcement intelligence. What information is available for collection and how it is to be collected is also different between law enforcement and the IC.

Many law enforcement agencies have limited knowledge and use of intelligence products. According to a study conducted by the University of Alabama, law enforcement agencies do not have the analysts to conduct intelligence analysis or the software to support analysis.¹ The National Criminal Intelligence Sharing Plan discussed a survey conducted by the Major Cities Chiefs Association that came to the same

¹ The United States Department of Justice, *Crime Analysis in America*, (Washington, D.C.: DOJ, 2002), <http://www.cops.usdoj.gov/mime/open.pdf?Item=790> (accessed February 28, 2008).

conclusion as the University of Alabama study.² While there does not appear to be a shortage of information gathered by law enforcement agencies, clearly there is a shortage of analysis. Most law enforcement agencies' analysts are conducting rudimentary analysis with limited use of software. Academia's preoccupation with teaching foreign or military intelligence analysis has contributed to this problem.

At the collegiate level, challenges for teaching law enforcement intelligence analysis would come from both colleges and police management. Colleges are more concerned with addressing the dearth of analysts required for foreign intelligence. Recently, the media has addressed the shortage of analysts needed in all levels of the federal government and the military. The Washington Post³ and The Business Monthly⁴ have reported on the shortage of analysts in the Intelligence Community and in the Department of Defense. However, there has been little or no media discussion on the need for analysts in local law enforcement. The federal government has been recruiting analysts from academia. This has not been the case with local law enforcement. Academia is responding to the demand from the federal government and it is tailoring its analyst curriculum towards federal needs. Unless there is a significant demand for law enforcement analysts, academia would not see the need to provide a curriculum for law enforcement analysts.

Law enforcement management does not fully appreciate nor totally understand the intelligence process. Until management acquires a better understanding of intelligence, it will not be able to make the best use of intelligence analysts. Therefore, management will not be in position to ask or demand from academia the skills needed of law enforcement analysts.

² The United States Department of Justice, *The National Criminal Intelligence Sharing Plan* (Washington, D.C.: DOJ, 2005), http://www.it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf (accessed February 28, 2008).

³ Katherine Pflieger Shrader, "Analysts Are in Great Demand," Associated Press December 30, 2004 <http://www.washingtonpost.com/wp-dyn/articles/A35070-2004Dec29.html> (accessed March 27, 2008).

⁴ Mark R. Smith, "Intelligence Analyst Shortage: AACC Keys in on New Program Options," *The Business Monthly*, July 2006 http://www.bizmonthly.com/7_2006/2.shtml (accessed March 27, 2008).

Some governmental leaders with influence in establishing national intelligence protocols do not value including law enforcement as part of the nation's homeland security intelligence process. These leaders would not see value in requiring colleges to prepare law enforcement intelligence analysts. They would propose that academia continue to emphasize foreign and military intelligence training.

D. RESEARCH SIGNIFICANCE

This thesis would have the most impact on the following areas:

- College administrators: This is the immediate consumer of this thesis. Administrators must see the value in changing the emphasis on their intelligence analyst programs from being predominately foreign, military, and business-oriented to also including law enforcement intelligence analyst training.
- Homeland Security practitioners and national leaders: These groups must realize that Homeland Security is not just a military and federal concern. Law enforcement intelligence analysis must be improved and included in the national approach to dealing with terrorism.

E. THESIS METHODOLOGY

Through an examination of current intelligence analyst programs, surveys of law enforcement intelligence analysts, and research of U.S. and foreign law enforcement intelligence analyst programs, this thesis will explore how law enforcement analyst organizations and academia should provide law enforcement analyst instruction. Each chapter addresses a different component of the challenge in the education and training law enforcement analysts. This thesis also provides recommendations for future law enforcement analyst instruction.

Chapter I discusses the problems involving non-federal law enforcement intelligence analysis. It further discusses some of the reasons for the problems: limited collection of domestic information, law enforcement managers' limited understanding of the intelligence process, lack of properly trained law enforcement intelligence analysts,

and academia's focus on training analysts for national security, business, and the military. The chapter also addresses the survey used in this thesis.

Chapter II provides a definition of intelligence and describes the analytical process of intelligence. It also discusses the intelligence collection disciplines: Human Intelligence (HUMINT); Imagery Intelligence (IMINT); Signals Intelligence (SIGINT); Measurement and Signature Intelligence (MASINT); Open Source Intelligence (OSINT); and Geospatial Intelligence. Finally, it discusses four of the major forms of intelligence analysis: foreign or national, military, business (competitive), and law enforcement.

Chapter III discusses the problems with non-federal law enforcement intelligence analysis. It examines studies on law enforcement intelligence analysis and crime analysis. The chapter also discusses the response of major law enforcement organizations to the problems of law enforcement intelligence and its analysis.

Chapter IV examines both criminal and terrorism projections for the United States and the world by the year 2020. Among the topics it addresses are expected increases in the elderly population, changes in birth rates, migration into the U.S from South America, and globalization.

Chapter V discusses the private and public academic instruction of intelligence analysis in the U.S. The discussion addresses certificate, undergraduate, and graduate programs. The chapter highlights the institutions that either provide degrees and certificates in law enforcement intelligence analysis or teach law enforcement specific analysis courses.

Chapter VI addresses the law enforcement intelligence analyst training in three foreign nations: Turkey, Canada, and the United Kingdom. It also provides a brief summary on the comparison between law enforcement intelligence analyst training in those countries and the United States.

Chapter VII discusses the survey questions. It describes their structure and the options for the questions. It further discusses the reasons for asking the questions. The chapter also provides a graphical analysis of survey results and relates them to classes that academia needs to teach.

Chapter VIII discusses the need to combine the education and training standards of the International Association of Law Enforcement Intelligence Analysts (IALEIA) and the International Association of Crime Analysts (IACA) into one standard for law enforcement analysts. The chapter also discusses educational philosophy and training. It also discusses why academia should be the source of training for law enforcement analysts.

Chapter IX integrates the preceding chapters into an argument for having academia provide law enforcement analyst training. The chapter provides an analysis of survey results and relates them to classes that academia needs to teach. The chapter also discusses ancillary issues that are impeding law enforcement intelligence analysis and the instruction of it. Finally, the chapter discusses the process of law enforcement intelligence analysis in the UK and why the U.S. should replicate the process.

F. RECOMMENDATIONS AND CONCLUSIONS

The two major law enforcement analyst organizations, the International Association of Law Enforcement Intelligence Analysts (IALEIA) and the International Association of Crime Analysts (IACA), should agree on joint training and education standards. IALEIA and IACA should also have input from major law enforcement organizations in establishing the joint standards. Academia should teach these standards to future generations of new law enforcement analysts.

II. WHAT IS INTELLIGENCE ANALYSIS?

This chapter describes the process of intelligence and will explore the various forms of intelligence analysis. There is a presentation on analyst requirements from several experts in intelligence analysis. There is a discussion of the intelligence cycle and the importance of analysis in the cycle. The chapter also discusses intelligence analysis in four areas: foreign or national intelligence; military; business; and law enforcement. Finally, the chapter concludes with a brief summary of how law enforcement intelligence analysis differs from the other form of intelligence analysis.

A. INTELLIGENCE DEFINED

There is no definitive definition of intelligence. Different agencies and governments have different definitions. In the United States, it is common for agencies to define it for purposes of their own agendas. For all agencies and governments, intelligence is usually viewed as more than information. A working definition can be stated as information that has been processed and refined for use by policy or decision makers. There are many types of policy or decision makers -- ranging from military and government leaders to business executives. However, intelligence has traditionally been a governmental function.

The process of intelligence can be studied in a cycle. Depending upon who is analyzing the cycle, it may have a different number of steps. One cycle has the following steps: direction, planning, collection, processing, analysis, production, and dissemination.⁵ Direction requires policy or decision makers to establish requirements for intelligence. Planning involves making assessments of current resources and capabilities to determine how information will be collected. Collection acquires information for analysis. Processing reduces the information into a format suitable for

⁵ Rob Johnson, *Analytic Culture in the U.S. Intelligence Community* (Washington: Central Intelligence Agency, 2005), <https://www.hsdl.org/homesec/docs/intel/nps10-012506-04.pdf&code=fdfe7d0c018a12e08efaa942fb1c7cd5> (accessed February 20, 2008). 45.

analysis. Analysis is defined in a following paragraph. Production is the creation of intelligence. Dissemination is the delivery of intelligence to the consumer.

In the United States, there are sixteen member agencies and organizations in the Intelligence Community (IC): Air Force Intelligence, Army Intelligence, Central Intelligence Agency (CIA), Coast Guard Intelligence, Defense Intelligence Agency (DIA), Department of Energy, Department of Homeland Security, Department of State, Department of Treasury, Drug Enforcement Administration, FBI, Marine Corps Intelligence, National Geospatial Intelligence Agency, National Reconnaissance Office, National Security Agency (NSA), and Navy Intelligence.⁶ Intelligence can be organized into six collection disciplines: Human (HUMINT), Imagery (IMINT), Open Source (OSINT), Signals (SIGINT), Measures and Signatures (MASINT) and Geospatial Intelligence. The Central Intelligence Agency (CIA), National Security Agency (NSA), National Geospatial Intelligence Agency, and the Defense Intelligence Agency (DIA) are the national lead agencies for the six collection disciplines. The members of the Intelligence Community (IC) regularly use the collection disciplines.

HUMINT can be divided into two categories: overt and covert.⁷ Overt HUMINT involves gathering of information by human sources via de-briefing emigrants, defectors, citizens traveling abroad, or citizens in neighborhoods. The use of official foreign government contacts, correspondence with intelligence and security services, and contact with local government and non-governmental organizations is also a non-secretive form of HUMINT. Another form of overt HUMINT involves information collection by civilian and military personnel with diplomatic assignments and by police officers on patrol. Covert HUMINT obtains secret information by spying, espionage, or by using undercover police officers or informants.

⁶ United States Intelligence Community, "Members of the Intelligence Community (IC)," <http://www.intelligence.gov/1-members.shtml> (accessed February 23, 2008).

⁷ Diane Snyder, "With a Little Bit of Heart and Soul Analyzing the Role of HUMINT in the Post Cold War Era," (paper presented at the Woodrow Wilson School Policy Conference 401a, June 6, 1997), <http://www.fas.org/irp/eprint/snyder/humint.htm> (accessed February 23, 2008).

Another of the collection disciplines, IMINT, is intelligence obtained from photographs and other imagery, such as infrared lasers, multi-spectral sensors, and radar.⁸ It is also the only form of intelligence that allows a military commander to see the battlefield in real time. IMINT is usually collected by satellite, manned aircraft, and unmanned aerial vehicles (UAVs). Law enforcement has the capability to collect intelligence with closed circuit television (CCTV).

SIGINT is derived from the exploitation of foreign communications systems and non-communications' emitters, such as radar.⁹ It complements intelligence derived from other sources and is frequently used to target sensors in other forms of intelligence, such as IMINT. SIGINT is divided into three subcategories: communications intelligence (COMINT), intelligence from the interception, and analysis of non-communications' emitters.¹⁰ Law enforcement uses SIGINT by using wiretaps and equipment, such as pen registers or trap and trace devices, to record the identity of telephone numbers. Information received from global positioning systems is also another form of SIGINT used by law enforcement.

Using technical methodology, MASINT detects, locates, tracks, identifies, and/or describes characteristics of both fixed and moving objects and sources.¹¹ It can include some of the following collection systems: radar, acoustic, radio frequency, nuclear detection, seismic sensors, and Chemical Biological Radiological Nuclear Explosive (CBRNE) sensors.¹² For example, bomb squads and airport luggage scanning equipment use trace detection devices to test for the presence of explosives.

OSINT covers the gamut of open source information obtained from both the internet and the private sector. It further includes unclassified information that is

⁸ Department of the Army, *Intelligence: Field Manual No.2*, (Washington, D.C.: Department of the Army, 2004), <https://www.hsdl.org/homesecc/docs/intel/nps10-060304-01.pdf&code=f4b7b65862927d0a1120216473203b99> (accessed February 23, 2008). 1-30.

⁹ Joint Chiefs of Staff, *Joint Intelligence*, <https://www.hsdl.org/homesecc/docs/dod/nps26-072007-01.pdf&code=f4b7b65862927d0a1120216473203b99> (accessed February 24, 2008). B-4.

¹⁰ Ibid.

¹¹ Department of the Army, *Intelligence: Field Manual No.2*, 1-31.

¹² Ibid.

accessible and acknowledgeable.¹³ Approximately 80% of OSINT is not online and is not available in the United States.¹⁴ Robert Steele, a former intelligence officer and founder of the United States Marines Corps Intelligence Center, is a major proponent of OSINT. Steele argues that spies and satellites collect less than 10% of the information needed to understand today's multi-cultural world.¹⁵ He added that intelligence professionals need a new form of intelligence that can process and analyze historical, cultural, and current events from open sources available in twenty-nine languages.¹⁶ While OSINT is not new, Steele is arguing for a government-established open source intelligence executive authority. This approach would centralize OSINT for the intelligence community. Law enforcement uses OSINT when gathering information on ideologies of domestic and foreign extremist groups.

Geospatial intelligence comes from the analysis and visual representation of security related sources of concern on the earth. It is the synthesis of imagery, imagery intelligence, and geospatial information. The National Geospatial Intelligence Agency is the lead agency for this geospatial intelligence. The Agency was formerly the National Imagery and Mapping Agency (NIMA).

B. INTELLIGENCE ANALYSIS

Much like intelligence, intelligence analysis has various definitions. A good definition is the process of evaluating and transforming raw information into a processed format that meets requirements of policy or decision makers. Analysts must evaluate raw information for reliability and credibility. Further, the analyst compares raw information with what information he knows to remove error and deception.¹⁷ Analysts will examine

¹³ Tom O'Connor, "Techniques of "Intelligence Gathering," (course notes on intelligence at North Carolina Wesleyan College, 2004), <https://www.hsd1.org/homesec/docs/edu/nps16-061704-15.pdf&code=27c043268c97b2acdb7f2c8414f6ee4d> (accessed February 24, 2008).

¹⁴ O'Connor, "Techniques of "Intelligence Gathering."

¹⁵ Robert David Steele, "The New Craft of Intelligence," *Time*, <http://www.time.com/time/covers/1101020311/viewpoint.html> (accessed February 24, 2008).

¹⁶ Ibid.

¹⁷ Stephane J. Lefebvre, "A Look at Intelligence Analysis" (paper presented at International Studies Association 44th Annual International Convention, Portland, Oregon, February 25-March 1, 2003), [http://isanet.ccit.arizona.edu/portlandarchive/ISA\[1\].Intelligence.2003.PDF](http://isanet.ccit.arizona.edu/portlandarchive/ISA[1].Intelligence.2003.PDF) (accessed February 24, 2008).

information for the following characteristics: nature, proportion, function, relevancy, and interrelationships.¹⁸ Policy or decision makers will frequently want analysts to make projections or to determine outcomes from information. A good analysis report will also indicate alternative scenarios or recommendations. Depending on the agency, for which the analyst works, and its intelligence requirements, the analyst will access information gathered by the intelligence functional groups. In addition to open-source information, this information was acquired using clandestine or covert methods. Analysts should also help determine the methods used for collecting information.

Sarah Taylor, an intelligence analyst for Lockheed Martin, said an analyst lives simultaneously in the following five worlds: customer, discipline, subject-environment, sources, and self.¹⁹ The analyst must understand all worlds and continuously update their information and perception. While this process is dynamic and chaotic, an analyst must deal with it and produce a useable product for the customer.

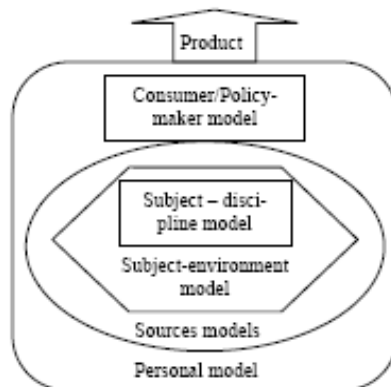


Figure 1: The five worlds of the intelligence analyst ²⁰

Figure 1. The Five Worlds of the Intelligence Analyst

¹⁸ Stephane J. Lefebvre, "A Look at Intelligence Analysis."

¹⁹ Susan M. Taylor, "The Several Worlds of the Intelligence Analyst," (paper presented at the 2005 International Conference on Intelligence Analysis, McClean, VA, May 3, 2005), https://analysis.mitre.org/proceedings/Final_Papers_Files/45_Camera_Ready_Paper.pdf (accessed February 24, 2008).

²⁰ Taylor, "The Several Worlds of the Intelligence Analyst."

Analysts must have a good understanding of policy and the decision maker's needs. A good understanding of these needs would allow the analyst to anticipate future needs of the decision maker. The analyst should also understand the process the decision maker uses to make a decision and the types of decisions that person would be required to make. An analyst needs to know the policy maker's style, i.e., does the person prefer graphics or text? focus on details or conclusions?

A thorough understanding of the subject and its environment is necessary for the analyst. This information could come from a variety of sources, such as OSINT, the internet, and academic research on literature and history. The subject-environment world is not as concrete as the discipline world.²¹ Analysts need as much information as possible about the setting where events could occur. Therefore, to analyze the subject environment, they must be able to apply information from history, language, and culture. A good analyst will examine historical examples of behavior and settings and, then, note trends. Language knowledge, combined with history of the subject, could help an analyst predict how a group of people may act.

From the various information sources available to the analyst, the analyst will address their coverage and reliability. Coverage involves the completeness of information required for the investigation of a matter. The analyst needs to determine how well the subject of the investigation is covered and if areas of coverage overlap. Overlapping coverage areas will help the analyst determine the reliability of the information. Areas without coverage will help the analyst identify information gaps.

Further, the mental processes and analytical skills of the analyst are a major component of the analysis process. In *Intelligence Essentials for Everyone*, Lisa Krizan stated that the National Security Administration (NSA) conducted an intelligence analyst job study. The NSA concluded that the following cognitive attributes were important for analysts: written expression, reading comprehension, inductive reasoning, deductive

²¹ Taylor, "The Several Worlds of the Intelligence Analyst."

reasoning, pattern recognition, oral comprehension, and information ordering.²² The analyst must also deal with biases and misperceptions which may prevent an objective analysis of a situation. Krizan also reviewed categories of misperception and biases by Douglas Dearth, a faculty member from the Joint Military Intelligence Training Center. These included the following misperceptions: prematurely formed views, inappropriate analogies, superficial lessons from history, mirror imaging, ethnocentrism, rational-actor hypothesis, and willful disregard of new evidence.²³ Two other important biases recognized by intelligence professionals are “groupthink” and “layering.” “Groupthink” involves multiple analysts holding an identical, or similar, interpretation of a subject, or incident, without challenging its common perception. “Layering” is creating new assessments from previous assessments without thoroughly evaluating the relevance and validity of existing assessments to new assessments.

Misperceptions and biases of the IC were part of the error used in alleging an Iraqi Weapons of Mass Destruction (WMD) program as a reason to invade Iraq. The United States Senate reviewed the IC’s prewar assessment of Iraq and derived several negative conclusions regarding the IC’s analysis of Iraq. Senators concluded analysts used group think which led analysts to believe ambiguous information was indicative of an Iraqi WMD program.²⁴ Senators also concluded analysts used “layering” by building assessments on previous judgments without addressing the uncertainties from the previous judgments.²⁵

The analyst’s skillful synthesis of the analyst’s multiple worlds results in a final product — a report or presentation — for the customer. This product should reflect a thorough and unbiased review of sources. It also should be validated as best as possible.

²² Lisa Krizan, *Intelligence Essentials for Everyone*, (Washington, D.C.: Joint Military Intelligence College, 1999), <https://www.hsdl.org/homesec/docs/dod/nps03-010907-04.pdf&code=ca753093689bd7033ed6c14358552b37> (accessed February 24, 2008). 55.

²³ Krizan, *Intelligence Essentials for Everyone*, 36.

²⁴ Select Committee on Intelligence, United States Senate, 108th Congress, “Report on the U.S. Intelligence Community’s Prewar Intelligence Assessments on Iraq,” July 2004, <https://www.hsdl.org/homesec/docs/intel/nps03-071204-01.pdf&code=5a1eaf8553d0475bebbbed17ee94e713f> (accessed February 24, 2008). 18.

²⁵ *Ibid.*, 22.

The analyst should be aware of information gaps used to compile the report. Further, the report format should be presented in the customer's preferred style. Analysts will likely work on multiple projects. Therefore, they must be able to maintain separation between information and customers.

C. FOREIGN OR NATIONAL INTELLIGENCE

The Central Intelligence Agency (CIA) is the primary intelligence agency for providing national security intelligence to senior U.S. policymakers. It personifies the United States' approach to dealing with foreign or national intelligence. The CIA has some of the same needs and processes as military analysis, but there are significant differences.

The CIA has established analytic and personnel practices. The Agency believes that for analysts to be effective they must have years of education and on-the-job experience.²⁶ To produce a final intelligence product, the CIA uses a complex system of specialties. Most analysts work for the Directorate of Intelligence (DI) and are assigned to groups that cover specific geographic areas.²⁷ The analysts are further assigned specialties, such as political, military, economic, leadership, scientific, technical, or weapons intelligence.²⁸ Geographical or regional expertise involves the combination of geography, history, sociology, and political systems for an area. Disciplinary expertise involves the theory and practice underlying the analyst's specialty. The previously mentioned analyst specialties are grounded in the corresponding academic disciplines.

CIA analysts usually have small areas of direct responsibility. These areas of responsibility — also referred to as accounts — are governed by a combination of the regions' and analysts' specialties.²⁹ CIA analysts work in country teams with analysts

²⁶ Stephen Marrin, "Homeland Security and the Analysis of Foreign Intelligence," Markle Foundation Task Force on National Security in the Information Age, http://www.markletaskforce.org/documents/marrin_071502.pdf. 6.

²⁷ Stephen Marrin, "Improving CIA Analysis by Overcoming Institutional Obstacles," *Bringing Intelligence About: Practitioners Reflect on Best Practices*, <http://ndic.edu/press/pdf/5138.pdf> (accessed February 29, 2008). 44.

²⁸ Ibid.

²⁹ Marrin, "Homeland Security and the Analysis of Foreign Intelligence," 6.

from other disciplines. They may also interact with analysts from other regions and specialties. While the CIA has created analytical niche specialties, the specialties must be integrated to obtain the “big picture.” Before submitting a draft for managerial approval, analysts are encouraged to work collectively with all analysts involved to write a pre-draft.

Most analysts work in one of three regional offices: Office of Russian and European Analysis; Office of Near Eastern, South Asian, and African Analysis; and Office of Asian, Pacific, and Latin American Analysis.³⁰ Analysts continuously monitor their accounts for new information. Most of the analysts’ source material comes from information systems available at their desks:³¹

- Corporate Information Retrieval and Storage (CIRAS): a text-based electronic processing system that combines various cable, and all-source traffic, into a single system. CIRAS has both disseminated information and processed intelligence from the State Department, National Security Agency, National Imagery and Mapping Agency, and the CIA’s Directorate of Operations. CIRAS is the primary source of information for analysts.
- Intelink: the Intelligence Community’s classified worldwide intranet.
- Internet to the Desktop Program: provides high-speed internet access; includes other analytical tools.

To supplement their desktop information systems, analysts also maintain contact with analysts from other Intelligence Community agencies. The information coming to analysts is so voluminous that the CIA narrowly defines analysts’ accounts. Thus, it is sometimes necessary for the CIA to sub-divide the accounts even further.

The CIA had several philosophical changes on how it should operate. Most of the history of the CIA involved analysts producing long reports to gain expertise.³² During the Reagan administration, the CIA was told to increase its output of research papers.

³⁰ Marrin, “Homeland Security and the Analysis of Foreign Intelligence,” 6.

³¹ Ibid., 7.

³² Marrin, “Improving CIA Analysis by Overcoming Institutional Obstacles,” 48.

During the 1990s, the papers were no longer addressing the needs of policy makers. There were complaints that these papers were not only untimely, but addressed subjects of marginal importance and contained much “fuzzy judgments.”³³ As a result, in the mid-1990s, the agency limited the size of the papers. Even though the shorter papers were somewhat more relevant for policy makers, there was less analytical expertise required to produce them. The shorter papers also contained fewer insights for policymakers.³⁴ Another upside of shorter papers was that the DI recognized the need for analysts to acquire more expertise. Therefore, the DI began funding programs to provide analysts with more expertise and more forward looking analytical skills.

The CIA produces many types of analytical products. These products are also produced in different formats: written reports, oral briefings, maps, charts, photographs, and models. Written reports are the primary format for analytical products. There are four categories of CIA publications:³⁵

- Current Intelligence: appraises customers of daily events and new developments to assess significance and warn of near-term consequences.
- Research Intelligence: more in-depth than current intelligence; supports specific operations or decisions; may also provide a compilation of geographic, demographic, social, military, or political data on foreign nations.
- Estimative Intelligence: starts with what is known and progresses to the unknown and, then, to the unknowable; helps policymakers fill in intelligence gaps by giving informed assessments on the gamut and likelihood of possible outcomes.
- Warning Intelligence: related to estimate intelligence; deals with developments that may have sudden, disastrous effects on U.S. security or policy.

³³ Marrin, “Improving CIA Analysis by Overcoming Institutional Obstacles,” 48.

³⁴ Ibid., 49.

³⁵ Marrin, “Homeland Security and the Analysis of Foreign Intelligence,” 5.

CIA analysts produce these specific intelligence products:³⁶

- Presidential Daily Brief (PDB): produced solely for Presidential interest; distributed to few other officials.
- Senior Executive Intelligence Brief (SEIB): less sensitive and distributed more broadly than PDB; similar focus as PDB.
- Economic Executives' Intelligence Brief (EEIB): multidisciplinary analysis of economic issues, such as foreign trade, illicit finance, and international energy.

The main purpose of the CIA, and other intelligence agencies, addressing foreign intelligence is to provide policy makers with intelligence that can help make effective policy decisions. This process involves assessing alternative courses, including taking no action regarding potential results, feasibility, and cost-benefit tradeoffs.³⁷ The policymaker's decision framework extends from strategic to tactical concerns. The impact of intelligence on the decision process involves content, presentation, interpretation, and timeliness.³⁸ The relationship of these factors in the presentation to the policymaker has great impact on the policymaker's use of the intelligence product.

The CIA, like the military, business, and law enforcement, uses the intelligence cycle. The first step in the intelligence cycle is planning and direction (setting requirements). Requirements could target a nation, such as the Soviet Union during the Cold War, or a generic threat, such as the proliferation of weapons of mass destruction during the Clinton administration. Policymakers must also decide on the types of intelligence to produce: military, political, economic, or cultural.³⁹ Most policymakers' attention is directed to current intelligence.

³⁶ Marrin, "Homeland Security and the Analysis of Foreign Intelligence," 11.

³⁷ Douglas MacEachin, "Analysis and Estimates: Professional Practices in Intelligence Production," *Transforming U.S. Intelligence* (Washington, D.C.: Georgetown University Press, 2004). 118.

³⁸ *Ibid.*

³⁹ Loch K. Johnson and James J. Wirtz, *Strategic Intelligence: Windows into a Secret World*, (Los Angeles, CA: Roxbury Publishing, 2004). 43.

Once the requirements have been established, a decision must be made on collection methods. The CIA, and other foreign or national intelligence agencies, has many types of collection methods available: OSINT, IMINT, SIGINT, MASINT, and HUMINT. None of the collection methods is foolproof. The objective is to use as many of the collection methods as possible to obtain a synergy from them.⁴⁰ After the Cold War, the United States became more dependent upon technical means of collecting intelligence and reduced its number of human spies; as a result, HUMINT is the weakest collection method.

D. MILITARY INTELLIGENCE

The United States Department of Defense (DoD) manages the operation of all branches of the U.S. military. DoD has nine combatant commands, one of which is the U.S. Joint Forces Command (USJFCOM).⁴¹ USJFCOM's mission is to provide support and development for joint and interagency military efforts through four major mission areas: joint innovation and experimentation, joint training, joint capabilities development, and joint force provider. It is comprised of active military personnel to civilian contractors.

USJFCOM produced a publication titled *Joint and National Intelligence Support to Military Operations*. This publication provides the doctrine for U.S. military involvement in interagency and multinational operations.⁴² The goal of joint intelligence operations is to provide the joint force commander (JFC) with a timely and accurate assessment of the adversary and his environment.⁴³ Commanders need intelligence to foresee a battle, to comprehend battlespace, and to sway the battle's outcome. Intelligence further enables commanders to determine the enemy's center of gravity and allows commanders to know where to exploit enemy vulnerabilities with minimum risk.

⁴⁰ Johnson and Wirtz, *Strategic Intelligence: Windows into a Secret World*, 46.

⁴¹ United States Joint Forces Command, "About Us," <http://www.jfcom.mil/about/about1.htm> (accessed February 24, 2008).

⁴² Joint Chiefs of Staff, *Joint and National Intelligence Support to Military Operations*, <https://www.hsdl.org/homesecc/docs/dod/nps03-112204-03.pdf&code=659771bf672da7a488862b1823e0364d> (accessed February 24, 2008). i.

⁴³ Joint Chiefs of Staff, *Joint and National Intelligence Support to Military Operations*, xi.

The global threat environment of today requires changes in the intelligence process from yesteryear. Today, military planners and decision makers require intelligence support that is more dynamic and which involves overlapping and simultaneous activities.⁴⁴ Speed is a key factor in intelligence support.

Joint intelligence is comprised of several organizations. It is responsible for providing the combatant command and subordinate joint force with coordinated intelligence.⁴⁵ Combatant command (J-2) aids the battle commander and staff with strategy development, planning theater campaigns, and the organization of theater intelligence assets for joint and multinational operations.⁴⁶ The J-2 may also fuse intelligence from national intelligence organizations with its other intelligence sources. Further, J-2 provides intelligence support that includes:

- General Support: intelligence provided to support the joint force; not a subordinate unit.
- Direct Support: intelligence in support of a particular unit.
- Close Support: intelligence support for targets and objectives near the supported force; this includes coordination of fire and movement of the supported unit.

⁴⁴ Joint Chiefs of Staff, *Joint and National Intelligence Support to Military Operations*, xi.

⁴⁵ *Ibid.*, 13.

⁴⁶ *Ibid.*

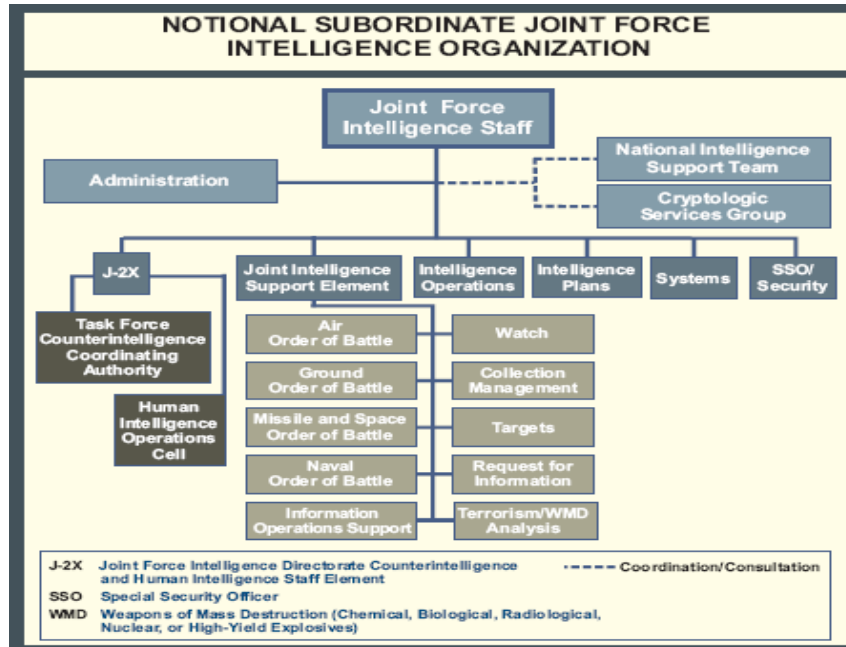


Figure 2. A Hypothetical J-2 Subordinate Organizational Structure.⁴⁷

The Joint Intelligence Center (JIC) is the center for intelligence analysis and its production. It is organized to suit the combatant commander’s intelligence requirements. Requirements not fulfilled by the JIC are forwarded by it to either the National Military Joint Intelligence Center (NMJIC) or to a subordinate command level.⁴⁸ NMJIC is the center for defense intelligence that supports joint operations. It contains regional and target analysts, terrorism analysts, operations specialists, warning intelligence officers, and Joint-Staff J-2 collection managers.⁴⁹ NMJIC maintain an intelligence alert center which is a full-time, all-source, multi-discipline intelligence center for monitoring and reporting on current and developing calamities. JFC support from NMJIC could come in the form of intelligence cells, intelligence working groups, or intelligence task forces. In addition to receiving support from NMJIC, the JIC may also request intelligence support from the IC.

⁴⁷ Joint Chiefs of Staff, *Joint and National Intelligence Support to Military Operations*, II-6.

⁴⁸ *Ibid.*, 32.

⁴⁹ *Ibid.*, 44.

The IC may provide support to the JFC through National Intelligence Support Teams (NIST). NIST's mission is to provide all-source national intelligence to support JFCs during crisis or contingency operations.⁵⁰ NISTs may include representation from DIA, CIA, NSA, and other agencies in support of the JFC. An NIST is usually co-located at the joint task force (JTF) component command and/or requesting combatant command. Quick Reaction Teams are another source of intelligence augmentation for the JIC. These teams provide enhanced support for target and collection management.

Subordinate command levels are J-2s. The JFCs base their organizational structure upon situation and mission.⁵¹ At a minimum, they require analytical and administrative capability. Most often J-2s will support joint force intelligence by deploying and integrating theater intelligence into joint intelligence support elements (JISE).⁵² The JISE will address battle analysis, adversary center of gravity, adversary command analysis, communications, control, target support, and, at all times, will establish a watch.⁵³

USJFCOM refers to the intelligence cycle as the intelligence process. It includes several interrelated and non-sequential operations without defined boundaries. These operations are "planning and direction, collection, processing and exploitation, analysis and production, dissemination and integration, and evaluation and feedback."⁵⁴ The operations are geared toward the JFC's mission and concept of operations.

⁵⁰ Joint Chiefs of Staff, *Joint and National Intelligence Support to Military Operations*, 41.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid., 56.

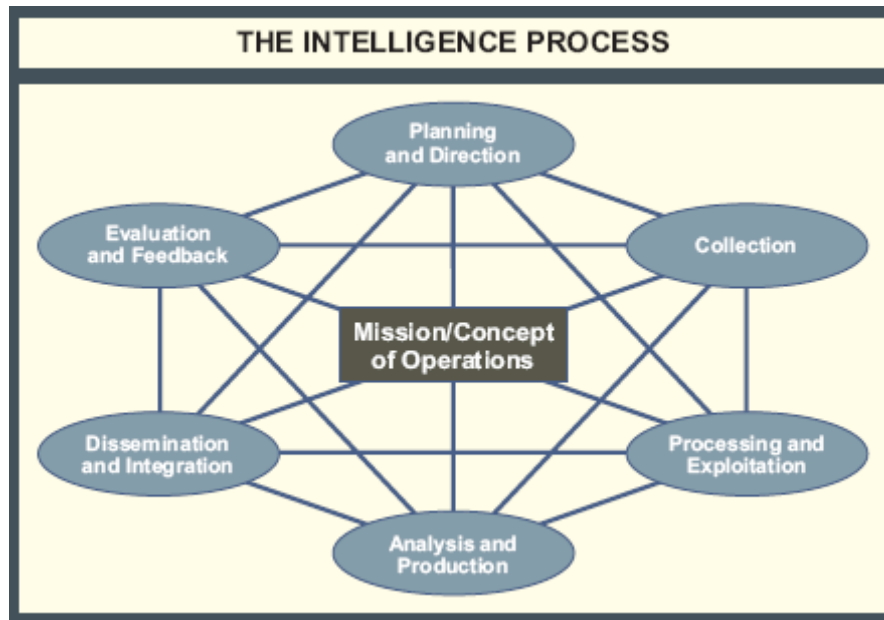


Figure 3. Intelligence Process⁵⁵

The JFC and joint force staff's needs for battlespace intelligence initiates joint intelligence operations. These needs, or requirements, are commander's intelligence priorities (PIRs). The J-2 addresses them. Next, the appropriate collection assets must be identified and tasked to obtain information needed to fulfill the PIRs. To develop a complete intelligence product, analysis and production, which involves the integration, evaluation, and interpretation of data from sources, is performed. The finished product must be disseminated to the JFC and/or J-2 staff. In some cases, the product must be given to forces or personnel at risk. Finally, information and processes must constantly be evaluated to identify needed changes and/or improvements.

That was a brief description of the processes involved in joint United States military operations. To address their needs, individual branches of the military would use a similar intelligence process. Most major military operations would, however, require a joint force.

⁵⁵ Joint Chiefs of Staff, *Joint and National Intelligence Support to Military Operations*, III-1.

E. BUSINESS (COMPETITIVE INTELLIGENCE)

Businesses also use intelligence: one form is competitive intelligence. Competitive Intelligence (CI) is the systematic process of gathering, analyzing, and managing external information that could affect a business' decisions and operations. In contrast to industrial espionage, CI uses legal methods and processes to obtain information on competitors. Much of this information comes from open source material, such as online databases and the internet. However, information could come from basic research and inquiries. The users of CI come from all organizational levels. CI is used in the following areas: strategic planning, benchmarking, investing, product planning, marketing, and sales.⁵⁶ An organization may also use CI to make decisions in other areas regarding a competitor.

The major elements of CI can be succinctly stated. A leading CI professional, Arthur Weiss, wrote that the CI's keys to success are: knowing where and when to look; how to get information without lying or using impropriety; and how to understand information by correlating it with other information to produce a logical picture.⁵⁷ CI is a field with a code of ethics and it requires practitioners to reveal their identities and to respect confidentiality.

Most businesses are not monopolies. Therefore, it is important for them to have information and intelligence about their competitors. There are four types of competitors: organizations currently offering the same, or similar, products and services; organizations currently offering comparable products and services; organizations with the potential to offer the same, comparable, or alternative products or services; and organizations that could eliminate customers' need for a product or service.⁵⁸

CI sources can be divided into four categories: high use, moderate use, low use, and very little use. High use sources are trade journals, online external data bases,

⁵⁶ Arthur Weiss, "A Brief Guide to Competitive Intelligence: How to Gather and Use Information on Competitors," *Business Information Review* Volume 19, no.5 (2002), <http://www.marketing-intelligence.co.uk/data-sources/papers/1-Guide%20to%20CI.pdf> (accessed February 24, 2008). 41.

⁵⁷ Ibid.

⁵⁸ Ibid.

external documents, employees, industry experts, and trade organizations. Moderate use sources are sales representatives, clients, internal documents, databases, and telephone interviews. Low use sources are government records, direct observation, clipping services, security analysis, direct competitor contact, personal interviews, and suppliers. Very little use sources include product purchasing, the Freedom of Information Act, focus groups, case studies, and mail questionnaires.

In 2005, the Society for Competitive Intelligence Professionals (SCIP) conducted a survey of CI professionals to determine how CI practitioners functioned. SCIP conducted this survey with over 500 CI practitioners from more than twelve industries. The survey indicated CI professionals dealt with all aspects of the intelligence cycle, but most of their time was devoted to analysis and secondary data collection.⁵⁹ In descending order, CI professionals produced an assortment of intelligence products: company profiles, competitive benchmarking, market or industry analysis, early warning audits, customer or supplier profiles, and technology assessments.⁶⁰ The survey also indicated CI practitioners use a variety of analytical techniques: competitor analysis; Strength, Weaknesses, Opportunities, Weaknesses and Threats (SWOT); industry analysis; customer segmenting; financial ratio; customer value; scenario analysis; issue analysis strategic group; sustainable growth rate; product life cycle; and management profiling.⁶¹ Competitor analysis and SWOT were the most used techniques.

The SCIP survey addressed the dissemination of intelligence deliverables throughout organizations. Survey results indicated the deliverables were most frequently delivered, in this order, to division management, directors, corporate vice presidents, corporate staff, and division staff.⁶² The deliverables were disseminated by a variety of methods: e-mail, printed alerts or reports, company intranet, personal delivery,

⁵⁹ Competitive Intelligence Research Foundation, *State of the Art: Competitive Intelligence*, Executive Summary (Research Report 2005-2006). Edited by Dale Fehringer, Bonnie Hohhof, and Ted Johnson. 6.

⁶⁰ *Ibid.*, 7.

⁶¹ Weiss, "A Brief Guide to Competitive Intelligence," 9.

⁶² *Ibid.*

presentations or staff briefings, central database, newsletters, and teleconferences. E-mail was the overwhelming method of delivery. Printed alerts or reports were a distant second.

Another important survey category was technology used to support CI activity. The results indicated that most CI practitioners used technologies, such as search and text retrieval software. This included other technologies that enabled them to report intelligence, such as intranet, internet, and teleconferencing.⁶³ Surprisingly, CI-specific commercial software was rated second to last in support technology.

Another survey category was changes in CI that would improve it over the next year. The respondents' first choice was better integration of information from multiple sources.⁶⁴ The second choice was more training for individuals involved in intelligence development. More training for executives on how to use intelligence was the third choice. CI practitioners apparently value education as an important part of the intelligence process.

F. LAW ENFORCEMENT INTELLIGENCE

Law enforcement intelligence in the United States goes back to the 1920s. However, it experienced a growth spurt in the 1970s. *Intelligence-Led-Policing*, written in 1973 by the Law Enforcement Assistance Administration, a segment of U.S. Department of Justice, indicated the framework for law enforcement intelligence.⁶⁵ Further, two years later, *Intelligence-Led-Policing* reported the following: the National Advisory Council on Criminal Justice Standards and Goals proposed that every law enforcement agency establish and maintain an intelligence gathering and analysis capability that protects individual rights to privacy.⁶⁶ Law enforcement intelligence can be defined as a process for integrating disparate information on crime and crime trends,

⁶³ Weiss, "A Brief Guide to Competitive Intelligence," 10.

⁶⁴ *Ibid.*, 11.

⁶⁵ U.S. Department of Justice, *Intelligence-Led Policing: The New Intelligence Architecture*, (Washington, D.C: Office of Justice Programs, 2005), <http://www.ncjrs.gov/pdffiles1/bja/210681.pdf> (accessed February 24, 2008). 5.

⁶⁶ U.S. Department of Justice, *Intelligence-Led Policing: The New Intelligence Architecture*, 5.

threats involving crime and security, and conditions involved with criminality.⁶⁷ Law enforcement intelligence depends upon information -- raw data that identifies people, evidence, and events -- and demonstrates processes indicative of, or related to, criminality. There is often confusion about the difference between information and intelligence.

Shortly after September 11, 2001, the International Association of Chiefs of Police recommended convening an Intelligence Sharing Summit. The Summit was held in March 2002 and included representatives from the United States and Europe. Attendees examined the United States' General Criminal Intelligence Plan and the United Kingdom's National Intelligence Model. The Summit made two key recommendations: to correct deficiencies in analysis and information and, two, address intelligence training and technology.⁶⁸ The Summit created the Global Intelligence Working Group (GIWG).

The GIWG developed the *National Criminal Intelligence Sharing Plan (NCISP)*. NCISP addressed the law enforcement intelligence cycle or process. It contains six steps: planning and direction, collection, processing/collation, analysis, dissemination, and reevaluation.⁶⁹

⁶⁷ U.S. Department of Justice, *Intelligence-Led Policing: The New Intelligence Architecture*, 5.

⁶⁸ U.S. Department of Justice, *Criminal Intelligence Sharing: A National Plan for Intelligence-Led Policing at the Local, State and Federal Levels*, (Washington, D.C.:DOJ, 2002), <http://www.epic.org/privacy/fusion/intelsharerpt.pdf> (accessed February 24, 2008). 12.

⁶⁹ The United States Department of Justice, *The National Criminal Intelligence Sharing Plan* (Washington, D.C.: DOJ, 2005), http://www.it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf (accessed February 24, 2008). 3.

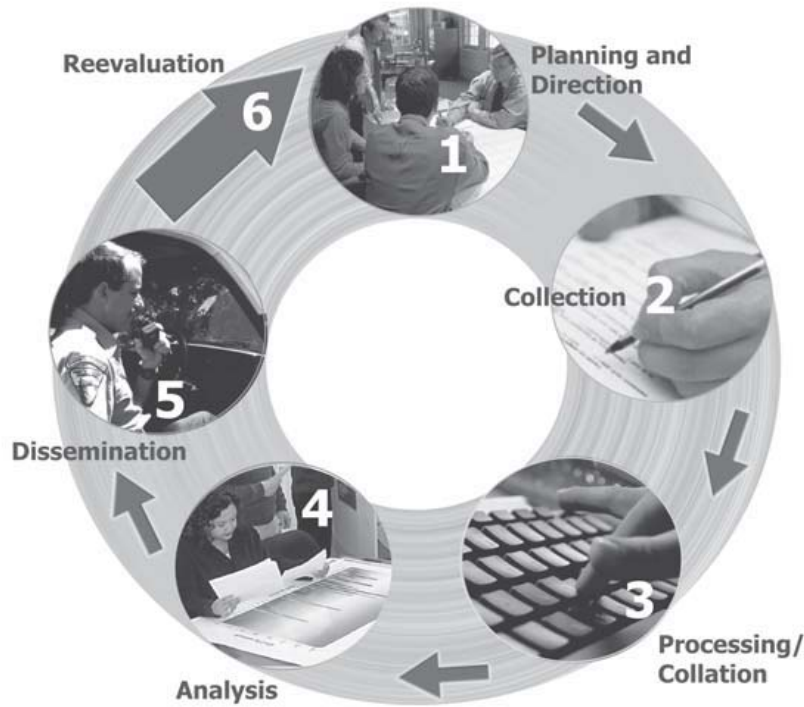


Figure 4. The Intelligence Process⁷⁰

For planning and direction, several conditions must be addressed by law enforcement management to establish intelligence requirements. Law enforcement primarily operates within the borders of the United States. It focuses on criminal activity on U.S. nationals or upon illicit foreign activity that affects U.S. nationals or property of the U.S.⁷¹ Law enforcement action outside the United States in a foreign county is usually coordinated with that country. The purpose of law enforcement information is to establish proof beyond a reasonable doubt for the prosecution of suspects. As a result, information must be presented in a public trial. Information gathered by law enforcement comes from interviews, statements, searches, and surveillances. This information must comply with federal and state constitutions. Informants used by law enforcement are generally short-term for use in prosecuting or investigating a particular suspect.

⁷⁰ The United States Department of Justice, *The National Criminal Intelligence Sharing Plan*, 3.

⁷¹ *Ibid.*

Effective planning and direction enable law enforcement managers to establish a good requirements' base. Planning involves describing a goal and methods for achieving it. Intelligence requirements attempt to fill gaps between what a decision maker knows and what missing information the decision maker requires. Requirements involve detecting potential threats and determining their validity, along with identifying possible targets and their vulnerabilities.⁷² Gaps between what is known and what is required will generate intelligence requirements. To obtain intelligence requirements, managers will need to plan and direct their agencies. This means intelligence managers should define the products their personnel will produce -- along with the product format that meets agency management requirements.

Collection is not only the most labor-intensive part of the process, but also the most emphasized.⁷³ The following have been the most frequently used sources of data collection for law enforcement: physical surveillance, electronic surveillance, confidential informants, undercover operators, newspapers reports, public records, and the internet.

The 9/11 Commission reported a major factor in failing to prevent the terrorist attacks of September 11, 2001: failure to share information. Law enforcement personnel, particularly managers, must have a clear understanding of the differences between information and intelligence. Examples of information are: criminal history and driving records; statements of informants, witnesses and suspects; registration information of motor vehicles, watercraft, and aircraft; vehicle licensing details about operators; details about professional licenses; observations of investigators, surveillance teams, and citizens on behaviors and incidents; details of banking, investment, credit reports, and other financial conditions; descriptions of travel, which include, name, itinerary, and method of travel, and more. Examples of intelligence are: analyst report, derived from analysis of information collected by investigators or researchers, makes conclusions about a person's criminal liability; analysis of crime, or terrorism trends, with conclusions based upon

⁷² David L. Carter, "The Law Enforcement Intelligence Function," *FBI Law Enforcement Bulletin* 74 no.6 June 2005, <http://www.justicestudies.com/pubs/leif.pdf> (accessed February 24, 2008). 5.

⁷³ U.S. Department of Justice, *Intelligence-Led Policing: The New Intelligence Architecture*, 6.

probability of future crimes and processes for preventing future crimes; and, based upon both an analyst's experiences and estimate of a person's income from criminality -- supported by an analysis of market and trafficking commodities --, an analyst forecast of crime victimization.

Frequently, law enforcement intelligence has been classified into three categories: strategic, operational, and tactical. Strategic intelligence involves areas, such as planning and staffing allocation. Operational intelligence refers to the process of identifying, targeting, detecting and mitigating criminal activity, and the support for long-term investigations with multiple, similar targets.⁷⁴ Tactical intelligence is used for specific investigations.

Decision-making, planning, strategic targeting, and crime prevention are areas where intelligence is crucial. Generally, there is no shortage of information or data for police agencies. However, law enforcement managers often make decisions based on incomplete information. To support management decisions, analysis is critical in transforming information into intelligence. Planning is a key area for intelligence, and many law enforcement agencies. Thus, planning based on understanding criminality in their jurisdictions is vital. Without understanding crime problems, agencies cannot effectively use strategic planning. At best, planning would address funding and operational issues. Strategic targeting helps agencies identify individuals, operations, and locations for enforcement or investigation that produce a high probability of success. Intelligence can aid crime prevention: analysts can compare crime indicators from previous incidents to forecast future crime patterns.

Law enforcement intelligence may also be classified into levels. Level-one intelligence, the highest level, involves agencies producing tactical and strategic intelligence products for both their agencies and others.⁷⁵ Agencies at this level have

⁷⁴ U.S. Department of Justice, *Intelligence-Led Policing: The New Intelligence Architecture*, 3.

⁷⁵ *Ibid.*, 12.

hundreds, or thousands, of sworn personnel, including intelligence managers, intelligence officers, and intelligence analysts. In the United States, there is probably about 300 level-one agencies.⁷⁶

Level-two intelligence agencies resemble level-one agencies, but with one major difference: level-two agencies produce intelligence products for internal use. These agencies may employ the same types of intelligence personnel as level-one agencies and have the same approximate number of sworn personnel. Examples of level-two agencies are state police, big city police departments, and a few investigating commissions. Estimates indicate fewer than 500 agencies are in this category.⁷⁷

Level-three intelligence agencies are more likely to use intelligence products created by such agencies as High Intensity Drug Trafficking Areas (HIDTAs), federal intelligence agencies, and state agencies. Agencies in level-three usually do not employ analysts or intelligence managers, but they may hire analysts for specific cases. The agencies in level-three may have a few officers designated as intelligence officers. There are thousands of agencies in level-three.

Level-four agencies do not have intelligence officers. These are small agencies with a few dozen personnel or less. If an officer works on intelligence issues, that officer has multiple responsibilities, such as narcotics, gang, or terrorism investigations. Level-four agencies are usually members of county or regional information sharing networks.

Many law enforcement agencies are moving towards intelligence-led policing. Intelligence-led policing originated in the Kent Constabulary in the United Kingdom. The model was developed in response to a severe increase in property crimes. The police believed a few suspects were responsible for the majority of the offenses. Further, police management believed officers would have the most impact on crime by targeting the most prevalent offenses. This model prioritized calls for service and de-emphasized responding to less serious calls for service by referring them to service agencies. This

⁷⁶ U.S. Department of Justice, *Intelligence-Led Policing: The New Intelligence Architecture*, 12.

⁷⁷ *Ibid.*

condition created an opportunity to establish intelligence units which initially focused on property crimes. These intelligence units were able to help the police drastically reduce crime (twenty-four percent) in only three years.

There are several key elements in an intelligence-led policing model. First, intelligence-led policing uses accurate and timely intelligence products to further the agency's goals by addressing jurisdictional problems.⁷⁸ The intelligence products must also be used to produce and direct a strategy, or course of action, to tackle the problems. Finally, there must be an on-going evaluation of the strategy.

G. SUMMARY

While there is similarity between analysis for the military, business, and law enforcement; there are clearly different requirements and processes involved amongst them. While the speed involved in obtaining an intelligence product is an important factor for all three disciplines, the military and national security intelligence agencies require more speed in obtaining intelligence products than either business or law enforcement. Analysts involved with foreign intelligence are very specialized and have limited focus areas. This is not the case for law enforcement analysts. Non-federal law enforcement analysts have wider areas of concerns. Unlike foreign and military analysts, law enforcement analysts also do not have the luxury of various collection resources. Unlike national intelligence, military, and business analysts, law enforcement analysts may be required to testify in court about their work products.

There is a need for more and better law enforcement analyst instruction. Clearly law enforcement analysis differs from national and military intelligence analysis. Law enforcement analysts need expanded academic opportunities to reach higher levels of competency to place them on par with their national and military counterparts. The next chapter expands upon this chapter and addresses the current state of law enforcement intelligence analysis.

⁷⁸ International Association of Law Enforcement Intelligence Analysts, *Intelligence Led Policing*, (Lawrenceville, NJ, IALEIA, 1997), <http://www.ialeia.org/files/other/Intelligence%20Led%20Policing.pdf> (accessed February 24, 2008). 16.

THIS PAGE INTENTIONALLY LEFT BLANK

III. CURRENT STATE OF LAW ENFORCEMENT INTELLIGENCE ANALYSIS

This chapter examines several studies on criminal intelligence analysis and crime analysis. It discusses how the process of law enforcement analysis in the United States is a dichotomy between the two approaches. The chapter discusses the methods and processes used by analysts along with their skills in using them. There is also a discussion of major law enforcement organizations' perception of the condition of law enforcement intelligence and analysis. The chapter concludes with a short summary of law enforcement intelligence analysis and a few reasons explaining the current condition of it.

A. INTELLIGENCE ANALYSIS AT LARGE

Jeffrey R. Cooper, Director of the Center for Information Strategy and Policy at Science Applications International Corporation, conducted a study on improving intelligence analysis. He observed there were a series of recent strategic intelligence failures in this country such as the surprise attacks on September 11, 2001 and the erroneous intelligence reports in 2002 on Iraqi weapons of mass destruction.⁷⁹ Cooper concluded the failures were due to systematic pathologies in the intelligence community that inadequately failed to provide good anticipatory intelligence and warning.⁸⁰ One of Cooper's remedies was to revamp analyst recruiting, education, and training.⁸¹

The Strategic Investment Plan for Intelligence Community Analysis (SIP) indicated there was a reduced total investment in intelligence analysis during the 1990s.⁸² The numbers of analysts declined in the 1990s and the trend is continuing. The SIP

⁷⁹ Jeffrey R Cooper, *Curing Analytic Pathologies: Pathways to Improved Intelligence Analysis* (Washington, D.C.: Center for the Study of Intelligence, 2005), <https://www.hsdl.org/homesec/docs/intel/nps22-051606-02.pdf> (accessed February 24, 2008). 3.

⁸⁰ Ibid.

⁸¹ Ibid., 8.

⁸² National Intelligence Planning Board, *Strategic Investment Plan for Intelligence Community Analysis* (Washington, D.C.: n.d.), <https://www.hsdl.org/homesec/docs/cia/UnclasSIP.pdf> (accessed February 24, 2008). 11.

further indicates that without increased investment in analysis, intelligence will lag behind global developments. Analysts must stay up to date on current and future problematic regions and subjects. They must receive on-going training and have access to good information collection systems. This process requires a sizeable financial investment.

B. LAW ENFORCEMENT INTELLIGENCE ANALYSIS

The Cooper study and the SIP were describing intelligence analysis in the Intelligence Community. However, their results are applicable to law enforcement intelligence analysis. The Major Cities Chiefs Association, a law enforcement organization, conducted a survey on impediments to intelligence flow between law enforcement agencies. The National Criminal Intelligence Sharing Plan (NCIS) reported that the Major Cities Chief Association study listed the lack of intelligence analysis as the fourth most important impediment.⁸³ Survey respondents indicated there was a lack of compatible analytical software, along with a shortage of support, personnel, equipment, and training.⁸⁴

Law enforcement intelligence analysis in the United States differs from that of other countries. Analysis in non-federal law enforcement in the United States has followed one of two paths: intelligence analysis and crime analysis.⁸⁵ The first path is similar to analysis at most federal law enforcement agencies because it supports investigative operations (also called investigative analysis). Crime analysis is used by local law enforcement to assist in making both tactical and strategic decisions. State law enforcement may also use crime analysis to examine crime trends. Crime analysis is patrol-oriented. This is because it frequently is used to make decisions on deployment of

⁸³ The United States Department of Justice, *The National Criminal Intelligence Sharing Plan* (Washington, D.C.: DOJ, 2005), http://www.it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf (accessed February 24, 2008). 3.

⁸⁴ Ibid.

⁸⁵ Deborah Osborne, *Out of Bounds*, (Washington, D.C.: Joint Military Intelligence College, 2006), <https://www.hsdl.org/homesec/docs/intel/nps32-031507-01.pdf&code=651a7f06ccc44b8df8b04c5ff2e05c76> (accessed February 24, 2008). 6.

patrol officers to prevent burglaries, auto thefts, and other crimes.⁸⁶ Investigative analysis or intelligence analysis historically has been used to support major crimes and organized crime units in specific investigations.⁸⁷ Law enforcement analysts from other countries do not understand why there are two paths to analysis in the United States.⁸⁸

The dual path to analysis in the United States is the result of police managers requiring different types of information from crime analysts and intelligence analysts.

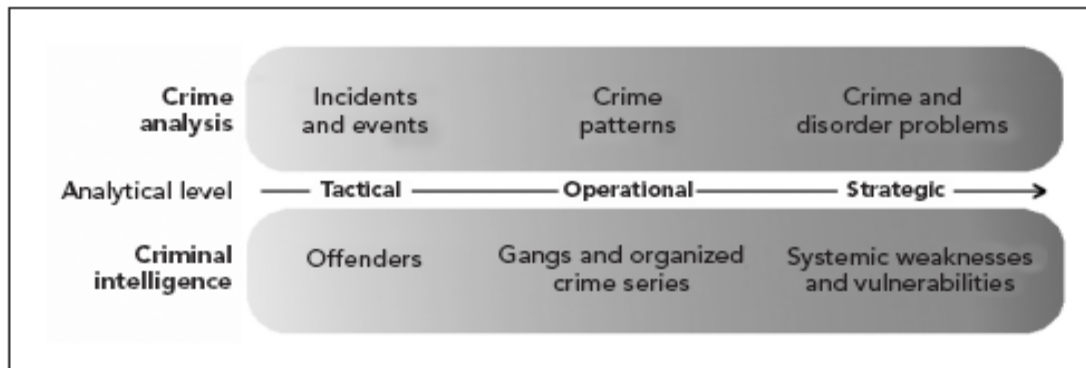


Figure 5. Isolated Crime and Intelligence Analysis Model 89

Many police executives view criminal intelligence as secretive and as a tool to study the behavior of individual offenders and organized crime groups. Further, they believe it should be separated from the basic patrol function.⁹⁰ There is also a belief by some police executives that intelligence support is only for law enforcement decision makers. Thus, they restrict its use beyond sworn personnel. Crime analysts have generally been tasked with the responsibility of providing crime patterns and trends based

⁸⁶ Marilyn B. Peterson, *Applications in Criminal Analysis: A Sourcebook* (Westport, CT: Praeger, 1998). 2.

⁸⁷ Peterson, *Applications in Criminal Analysis: A Sourcebook*, 2.

⁸⁸ Osborne, *Out of Bounds*, 6.

⁸⁹ Police Foundation, *Integrated Intelligence and Crime Analysis: Enhanced Information for Law Enforcement Leaders*, (Washington, D.C.: DOJ, 2007), <http://www.policefoundation.org/pdf/integratedanalysis.pdf> (accessed February 24, 2008).

⁹⁰ Police Foundation, *Integrated Intelligence and Crime Analysis: Enhanced Information for Law Enforcement Leaders*, 8.

upon open source or non-secretive information. Crime analysis is a much younger discipline than intelligence analysis and crime analysts are usually non-sworn, female personnel.⁹¹ Police officers tend to value information that has been secretly or covertly gathered more than open source material. Therefore, crime analysis is generally not held in the same regard as intelligence analysis. There are police experts in the United States who are recommending an integrated approach to analysis that would combine both crime analysis and intelligence analysis.

There are two major law enforcement intelligence analyst organizations: the International Association of Law Enforcement Intelligence Analysts (IALEIA) and the International Association of Crime Analysts (IACA). IALEIA was founded in 1981 and is comprised of members from local, state, provincial, and federal agencies. It is the largest professional organization in the world for law enforcement intelligence analysts.⁹² IALEIA's purpose is to address the following: enhance understanding of intelligence analysis; promote intelligence analysis as a profession; develop qualification and competence standards; develop training standards; provide advice and support for intelligence analysis; conduct analytical research; and disseminate information on analytical techniques.⁹³

IACA was founded in 1990. Its goals are to help crime analysts improve their skills; assist law enforcement agencies in making their analysts more productive; and to advance analytical standards and techniques for analysis.⁹⁴ These goals are addressed by training, networking, and publications.⁹⁵ IACA has an international membership composed of crime analysts, intelligence analysts, police officers, educators, and students.

⁹¹ Police Foundation, *Integrated Intelligence and Crime Analysis: Enhanced Information for Law Enforcement Leaders*, 16.

⁹² International Association of Law Enforcement Intelligence Analysts, "Who We Are," www.ialeia.org/aboutus, (accessed February 24, 2008).

⁹³ International Association of Law Enforcement Intelligence Analysts, "Purpose," www.ialeia.org/aboutus (accessed February 24, 2008).

⁹⁴ International Association of Crime Analysts, "About the IACA," www.iaca.net/about.asp (accessed February 24, 2008).

⁹⁵ Ibid.

The University of Alabama conducted a study on crime analysis in local law enforcement for Community Oriented Policing Services (COPS). This study concluded “bean counting” was the major focus of most crime analysis and that agency size was irrelevant.⁹⁶ The University of Alabama included intelligence analysis as part of crime analysis. The University also found agencies reported training was deficient for analytical software and basic statistics.⁹⁷ In studying crime analysis, they sent surveys to 859 law enforcement agencies. The University asked respondents to address the use of the following statistical techniques: frequencies; mean, median, mode; cluster analysis; correlation; standard deviation; crosstabs; and regression. The study findings indicated more than fifty percent of responding agencies did not use statistical methods beyond frequencies.⁹⁸ Agencies that used means, median, and modes; correlation; and cluster analysis were 64%, 58%, and 60%, respectively.⁹⁹ Respectively, standard deviation, crosstabs and regression was used by 49%, 40%, and 36% of responding agencies.¹⁰⁰ Analysts in an effective intelligence analysis program would have the knowledge and capability to use those statistical methods.

The University of Alabama inquired into the use of intelligence analysis and crime analysis software. Respectively, only 35% and 45% of responding agencies used them.¹⁰¹ Law enforcement agencies used crime mapping and spreadsheet software more than other analytical software.¹⁰² The limited use of crime and intelligence analysis software is restricting both tactical and strategic intelligence analysis. Law enforcement agencies handle too much data for analysts to rely on manual or non-computerized methods for analysis. The University of Alabama also concluded that more sophisticated requests for analysis by management resulted in more sophistication of methods used in

⁹⁶ Timothy O’ Shea, Keith Nichols, and Jonathan Archer, *Crime Analysis in America*, (Washington, D.C.: DOJ, 2002), <http://www.cops.usdoj.gov/mime/open.pdf?Item=790> (accessed February 24, 2008). 52.

⁹⁷ O’ Shea, Nichols, and Archer, *Crime Analysis in America*, 53.

⁹⁸ *Ibid.*, 25.

⁹⁹ *Ibid.*, 24.

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*, 19.

¹⁰² *Ibid.*, 19.

these agencies, such as hardware/software, training, data, and analysis.¹⁰³ David Carter, in *Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies*, wrote that law enforcement managers frequently do not have an understanding of the importance of intelligence for planning and operations.¹⁰⁴

Several professors from the University of Arizona also studied crime analysis. These professors concluded that there are four types of deficiencies in crime analysis:¹⁰⁵

- Analysts must search a variety of data sources and attempt to complete a mosaic with scattered information.
- Many crime analysis steps are not automated.
- Many forms need to be repeatedly completed.
- Many cases may be related, but are hidden from analysts.

To correct these deficiencies, these professors propose a collaborative workflow process for interagency crime analysis.

The Rand Corporation conducted a study of state and local law enforcement in fighting terrorism. The Rand study analyzed data from a 2002 study on law enforcement preparedness, case studies of individual law enforcement agencies, and wiretap statistics. The study concluded the threat of terrorism has increased agencies awareness of intelligence gathering and analysis, but most local agencies do not have the capacity to analyze their information.¹⁰⁶ The study further elaborated on a major difference between traditional crime analysis and counterterrorism analysis. In a traditional law enforcement investigation, the analyst would attempt to reconstruct a single path from the crime to the

¹⁰³ O' Shea, Nichols, and Archer, *Crime Analysis in America*, 35.

¹⁰⁴ David L. Carter, *Law Enforcement Intelligence: A Guide for State, Local and Tribal Law Enforcement Agencies*, (Washington, D.C.: DOJ, 2004), <https://www.hsd1.org/homsec/docs/dhs/nps03-120704-01.pdf&code=fac9fc14c649a3dd338af5a84e38e53f> (accessed February 24, 2008). 96.

¹⁰⁵ J. Leon Zhao, Henry Bi, and Hasinchun Chen, "Collaborative Workflow Management for Interagency Crime Analysis," *Crime Analysis: Knowledge Processes* (PowerPoint Presentation, slide 6), http://www.isiconference.org/2003/resources/presentation/ISI03_ZBC.PPT#423.

¹⁰⁶ K. Jack Riley et al., *State and Local Intelligence in the War on Terrorism*, (Santa Monica, CA: Rand, 2005), http://www.rand.org/pubs/monographs/2005/RAND_MG394.pdf (accessed February 24, 2008). xiv.

suspect. In contrast, in counterterrorism an analyst must examine multiple paths.¹⁰⁷ Further, the analyst working on a counterterrorism case must have enough information on each path to know when patterns are changing or when something is suspicious along a path.

In 2004, the International Association of Chiefs of Police (IACP) started the Taking Command Initiative. The purpose of the project was to determine the areas of Homeland Security that worked and identify obstacles to areas that did not work. The IACP determined the nation's current strategy does not utilize public safety organizations at either the state, tribal or local level.¹⁰⁸ This means public safety organizations are not being counted on as first responders or to provide intelligence in the nation's effort to fight terrorism.

The Global Justice Information Sharing Initiative (Global), which advises the U.S. Attorney General on justice integration and sharing issues, created the Global Intelligence Working Group (GIWC). GIWC reviewed law enforcement intelligence organizational methods and best practices. This included approximately nineteen intelligence training curricula.¹⁰⁹ GIWC concluded there was an absence of both national training standards and a lead national agency coordinating intelligence training.¹¹⁰ Currently, intelligence training is addressed at the local, state, and federal level.

¹⁰⁷ Riley et al., *State and Local Intelligence in the War on Terrorism*, 57.

¹⁰⁸ International Association of Chiefs of Police, "Memorandum," <http://www.theiacp.org/Leadership/073105ExecDirQtrlyReport.htm> (accessed February 24, 2008).

¹⁰⁹ The Global Justice Information Sharing Initiative Intelligence Working Group, *Core Criminal Intelligence Training Standards for United States Law Enforcement and Other Criminal Justice Agencies*, (Washington, D.C.: Global Justice Information Sharing Initiative, n.d.), http://www.it.ojp.gov/documents/criminal_intel_training_standards.pdf (accessed February 24, 2008). 2.

¹¹⁰ *Ibid.*

In 2004, Dr. Tom O'Connor from North Carolina Wesleyan College lectured about integrating Homeland Security and law enforcement. O'Connor said there were factors that reduced chances of adding law enforcement in the intelligence process for Homeland Security. He referred to a book written by Jonathan White: *Defending the Homeland*. O'Connor said White implied the following reasons why law enforcement should not be a part of Homeland Security intelligence: police do not have the higher order critical skills needed to understand causes of terrorism; police have almost no interest in thinking outside their jurisdiction; police are focused on publicity on their crime-fighting activities and not on secrecy required for Homeland Security; police are leak prone; police act officiously and cause public insecurity; and police organizations are bureaucratic and stagnant when intelligence requires creativity.¹¹¹

The Heritage Foundation is a privately supported public policy research and educational organization. It established a Homeland Security Task Force that produced a report, *Combating Terrorism: Protecting the United States-Part 1*. One of the areas of the report was on improving intelligence and law enforcement capabilities. The Task Force concluded state and local governments should improve the intelligence analysis mechanisms of their law enforcement and first responder agencies.¹¹²

In 2005, Lisa Palmieri, the president of IALEIA, wrote *Information vs. Intelligence: What Police Executives Need to Know*. In this article, Palmieri identified several problematic areas of the intelligence process. One major problem was the lack of understanding between information and intelligence by law enforcement agencies. Palmieri stated that until very recently, few state and local law enforcement agencies had the capability to produce intelligence and, usually, there was not an analytic component.¹¹³ She further elaborated that problems with an understanding of the

¹¹¹ Tom O'Connor, "The Integration of Homeland Security and Law Enforcement," (course notes on intelligence at North Carolina Wesleyan College, 2004), <https://www.hsdl.org/homesec/docs/edu/nps16-061704-16.pdf&code=cb7a2634f22db8f8003ac0f165cfb785> (accessed February 24, 2008).

¹¹² Working Group on Intelligence and Law Enforcement, "Top Priorities for Improving Intelligence and Law Enforcement Capabilities," http://www.heritage.org/Research/HomelandDefense/upload/9709_1.pdf (accessed February 24, 2008). 73.

¹¹³ Lisa M. Palmieri, "Information vs. Intelligence: What Police Executives Need to Know," <http://www.ialeia.com/pubs/InformationvsIntelligence.pdf> (accessed February 24, 2008). 1.

differences between information and intelligence caused many agencies to improperly use their analysts. Some agencies had analysts who were either unaware of, or untrained in, analysis collecting and disseminating raw data.¹¹⁴ Palmieri also mentioned that some agencies believed analysts should be restricted to searching databases.¹¹⁵

Another analyst, Deborah Osborne, wrote a book, *Out of Bounds: Innovation and Change in Law Enforcement Intelligence Analysis*, discussing law enforcement analysis with similar findings to Lisa Palmieri. Osborne produced a study on law enforcement intelligence analysis, where one of her assumptions was roles of both crime analysts and intelligence analysts were not understood nor documented.¹¹⁶ Osborne further concluded that law enforcement analysis is primarily focused on current investigations rather than being used strategically.¹¹⁷

C. SUMMARY

In general, law enforcement analysis in the U.S. is hampered by the lack of police awareness of the process of intelligence. Police managers and intelligence managers are not making good use of the analysts they currently employ. Managers and analysts are not establishing good requirements. As a result, analysts are not being used to their current capabilities. Analysts need more training and better computerized products to take analysis to higher levels. The nation's Homeland Security intelligence strategy does not include non-federal law enforcement. This hampers both law enforcement's understanding of intelligence and the need to obtain better intelligence products.

Law enforcement organizations and law enforcement managers can address the ancillary problems of analysis involving the lack of awareness of the process of intelligence by police personnel. These groups and organizations can also address the problems with poor intelligence requirements. However, academia must help rectify the problems of law enforcement analysts. With support and input from appropriate law

¹¹⁴ Lisa M. Palmieri, "Information vs. Intelligence: What Police Executives Need to Know," 1.

¹¹⁵ Ibid.

¹¹⁶ Osborne, *Out of Bounds*, 4.

¹¹⁷ Ibid., 113.

enforcement analyst organizations, academia can marshal the appropriate resources needed to provide law enforcement intelligence analyst instruction. The next chapter provides a forecast on crime and terrorism and discusses how academia could address these problems.

IV. ANTICIPATED TRENDS IN CRIMINALITY AND TERRORISM

Chapter IV examines projections of criminality and terrorism and some of the conditions expected to influence them by the year 2020. The information used for the projections comes from the National Intelligence Council, the U.S. Census Bureau, and the Futures Working Group. A large part of the discussion involves expected changes in the world's population and immigrant migration into the United States. The chapter concludes with an examination of potential training for intelligence analysts to address the projected changes in the world and in the United States.

A DEMOGRAPHIC TRENDS

Projections of world demographics by the year 2020 indicate areas of concern for law enforcement. The process of law enforcement intelligence will play a major role in addressing these concerns. There are other predicted changes in the U.S. and the world that will have implications for U.S. law enforcement. Law enforcement intelligence analysts must be prepared for what is coming.

By 2020, the number of elderly in western societies and the U.S. will dramatically increase. This condition will produce these consequences: increased calls for service, more occurrence of elderly-focused types of crimes, and the creation of elderly criminals.¹¹⁸ Computer hackers and criminals will target the elderly and commit crimes ranging from the theft of intellectual property to the fraudulent use of automated toll collection devices.¹¹⁹ There are reports currently indicating increases in elderly committed crime. This is likely to continue through the 2020s. The increase in the elderly population would also provide police with potential pools of information. The

¹¹⁸ Futures Working Group, Police Futurists International and FBI, "The World of 2020: Demographic Shifts, Cultural change, and Social Challenge," *Policing 2020: Exploring the Future of Crime, Communities, and Policing* (Quantico, VA: DOJ, 2007), <http://www.policefuturists.org/pdf/Policing2020.pdf>. 31.

¹¹⁹ *Ibid.*, 51.

elderly have befriended the police in the past. Therefore, police have the opportunity to expand relationships with the elderly which may provide more information for analysis.

Changes in birth rates will also create new issues for law enforcement. Native-born birth rates are projected to remain low in developed nations. Conversely, birth rates in Africa and the Middle East are projected to be high.¹²⁰ Western nations, including the U.S., will need to fill many worker shortages with youthful immigrants from Africa and the Middle East. The children of some Middle Eastern immigrants have been problematic for European nations. They have been involved in fundraising for terrorist activity and participated in it.¹²¹

Migration into the U.S. from South America is increasing. The U.S. is also increasing its Hispanic origin population; individuals of Hispanic descent born in the U.S. The U.S. Hispanic origin population is expected to account for 44% of the nation's population growth between 1995 and 2025.¹²²

The projected status of women in the year 2020 has implications for law enforcement. Current estimates for global female trafficking are \$4 billion a year.¹²³ This is projected to increase and become second only to global drug trafficking as the most profitable criminal activity.¹²⁴

B. GLOBALIZATION

Globalization, the process of increasing connectivity and interdependence of world markets, is expected to increase. Emerging nations will demand a greater share of resources, such as oil. This could possibly create new types of crime, such as energy

¹²⁰ Futures Working Group, Police Futurists International and FBI, "The World of 2020: Demographic Shifts, Cultural change, and Social Challenge," 51.

¹²¹ Robert S. Leiken, "Europe's Angry Muslims," *Foreign Affairs*, July/August 2005, <http://www.foreignaffairs.org/20050701faessay84409-p10/robert-s-leiken/europe-s-angry-muslims.html> (accessed March 25, 2008).

¹²² Paul R. Campbell, "Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2026," <http://www.census.gov/population/www/projections/ppl47.html> (accessed February 29, 2008).

¹²³ *Ibid.*, 38.

¹²⁴ *Ibid.*

smuggling.¹²⁵ There will also be a blurring of boundaries between criminal organizations, terrorist groups, and gangs.¹²⁶ In addition to the physical boundaries between these seemingly disparate groups, they will be augmented, and perhaps surpassed, by electronic and philosophical boundaries.¹²⁷

By the year 2020, political Islam is projected to have a major influence. Political Islam or Islamization can be defined as individuals and organizations that use Islam as the foundation for achieving political representation or increasing it in nations and states. It is projected to rally disparate ethnic and national groups and, possibly, establish an authority without national borders.¹²⁸ Further, political Islam will remain strong due to the following conditions: “youth bulges” in Arab states, poor economic prospects, religious education, and Islamization of trade unions, non-governmental organizations, and political parties.¹²⁹

The causative factors of terrorism are not projected to decline by 2020. Radical Islam will continue to spread in the Middle East, South East Asia, Central Asia, and Western Europe.¹³⁰ Al-Qa’ida’s influence is projected to decline and similarly inspired Islamic groups may merge with separatist movements.¹³¹ Due to advances in information technology, these groups will become more decentralized and utilize online capabilities for training materials, targeting guidance, weapons know-how, and fund-raising.¹³² Terrorists are not projected to use new weapons for attacks, but will use new operational concepts such as scope, design, and support for attacks.¹³³

¹²⁵ Paul R. Campbell, “Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2026,” 32.

¹²⁶ Ibid.

¹²⁷ Ibid.

¹²⁸ National Intelligence Council, “Mapping the Global Future,” <http://www.foia.cia.gov/2020/2020.pdf> (accessed February 29, 2008). 13.

¹²⁹ Ibid.

¹³⁰ Ibid., 15.

¹³¹ Ibid.

¹³² Ibid.

¹³³ Ibid., 16.

The decentralization of terrorist organizations may also find its way into policing. Police agencies may become more decentralized. Local police agencies may become linked to regional intelligence and information analysis centers.¹³⁴ These centers would have much of the power and provide direction for local problem solving.¹³⁵ Instead of receiving intelligence from their departments, officers in these police agencies may receive intelligence from the analytical centers.

C. SUMMARY

The predicted changes by the year 2025 will necessitate changes in law enforcement intelligence analyst training. The projected increase of computer crimes involving the elderly and the elimination of physical boundaries between disparate criminal groups will require analysts to have a better grasp of computer crimes and computer technology. Increases in senior crimes may cause analysts to have a better understanding of the psychological processes of the elderly. The expected increase of youthful immigrants from the Middle East, Asia, and Africa should create the need for more geography, history, and language courses on those regions. China and India will also expand their economic influence. As a result, analysts must have an awareness of Chinese and Indian culture and languages. The projected increase in Hispanic immigrants and the Hispanic origin population should mandate Spanish as a required language for analysts. Due to the increased profitability of female trafficking, perhaps there should be specialized courses in intelligence for this topic.

The projected changes in crime and terrorism will place demands on law enforcement analysts that academia can address. Academia's professors have the interest and capability to research new procedures and methods for dealing with crime and terrorism. Academia could also develop new intelligence professionals who could address unforeseen problems. The next chapter examines academia's current efforts in instructing intelligence analysis.

¹³⁴ National Intelligence Council, "Mapping the Global Future," 507.

¹³⁵ Ibid.

V. COLLEGIATE CURRICULUM REVIEW

This chapter will take an extensive look at academic intelligence analyst training in the United States. It will examine public and private collegiate analyst training. The chapter will look at undergraduate and graduate programs along with certificate programs. At the end of each program section, there will be a discussion on the strengths and weaknesses of the schools.

Academia has started teaching programs in intelligence analysis. These programs range from graduate studies to certificates in intelligence analysis. Certificates are offered at both the undergraduate and graduate level. Undergraduate programs in intelligence analysis start at the community or junior college level and end at the bachelor's degree level. Graduate programs in intelligence analysis are at the master's level. Instruction in intelligence analysis at these institutions covers national security intelligence analysis, competitive analysis, and law enforcement analysis.

A. CERTIFICATE PROGRAMS

Some certificate programs in intelligence analysis range from as little as a requirement of three courses to six required courses. Frequently, these programs take about eighteen months to complete. The certificate programs are diluted versions of the graduate and undergraduate analysis programs. Most require a course grade of "C" or higher for certification.

Sacramento State College has an extensive certification program offering nine classes for completion: Basic Elements of Criminal Intelligence; Crime Analysis Applications; Crime Analysis Data Analysis; Criminal Intelligence Analysis; Criminal Investigative Analysis; Criminal Investigative Analysis: Suspects; Criminal Investigative Analysis: Violent Crime; Law Enforcement Research and Statistical Methods:

Forecasting; Law Enforcement Research and Statistical Methods: Sampling; and Practicum in Crime & Intelligence Analysis.¹³⁶

Central Pennsylvania College has an eighteen credit intelligence analysis certificate program. This program is geared toward analysts in criminal justice.¹³⁷ The required coursework consists of the following classes: Fundamentals of Intelligence Analysis, Business Intelligence, National Intelligence, Criminal Intelligence Analyst I, Criminal Intelligence Analyst II, and Advanced Intelligence Analysis.¹³⁸ Criminal Intelligence Analyst I addresses the roles and duties of analysts, collection, analysis, information dissemination, and related rules. Criminal Intelligence Analyst II focuses on crime and intelligence analysis with advanced analytical methods. Advanced Intelligence Analysis incorporates prior learned analytical methods for case studies and research projects on special topics on organized crime, anti-terrorism, and counter-intelligence.

California State University at Fullerton has a certificate program in crime and intelligence analysis. There are nine required courses in the program: Basic Elements of Criminal Intelligence, Criminal Intelligence Analysis, Crime Analysis Data Analysis, Crime Analysis Applications, Criminal Investigative Analysis I, Criminal Investigative Analysis II, Law Enforcement Research and Statistical Methods, Computer Applications for Crime and Intelligence Analysis, and Practicum in Crime and Intelligence Analysis.¹³⁹ This program also requires participants to complete a 400-hour practicum/internship with a law enforcement agency.

¹³⁶ Sacramento State: College of Continuing Education, "Crime and Intelligence Analysis Certificate Program," http://www.cce.csus.edu/catalog/course_group_detail.asp?group_number=115&group_version=1 (accessed February 24, 2008).

¹³⁷ Central Pennsylvania College, "Academic Programs: Intelligence Analysis Certificate," <http://www.centralpenn.edu/academics/programs/program.asp?id=956M97b89C1OIADXeZMS> (accessed February 24, 2008).

¹³⁸ Central Pennsylvania College, "Academic Programs: Intelligence Analysis Certificate-Specific Coursework," <http://www.centralpenn.edu/academics/programs/courses.asp?id=956M97b89C1OIADXeZMS> (accessed February 24, 2008).

¹³⁹ Cal State Fullerton, "Certificate in Crime and Intelligence Analysis," <http://www.csufextension.org/Classes/Certificate/CertificateClasses.asp?GN=3011&GV=2&LID> (accessed February 24, 2008).

Chandler-Gilbert Community College in Chandler, Arizona has a certificate program in crime and intelligence analysis. It addresses strategic, administrative, and tactical crime analysis. The program contains the following courses: Introduction to Crime and Intelligence Analysis I; Link Analysis, Visual Investigative Analysis and Time Event Charting; Telephone Toll and Flow Analysis; Crime Analysis; Statistics for Crime Analysis; and Analysis Using Geographic Information Systems.¹⁴⁰ Students in the certificate program have the option of completing an AAS in Administration of Justice Studies. College administrators believe this degree would allow students to customize their degree in pursuit of criminal justice employment. The AAS program requires students to complete the following General Education and General Education Distribution courses: English Composition; Oral Communication; Critical Reading; Mathematics; Ethics and the Administration of Justice; Introduction to Criminal Justice, and one Natural Science course (Agricultural Science, Anthropology, Astronomy, Biology, Chemistry, Food and Nutrition, Forensic Science, Geology, Physical Geology, Physical Geography, Interdisciplinary Science Studies, Physical Science, Physics, or Psychology). Students who have a certificate in crime and intelligence analysis may apply courses from that program towards the AAS program.

Notre Dame College in South Euclid, Ohio has two intelligence certificate programs: competitive (business) intelligence and intelligence analysis. The competitive intelligence analysis program requires completion of the following courses: Competitive Intelligence in a Global Economy, Writing for Business Intelligence, Research and Business Decision Making for Competitive Intelligence, Analysis Techniques for Business Intelligence, Independent Study, and Executive Briefing Skills.¹⁴¹ The intelligence analysis certificate program requires these courses: Introduction to Intelligence, Overview of Competitive (Business) Intelligence, Research and Analysis for Security Intelligence, Writing for Intelligence/Briefings, Terrorism, and Independent

¹⁴⁰ Chandler-Gilbert Community College, "Social & Behavioral Sciences," http://webport.cgc.maricopa.edu/published/s/oc/social/home/7/?_s=nf-20080123155213-9726 (accessed February 24, 2008).

¹⁴¹ Notre Dame College, "Certificate in Competitive (Business) Intelligence," http://www.notredamecollege.edu/professional_development/CompetitiveIntelligence.html (accessed February 24, 2008).

Study Project. Notre Dame indicates certificate holders from its intelligence analysis program will possess the skills to work as analysts for law enforcement, national security, or the private sector.¹⁴²

Neumann College in Aston, Pennsylvania has a certificate program in intelligence studies. The College indicates its program is designed to prepare students for employment involving problem-solving and analytical thinking in the private sector, intelligence analysis, and both national security and law enforcement.¹⁴³ The program requires completion of the following courses: Basic Intelligence Analysis, Strategic/National Security Intelligence Analysis, Intelligence Analysis of Organized Crime, Intelligence Analysis of Terrorism, Electronic Intelligence Analysis, and Foreign Language.¹⁴⁴ The foreign language must be at an intermediate level.

The University of California, Riverside's (UCR) certificate program is for crime and intelligence analysis. UCR says the program would benefit current law enforcement personnel and potential law enforcement personnel. Students are required to take the following classes: Introduction to Criminal Intelligence, Crime Analysis Applications, Research Methods and Statistics in Crime Analysis, Criminal Investigative Analysis, Computer Skills for the Crime Analyst, Introduction to Criminal Law and Procedure, and Introduction to Criminal Justice.¹⁴⁵

The University of Maryland has a certificate program in intelligence analysis in its School of Public Policy. The certificate program is primarily for students interested in employment in national security and other intelligence agencies.¹⁴⁶ The University also indicates students would develop conceptual competencies for other types of intelligence

¹⁴² Notre Dame College, "Certificate in Intelligence Analysis," http://www.notredamecollege.edu/professional_development/IntelligenceAnalysis.html (accessed February 24, 2008).

¹⁴³ Neumann College, "Academics: Professional and Certificate Program," http://www.neumann.edu/academics/contedu/intell_studies.asp (accessed February 24, 2008).

¹⁴⁴ Neumann College, "Courses," http://www.neumann.edu/academics/contedu/intell_studies_07.pdf (accessed February 24, 2008).

¹⁴⁵ UCR Extension, "Crime and Intelligence Analysis Certificate," <http://www.extension.ucr.edu/certificates/cia/requirements.html> (accessed February 24, 2008).

¹⁴⁶ University of Maryland, "Intelligence Studies-Maryland School of Public Policy," <http://www.publicpolicy.umd.edu/IntelligenceStudies/certificate/> (accessed February 24, 2008).

analysis. Students in the certificate program are required to take two classes: Intelligence Policy and Organization and, also, Intelligence and Policy: Executive, Congressional, and Public Dimensions.¹⁴⁷ Students must choose four of the following courses to complete the program: Problems of Global Security, Critical Thinking for Analysts, U.S. Foreign Policy Process, Terrorism and Democracy, International Security Policy, and International Economic Policy.¹⁴⁸

Bellevue Community College in Bellevue, Washington has two intelligence certificate programs: Business Intelligence Developer and Business Intelligence Analyst. The Business Intelligence Developer Program was designed to prepare students to develop business intelligence systems. In this program, students learn to design, create, and use data for multi-dimensional online analytical processing databases.¹⁴⁹ After students complete the program they should be able to create predictive queries with data mining techniques.¹⁵⁰ Students are required to take six courses: Multi-Dimensional Analysis I, Data Warehousing I, Data Mining I, Dimensional Modeling, Multi-Dimensional Business Analysis II, Data Visualization and Data Warehousing II.¹⁵¹ Students must also take one of the following electives: Statistical Analysis or Introduction to Statistics.

Bellevue Community College's intelligence analyst program is not as intense as the intelligence developer program. The intelligence developer program requires the completion of 45 credit hours, while the intelligence analyst program requires 25 credit hours. The analyst program requires students to complete the following courses: Multi-Dimensional Analysis I, Data Warehousing I, and Data Mining I.¹⁵² Like the students in the intelligence developer program, students must take one of two electives: Introduction to Statistics or Statistical Analysis.

¹⁴⁷ University of Maryland, "Intelligence Studies-Maryland School of Public Policy."

¹⁴⁸ Ibid.

¹⁴⁹ Bellevue Community College, "Business Intelligence," <http://bellevuecollege.edu/catalog/degrees/busit/> (accessed February 24, 2008).

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² Ibid.

Radford University in Radford, Virginia has a certificate program in informatics. One definition of informatics used by the Informatics Coalition is “The use of computing to extend human abilities to think, reason, and discover.”¹⁵³ Radford’s program consists of three core courses and two discipline specific courses. The core courses are Selected Topics in Information Technology: Information Sources and Management I; Data Mining and Selected Topics in Information Technology: Information Sources and Management II.¹⁵⁴ The disciplines in the certificate program are healthcare, security and intelligence, Geographic Information Systems (GIS), and biology. The security and intelligence electives are Seminar: Investigative Data Mining and, also, Spatial Aspects of Criminal Intelligence Analysis.

Mercyhurst College in Erie, Pennsylvania has online certificate programs at both the undergraduate and graduate level. Students in the undergraduate certificate program must take the following courses: Introduction to Intelligence Analysis, Advanced Intelligence Analysis, Writing for Intelligence, History of U.S. Intelligence, Introduction to Law Enforcement Intelligence, and Business Intelligence.¹⁵⁵ The graduate certificate program requires students to complete Intelligence Theory and Applications, Intelligence Communications, and Advanced Analytical Techniques.¹⁵⁶

Michigan State University has a law enforcement intelligence certificate program. Students must take three of the following courses: Law Enforcement Intelligence Operations, Issues in Terrorism, Counterterrorism and Intelligence, and Public/Private Partnerships for Emergency Preparedness in Homeland Security.¹⁵⁷ Law Enforcement Intelligence Operations gives students an overview of the process of intelligence along

¹⁵³ Informatics Coalition, “Informatics,” <http://www.informaticscoalition.com/> (accessed February 24, 2008).

¹⁵⁴ Radford University, “RU Informatics,” <http://www.radford.edu/~informatics/courses.shtml> (accessed February 24, 2008).

¹⁵⁵ Mercyhurst College Institute for Intelligence Studies, “Undergraduate OnLine Certificate,” <http://www.mciis.org/onlinercert/index.php> (accessed February 24, 2008).

¹⁵⁶ Mercyhurst College Institute for Intelligence Studies, “Graduate Certificate in Applied Intelligence,” <http://www.mciis.org/graduate%20certificate/index.php> (accessed February 24, 2008).

¹⁵⁷ Michigan State University, “Certificate Program in Law Enforcement Intelligence,” https://intellprogram.msu.edu/documents/Intelligence_Certificate_Announcement_2.pdf (accessed February 24, 2008).

with managerial concerns and operational intelligence issues. *Issues in Terrorism*, addresses motivational factors in domestic and international terrorism. *Counterterrorism and Intelligence* integrates knowledge of intelligence and terrorism to develop tactical and strategic strategies to address the various forms of terrorism. *Public/Private Partnerships for Emergency Preparedness and Homeland Security* analyzes the issues and processes to develop effective public-private relationships to counter terrorism.

Point Park University in Pittsburgh, Pennsylvania has a certificate program in intelligence and national security. Students must select five of the following courses to complete the program: Terrorism Risk Assessment/Investigations, Intelligence & Security Principles, Intelligence Tradecraft Techniques, International Terrorism, Intelligence Analyst/ Critical Thinking (I-2) Program, National Intelligence Authorities, Emergency Planning & Security Measures, High Impact Event Planning, and Weapons of Mass Destruction.¹⁵⁸ This program is designed for students who wish to enhance their skills in intelligence and national security.

Ann Arundel Community College in Arnold, Maryland started an Intelligence Analytics Certificate program in 2007 to accompany its Associate of Applied Science degree in Homeland Security Management. Certificate requirements include these classes: Intelligence and U.S. National Security, Introduction to Intelligence Analytics, Intelligence Support to the Policy Maker and Military, Intelligence Analytics Seminar, and National Security Challenges of the 21st Century.¹⁵⁹ The College says the certificate program is structured to provide students with an understanding of the complexities of the intelligence community in supporting U.S. national security. Further, the College says the program is for potential and current employees of the intelligence community along with firms in private industry that want to develop employee skills in intelligence analysis.

¹⁵⁸ Point Park University, "Program Guide Certificate in Intelligence and National Security," <http://www.pointpark.edu/files/pgintelligenceandnationalsecuritycert2006.pdf> (accessed February 24, 2008).

¹⁵⁹ Anne Arundel Community College, "Intelligence Analytics," <http://www.aacc.edu/catalog/interactivcatalog/> (accessed February 24, 2008).

Clackamas Community College in Oregon City, Oregon has a Crime Analysis Certificate program. Students take the following courses in the First Term: Introduction to Law Enforcement, Patrol Procedures; Criminal Law, Introduction to Crime Analysis, Criminal Investigation I, and Survey of Computing.¹⁶⁰ Students are to take these courses in the Second Term: Introduction to Crime Mapping, Statistics for Crime Analysis, Criminal Investigation II, Computer Applications, Technical Mathematics or Algebra II, Human Relations, and English Composition.¹⁶¹ These courses comprise the Third Term: Criminology, Crime Analysis and Statistical Analysis, Crime Analysis via Modus Operandi, Crime Analysis Capstone, Crime Analysis/Link Analysis, Profiling Violent Crimes, Crime Scene Analysis Profiling, Research Methods/Crime Analysis, Intro to Police Intelligence, Crime Intelligence Analysis, Crime Scene Analysis Capstone, Crime Intelligence Analysis Capstone, and Criminal Justice/Corrections.¹⁶² Clackamas also offers two courses that supplement the Crime Analysis Certificate: Community Relations & Policing and, also, Criminal Investigation III.

B. CERTIFICATE PROGRAM SUMMARY

There are fifteen colleges offering certificates in intelligence analysis. Seven of those institutions offer law enforcement related analysis certificates. All the institutions that offer law enforcement analysis certificates address the basic tools of analysis and research methods. These institutions also address statistics and research methods. Sacramento College and Clackamas Community College both have enhanced statistical courses. None of the institutions that teach law enforcement analysis addresses critical thinking as a specialized course. None of these schools requires a foreign language. Only Cal State Fullerton and Sacramento State requires students to complete an internship with a law enforcement agency. Clackamas Community College indicates its students have access to cooperative work programs with law enforcement agencies. It is also the only institution teaching law enforcement analysis that provides both an introductory class to

¹⁶⁰ Clackamas Community College, "Crime Analysis Certificate," <http://depts.clackamas.edu/crimjust/documents/crimjust.pdf> (accessed February 24, 2008).

¹⁶¹ Ibid.

¹⁶² Ibid.

law enforcement and a class on patrol techniques. These classes would give students who are not familiar with law enforcement a solid foundation in the process of non-federal law enforcement.

C. UNDERGRADUATE PROGRAMS

The intelligence analysis offerings at the undergraduate level somewhat parallel those at the certificate level. Some of the same institutions that offer certificate programs also provide undergraduate level intelligence analysis instruction. There were no colleges or universities providing certificates in military intelligence analysis, but there are academic institutions addressing this area at the undergraduate level. The courses described in the following undergraduate programs will not address general electives -- only electives required as part of the major will be mentioned.

Perhaps the best known undergraduate program in intelligence analysis is at Mercyhurst College. This program was the first non-governmental undergraduate program for intelligence analysis.¹⁶³ Mercyhurst indicates its undergraduate program combines a liberal arts foundation with a foreign language requirement, has national and international studies, internships, and intelligence related courses. The end result is a graduate who should have the capability to find employment as an intelligence analyst in both governmental agencies and the private sector.¹⁶⁴ The Mercyhurst undergraduate program for intelligence analysis contains these core courses: Introduction to Research and Analysis, Advanced Research and Analysis, Business Intelligence, History of U.S. Intelligence or Intelligence and National Security, Terrorism, Intro to Law Enforcement Intelligence, Strategic Intelligence, Writing for Intelligence, and Internship. These courses comprise the Mercyhurst College interdisciplinary area: U.S. History I, II, and III; European History Since the Renaissance or World History I, II, or III; American Government; American Criminal Justice or Criminology; Geopolitics; Political Theory; Macroeconomics; General Anthropology; Three semesters of a Foreign Language;

¹⁶³ Mercyhurst College, "Undergraduate Studies," <http://www.mciis.org/undergrad/index.php> (accessed February 27, 2008).

¹⁶⁴ Ibid.

Language Related History or Language Related Culture; Statistics, and Intro to Psychology or Contemporary Social Problems.¹⁶⁵

Point Park University in Pittsburgh, Pennsylvania has a Bachelor of Science Degree in Intelligence and National Security that prepares students for entry level positions in those fields. The program is a combination of general requirements, major requirements, and major electives.

Departmental General Requirements:¹⁶⁶

- Introduction to Criminal Justice
- Professional Responsibility
- Criminal Law and Procedure
- Criminal Evidence
- Statistics or Quantitative Methods for Law Professionals
- Philosophy or Religion
- Constitutional Law or Police and the Constitution
- Elementary Spanish I or French, Chinese, Japanese, or Arabic
- Elementary Spanish II or French, Chinese, Japanese, or Arabic

Departmental Major Requirements:¹⁶⁷

- Terrorism Risk Assessment/Investigations
- Intelligence & Security Principles
- Intelligence Tradecraft Techniques
- International Terrorism
- Intelligence Analyst/Critical Thinking
- National Intelligence Authorities

¹⁶⁵ Mercyhurst College, "Undergraduate Classes," <http://www.mciis.org/undergrad/classes.php> (accessed February 27, 2008).

¹⁶⁶ Point Park University, "Intelligence & National Security," http://www.pointpark.edu/files/saps_nat_security.pdf (accessed February 27, 2008).

¹⁶⁷ Ibid.

- Emergency Planning & Security Measures
- High Impact Event Planning
- Weapons of Mass Destruction

Departmental Major Electives (Choice of 3 courses):¹⁶⁸

- International Criminal Threat
- Cyber Crime
- Selected Topics in Criminal Justice
- Recruitment, Preparation, and Training of Terrorists
- Domestic Terrorism
- Critical Issues in Risk Communications
- Emergency Medical Services and Fire Operations
- Intelligence Internship I
- Special Topics in Intelligence
- Current Issues in U.S. Security Policy
- Mass Casualty Management Planning
- Intelligence Internship II

Point Park emphasizes that critical thinking, analytical skills, communications, ethical behavior, decision making, technological skills, and strategic thinking are integrated into all parts of the curriculum.

American Military University (AMU) in Charles Town, West Virginia offers a Bachelors of Arts in Intelligence Studies. There are various concentrations in the program: criminal intelligence, general, intelligence analysis, intelligence collections, intelligence operations, and terrorism studies. The program covers a variety of subjects: terrorism, espionage, national security, competitive intelligence, regional intelligence, the

¹⁶⁸ Point Park University, "Intelligence & National Security."

“war on drugs,” and ethnic conflict.¹⁶⁹ The AMU program also attempts to address learning outcomes in the Intelligence Community, historical perspectives of intelligence, the intelligence process, threats and analysis, and intelligence and ethics.

AMU has General Education Requirement of English Composition, Social Sciences (six semester hours), Science (four semester hours) and Mathematics (three semester hours). These are the courses for the General Education Requirements for criminal intelligence:¹⁷⁰

History (six semester hours):

- American History to 1877
- American History since 1877
- World Civilization I
- World Civilization II
- Western Civilization Before The Thirty Years War
- Western Civilization Since The Thirty Years War
- History of the American Indian
- African-American History before 1877
- African-American History since 1877

Humanities (three semester hours):

- Spanish I
- Spanish II
- French I
- French II
- Arabic I
- Arabic II

¹⁶⁹ American Military University, “Bachelor of Arts in Intelligence Studies,” <http://www.amu.apus.edu/Catalog/08/undergraduate/degree/bachelor/intelligence/intelligence.htm> (accessed February 27, 2008).

¹⁷⁰ American Military University, “Bachelor of Arts in Intelligence Studies.”

- Russian I
- Russian II
- Chinese I (Mandarin)
- Chinese II (Mandarin)
- German I
- German II
- Music Appreciation
- Introduction to World Religions
- Art Appreciation
- Intro to Ethics
- Intro to Philosophy
- Public Speaking

English (six semester hours):

- Composition and Literature
- Effectiveness in Writing
- Proficiency in Writing (Required)

Literature (three semester hours):

- American Literature before the Civil War
- American Literature from Civil War to Present
- English Literature: Beowulf to 18th Century
- English Literature: 18th Century to Present
- World Literature through the Renaissance
- World Literature since the Renaissance

Political Science (three semester hours):

- American Government I
- International Relations I

Mathematics (three semester hours):

- Math for Liberal Arts Majors
- Calculus
- College Algebra
- College Trigonometry

Social Science (six semester hours):

- Introduction to Geography
- Introduction to Sociology
- Microeconomics
- Macroeconomics
- Introduction to Psychology
- Human Sexuality
- Intro to Anthropology
- American Popular Culture

Science (four semester hours):

- Introduction to Oceanography
- Introduction to Meteorology
- Introduction to Meteorology Lab
- Introduction to Physics
- Introduction to Human Anatomy and Physiology
- Introduction to Human Anatomy Lab
- Introduction to Physics Lab
- Introduction to Astronomy
- Introduction to Astronomy Lab
- Introduction to Chemistry Lab
- Introduction to Biology
- Introduction to Biology Lab

Concentration Requirements: Intelligence Analysis (four courses):

- Intelligence Data Analysis (required)
- Criminal Intelligence Analysis
- Threat Analysis
- Geographic Information Systems I
- Geographic Information Systems II
- Forecasting Terrorism

General Program Requirements: Intelligence Analysis (four courses; not from intelligence analysis concentration):

- Criminal Intelligence Analysis
- Geographic Intelligence
- Signals Intelligence and Security
- Counterintelligence
- Open Source Collection
- Introduction to the War on Drugs
- Threat Analysis
- Terrorism and Counterterrorism
- International Criminal Organizations
- Human Intelligence
- Espionage/Counterespionage
- Terrorism and U.S. National Security
- Psychology of Terrorism
- Interrogation
- China Country Analysis
- Iraq Country Analysis
- Korea Country Analysis
- Forecasting Terrorism
- Intelligence and Homeland Security

- Cyber Warfare
- Imagery Intelligence
- Geographic Information Systems I
- Geographic Information Systems II
- Intelligence and Assassination
- Covert Action
- Spycraft
- Joint Forces Intelligence Planning
- Illicit Finance
- Intelligence Data Analysis
- Tactical Intelligence
- Foreign Intelligence Organizations
- Contemporary Intelligence Issues

The general intelligence analysis concentration requires students to complete four of these courses: Intelligence Data Analysis (required), Criminal Intelligence Analysis, Threat Analysis, Geographic Information Systems I, Geographic Information Systems II, and Forecasting Terrorism. The other general intelligence analysis General Program Course requirements are the same as those of the criminal intelligence concentration.

Emery-Riddle Aeronautical University, which has U.S. campuses in Florida and Arizona, has a Bachelor of Science degree in Global Security and Intelligence Studies (GSIS). This program was designed to provide upcoming security and intelligence professionals with a diverse understanding on global relationships in politics, economics, social change, science and technology, military developments, cyber-security, environmental concerns, environmental issues, and human culture. University officials want students to be able to show innovative problem solving and critical thinking for terrorism and asymmetric warfare, transportation, threats to corporate personnel and facilities, threats to computer and telecommunication infrastructure, trafficking networks in illicit services and substances, proscribed weapons technologies such as weapons of

mass destruction, international crime, population migrations, natural disasters, pandemics, and Homeland Security. GSIS students must take classes in the following areas:¹⁷¹

GSIS Core Courses (thirty-three semester hours):

- Microeconomics
- Introduction to Global Security and Intelligence Studies
- Introduction to the American Legal System
- Global Crime and Criminal Justice Systems
- Studies in Global Intelligence I
- History of Terrorism
- World Geography
- International Studies
- Personality Development
- American National Government
- American Foreign Policy

GSIS Areas of Concentration (fifteen semester hours):

- Political Change, Revolution, and War
- Intelligence and Technology
- Intelligence Analysis, Writing, and Briefing
- International Security and Globalization
- Studies in Global Intelligence II

GSIS Designated Electives (nine semester hours):

- International Business
- Macroeconomics
- World Philosophy

¹⁷¹ Embry-Riddle Aeronautical University, "Bachelor of Science in Global Security and Intelligence Studies (GSIS)," <http://www.erau.edu/pr/degrees/b-gsis.html#req> (accessed February 27, 2008).

- Comparative Religions
- Applied Cross-Cultural Communication
- Social Psychology
- Asian Literature
- Topics in Global History, Politics, and Culture
- U.S.-Asian Relations

GSIS students must also take a foreign language and write a thesis.

Henley-Putnam University in San Jose, California offers a Bachelor of Science in Intelligence Management. This program is entirely online and introduces students to the basic concepts of intelligence gathering and analysis.¹⁷² The program further attempts to teach students the various manifestations of intelligence, how to analyze information, and how to use intelligence. Students are required to take the following courses: Introduction to Intelligence, Introduction to Critical Thinking and Logic, Intelligence Collection, Introduction to Analysis, Open Source Research, Covert Action, Counterintelligence, Writing for the Intelligence Professional, Ethics, History of Intelligence Part 1, and History of Intelligence Part II.¹⁷³ Students must also take all courses from any three of the following areas of emphasis:

Collection Management:

- Propaganda and Disinformation
- Elicitation and Briefing/Debriefing
- Collection Management

¹⁷² Henley-Putnam University, "Bachelor of Science, Intelligence Management," <http://www.henley-putnam.edu/127-192.htm> (accessed February 27, 2008).

¹⁷³ Ibid.

Counterintelligence:

- World Intelligence Agencies
- Terrorist Support Networks
- Operational Security

Counterterrorism:

- Counterterrorism
- Strategy and Tactics
- Religious Extremism

Intel Operations:

- Technical Surveillance
- Clandestine Communications
- Infiltration Techniques

Analysis:

- Weapon Systems
- Underground Economies
- Introduction to Data Analysis

There are also academic institutions addressing intelligence analysis as part of other undergraduate programs. Penn State has an undergraduate program in Security and Risk Analysis. There are three concentrations in this program: intelligence analysis and modeling, information and cyber security, and social factors and risk.¹⁷⁴ The intelligence analysis and modeling program has these prescribed courses: Intro to the American Criminal Justice System, Intermediate Microeconomic Analysis, Decision Making and

¹⁷⁴ Penn State, "College of Information Sciences and Technology," <http://ist.psu.edu/currentstudents/undergraduate/sra/options/> (accessed February 27, 2008).

Strategy in Economics, Quantitative Political Analysis; and Politics of Terrorism.¹⁷⁵ Students must take six credits from Support of Option Courses: Comparative Criminal Justice Systems, American Foreign Policy, Introduction to Statistical Program Packages, Geography of Developing World, Mapping Our Changing World, Elements of Cultural Geography, Geography of International Affairs, and Geographic Information Systems.¹⁷⁶

Notre Dame College has an undergraduate degree in history with an emphasis on intelligence analysis and research. This program is patterned after the intelligence analyst program at Mercyhurst College. Notre Dame says students in the program will be qualified to enter careers as intelligence analysts or researchers with the government or private industry. The program aims to provide them with the following skills:¹⁷⁷

- Extensive comprehension of world and American history
- Knowledge of comparative governments and political philosophies
- Ability to produce written and oral reports and assessments based upon research, correlation and analysis
- Reading competency in a foreign language
- Familiarity with computer operations and database management
- General understanding of statistical techniques

¹⁷⁵ Penn State, “College of Information Sciences and Technology: Requirements for the Intelligence and Analysis Modeling Option,” <http://ist.psu.edu/currentstudents/undergraduate/sra/page2.cfm?intPageID=986> (accessed February 27, 2008).

¹⁷⁶ Penn State, “College of Information Sciences and Technology: Requirements for the Intelligence and Analysis Modeling Option.”

¹⁷⁷ Notre Dame College, “History/Political Science Department,” http://www.notredamecollege.edu/academics/history_polSci/index.html#MajorHistoryIAR (accessed February 27, 2008).

To graduate from the program, students need to complete a history core and coursework for completion of program. The history core contains the following courses:¹⁷⁸

- Western Civilization after 1500
- Major Themes in American History
- Critical Writing
- Senior Research Project
- Cooperative Education.
- The coursework for completion of program contains the following courses:¹⁷⁹
- American Government and Politics
- Macroeconomics
- Comparative Politics
- International Relations
- American Foreign Policy
- One of these non-western history courses: Africa: A Continental History; The Transformation of Japan from Feudalism to Nationhood; The Middle East: From Islam to Nationalism; and Latin America: A Regional History
- Introduction to Intelligence
- Terrorism
- Competitive Intelligence
- Methods of Financial Investigation and Research
- Intelligence and National Security
- Strategic Intelligence
- Advanced Research and Analysis
- Foreign Language (twelve credits)

¹⁷⁸ Notre Dame College, "History/Political Science Department."

¹⁷⁹ Ibid.

Patrick Henry College in Purcellville, Virginia, offers a Bachelor of Arts Degree in Government. There are four tracks in the program: American Politics and Policy, International Politics and Policy, Political Theory, and Strategic Intelligence.¹⁸⁰ Students in all tracks must take Government Core Courses: American Political Institutions, Political Science Research Methods, Comparative Politics, and International Relations. Students must take the Core Curriculum: Theology of the Bible I and II, Principles of Biblical Reasoning, Research and Writing, Logic, Rhetoric, Economics of the Citizen, Constitutional Law, Freedom's Foundations I and II, History of the United States I and II, History of Western Civilization I and II, Western Literature I and II, Euclidean Geometry, Music History and Appreciation, Philosophy, Biology and Lab, Physics and Lab, and Modern/Classical Foreign Language. Students in Strategic Intelligence must also take History of American Intelligence; Intelligence, Law Enforcement, and Civil Liberties; Counterintelligence; and Counterterrorism.¹⁸¹ These students must also take an apprenticeship: Internship in Strategic Intelligence and, also, Faith & Reason Integration Essay. Major Electives: Additional Apprenticeship, is an additional requirement for Strategic Intelligence and students must take eleven credits from these courses: Model United Nations, Moot Court, Topics in Politics and Policy, Special Projects in Strategic Intelligence, Independent Readings, and Intelligence Community Seminars.

West Virginia University has an undergraduate program in International Studies with an area of emphasis on intelligence and national security. This program is for students interested in intelligence analysis with national security agencies or other areas of the policy community. Students must take the following required courses: Introduction to Intelligence Analysis, Intelligence Analysis Methods, Comparative Foreign Policy, Foreign Policy Decision Making, and two semesters of Advanced Foreign Language.¹⁸² Students are required to take twelve hours of the following

¹⁸⁰ Patrick Henry College, "Department of Government: Bachelor of Arts in Government Major," <http://www.phc.edu/academics/government/bagovernment.asp#intelligence> (accessed February 27, 2008).

¹⁸¹ Patrick Henry College, "Department of Government: Bachelor of Arts in Government Major."

¹⁸² West Virginia University, "International Studies Program," <http://internationalstudies.wvu.edu/major/curriculum/intelNC> (accessed March 15, 2008).

analytical courses in at least two disciplines: International Economics, Comparative Economic Systems, Political Geography, Global Issues: Inequality & Interdependence, Population Geography, American Diplomacy to 1941, American Diplomacy since 1941, American Presidency, Conduct of American Foreign Relations, International Organization, and Politics of War and Peace.¹⁸³ Finally, the students must take twelve hours of cross-cultural courses in at least two disciplines:¹⁸⁴

- Geography (United States and Canada)
- Geography of Europe
- Geography of Africa
- Geography of the Middle East/North Africa
- History of Twentieth Century Europe
- History of England: 1066 to Present
- History of Russia: Emancipation to Present
- History of Modern Germany
- History-Latin America: Reform and Revolution
- History-Brazil: Colony to World Power
- History-Modern Spain
- History-Eastern Europe Since 1945
- History-USSR: 1939 to Present
- History-Twentieth Century Germany from Weimar to Bonn
- History of Modern China
- History of Modern Japan
- History-East Africa Since 1895
- History of Africa: European Dominance to Independence
- History-West Africa to 1885
- History-West Africa from 1885
- Political Science-Government of Japan

¹⁸³ West Virginia University, "International Studies Program."

¹⁸⁴ Ibid.

- Political Science-Governments of Russia and Eastern Europe
- Political Science-Western Democratic Governments
- Political Science-Government of China
- Political Science-Governments of Latin America
- Political Science-Governments of the Middle East
- Political Science-Politics of Africa
- Political Science-Russian Foreign Policy
- Political Science-Latin America in International Affairs
- Political Science-Far Eastern International Affairs
- Sociology/Anthropology-Latin American Cultures
- Sociology/Anthropology-Traditional and Changing Africa

The National Defense Intelligence College (NDIC) offers a Bachelor of Science in Intelligence. NDIC does not offer a major or concentration in intelligence analysis, but NDIC indicates analysis is woven throughout the program. To enter this program, students must have completed three years of undergraduate study. There are eleven core courses: Globalization: The Intelligence Landscape; Analytic Methodologies, Collection Assets and Capabilities; The Nature of Conflict and Conflict Capabilities; Intelligence and National Security Strategy, Culture and Identity in an Age of Globalization, Science and Technology and Intelligence, Terrorism: Origins and Methodologies, Capstone Colloquium, The Analyst-Collector Interface: Closing the Intelligence Gap, and Capstone Project.¹⁸⁵ Students must take six of the following electives: Intelligence: Building Stability and Peace, Introduction to Denial and Deception, Information Operations, Collection Management, Homeland Security Intelligence, Proliferation of Weapons of Mass Destruction, Africa: Intelligence Issues, Middle East: Intelligence Issues, Eurasia: Intelligence Issues, South Asia: Intelligence Issues, and East Asia: Intelligence Issues. ¹⁸⁶

¹⁸⁵ National Defense Intelligence College, "Bachelor of Science in Intelligence," <http://www.ndic.edu/bsi/bsi.htm> (accessed February 27, 2008).

¹⁸⁶ Ibid.

D. UNDERGRADUATE PROGRAM SUMMARY

There are ten colleges and universities in the U.S. that provide undergraduate degrees in intelligence analysis. None of these institutions offers an undergraduate degree in law enforcement intelligence analysis. However, American Military University offers a Bachelors of Arts in Intelligence Studies with a concentration in criminal intelligence. Most of the undergraduate institutions indicate their graduates would be able to find employment in governmental agencies and the private sector. Mercyhurst College which has received a lot of attention as a leader in intelligence analysis instruction provides three courses directly related to law enforcement intelligence analysis: Intro to Law Enforcement Intelligence, American Criminal Justice, and Criminology. Emery-Riddle University has a Bachelor of Science degree in Global Security and Intelligence Studies that offers two law enforcement related courses: Introduction to the American Legal System and, also, Global Crime and Criminal Justice Systems. Penn State offers Intro to the American Criminal Justice System and, then, Comparative Criminal Justice Systems as law enforcement related courses. Notre Dame College, Patrick Henry College, and West Virginia University do not offer law enforcement related courses in their analyst programs.

While not law enforcement, Point Park University offers a Bachelor of Science Degree in Intelligence and National Security. It requires students to be familiar with law enforcement concerns. Point Park requires students to take Criminal Law and Procedure, Criminal Evidence, Constitutional Law or Police and the Constitution, and Emergency Planning and Security Measures. It also has, as an elective, Selected Topics in Criminal Justice.

Surprisingly, not all the institutions required students to take a foreign language. Mercyhurst College, Point Park University, AMU, Notre Dame College, and Emery-Riddle University were the only schools requiring a foreign language. AMU requires students to take Spanish.

E. GRADUATE PROGRAMS

There are also a small number of colleges and universities that teach intelligence analysis at the graduate level. None of the institutions currently offer degrees in law enforcement intelligence analysis. However, one university, Michigan State, plans to offer such a degree in the near future. One university, St. Joseph's, offers a master's degree with a concentration in intelligence and crime analysis.

Mercyhurst College has a Master of Science degree in Applied Intelligence. Graduates of the program are expected to demonstrate a broad understanding of the intelligence cycle; perform extensive research with print and open source material; communicate assessments through written and oral reports; demonstrate a knowledge of statistical research techniques; demonstrate knowledge of computer operations and database management in relation to the intelligence cycle, demonstrate appreciation for cultural, political, and philosophical differences; and possess reading competency in a foreign language.¹⁸⁷ To develop those competencies, Mercyhurst requires students to take eleven courses.¹⁸⁸ Students must take all Core Courses: Research Methods in Criminal Justice, Intelligence Theories and Applications, Managing Strategic Intelligence Analysis, Intelligence Communications, Analyzing Financial Crimes, Topics in Intelligence, and Thesis in Applied Intelligence. Students must take four of the following electives: Leadership and Organizational Behavior, Graduate Seminar: National Security, Strategic Business Intelligence, Studies in Terrorism, Comparative History of Intelligence, Advanced Analytical Techniques, and Internship/Co-op.

The University of Detroit Mercy has a Master of Science in Intelligence Analysis. The curriculum contains five components: courses in research and crime mapping; background courses in conflict and terrorism; courses in interviewing and threat assessment; specialized tracks in profiling, physical and personal security or policy

¹⁸⁷ Mercyhurst College, "Graduate Studies," <http://www.mciis.org/graduate/index.php> (accessed February 27, 2008).

¹⁸⁸ Mercyhurst College, "Graduate Classes," <http://www.mciis.org/graduate/classes.php> (accessed February 27, 2008).

analysis; and a thesis or capstone project.¹⁸⁹ The program requires the completion of eleven courses from Required Courses, Recommended Electives, Other Elective and Projects.¹⁹⁰ Required Courses are Research Methods, Spatial Analysis and Mapping, Terrorism, Homeland Security and Threat Assessment, and Roots of 21st Century Conflict and Intelligence Acquisition: Debriefing and Interviewing Techniques. Recommended electives are Leadership and Behavior in Organizational Intelligence and, also, Topics in Intelligence and Seminar in Security Issues. Other electives are the choice of one course from Intelligence, Criminal Justice Studies, Security Administration, or the Master's in Business Administration program. Projects are either the Thesis or Research Capstone Project.

Johns Hopkins University has a Master of Science in Intelligence Analysis degree. The program is for intelligence analysts in the private sector and analysts in federal, state, and local government. Johns Hopkins indicates the degree will develop the following competencies: basic leadership skills; oral, written, and visual presentation skills; skill in using research tools for collection and analysis of large amounts of data; development of new and enhanced skills for decision making; awareness of the importance of ethics; and enhancement of creative and strategic thinking.¹⁹¹ Students in the program are required to complete fourteen courses: Ethics of Beliefs; Leadership and Organizational Behavior; Managing Differences; Analytical Writing; Information and Telecommunication Systems; Strategic Thinking: Concept, Policy, Plan, and Practice; Terrorism: Concepts, Threats, and Delivery; Ethics and Society; Leadership through the Classics (study of classical works in literature and film); Analysis, Data Mining, and Discovery Informatics; Art, Creativity, and the Practice of Intelligence; Case Studies in Intelligence Analysis; Special Issues in Intelligence Analysis; and Current Issues: Capstone.¹⁹²

¹⁸⁹ University of Detroit Mercy, "Master of Science in Intelligence Analysis," <http://liberalarts.udmercy.edu/intelanalysis/curriculum.php> (accessed February 27, 2008).

¹⁹⁰ Ibid.

¹⁹¹ Johns Hopkins University, "Division of Public Safety Leadership: Objectives," <http://psl.jhu.edu/programs/intelligence-analysis/objectives/> (accessed February 28, 2008).

¹⁹² Johns Hopkins University, "Divisions of Public Safety Leadership: Curriculum," <http://psl.jhu.edu/programs/intelligence-analysis/curriculum/> (accessed February 28, 2008).

In the fall of 2008, Michigan State University will have a Master of Science degree in Law Enforcement Intelligence Analysis. All courses will be online and the degree is intended for federal, state, local, and private sector individuals. The following courses are required for graduation: Law Enforcement Intelligence Operations; Homeland Security; Proseminar in Criminal Justice (survey of classical and recent literature in criminal justice); Design and Analysis in Criminal Justice Research; Counterterrorism and Intelligence; Analytic Thinking and Intelligence; Quantitative Methods in Criminal Justice Research, and Policy Analysis Under Conditions of Change.¹⁹³ Students must also take one of the following courses: Crime Causation, Prevention, and Control; Comparative Criminal Justice; Globalization of Crime; Terrorism; and Legal Issues in Criminal Justice.¹⁹⁴

St. Joseph's University in Philadelphia, Pennsylvania, has a Master of Science in Criminal Justice degree with one of several concentrations: Criminal Justice; Administration; Behavior Management and Justice; Probation, Parole, and Corrections; Federal Law Enforcement; Criminology; and Intelligence and Crime Analysis. Students in all concentrations must take the following courses: Research Methods and Analysis or Advanced Research Methods and Analysis; Criminology Theory; Ethics and Criminal Justice; and Professional Writing for Law Enforcement.¹⁹⁵ Students in the Intelligence and Crime Analysis concentration must also take Law Enforcement Intelligence Analysis and Law Enforcement Intelligence: Policy and Process.¹⁹⁶ These students must also take two of the following courses: Crime Analysis Using GIS Mapping; Organized Crime: Targets and Strategies; White Collar Crime; Drugs: Threats, Laws, and Strategies;

¹⁹³ Michigan State University, "Law Enforcement Intelligence Analysis-Fall 2008," <http://criminaljustice.msu.edu/academic/LErequire.php> (accessed February 28, 2008).

¹⁹⁴ Ibid.

¹⁹⁵ Saint Joseph's University, "Degree Requirements," http://www.sju.edu/academic_programs/grad_art_science/crime_just/pages/degree.html (accessed February 28, 2008).

¹⁹⁶ Saint Joseph's University, "Degree Requirements."

Terrorism: Threats and Strategies; and Electronic Intelligence Analysis.¹⁹⁷ Finally, the intelligence analysis students must take two electives from any Criminal Justice concentration.¹⁹⁸

American Military University (AMU) also offers a Master of Arts in Intelligence Studies degree. AMU's graduate program has several concentrations in addition to the General Program: Competitive Intelligence, Criminal Intelligence, Homeland Security, Intelligence Analysis, Intelligence Collection, Intelligence Operations, Middle Eastern Studies, Political-Military Intelligence, and Terrorism Studies. Students in all concentrations must take these courses: Research Methods in Security and Intelligence Studies, Strategic Intelligence, Collection, Analytic Methods, and Interagency Operations.¹⁹⁹ Students in the Intelligence Analysis concentration must take Security and Intelligence Data Analysis and three of the following courses: Criminal Intelligence Analysis, Geographical Information Systems and Spatial Analysis I, Advanced Geographic Information Systems and Spatial Analysis II, Threat Analysis; Indications and Warning, Intelligence Profiling, Regional Threat Analysis, Forecasting Terrorism, and Foreign Policy and Security Analysis.²⁰⁰ All intelligence studies students must also take either a comprehensive exam or capstone. A major expectation of AMU faculty is for students to have the capability to appraise the intelligence cycle, conduct advanced research, and to evaluate the latest techniques for improving interagency cooperation and intelligence sharing.²⁰¹

NDIC has a Master of Science in Strategic Intelligence. This program does not provide a major or concentration in intelligence analysis. However, like its Bachelor of Science in Intelligence program, NDIC says analysis is integrated throughout the curriculum. The goal of the program is to enable students to know the global context that

¹⁹⁷ Saint Joseph's University, "Degree Requirements."

¹⁹⁸ Ibid.

¹⁹⁹ American Military University, "Master of Arts in Intelligence Studies," <http://www.amu.apus.edu/Catalog/08/graduate/degree/master/intelligence/intelligence.htm> (accessed February 28, 2008).

²⁰⁰ Ibid.

²⁰¹ Ibid.

determines world systems and to know the complexity, velocity, and interdependency of world events and issues.²⁰² Further, the program has a goal of influencing national intelligence to have the ability to reduce intelligence gaps and forecast national security dangers, while working through collaboration and teamwork in realizing areas and disciplines of specialization.²⁰³ The program requires the following courses: Globalization: The Context for Intelligence, Social Analysis and the Spectrum of Conflict; Operational Capabilities; Argumentation, Logic, and Reasoning; The Compound Eye: Intelligence Collection; Intelligence and National Security Policy; and Science and Technology or Deconstructing Strategy.²⁰⁴ Students may take electives from the following areas: Military Strategy: Intelligence in Combat and Peacetime, Intelligence Community Issues and Management, Transnational Threats: Intelligence Challenges, and The Geostrategic Environment: Closing Intelligence GAPS. There are seven elective courses in area of military strategy. Intelligence Community Issues and Management contain these courses:

- The National Intelligence Community: Mission and Enterprise
- Intelligence Planning, Spending, and Accountability
- Acquisition and Intelligence Capabilities
- Advancing Intelligence Collection
- Signals Intelligence Resources, Methods, and Operations
- Advanced Analysis
- Transnational Issues in a Cryptologic Environment
- Covert Action
- Current Cryptologic Issues
- Geospatial Intelligence: Situational Awareness for Decision and Action

²⁰² National Defense Intelligence College, "Master of Science of Strategic Intelligence," <http://www.ndic.edu/mssi/mssi.htm> (accessed February 29, 2008).

²⁰³ Ibid.

²⁰⁴ National Defense Intelligence College, "Master of Science of Strategic Intelligence," <http://www.ndic.edu/mssi/corecourses.htm> (accessed February 29, 2008).

Transnational Threats: Intelligence Challenges contain these courses:

- Roots of Terrorism
- Transnational Threat Environment
- Islam and the Modern World
- Threats to the Homeland
- Countering the Terrorist Threat
- Counterintelligence
- WMD: Counter proliferation
- Space and Missile Systems
- The Biological Threat
- Nuclear, Radiological, Explosives, and Chemical Agents
- Medical Intelligence

The Geostrategic Environment: Closing Intelligence GAPS comprises these courses:

- Africa: Geostrategic Intelligence Issues
- North Asia: Geostrategic Intelligence Issues
- South Asia: Geostrategic Intelligence Issues
- China in the Future
- Europe: Intelligence Partner and Analytic Subject
- Latin America: Geostrategic Intelligence Issues
- The Middle East: Geostrategic Intelligence Issues
- Russia and Central Asia: Geostrategic Intelligence Issues

Henley-Putnam also offers a Master of Science in Intelligence Management. Like its Bachelor of Science in Intelligence Management, this program addresses the broad area of intelligence. The University emphasizes that graduates will have enhanced skills in intelligence analysis, counterintelligence, collection management, and intelligence operations. The following courses are required: Recruitment Cycle; Cover; Double Agents, Denial, and Deception; Advanced Analytical Methods; Advanced Open Source

Intelligence; and Advanced Surveillance and Countersurveillance.²⁰⁵ Students must choose two of the following electives: Advanced Intelligence Operations, Advanced Intelligence Practicum, Intelligence Team Management, and Secret Societies.²⁰⁶ Students must also choose any two of the following areas of emphasis:²⁰⁷

Collection Management:

- All Source Intelligence
- Intelligence Policy and Reform
- Advanced Intelligence Collection

Counterintelligence:

- WMD Terrorism
- Counterespionage
- Vetting

Counterterrorism:

- Counterterrorism Analysis
- Cults and Charismatic Leaders
- Advanced Domestic Terrorism

Intelligence Operations:

- Operational Concepts and Planning (Targeting)
- Seminar: Case studies in Covert Action
- Strategic Intelligence

²⁰⁵ Henley Putnam, "Master of Science, Intelligence Management," <http://www.henley-putnam.edu/128-195.htm> (accessed February 29, 2008).

²⁰⁶ Ibid.

²⁰⁷ Ibid.

Analysis:

- Leadership Analysis
- Political Analysis
- Area Studies Analysis

Finally, students must take four research project courses: Research Topic with Advisor; Research Techniques; Publication Writing Techniques; and Research Paper for Publication.²⁰⁸

The University of Michigan offers a Master of Science in Information (MSI) degree with nine specializations. One of the specializations is Information Analysis and Retrieval (IAR). The University says graduates with this degree may pursue diverse career paths including competitive intelligence analysis.²⁰⁹ The University further indicates students will develop skills in natural language processing, database design, information retrieval, and network analysis.²¹⁰ MSI students must take the following courses: Information in Social Systems: Collection, Flows, and Processing; Contextual Inquiry and Project Management; Networked Computing: Storage, Communication, and Processing; one management course; one research methods course; six credits in courses outside area of study; and six credits in internship. Students must also take twelve credits from the following courses: Networks: Theory and Application I; Human Interaction in Information Retrieval; Natural Language Processing I; Database Application Design; Recommender Systems; Data Manipulation; Exploratory Data Analysis; Information Retrieval; Online Searching and Databases; Networks: Theory and Application II; Language and Information; Natural Language Processing II; and Advanced Natural Language Processing and Information Retrieval.

²⁰⁸ Henley Putnam, "Master of Science, Intelligence Management."

²⁰⁹University of Michigan: School of Information, "Information Analysis and Retrieval (IAR) Specialization," <http://www.si.umich.edu/msi/iar.htm> (accessed February 29, 2008).

²¹⁰ Ibid.

F. GRADUATE PROGRAM SUMMARY

There are only three graduate schools that currently address, or will address, law enforcement intelligence analysis: AMU, St. Joseph's University, and Michigan State University. These schools will address needed areas of law enforcement intelligence instruction. All graduate schools provide instruction on the basics of intelligence. Most of the graduate schools teaching intelligence analysis have addressed research methods and statistics. There is only one school, National Defense Intelligence College, that does not require statistics or research methods. None of the schools require a foreign language. AMU offers critical thinking as an elective from its General Program for students without a concentration; Michigan State will offer analytic thinking; and NDIC offers a logic and reasoning course. Other schools, such as Mercyhurst College, may address critical thinking as part of other courses. NDIC offers a diverse area of specialized instruction on intelligence issues in world regions that is unmatched by the other schools.

G. SUMMARY

This chapter has examined public and private intelligence analyst instruction in the United States. Clearly this examination revealed most of the instruction is devoted to foreign and military analysis. However, law enforcement intelligence analysis comprises a significant portion of the certificate programs. There are several schools that are addressing law enforcement intelligence analysis instruction at the undergraduate level. However, in the near future, only Michigan State University will address law enforcement intelligence analysis as a major at the graduate level, while two institutions have law enforcement or criminal intelligence as concentrations in their graduate programs. More academic institutions need to provide law enforcement intelligence analysis instruction and degrees in law enforcement analysis. The next chapter will discuss how several foreign nations are addressing the training of law enforcement intelligence analysts.

VI. REVIEW OF ANALYST TRAINING IN FOREIGN NATIONS

This chapter will explore law enforcement intelligence analyst training in three countries: Turkey, Canada, and the United Kingdom. These countries differ in their curriculum and how they deliver training. It is important to examine how other nations are providing law enforcement analyst instruction to determine best practices and how this training should be delivered in the U.S. The chapter concludes with a short comparison between training in the three nations and the United States.

A. TURKEY

Policing in Turkey is the responsibility of the Ministry of Internal Affairs. The Turkish National Police (TNP) is responsible for policing urban areas and the Gendarmerie is responsible for policing outside urban areas.²¹¹ Since it may be called upon by the military General Staff to enforce military laws and regulations, the Gendarmerie is also considered a law enforcement force of military nature.

The TNP is comprised of a Central and a Provincial Organization. The General Directorate of Security is the Central Organization and functions as the headquarters for the TNP.²¹² Headquarters contains the following positions and areas: Director General, five Deputy Director Generals, 27 departments, 4 directorates, 2 boards, and the police academy. The Provincial Organization consists of 81 Provincial Security Departments, 751 Security Directorates of towns associated with provinces, 22 Border Gates Security Directorates, 18 Free-Zone Police Stations, and 834 TNP Stations in Turkey.²¹³ Governors and district governors are accountable for security in the towns and provinces. As a result, chiefs of Provincial departments are accountable to the province governor

²¹¹ Interpol, "Turkey," <http://www.interpol.int/Public/Region/Europe/pjsystems/turkey.asp> (accessed March 1, 2008).

²¹² Huseyin Durmaz, "Officer Attitudes Toward Organizational Change in the Turkish National Police," (Dissertation Prepared for the Degree of Doctor of Philosophy at University of North Texas, 2007). 12.

²¹³ *Ibid.*, 13.

and to the General Directorate of Security.²¹⁴ Provincial security departments are structured similarly to headquarters and each headquarters' department has a counterpart in the provinces.

Turkey has three categories of police functions: administrative, judicial, and political. Some administrative police functions are: the safety of persons and property, enforcement of laws and regulations, quelling public disorder, locating missing persons, apprehending thieves, and controlling traffic.²¹⁵ Judicial police functions involve assisting in investigating crimes, issuing arrest warrants and assisting with the gathering of evidence for trial.²¹⁶ Officers conducting judicial police functions are assigned to offices of public prosecutors. Political police functions involve combating subversive activities.²¹⁷

Intelligence in the TNP is addressed by the Department of Intelligence. This department reports directly to the Director General in the Central Organization. The Department of Intelligence contains investigators, technical intelligence officers, managers, and analysts. All intelligence personnel receive training conducted by the Department of Intelligence. There are no private organizations that provide intelligence analyst training in Turkey.

All Department of Intelligence personnel receive the same training. These courses address current threats, basic terrorist organizations, technical issues, and field practice. The following courses comprise intelligence training for the TNP: Terrorism Concepts, Left-Wing Terrorism, Separatist Terrorism, Religiously Motivated Terrorism, Organized Crime Groups, Basic Technical Intelligence, Basic Intelligence Training for Law Enforcement Intelligence Officers, Operations Management, Street Chasing, and

²¹⁴ Huseyin Durmaz, "Officer Attitudes Toward Organizational Change in the Turkish National Police."

²¹⁵ Library of Congress, "Turkey," [http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field\(DOCID+tr0113\)](http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+tr0113)) (accessed March 1, 2008).

²¹⁶ Ibid.

²¹⁷ Ibid.

Legal Issues for Intelligence Officers. TNP intelligence personnel are cross-trained. They receive assignments as investigators, technical officers, managers, or analysts at the conclusion of training.

B. CANADA

Canada has an integrated criminal intelligence system: Criminal Intelligence Service Canada (CISC). CISC was founded in 1970 and comprises approximately 380 Canadian law enforcement agencies.²¹⁸ This organization is responsible for championing intelligence-led policing in Canada and enhancing the production and exchange of criminal intelligence in the nation. Terrorism is investigated by the Canadian Security Intelligence Service.

The Royal Canadian Mounted Police (RCMP) manages CISC. CISC has a Central Bureau that provides administrative support to the organization. In addition to providing administrative support, the Central Bureau delivers strategic intelligence products to Canadian law enforcement. It is also the center for the nation's organized crime effort.²¹⁹

CISC contains ten provincial bureaus: Alberta, Newfoundland, British Columbia, Nova Scotia, Manitoba, Ontario, New Brunswick, Quebec, Saskatchewan, and Prince Edward Island. These provinces operate independently, but also provide intelligence for national criminal intelligence products. Information that is processed locally is forwarded to CISC.

While CISC is managed by the RCMP, it is governed by the National Executive Committee. The National Executive Committee is comprised of twenty-five Canadian law enforcement community members and chaired by the Commissioner of the RCMP.²²⁰ There are three categories of CISC membership: Category I, police agency; Category II, agency with specific law enforcement role; and Category III, agency with

²¹⁸ Government of Canada, "Who We Are," http://www.cisc.gc.ca/about/about_cisc_e.htm (accessed March 1, 2008).

²¹⁹ Ibid.

²²⁰ Ibid.

complementary role to law enforcement.²²¹ CISC staffing is comprised of RCMP members and employees from member agencies.

CISC also provides criminal intelligence training. The training varies. However, it includes instruction on planning and direction, collection/evaluation, collation, reporting/dissemination, internet research, and criminal analysis. Intelligence managers, analysts, and investigators receive joint training. Students selected for the training are chosen with the assistance of CISC provincial bureaus. CISC also participates in joint training with its law enforcement partners.

Canada provides police training at the Canadian Police College (CPC). The CPC develops police leadership and management skills along with providing specialized training to police officers and senior police officials.²²² The Academic Services branch of CPC provides training in multiple areas: explosives, forensic identification, technological crimes, distance learning, and investigations.²²³ One of the sub-areas of investigations is intelligence analysis. CPC provides four classes in intelligence analysis: Tactical Intelligence Analysis, Criminal Intelligence Analysis-Distance Learning, Strategic Intelligence Analysis, and Advanced Intelligence Analysis Workshop.

The Tactical Intelligence Analysis course teaches students analytical skills required to transform information into intelligence. This course has many objectives: after completing the course students should be able to: understand the basics of inductive logic in analysis; construct link charts, time lines, and commodity flow charts; use analytical and presentation tools with computer graphing software; recognize the capabilities of computer-assisted tools; and present analytical results using electronic tools learned in the course.²²⁴ Students in this course must be full-time analysts or identified by an intelligence unit manager to become full-time analysts. However, other

²²¹ Government of Canada, "Who We Are."

²²² Canada, "The Canadian Police College," http://www.cpc.gc.ca/home_e.htm (accessed March 1, 2008).

²²³ Canada, "Academic Services," http://www.cpc.gc.ca/sciences/scienc_e.htm (accessed March 1, 2008).

²²⁴ Canada, "Tactical Intelligence Analysis (TIAC): Purpose of the course," http://www.cpc.gc.ca/courses/descript/iac_e.htm (accessed March 1, 2008).

police employees may be considered for this course if they have successfully completed the Criminal Intelligence Analysis-Distance Learning course.

The Criminal Intelligence-Distance Learning course teaches students basic intelligence analysis skills. The course addresses the following areas: analytical function, inductive reasoning, data collection and evaluation, inference, matrices, link analysis diagrams, event flow charting, and practical exercises.²²⁵ This course is self-paced and students have six weeks to complete it.

The course in Strategic Intelligence Analysis gives students the skills needed to collect and analyze data along with providing them the skills to make interpretations of current and future events. The course content aims to study the following areas: establishing a conceptual framework and its development; defining and restating a problem; the role of and developing hypotheses; developing strategic indicators; learning collation principles and systems; evaluating principles; applying analytical techniques; selecting analytical approaches; and reporting strategic intelligence.²²⁶ Students must be full-time analysts. Others may be considered if they show an interest and can explain how they are currently, or will be, involved in strategic intelligence.

The Advanced Intelligence Analysis Workshop provides students the chance to enhance their analytical skills and to keep current with new analytical techniques. After finishing this course, students will be able to: identify analytical biases; list actual and potential information to support opposing views; examine collections of strategic indicators to support opposing interpretations; identify benchmarks which would indicate how future events may unfold; analyze opposing outcomes from multiple events or decisions; and apply topical analytical techniques to a law enforcement intelligence case scenario.²²⁷ Students in this course must meet the following criteria: they must be full-time analysts with a minimum of three years experience as tactical and or strategic

²²⁵ Canada, "Criminal Intelligence Analysis-Distance Learning via Internet (DCIAC)," http://www.cpc.gc.ca/courses/descript/dciac_e.htm (accessed March 1, 2008).

²²⁶ Canada, "Strategic Intelligence Analysis (SIAC)," http://www.cpc.gc.ca/courses/descript/siac_e.htm

²²⁷ Canada, "Advanced Analytical Techniques (AANALT)," http://www.cpc.gc.ca/courses/descript/aiaw_e.htm (accessed March 1, 2008).

criminal intelligence analysts; they must have completed both the Tactical Intelligence Analysis course and the Strategic Intelligence Analysis course, or equivalent; and they must have read the pre-workshop reading material.²²⁸

Canadian law enforcement intelligence analysts may also receive analyst training from private organizations. This training is considered preliminary. These analysts must eventually receive analytical training from either CISC or CPC.

C. UNITED KINGDOM

The National Analyst Working Group (NAWG), through the National Policing Improvement Agency (NPIA), provides the framework for intelligence analyst training in the United Kingdom. NPIA was created to provide expertise in support of law enforcement in information and communications technology, core police processes, recruiting, training and deployment, and information and intelligence sharing. NPIA uses the National Intelligence Model (NIM) as a business model in addressing law enforcement intelligence analysis.

The National Criminal Intelligence Service (NCIS), along with the Crime Committee of the Association of Police Chiefs of the UK, developed the National Intelligence Model (NIM) for the UK. NCIS later merged with several UK law enforcement bodies into the Serious Organized Crime Agency (SOCA). Due to the UK's lagging behind in intelligence -- investigations in identifying best practices, professional knowledge, and the selection and identification of training for intelligence personnel -- NIM was created. NIM identifies patterns of crime and enables effective use of problem solving to address it. NIM has three levels of policing:²²⁹

²²⁸ Canada. "Advanced Analytical Techniques (AANALT)."

²²⁹ Association of Chief Police Officers, "Guidance on the National Intelligence Model 2005," <http://www.acpo.police.uk/asp/policies/Data/nim2005.pdf> (accessed March 1, 2008). 12.

- Level One: Local crime and disorder; this includes anti-social behavior that police can manage at the local level.
- Level Two: Cross-border issues involving more than one jurisdiction or Basic Command Unit (BCU).
- Level Three: Serious and organized crime that operates nationally and internationally.

The NIM requires the production of four products: analytical, intelligence, knowledge, and systems. Analytical products are compiled by intelligence units upon information received from sources within and outside police agencies. Intelligence products are derived from analytical products to complete tactical assessments, target profiles, and problem profiles. Knowledge products are used to make improvements to NIM and to maintain quality control. Systems products ensure the appropriate technical and computer equipment is available to support NIM. There are nine analytical products in NIM:²³⁰

- Results Analysis: Evaluates law enforcement effectiveness for areas, such as patrol strategies, reactive investigations, proactive investigations, crime reduction initiatives, or other policies and techniques.
- Crime Pattern Analysis: Involves crime series identification, crime trend identification, hotspot analysis, and general profile analysis.
- Market Profiles: Assessments of the criminal market involving a commodity of service such as drugs, stolen vehicles, and prostitution.
- Demographic/ Social Trend Analysis: Examines the nature of demographic trends and the impact on criminality and associated criminality; also studies social factors that may underlie changes or trends in offenders or their behavior.

²³⁰ Home Office Police, "National Intelligence Model-Analytical Techniques," <http://police.homeoffice.gov.uk/news-and-publications/publication/operational-policing/nim-analytical/> (accessed March 1, 2008).

- Criminal Business Profiles: Analyzes the functional processes of a criminal operation or technique; this includes victim selection and system weaknesses or procedures.
- Network Analysis: Examines criminal networks for key attributes and functions of individuals in the network, associates within or outside the network, and financial and communications data.
- Risk Analysis: Assesses the comparative risk by individuals or organizations to potential victims, the general public, and law enforcement agencies.
- Target Profile Analysis: Sometimes derives from network analysis and addresses criminal capability and threat; this includes information on associations, lifestyle, Modus Operandi (MO), financial data, strengths and vulnerabilities, and the results of previous techniques used against the target in the past.
- Operational Intelligence Assessment: Involves real-time evaluation and research into new information on associations involving suspects in a current operation.

NPIA's framework for law enforcement intelligence training is based upon the NIM. NPIA produced the *Learning Descriptor 'Intelligence Learning and Development Programme'* which is an Analyst Foundation Module. Analysts should have completed the Intelligence Learning and Development Programme Foundation Model before taking the Analyst Foundation Module. The Intelligence Learning and Development Programme consist of the following learning outcomes and corresponding foundations:

- What is Intelligence?
- The Intelligence Cycle
- Legislation Awareness
- 5x5x5 (intelligence grading system)
- The National Intelligence Model
- The Intelligence Roles

- Intelligence Tactical Options
- Security
- The National Briefing Model

The Analyst Foundation Module expands upon the Intelligence Learning and Development Programme. This module has two chapters devoted to learning outcomes. Chapter III addresses the learning outcomes and Chapter IV addresses the foundation for the learning outcomes, which are to:

- Develop Terms of Reference for an Intelligence Analysis Product.
- Obtain and Evaluate Information for Intelligence Analysis.
- Apply Analytical Techniques to Interpret Information for Intelligence Analysis.
- Use Inference Development to make Judgments Based on Intelligence Analysis Methodology.
- Create an Intelligence Analysis Product to Support Decision Making.
- Disseminate the Intelligence Analysis Product.
- Review the Effectiveness of the Intelligence Analysis Product.
- Outline the History of Analysis and the Roles of the Analyst.
- Outline Legislation and Protocols Appropriate to the Role of the Analyst

NPIA has various role profiles for analysts. The Generic Analyst Role Profile has several Core Responsibilities: Intelligence, Managing the Organization, and Personal Responsibility. Intelligence is sub-divided into these requirements: applying analytical techniques to describe information, disseminating results of analysis, inference development, obtaining information for the analysis process, recommending actions based upon analysis, and reviewing the effectiveness of the analysis. Managing the organization involves establishing and agreeing on terms of reference. Personal Responsibility includes complying with health and safety legislation; maintaining standards for security of information; maintaining standards of professional practice;

promoting equality, diversity and human rights in working practices; and working as part of a team. Behavior Area is another part of the profile and contains these responsibilities: Leading People, Leading the Organization, Leading the Way, and Personal Qualities & Values. Leading People addresses effective communication, while Leading the Organization involves problem solving, planning and organizing, and community and customer focus. Leading the Way addresses negotiation and influencing, respect for race and diversity, and strategic perspective. Personal Qualities & Values focuses on personal responsibility and resilience.

There are also other analyst profiles. These profiles are for supervisors and advanced analysts. These classifications are Higher Analyst, Principal Analyst, and Senior Analyst. These positions have some of the profiles of Generic Analyst Profile. However, they have included more managerial functions.

Law enforcement intelligence analyst training in the UK is taught by police schools and NPIA. There are seven police schools, including Scotland and Northern Ireland. They teach law enforcement intelligence analyst training in the UK. These schools teach law enforcement intelligence analysis based upon the framework provided by NAWG and NPIA. It is not a requirement for a law enforcement intelligence analyst in the UK to have completed training at NPIA or a police school. There are private organizations that teach also law enforcement intelligence analysis. However, they teach courses under the NAWG and NPIA framework.

D. SUMMARY

All three nations have more centralized direction of law enforcement intelligence analyst training than the U.S. These nations also have strong police participation in the delivery of intelligence analyst training. The U.S. provides law enforcement analyst training in police agencies, academia, and through private organizations. Turkey's analyst training is strictly given by the TNP. While both Canada and the UK have private organizations teaching law enforcement intelligence analysis, there is centralized direction to the process.

The process for law enforcement intelligence analyst instruction in the U.S. should follow a similar process as in the UK. There should be centralized direction for law enforcement analyst training that includes law enforcement organizations and the major law enforcement analyst organizations. Finally, academia should provide the instruction. The next chapter looks at the courses and topics that U.S. law enforcement intelligence analysts believe have benefited them or would have benefited them.

THIS PAGE INTENTIONALLY LEFT BLANK

VII. ANALYST SURVEY DEVELOPMENT AND RESULTS

Chapter VII looks at the development of the thesis survey. It lists the survey questions along with the answer options for the questions. It shows the reasons for asking the questions along with the reasons for giving the selected fixed responses to the respondents. The chapter concludes with a very short summary of the required areas of expertise needed by analysts.

This thesis uses a survey to determine what current law enforcement intelligence analysts believe needs to be added to academic instruction for new intelligence analysts. The survey contains twelve questions. These questions cover a broad area of instruction from quantitative courses to language courses.

The survey was designed with the help of a psychology professor from Notre Dame College. It was pre-tested using intelligence analysts from the FBI, the Ohio Bureau of Criminal Investigation, and IALEIA. The survey was distributed through SurveyMonkey, an online survey tool.

A. SURVEY METHODOLOGY RATIONALE

Question One: Which of these types of history courses (Middle Eastern, African, Asian, or European) would better prepare you for your job?

Law enforcement intelligence analysts should have a good understanding of the history of the people who are the subject of their analysis or who could be the subject of analysis. Question one gives respondents the fixed choices of the following histories: Middle East, Africa, Asia, Europe, all the courses, or none of the courses and the option of writing in other courses. History of the Middle East was selected due to the recent and current problems with Islamic extremists. Africa is becoming a home for terrorists due to the instability in Somalia and the Sudan. Therefore, it is worth exploring the necessity to understand the history of Africa. Indonesia and the Philippines also have significant terrorist activity. As a result, it is worthwhile considering the need to better understand the history of Asia.

Question Two: Which of these types of social science courses (sociology, anthropology, psychology, economics, or political science) would better prepare you for your job?

Social sciences are a discipline that uses scientific methods to study human characteristics of the world. Examples of social science disciplines are anthropology, sociology, political science, psychology, economics, and education. Question two gives respondents the option of selecting the following responses: sociology, anthropology, psychology, economics, political science, all the courses, or none of the courses. Respondents also have the option of writing in other courses. Anthropology attempts to understand the common constraints in which humans operate and the differences between societies and cultures. Current law enforcement analysts should be surveyed to determine if anthropology is a worthwhile course for analysts. Sociology is the study of social life, social change, and both social causes and consequences of human behavior.²³¹ Perhaps the study of sociology could help analysts better understand how criminals and terrorists interact in groups and societies. Psychology is the scientific study of mental processes and behavior. Therefore, it may help analysts understand the cognitive processes of themselves, criminals and terrorists. One definition of economics is the study of how people choose to use resources. Macroeconomics studies the collective behavior of businesses, industries, governments, and countries, while microeconomics studies decisions of individuals. The study of economics may help analysts better understand the motivations of nations and groups in undertaking criminality and terrorism. Political science is the study of governments, public policies and political processes, systems, and political behavior. Analysts may also need to study political science to further understand nations and political groups involved with criminality and terrorism.

²³¹ American Sociological Association, "What is Sociology?" http://www.asanet.org/cs/root/topnav/sociologists/what_is_sociology (accessed February 29, 2008).

Question Three: Which of these types of quantitative courses (basic statistics, multivariate statistics, or forecasting) would better prepare you for your job?

Quantitative courses could help analysts summarize, interpret, and forecast data. Courses in basic statistics, multivariate statistics, and forecasting have the capability to address those areas. Current law enforcement analysts should be surveyed to determine which of these courses would better help them perform their jobs. Respondents have the following survey response options: basic statistics, multivariate statistics, forecasting, all the courses, none of the courses, or writing in other courses. Basic statistics is the collection and interpretation of quantitative data with the use of probability theory to estimate parameters of the population from which the data were drawn. Multivariate statistics enables a researcher to analyze complex sets of data with many independent variables and potential dependent variables with various degrees of correlation. A law enforcement intelligence analyst may need to examine financial data, telephone data, crime data, and police or fire calls for service data. Both basic and multivariate statistics may help analysts analyze the data. Forecasting, which is also known as statistical forecasting, is an extension of basic statistics. It uses the past to predict the future. This is accomplished by identifying trends and patterns from the past. An intelligence analyst may be required to make a forecast of future crime trends and patterns or a forecast of future street prices of an illicit drug or commodity.

Question Four: The ability to read and write which of these languages (Spanish, Romance, Chinese, Russian, Arabic, Farsi, Swahili, or Eastern Cushitic) would better prepare you for your job?

An intelligence analyst would greatly benefit from having an understanding of the language of a particular individual or group that is the focus of analysis. This question gives respondents the option of selecting Spanish, Romance languages (French, Italian, Portuguese and Romanian), Chinese, Russian, Arabic, Farsi, Swahili, Eastern Cushitic (languages of Somalia, Ethiopia, and Kenya). Respondents also have the option of selecting none of the languages or making comments and writing in other languages. There are good reasons for analysts to learn Spanish. There is an increase in Spanish speaking immigrants in the United States. Further, information shows that Islamic

terrorists may attempt to enter the United States through Mexico by being smuggled in with Spanish speaking gangs. Spanish is a Romance language along with French, Italian, Portuguese, and Romanian. There is a sizeable Muslim population in France and Italy. It is worth exploring whether current intelligence analysts believe knowledge of the Romance languages would help their profession.

China is somewhat problematic for the United States. It maintains close relationships with countries hostile to the United States: Iran and North Korea. China also has been accused of supplying sensitive military technology to other countries supporting terrorism. Stratfor, a private global intelligence service, reported that former Secretary of Defense, Donald Rumsfeld, believed China was the major threat to the United States.²³² The United States Census 2000 lists Chinese as the largest Asian group in the United States with 2.3 million people. Further, it lists another 0.4 million people reporting their ancestry as Chinese with at least one other race or Asian group.²³³

Like China, Russia is also becoming problematic for the States. Russia has attempted to limit U.S. access to bases in Central Asia supporting military operations in Afghanistan.²³⁴ Russia also had meetings with Hamas leaders after agreeing not to have them. The National Criminal Justice Reference Service (NCJRS) published a study, *Threat of Russian Organized Crime*, which concluded there are 12 to 15 criminal groups with ties to Russia or other former Soviet republics currently operating in the U.S.²³⁵ These groups reportedly engage in health care fraud, insurance fraud, stock fraud, and forgery. They are also attempting to take over legitimate operations, such as movie businesses and textile firms.²³⁶

²³² Stratfor, "U.S. Perceptions of a Chinese Threat," June 1, 2006, http://www.stratfor.com/products/premium/read_article.php?id=266960 (accessed February 29, 2008).

²³³ U.S. Department of Commerce, "The Asian Population: 2000," <http://www.census.gov/prod/2002pubs/c2kbr01-16.pdf> (accessed February 29, 2008). 7.

²³⁴ Jim Nichol, "Central Asia's Security: Issues and Implications for U.S. Interests," *CRS Report for Congress* (Washington, D.C.: Congressional Research Service, 2007), <http://fpc.state.gov/documents/organization/43392.pdf> (accessed February 29, 2008).

²³⁵ National Criminal Justice Reference Service, "NCJRS Abstract," <http://www.ncjrs.gov/App/Publications/abstract.aspx?ID=187085> (accessed February 29, 2008).

²³⁶ National Criminal Justice Reference Service, "NCJRS Abstract."

Arabic was selected as an option due to the continued problem with Islamic extremists. They are creating problems for the United States both abroad and home. There have been several arrests of Islamic extremists in the United States who have spoken Arabic. Farsi is a Persian language and it is the language of Iran. It is also spoken in Afghanistan. Due to the influence of Iran in Iraq and the number of Shiite Muslims who speak Farsi, it is worth asking law enforcement intelligence analysts if Farsi should be studied.

Swahili is an African language spoken predominately in East Africa. The following African countries speak it: Kenya, Tanzania, Zanzibar, Uganda, Democratic Republic of Congo, Zambia, Mozambique, Malawi, Rwanda, Burundi, Somalia, and the Comoro Islands.²³⁷ Some of these countries are located in the Horn of Africa. For years the United States has considered the Horn of Africa as a major source of terrorism.²³⁸ The United States has received a sizeable number of immigrants from that region. According to the Migration Policy Institute, the U.S. Census Bureau's American Community Survey 2002 indicates there are approximately one million African-foreign-born immigrants in the United States.²³⁹ The largest group of immigrants came from Western Africa while Eastern Africa had the second largest group. This indicates the study of Swahili may be important for intelligence analysts.

The language of Eastern Cushitic is another African language. It is predominately spoken in Somalia, Ethiopia, and Kenya. In addition to speaking Swahili, the Horn of Africa's countries of Somalia and Kenya also speak Eastern Cushitic. In 2001, most of the 19,070 African refugees to the United States came from the Sudan and Somalia.²⁴⁰ Somalia lacks central authority in many parts of the country and analysts have no doubt that terrorist and extremist groups are in the country. There are three Islamic groups in

²³⁷ Stanford University Swahili Department, "Where Swahili is Spoken," <http://swahililanguage.stanford.edu/where%20swahili%20is%20spoken.html> (accessed February 29, 2008).

²³⁸ United States Institute of Peace, "Terrorism in the Horn of Africa," <http://www.usip.org/pubs/specialreports/sr113.html> (accessed February 29, 2008).

²³⁹ Migration Policy Institute, "US in Focus: The African Foreign Born in the United States," <http://www.migrationinformation.org/USfocus/display.cfm?id=250> (accessed February 29, 2008).

²⁴⁰ Migration Policy Institute, "US in Focus: The African Foreign Born in the United States."

Somalia: Al-Ittihad Al-Islamiya, Al-Islah, and Al-Tabligh. President Bush placed Al-Ittihad on a list of terrorism related groups in September 2001.²⁴¹ This set of circumstances indicates Eastern Cushitic should be considered as a possible language of study for intelligence analysts.

Question Five: More knowledge of which of these religions (Islam, Hinduism, Buddhism, Sikhism, Christianity, Judaism, or Odinism) would better prepare you for your job?

One of the major motivating factors of terrorism is religion. Intelligence analysts should thoroughly understand the religions of the individuals and groups they would encounter in their work. This question gives respondents the option of selecting Islam, Hinduism, Buddhism, Sikhism, Christianity, Judaism, Odinism, 'all the religions,' none of the religions,' or making 'comments.' Islam is obviously a potential choice of religions to study. Many government officials do not understand Islam and the differences between the Sunni and Shia. Some law enforcement intelligence analysts may be in the same predicament.

India is predominately a nation of Hindus with a large Muslim population. There is an increase in Hindu fundamentalism in India.²⁴² A major Hindu nationalist group is the Vishwa Hindu Parishad (VHP) or World Hindu Council. The VHP allegedly receives most of its funding from Indian immigrants in the United States.²⁴³ The VHP has been blamed for conducting terrorist attacks against Muslims; in particular, the large riot in the State of Gujarat in March 2002.²⁴⁴ In addition to the VHP, there are two other main fundamentalist groups in India: Rashtriya Swayamsevak Sangh (RSS) and Bharatiya Janta Party (BJP). While the groups have different constitutions, organizational

²⁴¹ Ted Dagne, "Africa and the War on Terrorism," *CRS Report for Congress*, (Washington, D.C.: Congressional Research Service, 2002), <http://fpc.state.gov/documents/organization/7959.pdf> (accessed February 29, 2008). 16.

²⁴²Chayanika Shah, "Hindu fundamentalism in India: Ideology, Strategies, and the Experience of Gujarat," <http://www.wluml.org/english/pubs/pdf/wsf/07.pdf> (accessed February 29, 2008). 61.

²⁴³ Arun R. Swamy, "Hindu Nationalism-What's Religion Got To Do With It?" Asia-Pacific Center for Security Studies, <https://www.hsdl.org/homesec/docs/foreign/nps18-070105-06.pdf&code=bc9a3271ac5e307791d826bd94f4e900> (accessed February 29, 2008). 7.

²⁴⁴ Ibid.

structures, and action agendas, the groups overlap.²⁴⁵ The RSS is the oldest group and provides a parental role to the others.²⁴⁶ The Migration Policy Institute reports the Indian born immigrant population for the United States in 2000 as one million.²⁴⁷ Given the problem with terrorism involving Hindus in India, the large Indian immigrant population in this country, and the alleged financing of Hindu extremists by Indian immigrants, law enforcement intelligence analysts may need to study Hinduism.

Sikhism is a minor religion in India. Sikhs have battled with Hindus and have conducted terrorist attacks around the world. Sikh's major terrorist group is Babbar Khalsa International (BKI). BKI's major goal is to establish a Sikh country in northwestern India (Khalistan).²⁴⁸ BKI's most notable attack was the downing of an Air India flight in 1985 off the coast of Ireland. The organization was nearly defeated in 1993 by Punjab province police. However, there have been recent attempts to revive it.²⁴⁹ New Delhi Police suspect BKI was involved in a bombing in Ludhiana in October 2007.²⁵⁰ Khalid Awan, a Canadian who lived in the United States, was indicted for collecting funds from Sikh businessmen in the United States to send to the Khalistan Commando Force (KCF).²⁵¹ KCF is another Sikh terrorist group. While most Sikhs live in India, there is a large Sikh Diaspora in the United States. Therefore, law enforcement intelligence analysts may need to understand Sikhism.

Many white supremacist groups base their philosophies on Christianity. One form of white supremacy, Christian Identity, influences almost all white extremist and

²⁴⁵ Chayanika Shah, "Hindu fundamentalism in India: Ideology, Strategies, and the Experience of Gujarat," 62.

²⁴⁶ Ibid.

²⁴⁷ Migration Policy Institute, "US in Focus: The Foreign Born from India in the United States," <http://www.migrationinformation.org/USfocus/display.cfm?ID=185> (accessed March 1, 2008).

²⁴⁸ MIPT Terrorism Knowledge Base, "Group Profile: Babbar Khalsa International (BKI)," <http://www.tkb.org/Group.jsp?groupID=4568> (accessed March 1, 2008).

²⁴⁹ Ibid.

²⁵⁰ Expressindia, "Babbar Khalsa Role Suspected in Ludhiana Blast," <http://www.expressindia.com/latest-news/Babbar-Khalsa-role-suspected-in-Ludhiana-blast/228575/> (accessed March 1, 2008).

²⁵¹ Joseph Goldstein, "Post-9/11 Detainee Faces Separate Terror Charge," *The New York Sun*, August 3, 2006, <http://www.nysun.com/article/37251> (accessed March 1, 2008).

anti-government groups.²⁵² Followers of Christian Identity believe whites of European descent can trace their origin back to the “Lost Tribes of Israel.” Christian Identity further espouses that Jews are descended from Satan and races that preceded Adam and Eve, “mud peoples,” were not created in God’s image. Therefore, they had no soul.²⁵³ The Identity movement also believes the world is in its final days (millennialism) and the apocalypse will be a racial battle. Due to the influence of Christianity in white supremacy, law enforcement intelligence analysts may need a deeper understanding of Christianity to deal with domestic terrorism and hate crimes.

There have been Jewish terrorist attacks in the United States. The major Jewish terrorist group in the United States is the Jewish Defense League (JDL). From 1968 to the present, the group committed 73 incidents involving 40 injuries and five deaths.²⁵⁴ The group is currently inactive. However, two JDL members were arrested in 2001 for plotting to bomb the office of a Lebanese-American Congressman and a mosque. The founder of the JDL was Rabbi Meir Kahane. Kahane was assassinated in 1990 and his son formed a new organization, Kahane Chai, which means Kahane lives. Kahane Chai is classified as religious, nationalist/separatist and racist by the Memorial Institute for the Prevention of Terrorism (MIPT).²⁵⁵ The group is based in Israel and aims to expel Arabs from Israeli territory and to create a Jewish theocracy. This group receives financial support from supporters in the United States.²⁵⁶ While acts of Jewish terrorism in this country are few, there is the possibility that Jewish extremists in Israel may use criminal acts by supporters in the United States to fund operations in Israel. As a result, it may be necessary for law enforcement analysts to have a better understanding of Judaism.

²⁵² Anti-Defamation League, “Extremism in America: Christian Identity,” http://www.adl.org/learn/ext_us/Christian_Identity.asp?xpicked=4&item=Christian_ID (accessed March 1, 2008).

²⁵³ Ibid.

²⁵⁴ MIPT Terrorism Knowledge Base, “Group Profile: Jewish Defense League (JDL),” <http://www.tkb.org/Group.jsp?groupID=183>

²⁵⁵ MIPT Terrorism Knowledge Base, “Group Profile: Kahane Chai,” <http://www.tkb.org/Group.jsp?groupID=3750> (accessed March 1, 2008).

²⁵⁶ Ibid.

Asatru is another religion that many white supremacists are adopting. Asatru is a term for an ancient Northern European religion that incorporates the worship of Thor, Odin, and other Norse gods and goddesses.²⁵⁷ Many non-racist whites practice the religion. However, white supremacists practice the Odinism form of it. Odinism is a blend of warrior mythology and the occult into a racist, violent ideology. Odinists believe Northern European identity is in danger of becoming extinct along with pre-Christian folk and tribal values. The Odinists believe this threat comes from a Jewish conspiracy. Odinism has a following amongst racist skinheads and is becoming increasingly popular in prisons. Odinism sympathizes with National Socialism. Since some white supremacists have an identity with Odinism, perhaps law enforcement intelligence analysts should learn more about the religion.

Question Six: Instruction in which of these types of philosophies (Western, Eastern, Middle Eastern, or African) would better prepare you for your job?

This question is related to question five. Religion and philosophy are sometimes entwined. Philosophy is the search for a general understanding of values and reality through speculation. It can also be referred to as the love of wisdom. Various areas of the world have developed their own philosophies. This question gives respondents the choice of selecting Western, Eastern, Middle Eastern, African, ‘all the philosophies,’ ‘none of the philosophies,’ or writing in comments for other philosophies. Western philosophy contains the philosophies of the following countries: Greece, England, France, and the United States. There were also Western philosophical movements based in those countries. Eastern philosophy is centered on an awareness of the unity and mutual interaction of everything and events. It is comprised of Buddhism, Hinduism, Taoism, and Confucianism. Middle Eastern philosophy could include philosophies of Israel, Armenia, Persia, and Islam. Some of the Islamic philosophies are mystical and most Islamic extremists do not support them. Much of African philosophy has been passed through oral traditions. There are some written works by Ethiopian philosophers

²⁵⁷ Anti-Defamation League, “Dangerous convictions: An Introduction to Extremist Activities in Prison,” <https://www.hsd1.org/homesec/docs/nonprof/nps03-120204-03.pdf&code=d922a1f201ace574ecdbfedalac66d4> (accessed March 1, 2008). 37.

in the sixteenth and seventeenth centuries. However, there are new African philosophers attempting to address philosophy through the African point of view.²⁵⁸ Analysts may need to study the philosophies of various regions in addition to studying the religions of the regions.

Question Seven: Would geography courses on the following regions (Middle East, Africa, South America, Europe, or South East Asia) better prepare you for your job?

The study of geography has the potential to help intelligence analysts. Geographic knowledge could help analysts understand issues leading to changes in landscape and/or land use and, also, how individuals or groups may commit terrorism or engage in criminal activity to deal with those changes. The location of natural resources, transportation network distribution, energy production, industrialization, and other geographical factors influence a country or region's economy. Climate and landforms affect migration patterns and the rise and fall of civilizations. Geography also deals with the impact of environmental factors on individual human and group behavior. Intelligence analysts may benefit from studying the geography of key regions around the world. Respondents to this question have the option of selecting the geographies of the Middle East, Africa, South America, Europe, South East Asia, 'all the courses,' 'none of the courses,' or making comments.

The Middle East is one choice for a geographical region to study. Much of the terrorism in the world today is centered in the Middle East or influenced by groups based in the Middle East. It may be helpful for law enforcement intelligence analysts to have a better understanding of the geography of the Middle East.

Africa has been the location of some terrorist training camps. Some African countries and regions are also becoming more hospitable to terrorists. The Memorial Institute for the Prevention of Terrorism (MIPT) reports there are 128 terrorist groups in

²⁵⁸ West Valley College, "African Philosophy," <http://www.westvalley.edu/ph/africa.html> (accessed March 1, 2008).

Africa with Libya having the largest number (thirteen).²⁵⁹ Perhaps the study of African geography will help clarify some terrorist issues for intelligence analysts.

South America has a history of terrorist activity. MIPT indicates there were 3,675 terrorist incidents in South America and the Caribbean from January 1, 1968 to the present, involving 4,008 injuries and 2,367 fatalities.²⁶⁰ The overwhelming number of those attacks (1,801) occurred in Columbia.²⁶¹ Given South America's relative close proximity to the United States and increasing concerns that South America has a radical Muslim contingent, it may be necessary for law enforcement intelligence analysts to study the geography of South America.²⁶²

Europe has been an active region for terrorist activity. Between January 1, 2000 and the present, there have been 3,356 terrorist attacks.²⁶³ Western Europe had the most attacks (2,370). Most of those attacks (788) were in Spain. Northern Ireland had the second greatest number of attacks (568). Many of the attacks in Northern Ireland were committed by the Irish Republican Army (IRA), which received significant funding from supporters in the United States. The IRA has allegedly moved towards disarmament and peace. However, there are violent splinter groups and loyalist paramilitary organizations that could drive the IRA back to terrorism. Potentially, supporters of the IRA in the United States could commit crimes to support the activities of the IRA. A good understanding of the geography of Europe may help analysts understand some of the

²⁵⁹MIPT Terrorism Knowledge Base, "Terrorist Group Reports: Groups by Region," <http://www.tkb.org/GroupRegionModule.jsp?regionid=8&pagemode=national> (accessed March 1, 2008).

²⁶⁰MIPT Terrorism Knowledge Base, "Terrorist Incident Reports: Incidents by Region," <http://www.tkb.org/IncidentRegionModule.jsp?regionid=9&pagemode=national&startDate=01/01/1968&endDate=12/01/2007&domInt=0&suiInt=0&filter=0&detail=0&setFilter=1&info1=9> (accessed March 1, 2008).

²⁶¹ Ibid.

²⁶² Chris Zambelis, "Radical Islam in Latin America," *The Jamestown Foundation, Global Terrorism Analysis*, <http://www.jamestown.org/terrorism/news/article.php?articleid=2369844> (accessed March 1, 2008).

²⁶³MIPT Terrorism Knowledge Base, "Terrorist Incident Reports: Incidents by Region," <http://www.tkb.org/IncidentRegionModule.jsp?startDate=01%2F01%2F2000&endDate=12%2F01%2F2007&domInt=0&suiInt=0&filter=0&detail=0&info=&info1=3&pagemode=national®ionid=3&countryid=&sortby=&imageField.x=17&imageField.y=6> (accessed March 1, 2008).

reasons for terrorist activity in Europe and why immigrants from those areas may become involved in criminality or terrorist activity in the United States.

Southeast Asia is also a very active region for terrorist activity. Between January 1, 2000 and the present, there have been 1,442 terrorist attacks.²⁶⁴ The vast majority of the attacks occurred in Thailand (964). The Philippines and Indonesia were second and third, respectively, with 244 and 203 attacks. A large number of the attacks in the Philippines was committed by groups with links to al-Qaeda: Abu Sayyaf and the Moro Islamic Liberation Front. Behind the Chinese, Filipinos are the second largest group of Asian ancestry in the United States. There were approximately 1.9 million people who reported their sole ancestry as Filipino in the United States Census 2000, and another 0.5 million who reported being Filipino along with another race.²⁶⁵

Question Eight: What courses (written communications, public speaking, analytical/mental processes, research skills/tools, data management software tools, law enforcement organization, or critical thinking) have been most helpful in your job?

Current instruction in law enforcement intelligence analysis teaches a variety of courses: written communication, public speaking, analytical/mental processes, research skills/tools, data management software tools, law enforcement organization, and critical thinking. This question gives respondents the option of selecting each of those courses in addition to selecting ‘all the courses,’ ‘none of the courses,’ or making comments. Depending upon the source of the instruction, instructors may teach those classes along with others. This question attempts to determine which classes have been most important for law enforcement intelligence analysts in their job.

Question Nine: Which of these courses (crime pattern analysis, alternative hypothesis, or practical/simulation exercises) would better prepare you for your job?

This question is related to question eight. Some analysts, who are employed as law enforcement intelligence analysts, may not have had formal analyst instruction. Assuming

²⁶⁴MIPT Terrorism Knowledge Base, “Terrorist Incident Reports,: Incidents by Region.”

²⁶⁵ Jessica S. Barnes and Claudette E. Bennett, “The Asian Population: 2000,” United States Census 2000 <http://www.census.gov/prod/2002pubs/c2kbr01-16.pdf> (accessed March 1, 2008). 8.

the analyst had not taken the courses, this question attempts to determine areas of instruction that would improve an analyst's performance.. There are only three specific course options: crime pattern analysis, alternative hypothesis, practical/simulation exercises. However, respondents also have the option of selecting "all the courses," "none of the courses," or making comments.

Question Ten: Would completing an internship before completing analyst training better prepare you for your job?

Some law enforcement intelligence analyst programs provide internships and or require them. During an internship, a student could work with a law enforcement agency on a specific problem or duties assigned by the agency. Not all analyst programs have internships as options. However, current analysts should be polled to determine if internships are worthwhile.

Question Eleven: In your training, did you receive instruction on the mental processes used during analysis?

There is a lot of discussion in intelligence analyst literature about the utility of analysts understanding their mental processes. Not all law enforcement intelligence analysts have received training in the cognitive processes involved with analysis. This question attempts to determine a rough percentage of analysts that have received cognitive training.

Question Twelve: If you did not receive instruction on the mental processes used during analysis, would such instruction better prepare you for your job?

This question is related to question eleven. It attempts to determine the usefulness of providing cognitive instruction to analysts. There is an area for analyst comments. Hopefully analysts would complete this area in addition to answering yes or no to the question.

B. ANALYST SURVEY RESULTS

This section looks at the survey results. The results are presented in two forms: tabular and graphic. The graphs are in bar and pie charts. Survey results show the response percentage and response count for each option in all questions.

Table 1. Types of History Courses

Q1. Which of these types of history courses would better prepare you for your job?

Answer Options	Response Percent	Response Count
History of the Middle East	30.9%	54
History of Africa	3.4%	6
History of Asia	6.9%	12
History of Europe	6.3%	11
All the courses	47.4%	83
None of the courses	20.0%	35
Comments		39
	Answered question	175
	Skipped question	5

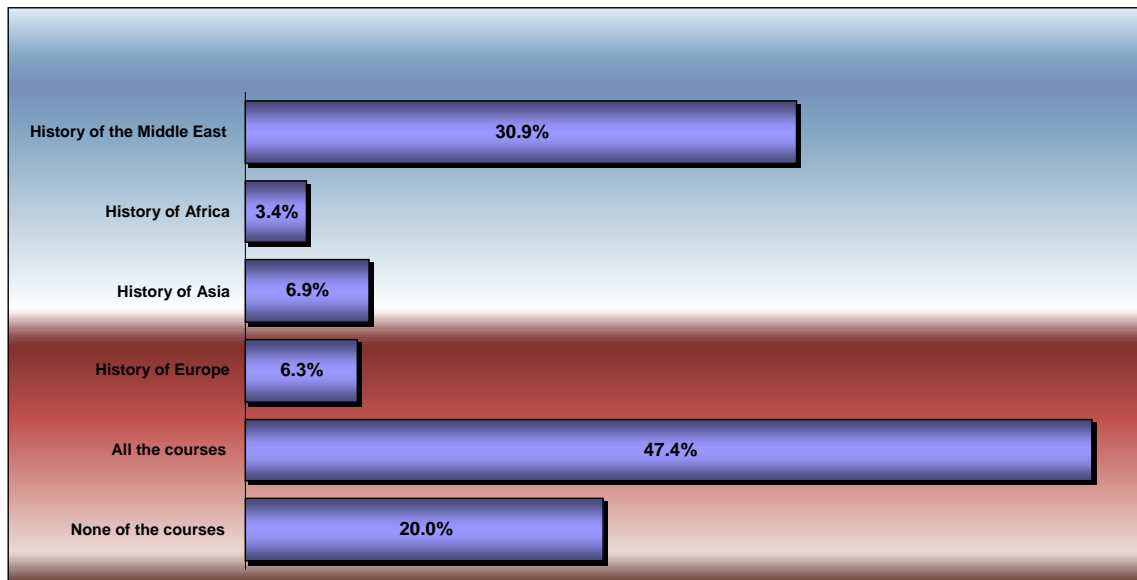


Figure 6. History Courses

Table 2. Types of Social Science Courses

Q2. Which of these types of social science courses would better prepare you for your job?

Answer Options	Response Percent	Response Count
Sociology	44.6%	79
Anthropology	3.4%	6
Psychology	38.4%	68
Economics	29.4%	52
Political Science	44.1%	78
All the courses	26.0%	46
None of the courses	3.4%	6
Comments		18
	Answered question	177
	Skipped question	3

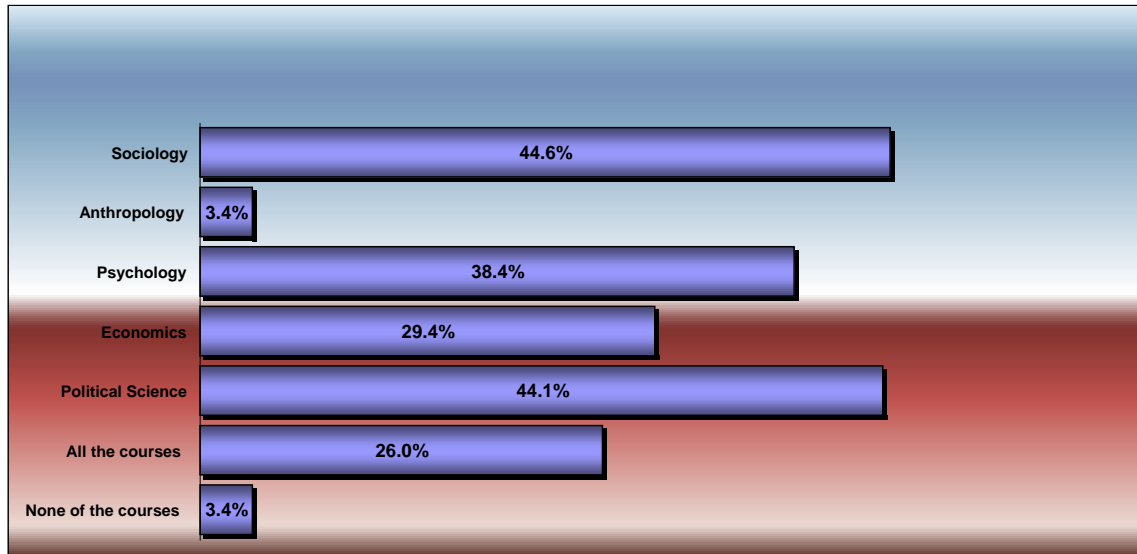


Figure 7. Social Science Courses

Table 3. Types of Quantitative Courses

Q3. Which of these types of quantitative courses would better prepare you for your job?

Answer Options	Response Percent	Response Count
Basic Statistics	34.5%	61
Multivariate Statistics	5.6%	10
Forecasting	27.7%	49
All the above	44.6%	79
None of the above	8.5%	15
Comments		11
	Answered question	177
	Skipped question	3

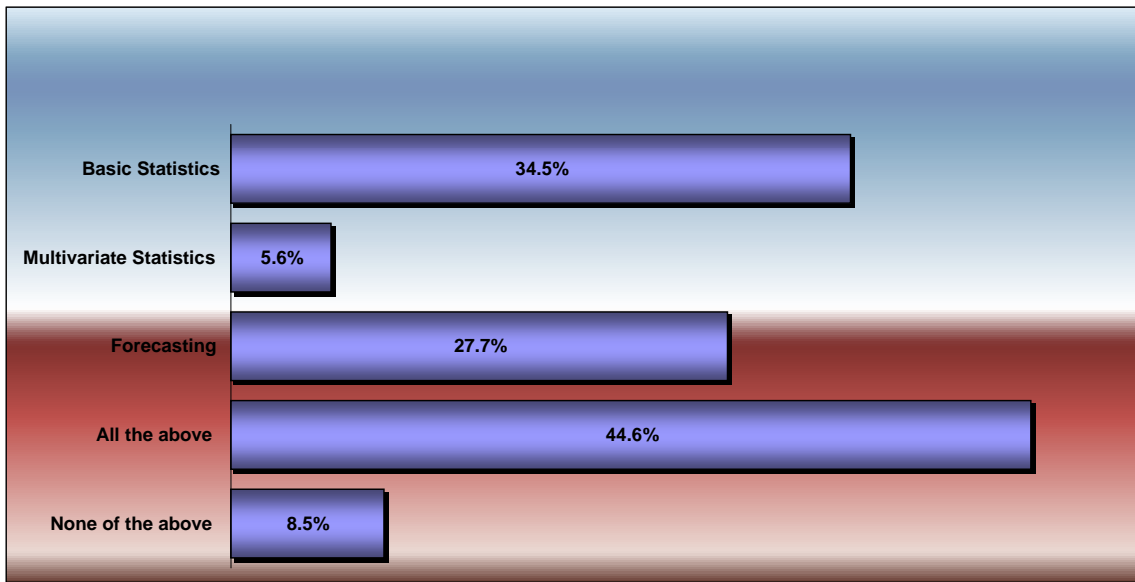


Figure 8. Quantitative Courses

Table 4. Types of Languages

Q4. The ability to read and write which of these languages would better prepare you for your job?

Answer Options	Response Percent	Response Count
Spanish	64.0%	110
Romance (French, Italian, Portuguese, and Romanian)	12.8%	22
Chinese	22.7%	39
Russian	25.0%	43
Arabic	43.6%	75
Farsi	25.0%	43
Swahili	3.5%	6
Eastern Cushitic (Somalia, Ethiopia, and Kenya)	7.0%	12
None of the languages	14.0%	24
Comments		23
	Answered question	172
	Skipped question	8

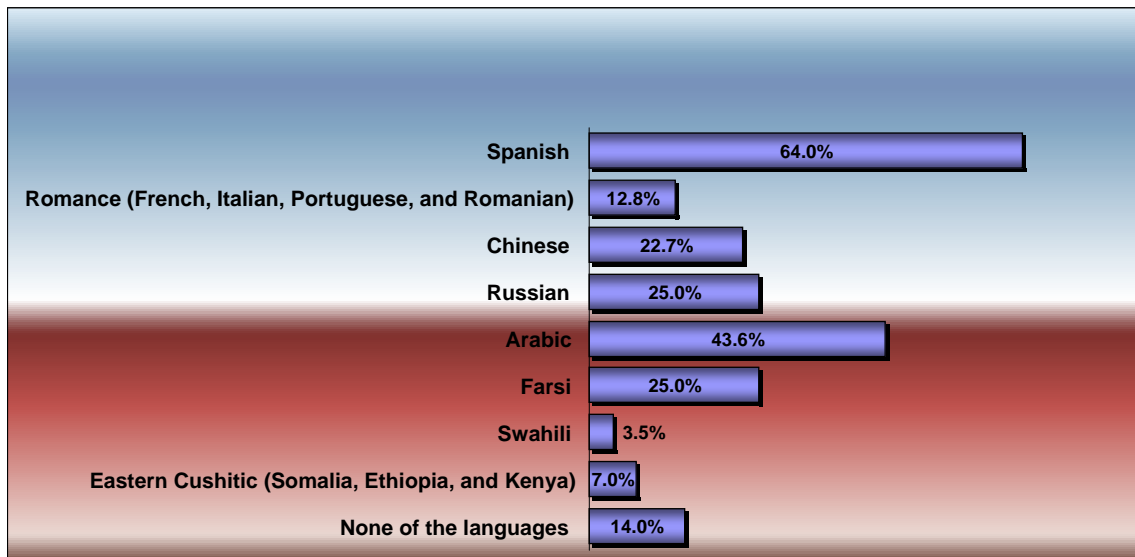


Figure 9. Languages

Table 5. Types of Religions

Q5. More knowledge of which of these religions would better prepare you for your job?

Answer Options	Response Percent	Response Count
Islam	46.0%	81
Hinduism	7.4%	13
Buddhism	7.4%	13
Sikhism	2.3%	4
Christianity	8.0%	14
Judaism	9.1%	16
Odinism	2.8%	5
All the religions	34.1%	60
None of the religions	19.9%	35
Comments		15
	Answered question	176
	Skipped question	4

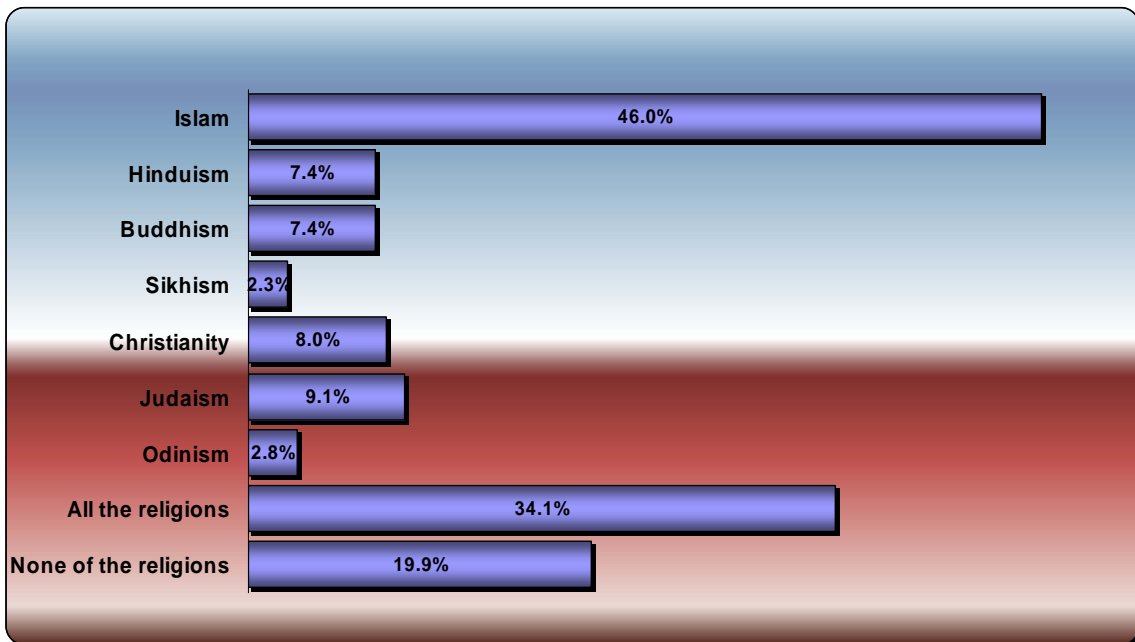


Figure 10. Religions

Table 6. Types of Philosophies

Q.6 Instruction in which of these types of philosophies would better prepare you for your job?

Answer Options	Response Percent	Response Count
Western	11.9%	21
Eastern	15.3%	27
Middle Eastern	34.5%	61
African	5.1%	9
All the philosophies	42.9%	76
None of the philosophies	16.4%	29
Comments		13
	Answered question	177
	Skipped question	3

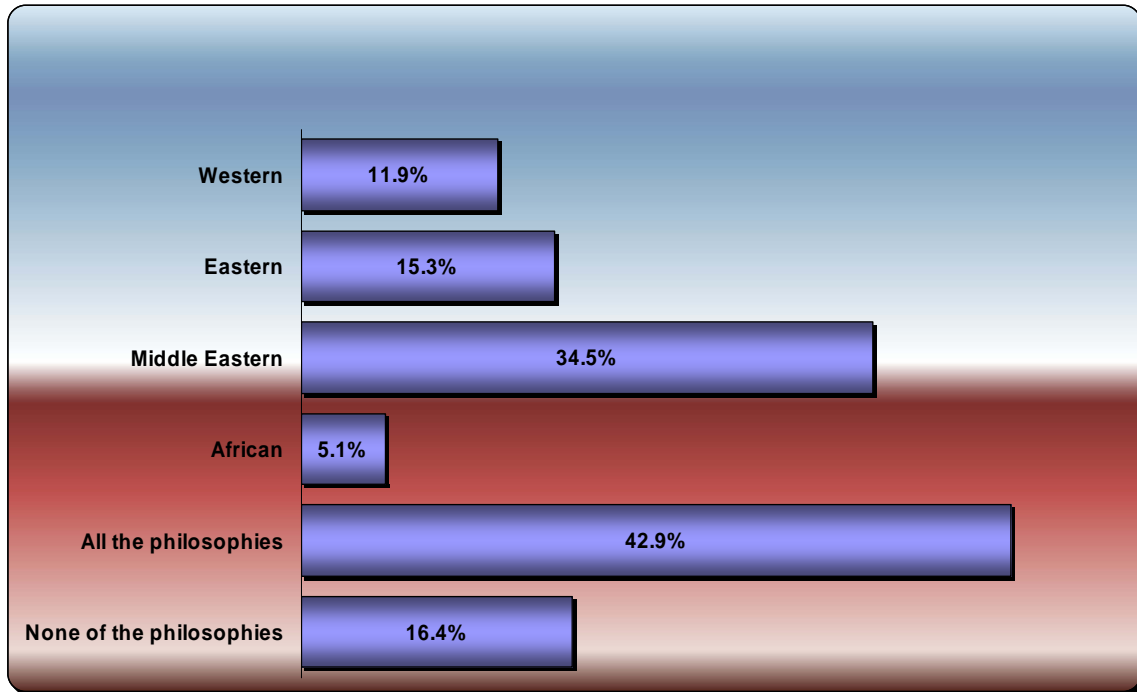


Figure 11. Philosophies

Table 7. Types of Geography Courses

Q7. Would geography courses on the following regions better prepare you for your job?

Answer Options	Response Percent	Response Count
Middle East	30.5%	53
Africa	10.9%	19
South America	10.3%	18
Europe	5.7%	10
South East Asia	8.6%	15
All the above	45.4%	79
None of the above	20.7%	36
Comments		15
	Answered question	174
	Skipped question	6

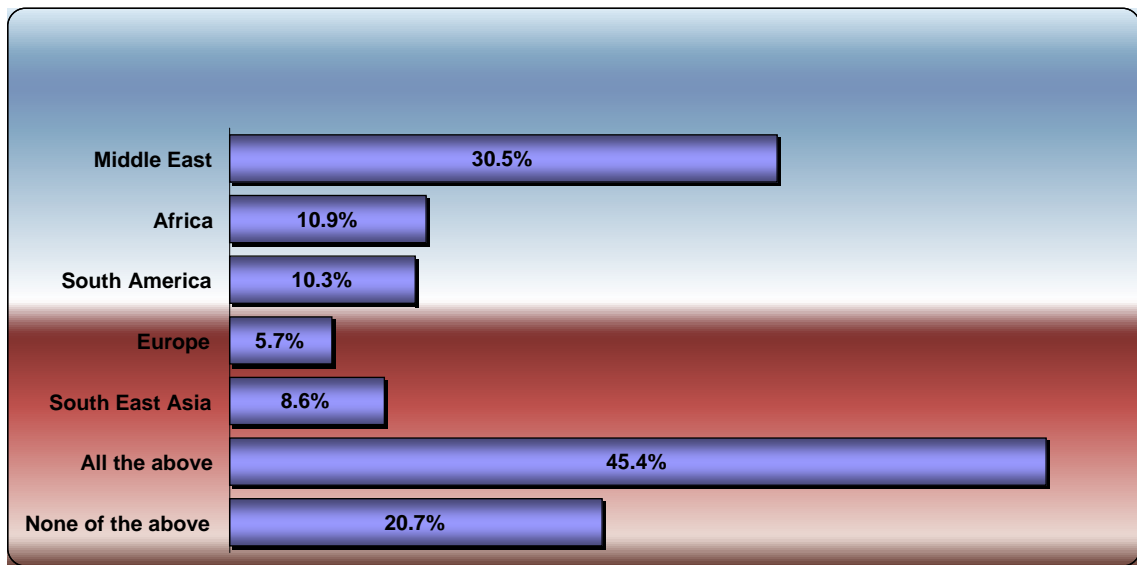


Figure 12. Geography Courses

Table 8. Most Helpful Courses

Q8. What courses have been most helpful in your job?

Answer Options	Response Percent	Response Count
Written Communication	39.1%	70
Public Speaking	22.3%	40
Analytical/Mental Processes	42.5%	76
Research Skills/Tools	48.6%	87
Data Management Software Tools	32.4%	58
Law Enforcement Organization	16.8%	30
Critical Thinking	41.3%	74
All the courses	43.6%	78
None of the courses	1.1%	2
Comments		11
	Answered question	179
	Skipped question	1

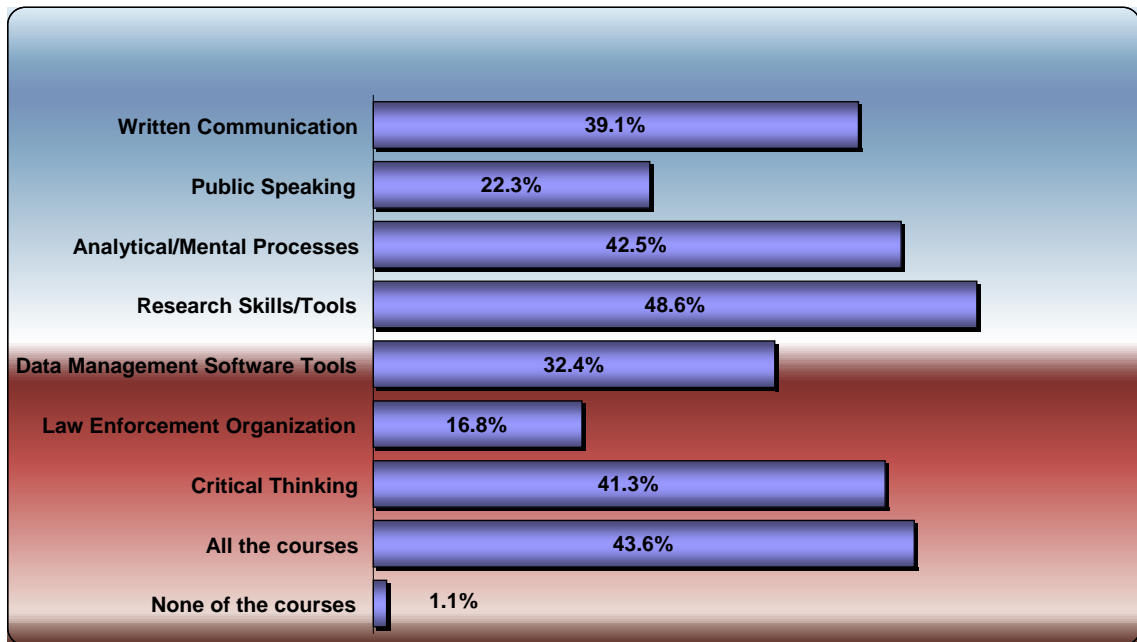


Figure 13. Most Helpful Courses

Table 9. Helpful Courses and Topics

Q9. Which of these courses or topics would better prepare you for your job?

Answer Options	Response Percent	Response Count
Crime Pattern Analysis	27.4%	49
Alternative Hypothesis	19.0%	34
Practical/Simulation Exercises	23.5%	42
All the above	53.6%	96
None of the above	2.2%	4
Comments		7
	Answered question	179
	Skipped question	1

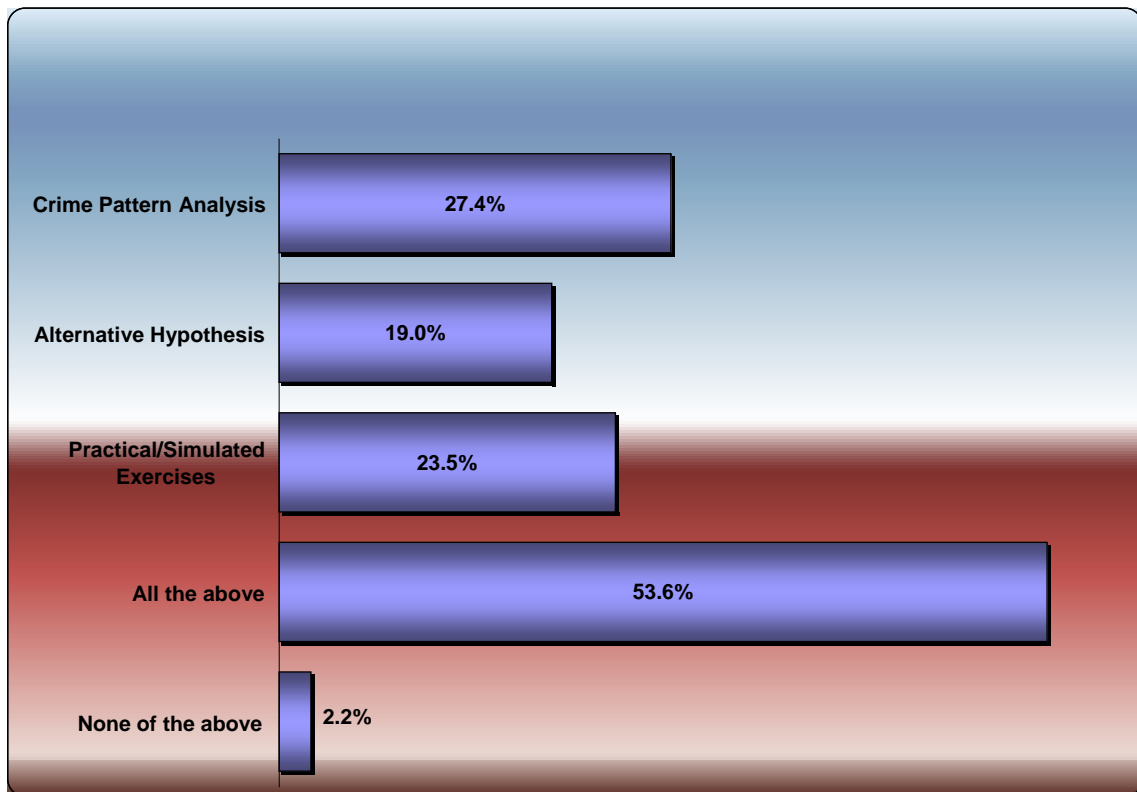


Figure 14. Helpful Courses and Topics

Table 10. Importance of Internship

Q10. Would completing an internship before completing analyst training better prepare you for your job?

Answer Options	Response Percent	Response Count
Yes	84.3%	150
No	15.7%	28
Comments		18
	Answered question	178
	Skipped question	2

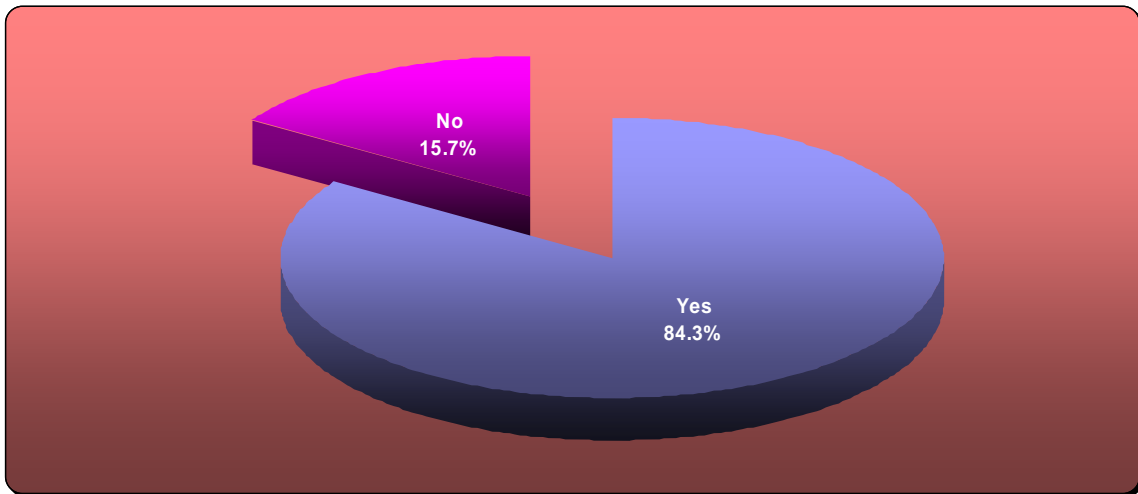


Figure 15. Importance of Internship

Table 11. Mental Processes Instruction During Training

Q11. In your training, did you receive instruction on the mental processes used during analysis?

Answer Options	Response Percent	Response Count
Yes	55.4%	97
No	44.6%	78
Comments		
	Answered question	175
	Skipped question	5

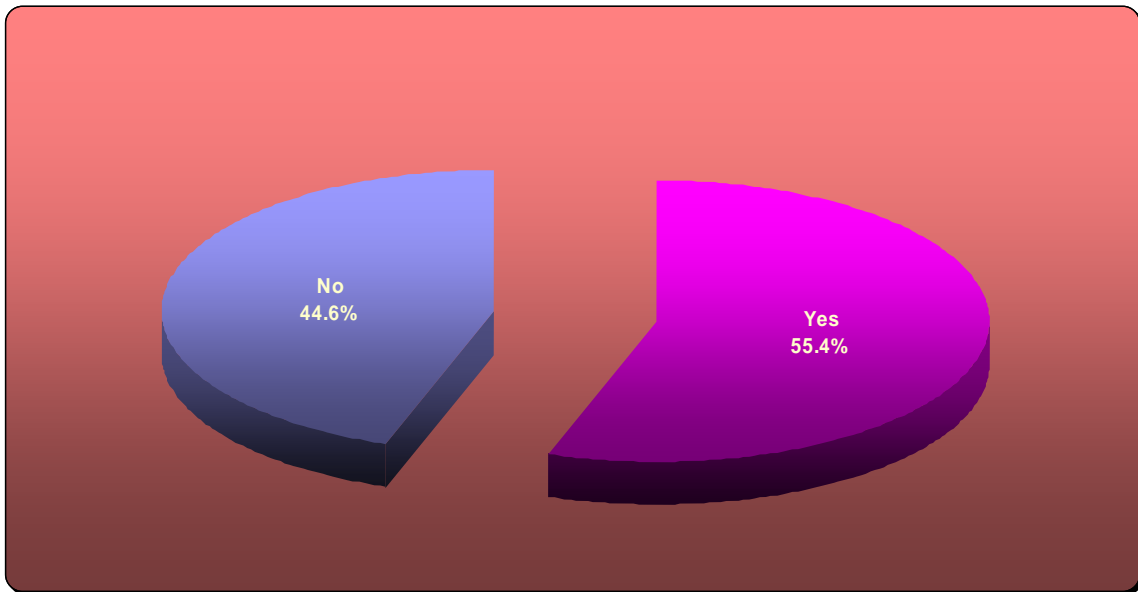


Figure 16. Mental Processes Instruction During Training

Table 12. Value of Mental Processes Instruction

Q12. If you did not receive instruction on the mental processes used during analysis, would such instruction better prepare you for your job?

Answer Options	Response Percent	Response Count
Yes	91.4%	106
No	8.6%	10
Comments		15
	Answered question	116
	Skipped question	64

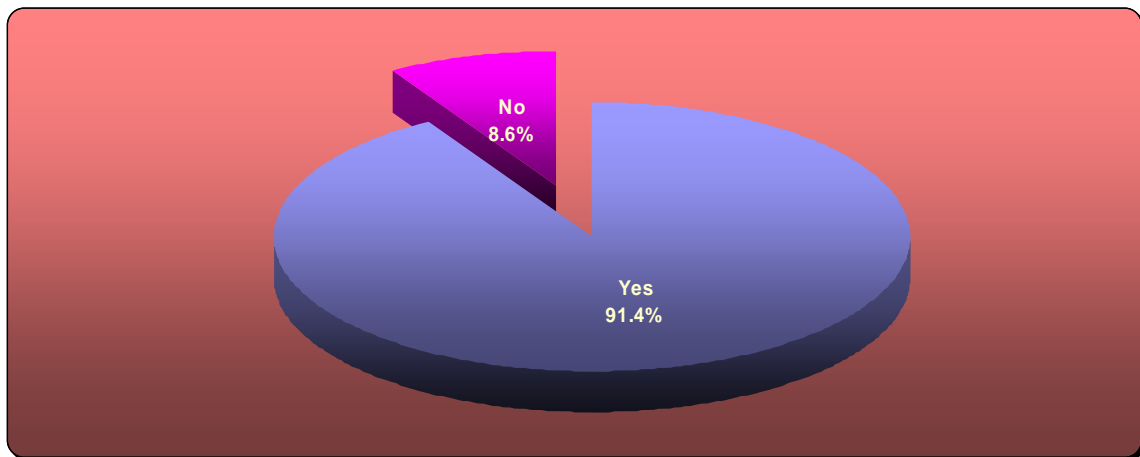


Figure 17. Value of Mental Processes Instruction

C. SURVEY RESPONSE ANALYSIS

The thesis survey indicated courses and topics needed for law enforcement intelligence analysts. The survey addressed history, geography, social sciences, philosophy, language, quantitative courses, critical thinking, and internships. It also asked questions regarding miscellaneous topics and courses in analysis.

Most of the results showed a current need for courses and topics involving the Middle East. History of the Middle East was the history course with the highest response. However, all history courses in the survey were viewed as important. While most of the results for language instruction indicated Spanish was the most needed language, Arabic and Farsi were second and third, respectively. Islam received the highest percentage of responses for needed religious instruction, while all the identified religions had the second greatest percentage of responses. The responses for the question regarding philosophical instruction indicated all the identified philosophies were important, but Middle Eastern philosophy received the greatest percentage of responses for a single philosophy. Respondents indicated all the identified geography courses were important, but the geography of the Middle East received the greatest number of responses for a single region.

The survey indicated a need for more social science courses. Respondents indicated sociology and political science courses would help them in their jobs. They also indicated psychology courses would help them. Economics was viewed as somewhat helpful, while anthropology was not viewed as helpful.

Respondents indicated a need to have all identified quantitative courses in the survey. Basic statistics received the greatest percentage of responses for a single course. Multivariate statistics received the fewest response percentage of needed quantitative courses.

Spanish received the highest response percentage for needed language instruction. While the Middle Eastern languages of Arabic and Farsi received the second and third highest response percentages, Chinese followed closely behind them. Respondents did not view the African languages of Swahili and Eastern Cushitic as important for law enforcement intelligence analysts.

Respondents felt all identified religions in the survey were important. However, they overwhelmingly believed Islam was the most relevant religion. The response percentages for the other identified religions were close together. The exceptions of Odinism and Sikhism had a response percentage of less than three percent.

While respondents identified Middle Eastern philosophy as the most important philosophy course of the given choices, they viewed all the choices as important. The choice, “none of the philosophies,” received the third highest response percentage. African philosophy had the lowest response rate of the given philosophies.

Geography of the Middle East received the highest response percentage of individual regional choices for geography courses. However, the choice of all the given geography course choices received the highest total response percentage. There was a big difference between the response percentage for geography of the Middle East and the region with the second highest response percentage (Africa). The response percentage for South America was very close to that of Africa.

Questions eight and nine addressed miscellaneous courses and topics for law enforcement intelligence analysts. Question eight asked which of the following courses have been most helpful: written communication, public speaking, analytical/mental processes, data management software tools, law enforcement organization, critical thinking, all the courses, or none of the courses. Research skills/tools received the highest response percentage at 48.6%. However, the choice of all the courses was second at 43.6%. Law enforcement organization received the lowest response percentage of specific courses at 16.8%. Question nine asked which of the following courses would better prepare a law enforcement analyst for his or her job: crime pattern analysis; alternative hypothesis, practical/simulation exercises, all the above, or none of the above.

The choice of “all the above” received the highest response percentage at 53.6%. Crime pattern analysis received the second highest response percentage at 27.4%.

Questions ten through twelve involved yes and no responses. Question ten asked if an internship would better prepare analysts for their jobs: overwhelmingly, the response percent was 84.3%, yes. Question eleven asked if respondents received training in the mental processes used during analysis: yes received the highest response percentage at 55.4%. Question twelve was related to question eleven. It asked if respondents did not receive mental processes training, would the training have better prepared them for their jobs: overwhelmingly, respondents indicated the training would have helped them.

The survey results correlate with the areas of the world that currently receive the most attention for terrorism: the Middle East. Respondents chose courses and topics involving Middle Eastern religions, philosophies, languages, and geography as areas of study that would be most beneficial to them. However, respondents generally viewed all given course choices in those questions as important. It is interesting to note that respondents viewed the study of the geography of Africa as the second most important region behind the Middle East to study. However, respondents did not view the study of the African languages, Swahili and Eastern Cushitic, as important as the other given choices. Respondents also did not view the study of African philosophy as important as the other given choices of philosophies.

According to survey respondents, there should be more courses on the social sciences of sociology and psychology. The responses on questions involving miscellaneous courses indicated all the given choices were important, but research skills/tools received the highest response percentage for a single course between questions eight and nine. Survey results clearly indicated the importance of instruction in critical thinking and the need for internships.

Survey respondents made few comments on the questions. Respondents made the most comments for the question about history courses: thirty-nine. Most questions had approximately one hundred-seventy five responses. The comments were a small

percentage of the responses. The comments for all questions were diverse and most were isolated. If there was one pattern in the comments, it was respondents indicated courses should be based upon the analyst's assignment or specialty.

D. SUMMARY

This survey has identified patterns in courses and topics for current law enforcement analyst instruction. Current world conditions show increased terrorist activity in South East Asia. However, survey respondents did not indicate a significant need for courses related to South East Asia. The projected trends in terrorism and criminality indicate a need for instruction in African geography, history, religions and languages. However, survey respondents also did not indicate a significant need for instruction on African related courses and topics. Law enforcement analyst instruction must address current areas of concern as well as future areas on concern. Therefore, academia should provide instruction on the religions, geography, languages and history of Asia (including South East Asia) and Africa. The next chapter discusses law enforcement analyst training guidelines for the two major law enforcement analyst organizations and why academia should be the source of law enforcement analyst instruction.

THIS PAGE INTENTIONALLY LEFT BLANK

VIII. RECOMMENDATIONS

This thesis discusses the definition of intelligence and intelligence analysis. It examines various types of intelligence analysis. It also addresses law enforcement analysis and the current state of it. There is an examination of how several foreign nations train their analysts and how academia in the United States trains intelligence analysts. Law enforcement intelligence analysts in the United States were surveyed to determine the courses and topics they believe are most relevant to them. Finally, this thesis discusses the processes involved in getting academia to teach law enforcement analysis.

This chapter revisits the educational standards and training for the International Association of Law Enforcement Intelligence Analysts (IALEIA) and the International Association of Crime Analysts (IACA). There is a discussion on combining the two standards. This chapter also presents an argument for academia teaching law enforcement analysts. At the end of the chapter, there is a short summary showing why academia should teach law enforcement analysts.

A. NATIONAL LAW ENFORCEMENT ANALYST STANDARDS

There are two major law enforcement intelligence analyst organizations: the International Association of Law Enforcement Intelligence Analysts (IALEIA) and the International Association of Crime Analysts (IACA). Both organizations have proposed standards for intelligence analysts. Education and training comprise a major part of standards for the organizations.

The IALEIA education standard calls for analysts to have either a four-year degree or commensurate experience.²⁶⁶ IALEIA defines commensurate experience as either not less than five years of intelligence analysis or research with a two-year degree

²⁶⁶ International Association of Law Enforcement Intelligence Analysts, Inc., *Law Enforcement Analytic Standards* (Richmond, VA: International Association of Law Enforcement Intelligence Analysts, 2004), http://it.ojp.gov/documents/law_enforcement_analytic_standards.pdf (accessed March 1, 2008). 5.

of not less than ten years of analysis or research with less than a two-year degree.²⁶⁷ Experience could come from the public, private, or military sector. IALEIA recommends a four-year degree as an analyst requirement. This is because persons with this degree would have had training in research in writing and, possibly, training in statistics, liberal arts, public speaking, and computer technology.²⁶⁸

IALEA provides an introductory intelligence analysis course and has made recommendations for others teaching an introductory course. This course is a minimum of forty hours and addresses the following minimum topics:²⁶⁹

- Intelligence cycle/process
- Intelligence-led policing
- National Criminal Intelligence Sharing Plan (NCISP)
- File management
- Information evaluation
- Critical thinking
- Logic
- Inference and recommendation development
- Collection plans
- Research methods and sources
- Crime-pattern analysis
- Association/network analysis
- Telephone record analysis/communication analysis
- Flow analysis
- Spatial/geographic analysis
- Financial analysis
- Strategic analysis
- Analytic writing

²⁶⁷ International Association of Law Enforcement Intelligence Analysts, Inc., *Law Enforcement Analytic Standards*, 5.

²⁶⁸ *Ibid.*

²⁶⁹ *Ibid.*, 6.

- Presentation skills
- Statistics
- Graphical techniques
- Computerized programs to assist analysis
- Ethics
- Professionalism
- Court testimony

Clearly, these topics cannot fully be addressed in a forty hour course which is usually taught in one week. The forty hour course merely provides exposure to the topics and forms the foundation for further study and training.

IALEIA also certifies analysts through testing. There are several levels of IALEIA certification: basic, practitioner, advanced, recertification basic, recertification practitioner, and conversion from practitioner to advanced certification. An analyst must be an IALEIA member to take the tests.²⁷⁰ Basic certification requires completion of an introductory training course comprised of at least nine of the above training topics. The higher certification levels require several years of analytical experience in addition to increased educational standards. The advanced certification requires an analyst to have at least ten years of analytical experience and at least a bachelor's degree or equivalent.²⁷¹

The IACA also has an analyst certification process. This process is based upon a point-system. An applicant needs 100 points to qualify to take a certification examination.²⁷² A college degree would give an applicant from 10 to 30 points. A grade of C or higher in certain courses (GIS, Research Methods, Statistics, Intro to Crime Analysis, Intro to Criminal Justice, or Intro to Criminal Behavior/Criminology) would

²⁷⁰ International Association of Law Enforcement Intelligence Analysts, "IALEIA Certification Process and Criteria," <http://www.certifiedanalysts.net/resources/Certification%20Process%20and%20Criteria.doc> (accessed April 2, 2008).

²⁷¹ Ibid.

²⁷² The International Association of Crime Analysts, *IACA Certification* (Overland Park, Kansas: International Association of Crime Analysts, 2005), <http://www.iaca.net/Certification/CertificationProgramOutline.pdf> (accessed March 1, 2008). 4.

give an applicant 6 points per course.²⁷³ Continuing professional education courses would give an applicant 1 point for every 12 hours of training. The applicant must score at least 70 percent on questions from 20 skill set modules to pass the certification examination. Clearly, IACA values the importance of formal educational training for intelligence analysts.

IACA recognizes the importance of skill sets for analysts. The organization requires the following skills for certification:²⁷⁴

- Knowledge of crime analysis basics
- Evaluation of information integrity
- Knowledge of criminal behavior
- Knowledge of criminal justice system
- Ability to conduct temporal analysis
- Knowledge of descriptive statistics
- Knowledge of inferential statistics
- Ability to conduct demographic analysis
- Ability to interpret crime statistics
- Knowledge of spatial analysis
- Ability to use investigative/intelligence analysis charting
- Reading comprehension
- Writing expository narratives
- Making effective presentations
- Word processing skills
- Spreadsheet operations
- Internet/intranet skills

²⁷³ The International Association of Crime Analysts, *IACA Certification*, 4.

²⁷⁴ The International Association of Crime Analysts, *IACA Certification Skill Set*, <http://www.iaca.net/Certification/CertificationSkillSet.pdf> (accessed March 1, 2008).

- Applied research methods in crime analysis
- Evaluation of qualitative information
- Critical thinking skills

Like IALEIA, IACA offers analyst training. IACA has a professional training series comprised of five, five-day modules: Fundamentals of Crime Analysis; Tactical Crime Analysis; Problem Analysis; Crime Mapping; and Computer Applications for Crime Analysts.²⁷⁵ Given the set of IACA required analyst skill sets, twenty-five days is not enough time to thoroughly address them.

Joint educational standards between IALEIA and IACA would provide a solid foundation for law enforcement analysts. These organizations should be part of the foundation for national standards in law enforcement analyst training. National standards would ensure all analysts meet the same requirements.

B. WHY COLLEGES SHOULD TRAIN LAW ENFORCEMENT ANALYSTS

Colleges and universities offer the perfect venue for teaching law enforcement intelligence analysis. These institutions have been providing advanced instruction for over a thousand years. Academia usually has the time and resources to research new ideas and theories. This condition provides the best option for providing law enforcement intelligence analysis instruction.

1. Philosophy of Education

There are various approaches to the philosophy of education. Robert Maynard Hutchins, a well known educational philosopher and former President of the University of Chicago, had a theory of learning. Hutchins believed learning should start students toward practical wisdom. Wisdom is acquired from both intellectual teaching and experience. He emphasized correctness of thinking in the pursuit of wisdom.²⁷⁶

²⁷⁵ The International Association of Crime Analysts, "IACA Training Classes," <http://www.iaca.net/IACATraining.asp> (accessed March 1, 2008).

²⁷⁶ Susan Pinto, "The Educational Theory of Robert Maynard Hutchins," <http://www.newfoundations.com/GALLERY/HutchinsII.html> (accessed March 1, 2008).

Education should focus on developing correctness in thinking. Hutchins further believed academic instruction should address great thinkers in science, history, and philosophy to develop skills in grammar, logic, and math.²⁷⁷ Students must also be exposed to contemporary material. His theory also says colleges should provide a supply of basic ideas for students.

John Dewey, philosopher and educational reformer, had an interesting view of education. Dewey believed in the continuity of life. This means living organisms must continuously adapt to the environment.²⁷⁸ The continuity of life for social groups or human beings is education which recreates beliefs, ideals, hopes, happiness, misery, and practices.²⁷⁹ Education is the vehicle for social continuity of life. Society must not only address the physical needs of the young, but must also initiate them into the interest, purposes, information, skill, and practices of the elders of society. Education provides the means to bring the young into continuity with rest of society. The more advanced societies become, the greater the need for formal teaching.

2. Analyst Training

College education is frequently desired by individuals needing training in skills for entry-level professional employment. Stephen Marrin, a former CIA analyst, argues that intelligence analysis has characteristics of both a craft and profession.²⁸⁰ He further states intelligence analysis has been practiced more as a craft.²⁸¹ This condition caused the field to lack structured personnel practices and procedures to judge analysts' intelligence products. Marrin believes intelligence analysis, like medicine, requires

²⁷⁷ Pinto, "The Educational Theory of Robert Maynard Hutchins."

²⁷⁸ John Dewey, *Democracy and Education*, <http://www.worldwideschool.org/library/books/soc/education/DemocracyandEducation/chap1.html> (accessed March 1, 2008).

²⁷⁹ Ibid.

²⁸⁰ Stephen Marrin, "Intelligence Analysis: Turning Craft Into a Profession," https://analysis.mitre.org/proceedings/Final_Papers_Files/97_Camera_Ready_Paper.pdf (accessed March 16, 2008). 1.

²⁸¹ Ibid.

practitioners to have both practical skill sets and academic preparation. Both disciplines use an approximation of the scientific method: hypothesis, experimentation, and conclusion.²⁸²

The operation of intelligence analysis resembles one of the working processes of medieval Europe. Jeffrey Cooper referred to intelligence as a “craft culture” that also calls itself a “tradecraft.”²⁸³ There are several conditions that must occur within intelligence analysis. The field will need minimal education requirements, a selection process, a formal training programs, professional development programs, and performance standards.²⁸⁴ Both IALEAI and IACA have analyst standards. The combined standards of these organizations could provide the framework work for academia to teach law enforcement intelligence analysis.

James Mikulec and Alyson Pinter wrote a short paper on the academic training of intelligence analysts. They concluded: intelligence professionals have viewed academia as a source for the future development of human resources, but the use of academia in current intelligence activities has not been utilized or explored.²⁸⁵ The authors also reported the use of college students in intelligence analysis usually involved temporary internships.²⁸⁶ These are internships at federal, state, or local agencies.

The field of law enforcement intelligence analysis would greatly benefit by having it become an academic discipline. If it becomes an academic discipline, centers of excellence within academia would develop law enforcement analysts as medical schools produce doctors. Law enforcement managers have stated a need for more training of intelligence analysts. Academia could refine skills of current analysts and groom new

²⁸² Marrin, “Intelligence Analysis: Turning Craft Into a Profession,” 1.

²⁸³ Jeffrey R. Cooper, “Curing Analytic Pathologies: Pathways to Improved Intelligence Analysis,” (Washington, D.C: CIA, 2005), <https://www.hsdl.org/homesecc/docs/intel/nps22-051606-02.pdf&code=7348b4d2b4b23cd4d856d7fd8f1b3623> (accessed March 1, 2008). 28.

²⁸⁴ Marrin, “Intelligence Analysis: Turning Craft Into a Profession,” 4.

²⁸⁵ James A. Mikulec, Jr. and Alyson Pinter, “Making the Grade: Academia and its Updated Role in Intelligence Analysis,” https://analysis.mitre.org/proceedings/Final_Papers_Files/326_Camera_Ready_Paper.pdf (accessed March 1, 2008). 1.

²⁸⁶ Ibid.

students to enter the field of analysis. College students could work on projects for law enforcements agencies using open source materials. These projects would give the students direct experience with the operations of law enforcement intelligence. These projects could be expanded to co-op opportunities.

C. SUMMARY

Academia has been the source for many new ideas and processes. Having academia teach law enforcement intelligence analysis would improve the field by bringing fresh insight and ideas into an established systematic process. This, coupled with academia's desire to explore and develop new methods, would ensure that law enforcement analysis does not become stagnant. Given the skills needed for intelligence analysis, the philosophies of Hutchins and Dewey indicate academia should be the provider of law enforcement intelligence analyst training.

IX. CONCLUSION

This chapter reiterates recommendations and findings in the thesis. The chapter also revisits the thesis survey and provides a discussion on courses and topics that analysts view as important. In addition, it shows the culture for which analysts are most focused. Finally, the chapter concludes with a discussion of the future of law enforcement analysis and identifies processes that must be changed or addressed to improve analysis.

A. SUMMARY OF FINDINGS

1. Law Enforcement Analyst Organizations

Various intelligence analysts and intelligence analyst organizations have discussed the generic skills required of analysts. Studies of analysts have either dealt with the field of intelligence analysis in general or with national security intelligence. There appears to be personality and cognitive differences between intelligence analysts and other professions. Understanding these differences and addressing them in the selection of intelligence analysts should improve the quality of analysis.

IALEIA in its *Law Enforcement Analytic Standards* referred to the works of Dr. Charles Frost on intelligence analysts. Frost believed analysts should have the following attributes: a broad range of interests, developed research ability, helpful previous experience, intellectual curiosity, rapid assimilation of information, keen information recall, tenacity, the willingness and capacity to make judgments, a developed writing ability, skill in oral briefing, initiative and self-direction, effective personal interaction, and disciplined courage.²⁸⁷

²⁸⁷ International Association of Law Enforcement Intelligence Analysts, Inc., *Law Enforcement Analytic Standards*, 14.

2. Analyst Personality Traits

As previously discussed, Lisa Krizan in *Intelligence Essentials for Everyone* discussed cognitive attributes of analysts from a NSA study: written expression, reading comprehension, inductive reasoning, deductive reasoning, pattern recognition, oral comprehension, and information ordering. The NSA study interviewed both junior analysts and supervisory analysts to obtain these cognitive attributes. As a result of this study, psychologists designed a job-relevant pre-employment aptitude examination for intelligence analysts.

Another component of the intelligence analyst profile is personality traits. Researchers at the Joint Military Intelligence College (JMIC) used the Myers-Briggs Type Indicator (MBTI) to examine intelligence professionals' personality traits. Their findings indicated intelligence professionals exhibit personality traits that distinguish them apart from the U.S. population. In this study, twenty-one percent of national security intelligence professionals exhibited the following behavioral characteristics: preference to ideas rather than things and people, proclivity to gather factual information with the senses rather than inspiration, tendency to make decisions using logic rather than emotion, and to actively seek closure rather than leaving possibilities open. National security intelligence professionals exhibited the traits of introversion, sensing, thinking, and judging. Both government intelligence students and practitioners comprised the intelligence professionals in the JMIC study. Lisa Krizan concluded: intelligence professionals from other disciplines and private industry may have the same attributes as those in the JMIC study if they adhere to the intelligence principles in *Intelligence Essentials for Everyone*.

There should be a study on the personality traits and cognitive attributes of law enforcement intelligence analysts. This study may indicate important personality traits for students to possess who would enter colleges or universities for law enforcement intelligence analyst training. Another important consideration is the potential students' backgrounds. Law enforcement intelligence analysts may need to obtain security clearances for their job. As part of an application process to an institution, students

should be briefed on the importance of having “clean” backgrounds that would not preclude them from obtaining clearances. Further, students must be told of the need to maintain a “clean” record while they are in training and throughout their employment.

3. Analyst Training

One may argue that law enforcement analysts need a better grasp of psychology and sociology than national analysts and military analysts. The subjects involved with criminal activity are very diverse and the methods used to investigate them are under strict federal and state constitutional guidelines. This limits law enforcement analysts’ access to information and collection methods that are readily used by national and military intelligence analysts.

Law enforcement intelligence analysis is different from military and national intelligence. Law enforcement intelligence analysis has a different set of rules than military and national intelligence analysis along with different requirements. Military or national intelligence analysts may not need courses on crime patterns, criminal laws and procedures, or patrol procedures. However, these courses are needed by law enforcement analysts. Academia has done a good job in addressing military and national intelligence analysis. Academia should expand its law enforcement intelligence analysis instruction.

There is clearly a need to merge crime analysis and criminal intelligence analysis into one process. While there are differences between the two areas, they are like the head and tail of a coin. IALEIA and IACA educational and training standards have overlapping areas that can be combined. Academia is the perfect setting to teach the amalgamation of IALEIA and IACA standards. The National Criminal Intelligence Sharing Plan (NCISP) also identified similar training objectives that should be addressed in an introductory analytic course. The objectives are good, but they are too numerous to be adequately covered in an introductory course. Both the NCISP objectives and the IALEIA and IACA standards should be taught by academia as part of an undergraduate or graduate program.

There are only two U.S. graduate schools that either currently award degrees or will award degrees in law enforcement intelligence analysis: St. John’s University and

Michigan State University. St. John's University offers a Master of Science in Criminal Justice with a specialization in Intelligence and Crime Analysis. This program combines both crime and criminal intelligence analysis. While both programs address law enforcement needs, neither program requires a foreign language. Given the time in which a student may complete a master's degree, there may not be enough time to complete a foreign language. Ideally, a law enforcement intelligence analyst would have an undergraduate degree in law enforcement intelligence analysis and also obtain a graduate degree in it. However, there are no U.S. institutions with undergraduate degrees in law enforcement intelligence analysis. AMU has a Bachelors of Arts in Intelligence Studies with a criminal intelligence concentration.

Bachelor's degree programs would provide students the time to learn foreign languages and also take the necessary classes in religion, philosophy, social sciences, geography, and applied mathematics. Neither St. John's nor Michigan State requires an internship. There are several undergraduate schools that require intelligence analyst majors to do internships. Survey respondents indicated internships were very important. Undergraduate programs also have a better potential than graduate programs for providing in-depth instruction on the various world regions of concern for intelligence. However, the NDIC graduate program incorporates elective classes on eight countries or world regions in its curriculum. Undergraduate programs could also provide students with more instruction on supportive topics for analysts, such as criminology, the legal system, and the philosophies and styles of law enforcement.

Law enforcement analysis is more widely represented in the certificate programs. There are six institutions offerings law enforcement analysis certificates. Unless a student is already an analyst, these programs do not provide the depth of instruction needed for law enforcement analysis. Some institutions indicated their programs were for analysts to enhance their skills. Survey respondents indicated a need to receive instruction on critical thinking. This area is lacking in many of the undergraduate schools and none of the certificate programs provide specialized instruction in it. None of the law enforcement analyst certificate programs requires students to complete foreign languages. The law enforcement certificate programs also do not teach critical thinking as a separate

course. Only two of the law enforcement analyst certificate programs require students to complete an internship. Most certificate programs are eighteen months or less in length. Therefore, there is not enough time to address religion, philosophy, social sciences, geography, or advanced statistical methods. The law enforcement certificate programs address the basic courses of intelligence analysis and research methods, but they do not address the many other necessities required of law enforcement intelligence analysts.

B. FUTURE OF LAW ENFORCEMENT INTELLIGENCE ANALYSIS

Academia should teach law enforcement intelligence analysis. Then, the future of law enforcement intelligence analysis in the U.S. should be bright. However, there are obstacles that must be overcome. Non-federal law enforcement must have a better understanding of the process of intelligence and, thus, fully adopt the National Criminal Intelligence Sharing Plan. The Intelligence Community (IC) needs to recognize law enforcement as a member of the IC. Crime and intelligence analysis need to be combined into one process. The implementation of these steps would help academia significantly improve the quality of law enforcement intelligence analysis.

The International Associations of Chief of Police and the National Sheriffs Association have adopted the National Intelligence Sharing Plan (NCISP). While these organizations have both adopted NCISP, law enforcement still has not fully embraced it. As previously discussed, Deborah Osborne mentioned how many police executives are not aware of the intelligence process. This lack of intelligence awareness permeates many law enforcement agencies. Not only are police executives not aware of the intelligence process, but neither are many of their subordinates. Law enforcement officers at all levels must be aware of the process of intelligence. If law enforcement personnel fully understand the intelligence process, they are more likely to understand the importance of analysis and why they should provide information to analysts. Police management must set intelligence requirements that will provide direction for intelligence in their organizations. If management is not aware of the intelligence process, they cannot set intelligence requirements. If line officers are not aware of the intelligence process, they cannot provide information for analysts. If neither

management nor line officers are aware of the intelligence process, they will not ask for or need intelligence analysis. Without a need for intelligence analysis, there will not be a demand for trained intelligence analysts. Therefore, for academia to provide intelligence analysis instruction, the consumers of intelligence products must demand and require intelligence products.

There are sixteen members of the U.S. Intelligence Community. There are no state, local, or tribal law enforcement agencies with membership in the IC. The Department of Homeland Security (DHS) has the responsibility of addressing law enforcement intelligence concerns. However, this process has not worked well. Non-federal law enforcement agencies are complaining about the lack of law enforcement intelligence products coming from DHS. The New York Police Department (NYPD) was so concerned about this condition that they have assigned detectives in foreign nations to provide timely information for analysis. The NYPD believes their presence in foreign nations gives them a more timely intelligence product than what is produced by DHS. Other police agencies are considering pooling their resources to duplicate NYPD's efforts.

The UK has law enforcement input in its intelligence process. The Joint Terrorism Analysis Center (JTAC) in the UK includes analysts from eleven departments and agencies. This includes the police. JTAC produces three intelligence products: "country-based threat analyses and sector, or location specific, threat analyses for the UK" which form the foundation for national security alerts, analyses of terrorist groups and networks, and trends in terrorism.²⁸⁸ Law enforcement officers on JTAC interact with the Central Services' Police International Counter Terrorism Unit (PICTU).

PICTU was a forerunner of JTAC and was created to address problems with police special branches that were comprised of detectives who were addressing the United Kingdom's counter terrorism policy. The UK regards terrorism as a criminal offense. Therefore, the Home Office and police have the duty to be primary and lead

²⁸⁸ U.S. House of Representatives, "Beyond Connecting the Dots: A Vital Framework for Sharing Law Enforcement Intelligence Information," <https://www.hsdl.org/homesec/docs/intel/nps23-010906-01.pdf&code=08cffc44c7f35acb436d0fbec7031a18> (accessed March 1, 2008). 44.

responders to terrorism on both the national and local level. Before the creation of PICTU, the police and MI5, UK's security intelligence agency, addressed counterterrorism in the UK. The Metropolitan Police Special Branch was the coordination mechanism between the two entities.²⁸⁹ Despite the Metropolitan Special Branch being comprised of police officers from every UK police force that addressed law enforcement intelligence, there were numerous complaints about the Metropolitan Special Branch and other police Special Branches not sharing counterterrorism information.²⁹⁰ There were also complaints that the Special Branches had a failure of imagination in including the police community at large in terrorism prevention. As a result of the criticism of the Special Branches, the UK Association of Chief Police Officers and MI5 created PICTU.

PICTU coordinates counterterrorist activity from all police Special Branches in the UK. The creating bodies of PICTU realized police needed intelligence assessments to protect against terrorism. PICTU analyzed intelligence reports created by the UK Intelligence Community for value to police officers and discovered the Intelligence Community frequently neglected law enforcement.²⁹¹ The PICTU analysis revealed only twenty percent of intelligence reports by the Intelligence Community were sent to police and most of those reports were forwarded to the Metropolitan Police Special Branch under the false assumption they would be forwarded to all police forces. PICTU addressed the problem by having input with JTAC. Members of PICTU began having regular meetings with JTAC. Law enforcement officers and intelligence analysts began reviewing intelligence reports compiled by MI5 for police intelligence requirements and to evaluate the delivery of reports in support of a police response to terrorism.

Non-federal law enforcement agencies need more direct input in the Homeland Security intelligence process. The United States should have an organization, such as PICTU, to provide input in Homeland Security intelligence. The nation does have the

²⁸⁹ U.S. House of Representatives, "Beyond Connecting the Dots: A Vital Framework for Sharing Law Enforcement Intelligence Information," 41.

²⁹⁰ Ibid.

²⁹¹ Ibid.

National Counterterrorism Center (NCTC), which is comparable to the UK's JTAC. The Homeland Security intelligence system also has the Homeland Security Advisory Council (HSAC), which includes law enforcement representatives from all levels, but DHS still does not have direct representation from non-federal law enforcement in its analysis process. HSAC is an advisory council that does not affect daily intelligence operations. Therefore, a structure, such as PICTU, would ensure non-federal law enforcement intelligence is addressed in Homeland Security.

A Congressional study by the U.S. House Committee on Homeland Security concluded: the nation needs an organization such as PICTU and, also, an intelligence link. The Congressional study named the link Vertical Intelligence Analysis Link (VITAL).²⁹² VITAL should be staffed with non-federal law enforcement at all levels and should:

- Identify intelligence and information for officers involved with operational and strategic planning.
- Help disseminate intelligence products containing classified and open source material to police officers.
- Educate the IC and law enforcement about Homeland Security plans and priorities.

The two major law enforcement analyst organizations have proposed similar minimum training topics and skill sets for analysts. These two organizations should produce a combined set of standards for a national certification for all law enforcement analysts. The U.S. version of PICTU should interact with IALEIA and IACA to ensure that long-term intelligence needs of law enforcement are addressed in the training and skill sets for law enforcement analysts. This process would be similar to intelligence analyst training in the UK. The National Analyst Working Group (NAWG) in the UK,

²⁹² U.S. House of Representatives, "Beyond Connecting the Dots: A Vital Framework for Sharing Law Enforcement Intelligence Information," 3.

through the National Policing Improvement Agency (NPIA), set the framework for law enforcement analyst training in the UK. However, unlike the UK, academia should teach law enforcement analyst training in the U.S.

Improving non-federal law enforcement awareness of the intelligence process, including non-federal law enforcement in the Intelligence Community, and merging crime analysis with criminal analysis are important preliminary steps in having academia provide law enforcement analyst instruction. These steps would increase the demand for intelligence products and, therefore, would increase the demand for quality analysts. Academia has provided professional training and instruction in other areas for over a thousand years. It should be the venue for law enforcement analyst training in the U.S. Since non-federal law enforcement will probably encounter criminality and the precursors of terrorism before federal law enforcement, non-federal law enforcement and its intelligence is crucial to the security of our nation.

THIS PAGE INTENTIONALLY LEFT BLANK

BIBLIOGRAPHY

- American Military University. "Master of Arts in Intelligence Studies," <http://www.amu.apus.edu/Catalog/08/graduate/degree/master/intelligence/intelligence.htm> (accessed February 28, 2008).
- American Sociological Association. "What is Sociology?" http://www.asanet.org/cs/root/topnav/sociologists/what_is_sociology (accessed February 29, 2008).
- Anne Arundel Community College. "Intelligence Analytics," <http://www.aacc.edu/catalog/interactivecatalog/> (accessed February 24, 2008).
- Anti-Defamation League. "Dangerous Convictions: An Introduction to Extremist Activities in Prison," <https://www.hsdl.org/homesec/docs/nonprof/nps03-120204-03.pdf&code=d922a1f201ace574ecdbdfeda1ac66d4> (accessed March 1, 2008). 37.
- . "Extremism in America: Christian Identity," http://www.adl.org/learn/ext_us/Christian_Identity.asp?xpicked=4&item=Christian_ID (accessed March 1, 2008).
- Association of Chief Police Officers. "Guidance on the National Intelligence Model 2005," <http://www.acpo.police.uk/asp/policies/Data/nim2005.pdf> (accessed March 1, 2008). 12.
- Barnes, Jessica S., and Claudette E. Bennett, "The Asian Population: 2000," United States Census 2000 <http://www.census.gov/prod/2002pubs/c2kbr01-16.pdf> (accessed March 1, 2008).
- Bellevue Community College. "Business Intelligence," <http://bellevuecollege.edu/catalog/degrees/busit/> (accessed February 24, 2008).
- Cal State Fullerton. "Certificate in Crime and Intelligence Analysis," <http://www.csufextension.org/Classes/Certificate/CertificateClasses.asp?GN=3011&GV=2&LID> (accessed February 24, 2008).
- Campbell, Paul R. "Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2026," <http://www.census.gov/population/www/projections/ppl47.html> (accessed February 29, 2008).
- Canada. "Academic Services," <http://www.cpc.gc.ca/sciences/science.htm> (accessed March 1, 2008).

- . “Advanced Analytical Techniques (AANALT),” http://www.cpc.gc.ca/courses/descript/aiaw_e.htm (accessed March 1, 2008).
- . “Criminal Intelligence Analysis-Distance Learning via Internet (DCIAC)” http://www.cpc.gc.ca/courses/descript/dciac_e.htm (accessed March 1, 2008).
- . “Strategic Intelligence Analysis (SIAC),” http://www.cpc.gc.ca/courses/descript/siac_e.htm (accessed March 1, 2008).
- . “Tactical Intelligence Analysis (TIAC): Purpose of the course,” http://www.cpc.gc.ca/courses/descript/iac_e.htm (accessed March 1, 2008).
- . “The Canadian Police College,” http://www.cpc.gc.ca/home_e.htm (accessed March 1, 2008).
- Carter, David L. “The Law Enforcement Intelligence Function,” *FBI Law Enforcement Bulletin* 74 no. 6, June 2005, <http://www.justicestudies.com/pubs/leif.pdf> (accessed February 24, 2008). 5.
- . *Law Enforcement Intelligence: A Guide for State, Local and Tribal Law Enforcement Agencies*, (Washington, D.C.: DOJ, 2004), <https://www.hsdl.org/homesec/docs/dhs/nps03-120704-01.pdf&code=fac9fc14c649a3dd338af5a84e38e53f> (accessed February 24, 2008).
- Central Pennsylvania College. “Academic Programs: Intelligence Analysis Certificate,” <http://www.centralpenn.edu/academics/programs/program.asp?id=956M97b89C1OIADXeZMS> (accessed February 24, 2008).
- . “Academic Programs: Intelligence Analysis Certificate-Specific Coursework,” <http://www.centralpenn.edu/academics/programs/courses.asp?id=956M97b89C1OIADXeZMS> (accessed February 24, 2008).
- Chandler-Gilbert Community College. “Social & Behavioral Sciences,” http://webport.cgc.maricopa.edu/published/s/oc/social/home/7/?_s=nf-20080123155213-9726 (accessed February 24, 2008).
- Clackamas Community College. “Crime Analysis Certificate,” <http://depts.clackamas.edu/crimjust/documents/crimjust.pdf> (accessed February 24, 2008).
- Competitive Intelligence Research Foundation. *State of the Art: Competitive Intelligence*, Executive Summary (Research Report 2005-2006). Edited by Dale Fehringer, Bonnie Hohhof, and Ted Johnson.

- Cooper, Jeffrey R. *Curing Analytic Pathologies: Pathways to Improved Intelligence Analysis* (Washington, D.C: CIA, 2005), <https://www.hsdl.org/homesec/docs/intel/nps22-051606-02.pdf&code=7348b4d2b4b23cd4d856d7fd8f1b3623> (accessed March 1, 2008).
- . Center for the Study of Intelligence, 2005), <https://www.hsdl.org/homesec/docs/intel/nps22-051606-02.pdf> (accessed February 24, 2008).
- Dagne, Ted. “Africa and the War on Terrorism,” *CRS Report for Congress*, (Washington, D.C. : Congressional Research Service, 2002), <http://fpc.state.gov/documents/organization/7959.pdf> (accessed February 29, 2008).
- Department of the Army. *Intelligence: Field Manual No.2*, (Washington, D.C.: Department of the Army, 2004), <https://www.hsdl.org/homesec/docs/intel/nps10-060304-01.pdf&code=f4b7b65862927d0a1120216473203b99> (accessed February 23, 2008).
- Dewey, John. *Democracy and Education*, <http://www.worldwideschool.org/library/books/soc/education/DemocracyandEducation/chap1.html> (accessed March 1, 2008).
- Durmaz, Huseyin. “Officer Attitudes Toward Organizational Change in the Turkish National Police,” (Dissertation Prepared for the Degree of Doctor of Philosophy at University of North Texas, 2007).
- Embry-Riddle Aeronautical University. “Bachelor of Science in Global Security and Intelligence Studies (GSIS),” <http://www.erau.edu/pr/degrees/b-gsis.html#req> (accessed February 27, 2008).
- Expressindia. “Babbar Khalsa Role Suspected in Ludhiana Blast,” <http://www.expressindia.com/latest-news/Babbar-Khalsa-role-suspected-in-Ludhiana-blast/228575/> (accessed March 1, 2008).
- Futures Working Group, Police Futurists International and FBI. “The World of 2020: Demographic Shifts, Cultural change, and Social Challenge,” *Policing 2020: Exploring the Future of Crime, Communities, and Policing* (Quantico, VA: DOJ, 2007), <http://www.policefuturists.org/pdf/Policing2020.pdf> (accessed March 1, 2008).
- Goldstein, Joseph. “Post-9/11 Detainee Faces Separate Terror Charge,” *The New York Sun*, August 3, 2006, <http://www.nysun.com/article/37251> (accessed March 1, 2008).
- Government of Canada. “Who We Are,” http://www.cisc.gc.ca/about/about_cisc_e.htm (accessed March 1, 2008).

- Henley Putnam University. "Master of Science, Intelligence Management," <http://www.henley-putnam.edu/128-195.htm> (accessed February 29, 2008).
- . "Bachelor of Science, Intelligence Management," <http://www.henley-putnam.edu/127-192.htm> (accessed February 27, 2008).
- Home Office Police. "National Intelligence Model-Analytical Techniques," <http://police.homeoffice.gov.uk/news-and-publications/publication/operational-policing/nim-analytical/> (accessed March 1, 2008).
- Informatics Coalition. "Informatics," <http://www.informaticscoalition.com/> (accessed February 24, 2008).
- International Association of Chiefs of Police. "Memorandum," <http://www.theiacp.org/Leadership/073105ExecDirQtrlyReport.htm> (accessed February 24, 2008).
- International Association of Crime Analysts. "About the IACA," www.iaca.net/about.asp (accessed February 24, 2008).
- . "IACA Training Classes," <http://www.iaca.net/IACATraining.asp> (accessed March 1, 2008).
- . *IACA Certification* (Overland Park, Kansas: International Association of Crime Analysts, 2005), <http://www.iaca.net/Certification/CertificationProgramOutline.pdf> (accessed March 1, 2008).
- . *IACA Certification Skill Set*, <http://www.iaca.net/Certification/CertificationSkillSet.pdf> (accessed March 1, 2008).
- International Association of Law Enforcement Intelligence Analysts. "Certification Process and Criteria," <http://www.certifiedanalysts.net/resources/Certification%20Process%20and%20Criteria.doc> (accessed April 2, 2008).
- . *Intelligence Led Policing*, (Lawrenceville, NJ, IALEIA, 1997), <http://www.ialeia.org/files/other/Intelligence%20Led%20Policing.pdf> (accessed February 24, 2008).
- . "Who We Are," www.ialeia.org/aboutus (accessed February 24, 2008).
- . "Purpose," www.ialeia.org/aboutus (accessed February 24, 2008).

- International Association of Law Enforcement Intelligence Analysts, Inc. *Law Enforcement Analytic Standards* (Richmond, VA: International Association of Law Enforcement Intelligence Analysts, 2004), http://it.ojp.gov/documents/law_enforcement_analytic_standards.pdf (accessed March 1, 2008).
- Interpol. "Turkey," <http://www.interpol.int/Public/Region/Europe/pjsystems/turkey.asp> (accessed March 1, 2008).
- Johns Hopkins University. "Divisions of Public Safety Leadership: Curriculum," <http://psl.jhu.edu/programs/intelligence-analysis/curriculum/> (accessed February 28, 2008).
- . "Division of Public Safety Leadership: Objectives," <http://psl.jhu.edu/programs/intelligence-analysis/objectives/> (accessed February 28, 2008).
- Johnson, Loch K. and Wirtz, James J. *Strategic Intelligence: Windows into a Secret World*, (Los Angeles, CA: Roxbury Publishing, 2004).
- Johnson, Rob. *Analytic Culture in the U.S. Intelligence Community* (Washington: Central Intelligence Agency, 2005), <https://www.hsd1.org/homesecc/docs/intel/nps10-012506-04.pdf&code=fdfe7d0c018a12e08efaa942fb1c7cd5> (accessed February 20, 2008).
- Joint Chiefs of Staff. *Joint and National Intelligence Support to Military Operation*, <https://www.hsd1.org/homesecc/docs/dod/nps03-112204-03.pdf&code=659771bf672da7a488862b1823e0364d> (accessed February 24, 2008).
- . *Joint Intelligence*, <https://www.hsd1.org/homesecc/docs/dod/nps26-072007-01.pdf&code=f4b7b65862927d0a1120216473203b99> (accessed February 24, 2008).
- Krizan, Lisa. *Intelligence Essentials for Everyone*, (Washington, D.C.: Joint Military Intelligence College, 1999), <https://www.hsd1.org/homesecc/docs/dod/nps03-010907-04.pdf&code=ca753093689bd7033ed6c14358552b37> (accessed February 24, 2008).
- Lefebvre, Stephane J. "A Look at Intelligence Analysis" (paper presented at International Studies Association 44th Annual International Convention, Portland, Oregon, February 25-March 1, 2003), [http://isanet.ccit.arizona.edu/portlandarchive/ISA\[1\].Intelligence.2003.PDF](http://isanet.ccit.arizona.edu/portlandarchive/ISA[1].Intelligence.2003.PDF) (accessed February 24, 2008).

- Leiken, Robert S. "Europe's Angry Muslims," *Foreign Affairs*, July/August 2005
<http://www.foreignaffairs.org/20050701faessay84409-p10/robert-s-leiken/europe-s-angry-muslims.html> (accessed March 25, 2008).
- Library of Congress. "Turkey," [http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field\(DOCID+tr0113\)](http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+tr0113)) (accessed March 1, 2008).
- MacEachin, Douglas. "Analysis and Estimates: Professional Practices in Intelligence Production," *Transforming U.S. Intelligence* (Washington, D.C.: Georgetown University Press, 2004).
- Marrin Stephen. "Intelligence Analysis: Turning Craft into a Profession,"
https://analysis.mitre.org/proceedings/Final_Papers_Files/97_Camera_Ready_Paper.pdf (accessed March 16, 2008).
- . "Improving CIA Analysis by Overcoming Institutional Obstacles," *Bringing Intelligence About: Practitioners Reflect on Best Practices*,
<http://ndic.edu/press/pdf/5138.pdf> (accessed February 29, 2008).
- . "Homeland Security and the Analysis of Foreign Intelligence," Markle Foundation Task Force on National Security in the Information Age,
http://www.markletaskforce.org/documents/marrin_071502.pdf (accessed March 1, 2008).
- . "Improving CIA Analysis by Overcoming Institutional Obstacles," *Bringing Intelligence About: Practitioners Reflect on Best Practices*,
<http://ndic.edu/press/pdf/5138.pdf> (accessed February 29, 2008).
- . "Intelligence Analysis: Turning Craft Into a Profession,"
https://analysis.mitre.org/proceedings/Final_Papers_Files/97_Camera_Ready_Paper.pdf (accessed March 1, 2008).
- Mercyhurst College Institute for Intelligence Studies. "Graduate Certificate in Applied Intelligence," <http://www.mciis.org/graduate%20certificate/index.php> (accessed February 24, 2008).
- . "Undergraduate On-Line Certificate,"
<http://www.mciis.org/onlinecert/index.php> (accessed February 24, 2008).
- Mercyhurst College. "Graduate Classes," <http://www.mciis.org/graduate/classes.php> (accessed February 27, 2008).
- . "Graduate Studies," <http://www.mciis.org/graduate/index.php> (accessed February 27, 2008).
- . "Undergraduate Classes" <http://www.mciis.org/undergrad/classes.php> (accessed February 27, 2008).

- . “Undergraduate Studies,” <http://www.mciis.org/undergrad/index.php> (accessed February 27, 2008).
- Michigan State University. “Certificate Program in Law Enforcement Intelligence,” https://intellprogram.msu.edu/documents/Intelligence_Certificate_Announcement_2.pdf (accessed February 24, 2008).
- . “Law Enforcement Intelligence Analysis-Fall 2008,” <http://criminaljustice.msu.edu/academic/LERequire.php> (accessed February 28, 2008).
- Migration Policy Institute. “US in Focus: The African Foreign Born in the United States,” <http://www.migrationinformation.org/USfocus/display.cfm?id=250> (accessed February 29, 2008).
- . “US in Focus: The Foreign Born from Indian in the United States,” <http://www.migrationinformation.org/USfocus/display.cfm?ID=185> (accessed March 1, 2008).
- Mikulec, Jr., James A. and Pinter, Alyson. “Making the Grade: Academia and its Updated Role in Intelligence Analysis,” https://analysis.mitre.org/proceedings/Final_Papers_Files/326_Camera_Ready_Paper.pdf (accessed March 1, 2008).
- MIPT Terrorism Knowledge Base. “Group Profile: Babbar Khalsa International (BKI),” <http://www.tkb.org/Group.jsp?groupID=4568> (accessed March 1, 2008).
- . “Group Profile: Jewish Defense League (JDL),” <http://www.tkb.org/Group.jsp?groupID=183> (accessed March 1, 2008).
- . “Group Profile: Kahane Chai,” <http://www.tkb.org/Group.jsp?groupID=3750> (accessed March 1, 2008).
- . “Terrorist Group Reports: Groups by Region,” <http://www.tkb.org/GroupRegionModule.jsp?regionid=8&pagemode=national> (accessed March 1, 2008).
- . “Terrorist Incident Reports: Incidents by Region: Europe (January 1, 2000 to March 1, 2008)” <http://www.tkb.org/IncidentRegionModule.jsp?startDate=01%2F01%2F2000&endDate=12%2F01%2F2007&domInt=0&suiInt=0&filter=0&detail=0&info=&info1=3&pagemode=national®ionid=3&countryid=&sortby=&imageField.x=17&imageField.y=6> (accessed March 1, 2008).

- . “Terrorist Incident Reports,: Incidents by Region: Southeast Asia (January 1, 2000 to March 1, 2008),”
<http://www.tkb.org/IncidentRegionModule.jsp?startDate=01%2F01%2F2000&endDate=12%2F01%2F2007&domInt=0&suiInt=0&filter=0&detail=0&info=&info1=5&pagemode=national®ionid=5&countryid=&sortby=&imageField.x=40&imageField.y=6> (accessed March 1, 2008).
- . “Terrorist Incident Reports: Incidents by Region: Terrorist Groups in Africa (Libya),”
<http://www.tkb.org/IncidentRegionModule.jsp?regionid=9&pagemode=national&startDate=01/01/1968&endDate=12/01/2007&domInt=0&suiInt=0&filter=0&detail=0&setFilter=1&info1=9> (accessed March 1, 2008).
- National Criminal Justice Reference Service. “NCJRS Abstract,”
<http://www.ncjrs.gov/App/Publications/abstract.aspx?ID=187085> (accessed February 29, 2008).
- National Defense Intelligence College. “Bachelor of Science in Intelligence,”
<http://www.ndic.edu/bsi/bsi.htm> (accessed February 27, 2008).
- . “Bachelor of Science in Intelligence,” <http://www.ndic.edu/bsi/electives.htm>
 (accessed February 27, 2008).
- . “Master of Science of Strategic Intelligence,”
<http://www.ndic.edu/mssi/mssi.htm> (accessed February 29, 2008).
- . “Master of Science of Strategic Intelligence: Required Core Courses,”
<http://www.ndic.edu/mssi/corecourses.htm> (accessed February 29, 2008).
- National Intelligence Council. “Mapping the Global Future,”
<http://www.foia.cia.gov/2020/2020.pdf> (accessed February 29, 2008).
- National Intelligence Planning Board. *Strategic Investment Plan for Intelligence Community Analysis* (Washington, D.C.: n.d.)
<https://www.hsdl.org/homesec/docs/cia/UnclasSIP.pdf> (accessed February 24, 2008).
- Neumann College. “Academics: Professional and Certificate Program,”
http://www.neumann.edu/academics/contedu/intell_studies.asp (accessed February 24, 2008).
- . “Courses,” http://www.neumann.edu/academics/contedu/intell_studies_07.pdf
 (accessed February 24, 2008).

- Nichol, Jim. "Central Asia's Security: Issues and Implications for U.S. Interests," *CRS Report for Congress* (Washington, D.C.: Congressional Research Service, 2007), <http://fpc.state.gov/documents/organization/43392.pdf> (accessed February 29, 2008).
- Notre Dame College. "Certificate in Competitive (Business) Intelligence," http://www.notredamecollege.edu/professional_development/CompetitiveIntelligence.html (accessed February 24, 2008).
- . "Certificate in Intelligence Analysis," http://www.notredamecollege.edu/professional_development/IntelligenceAnalysis.html (accessed February 24, 2008).
- . "History/Political Science Department," http://www.notredamecollege.edu/academics/history_polSci/index.html#MajorHistoryIAR (accessed February 27, 2008).
- O' Shea, Timothy, Nichols, Keith, and Archer, Jonathan. *Crime Analysis in America*, (Washington, D.C.: DOJ, 2002), <http://www.cops.usdoj.gov/mime/open.pdf?Item=790> (accessed February 24, 2008).
- O'Connor, Tom. "The Integration of Homeland Security and Law Enforcement," (course notes on intelligence at North Carolina Wesleyan College, 2004), <https://www.hSDL.org/homesec/docs/edu/nps16-061704-16.pdf&code=cb7a2634f22db8f8003ac0f165cfb785> (accessed February 24, 2008).
- . "Techniques of "Intelligence Gathering," (course notes on intelligence at North Carolina Wesleyan College, 2004) <https://www.hSDL.org/homesec/docs/edu/nps16-061704-15.pdf&code=27c043268c97b2acdb7f2c8414f6ee4d> (accessed February 24, 2008).
- Osborne, Deborah. *Out of Bounds*, (Washington, D.C.: Joint Military Intelligence College, 2006) <https://www.hSDL.org/homesec/docs/intel/nps32-031507-01.pdf&code=651a7f06ccc44b8df8b04c5ff2e05c76> (accessed February 24, 2008).
- Palmieri, Lisa M. "Information vs. Intelligence: What Police Executives Need to Know," <http://www.ialeia.com/pubs/InformationvsIntelligence.pdf> (accessed February 24, 2008).
- Patrick Henry College. "Department of Government: Bachelor of Arts in Government Major," <http://www.phc.edu/academics/government/bagovernment.asp#intelligence> (accessed February 27, 2008).

- Penn State. "College of Information Sciences and Technology,"
<http://ist.psu.edu/currentstudents/undergraduate/sra/options/> (accessed February 27, 2008).
- . "College of Information Sciences and Technology: Requirements for the Intelligence and Analysis Modeling Option,"
<http://ist.psu.edu/currentstudents/undergraduate/sra/page2.cfm?intPageID=986> (accessed February 27, 2008).
- Peterson, Marilyn B. *Applications in Criminal Analysis: A Sourcebook* (Westport, CT: Praeger, 1998).
- Pinto, Susan, "The Educational Theory of Robert Maynard Hutchins,"
<http://www.newfoundations.com/GALLERY/HutchinsII.html> (accessed March 1, 2008).
- . "Intelligence & National Security,"
http://www.pointpark.edu/files/saps_nat_security.pdf (accessed February 27, 2008).
- . "Program Guide Certificate in Intelligence and National Security,"
<http://www.pointpark.edu/files/pgintelligenceandnationalsecuritycert2006.pdf> (accessed February 24, 2008).
- Police Foundation. *Integrated Intelligence and Crime Analysis: Enhanced Information for Law Enforcement Leaders*, (Washington, D.C.: DOJ, 2007),
<http://www.policefoundation.org/pdf/integratedanalysis.pdf> (accessed February 24, 2008).
- Radford University. "RU Informatics,"
<http://www.radford.edu/~informatics/courses.shtml> (accessed February 24, 2008).
- Riley, K. Jack. et al., *State and Local Intelligence in the War on Terrorism*, (Santa Monica, CA: Rand, 2005),
http://www.rand.org/pubs/monographs/2005/RAND_MG394.pdf (accessed February 24, 2008).
- Sacramento State: College of Continuing Education. "Crime and Intelligence Analysis Certificate Program,"
http://www.cce.csus.edu/catalog/course_group_detail.asp?group_number=115&group_version=1 (accessed February 24, 2008).
- Saint Joseph's University. "Degree Requirements,"
http://www.sju.edu/ACADEMIC_PROGRAMS/GRAD_ART_SCIENCE/CRIME_JUST/pages/degree.html (accessed February 28, 2008).

- Select Committee on Intelligence, United States Senate, 108th Congress. "Report on the U.S. Intelligence Community's Prewar Intelligence Assessments on Iraq," July, 2004, <https://www.hsdl.org/homesecc/docs/intel/nps03-071204-01.pdf&code=5a1eaf8553d0475bebbd17ee94e713f> (accessed February 24, 2008).
- Shah, Chayanika. "Hindu fundamentalism in India: Ideology, Strategies, and the Experience of Gujarat," <http://www.wluml.org/english/pubs/pdf/wsf/07.pdf> (accessed February 29, 2008).
- Shrader, Katherine Pflieger. "Analysts Are in Great Demand," Associated Press December 30, 2004, <http://www.washingtonpost.com/wp-dyn/articles/A35070-2004Dec29.html> (accessed March 27, 2008).
- Smith, Mark R. "Intelligence Analyst Shortage: AACC Keys in on New Program Options," *The Business Monthly* July 2006 http://www.bizmonthly.com/7_2006/2.shtml (accessed March 27, 2008).
- Snyder, Diane. "With a Little Bit of Heart and Soul Analyzing the Role of HUMINT in the Post Cold War Era," (paper presented at the Woodrow Wilson School Policy Conference 401a, June 6, 1997), <http://www.fas.org/irp/eprint/snyder/humint.htm> (accessed February 23, 2008).
- Stanford University Swahili Department. "Where Swahili is Spoken," <http://swahililanguage.stanford.edu/where%20swahili%20is%20spoken.html> (accessed February 29, 2008).
- Steele, Robert David. "The New Craft of Intelligence," *Time*, <http://www.time.com/time/covers/1101020311/viewpoint.html> (accessed February 24, 2008).
- Stratfor. "U.S. Perceptions of a Chinese Threat," June 1, 2006, http://www.stratfor.com/products/premium/read_article.php?id=266960 (accessed February 29, 2008).
- Swamy, Arun R. "Hindu Nationalism-What's Religion Got To Do With It?" Asia-Pacific Center for Security Studies, <https://www.hsdl.org/homesecc/docs/foreign/nps18-070105-06.pdf&code=bc9a3271ac5e307791d826bd94f4e900> (accessed February 29, 2008).
- Taylor, Susan M. "The Several Worlds of the Intelligence Analyst," (paper presented at the 2005 International Conference on Intelligence Analysis, McClean, VA, May 3, 2005), https://analysis.mitre.org/proceedings/Final_Papers_Files/45_Camera_Ready_Paper.pdf (accessed February 24, 2008).

The Global Justice Information Sharing Initiative Intelligence Working Group. Core Criminal Intelligence Training Standards for United States Law Enforcement and Other Criminal Justice Agencies, (Washington, D.C.: Global Justice Information Sharing Initiative, n.d.), http://www.it.ojp.gov/documents/criminal_intel_training_standards.pdf (accessed February 24, 2008).

UCR Extension. "Crime and Intelligence Analysis Certificate," <http://www.extension.ucr.edu/certificates/cia/requirements.html> (accessed February 24, 2008).

United States Department of Commerce. "The Asian Population: 2000," <http://www.census.gov/prod/2002pubs/c2kbr01-16.pdf> (accessed February 29, 2008).

United States Department of Justice, *Crime Analysis in America*, (Washington, D.C.: DOJ, 2002), <http://www.cops.usdoj.gov/mime/open.pdf?Item=790> (accessed February 28, 2008).

———. *Criminal Intelligence Sharing: A National Plan for Intelligence-Led Policing at the Local, State and Federal Levels*, (Washington, D.C.:DOJ, 2002), <http://www.epic.org/privacy/fusion/intelsharecpt.pdf> (accessed February 24, 2008).

———. *Intelligence-Led Policing: The New Intelligence Architecture*, (Washington, D.C: Office of Justice Programs, 2005), <http://www.ncjrs.gov/pdffiles1/bja/210681.pdf> (accessed February 24, 2008).

———. *The National Criminal Intelligence Sharing Plan* (Washington, D.C.: DOJ, 2005), http://www.it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf (accessed February 24, 2008).

United States House of Representatives. "Beyond Connecting the Dots: A Vital Framework for Sharing Law Enforcement Intelligence Information," <https://www.hsdl.org/homsec/docs/intel/nps23-010906-01.pdf&code=08cffc44c7f35acb436d0fbec7031a18> (accessed March 1, 2008).

United States Institute of Peace. "Terrorism in the Horn of Africa," <http://www.usip.org/pubs/specialreports/sr113.html> (accessed February 29, 2008).

United States Intelligence Community. "Members of the Intelligence Community (IC)," <http://www.intelligence.gov/1-members.shtml> (accessed February 23, 2008).

United States Joint Forces Command. "About Us," <http://www.jfcom.mil/about/about1.htm> (accessed February 24, 2008).

- University of Detroit Mercy. "Master of Science in Intelligence Analysis," <http://liberalarts.udmercy.edu/intelanalysis/curriculum.php> (accessed February 27, 2008).
- University of Maryland. "Intelligence Studies-Maryland School of Public Policy," <http://www.publicpolicy.umd.edu/IntelligenceStudies/certificate/> (accessed February 24, 2008).
- University of Michigan: School of Information. "Information Analysis and Retrieval (IAR) Specialization," <http://www.si.umich.edu/msi/iar.htm> (accessed February 29, 2008).
- Weiss, Arthur. "A Brief Guide to Competitive Intelligence: How to Gather and Use Information on Competitors," *Business Information Review* Volume 19, no.5 (2002), <http://www.marketing-intelligence.co.uk/data-sources/papers/1-Guide%20to%20CI.pdf> (accessed February 24, 2008).
- West Valley College. "African Philosophy," <http://www.westvalley.edu/ph/africa.html> (accessed March 1, 2008).
- West Virginia University. "International Studies Program," <http://internationalstudies.wvu.edu/major/curriculum/intelNC> (accessed March 15, 2008).
- Working Group on Intelligence and Law Enforcement. "Top Priorities for Improving Intelligence and Law Enforcement Capabilities," http://www.heritage.org/Research/HomelandDefense/upload/9709_1.pdf (accessed February 24, 2008).
- Zambelis, Chris. "Radical Islam in Latin America," *The Jamestown Foundation, Global Terrorism Analysis*, <http://www.jamestown.org/terrorism/news/article.php?articleid=2369844> (accessed March 1, 2008).
- Zhao, J. Leon, Henry H. Bi, and Hasinchun Chen. "Collaborative Workflow Management for Interagency Crime Analysis," *Crime Analysis: Knowledge Processes* (PowerPoint Presentation: slide 6), http://www.isiconference.org/2003/resourses/presentation/ISI03_ZBC.PPT#423 (accessed March 1, 2008).

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California