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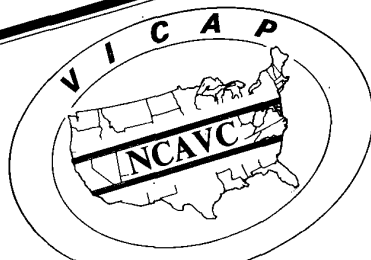
December 1986

FBI

Law Enforcement Bulletin



U.S. Department of Justice
Federal Bureau of Investigation



NATIONAL CRIMINAL APPREHENSION PROGRAM

VICAP
Crime Analysis Report

"The main idea of [NCAVC] was to bring together the fragmented efforts from around the country so that they could be consolidated into one national resource center available to the entire law enforcement community."

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ACQUISITIONS

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FBI

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Federal Bureau of Investigation
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William H. Webster, Director

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The Cover:

This special issue of the *Bulletin* reports on the National Center for the Analysis of Violent Crime, its four major programs, and the services it provides to the law enforcement community.

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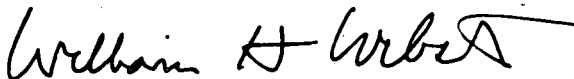
Director's Message

To further law enforcement cooperation, this issue of the *FBI Law Enforcement Bulletin* continues the reporting begun in August 1985, of developments in the National Center for the Analysis of Violent Crime (NCAVC). The need for interagency cooperation in law enforcement has become even more vital with the problem of the serial violent criminal. This highly mobile, repetitive offender often eludes identification and apprehension by law enforcement because his crimes transcend jurisdictional boundaries. This offender often confounds the investigations of separate police agencies where he operates which may not be aware of similar crimes elsewhere.

The FBI, in its dual role as a Federal criminal justice agency and as a law enforcement service organization, offers assistance to other agencies investigating these violent offenses through its NCAVC. The center is a law enforcement-oriented behavioral science and computerized resource center which consolidates research, training, and investigative support functions. It was jointly planned by the Department of Justice agencies of the National Institute of Justice (NIJ), the Office of Justice Assistance, Research and Statistics, the Office of Juvenile Justice and Delinquency Prevention, several State and local law enforcement agencies, and the FBI. NIJ initially funded the pilot project, but today the center is totally supported within the FBI's budget.

This special issue of the *Bulletin* describes the development of the center, its four major programs, and the center's services now available to law enforcement agencies. It also discloses how the center is providing training for police officers. The new insights into the criminal personality and the innovative investigative techniques developed as a result of research and case experiences of the center are immediately incorporated into training curricula. This new knowledge is also being disseminated to the law enforcement community through articles in professional journals, such as the *FBI Law Enforcement Bulletin*, in addition to the center's direct training efforts.

All of us in law enforcement must work together to combat the violent criminal and use every technique available to us. Inscribed on the courtyard wall of FBI Headquarters is our belief: "The most effective weapon against crime is cooperation . . . the efforts of all law enforcement agencies with the support and understanding of the American people." The center is now an important asset to law enforcement in the struggle to control the serial violent offender.



William H. Webster
Director
December 1, 1986

An American Response to an Era of Violence

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The year 1980 marked the beginning of a new decade. It was a time for looking back at the record and evaluating America's progress toward the good life on the one hand and for looking ahead toward the best possible future on the other. Despite many significant accomplishments made during the previous decade, one glaring societal failure stood out. Violent crime had steadily increased in American society and it was continuing to increase at an alarming rate.¹ In fact, the violent crime wave which had begun in 1963 was showing no signs of abatement well into 1980.² One of the more reliable indexes, the homicide rate had more than doubled since 1962. More than 20,000 people were being murdered per year as we entered the new decade. The year 1980 itself became a record year with more than 23,000 people becoming victims of homicide.³ It was unprecedented mayhem. The rates for other serious violent crimes, such as aggravated assault, forcible rape, and robbery, were equally disturbing. Predatory stranger-to-stranger violent crime was increasing steadily, while the number of cases cleared by arrest were decreasing.⁴ Lois Haight Herrington, Chairperson of the President's Task Force on Victims of Crime, summarized the national situation like this:

"Something insidious has happened in America: crime has made

victims of us all. Awareness of its danger affects the way we think, where we live, where we go, what we buy, how we raise our children, and the quality of our lives as we age. The specter of violent crime and the knowledge that, without warning, any person can be attacked or crippled, robbed, or killed, lurks at the fringes of consciousness. Every citizen of this country is more impoverished, less free, more fearful, and less safe, because of the ever present threat of the criminal. Rather than alter a system that has proven itself incapable of dealing with crime, society has altered itself."⁵

It was a downward spiral. Something had to be done.

In 1981, the Attorney General of the United States, William French Smith, established the Attorney General's Task Force on Violent Crime. It was his intention to assemble a group of knowledgeable individuals who were highly recognized for their expertise in a variety of pertinent professions and academic disciplines to study the problem of violent crime in America. The task force was to make recommendations regarding what might be done to curb the rapid growth of violent crime and to reduce its adverse impact on the quality of American life.⁶



Special Agent Depue

In addition to establishing the task force, Smith required each agency of the Department of Justice to submit a report outlining what the agency might do to assist in a national effort to reduce the level of violent crime. The Federal Bureau of Investigation (FBI) received its mandate, and Director William H. Webster began a systematic survey of Bureau resources to determine those which could be applied to this national cause. The FBI's Training Division located at the FBI Academy at Quantico, VA, was immediately considered to be a major resource to draw upon for ideas. It was often used as a think tank to address issues of this nature. After submitting its initial report, the Training Division was designated the lead division in formulating the FBI's role in combating violent crime in America, and within it, the Behavioral Science Unit (BSU) became the center of activity.

Over the years, the BSU had established an impressive record of furnishing assistance to Federal, State, and local law enforcement agencies. During training on violent criminal behavior, police officers would frequently discuss unsolved cases and ask for the instructor's opinion about the type of person they might be seeking. They were also interested in obtaining innovative investigative ideas, and the instructors helped them plan case strategies. Soon, the BSU was consulting on unsolved cases on a regular basis through a formalized Crime Analysis and Criminal Personality Profiling Program.

FBI Agents from the Behavioral Science Unit had also completed the first law enforcement-oriented behavioral science Criminal Personality Research Project. Thirty-six of the most notorious sexually oriented serial murderers incarcerated at that time and

their hundreds of crimes had been analyzed.⁷ The research instrument consisted of a 5-part, 57-page protocol which was completed in conjunction with 5- to 10-hour intensive interviews of the murderers by veteran FBI Agents with behavioral science backgrounds. The overall purpose was to elicit information regarding each offender's developmental history; physical and personality characteristics; modus operandi; pre- and post-offense behavior; victim selection, manipulation, and control; and techniques used to successfully evade detection, apprehension, prosecution, and confinement.

The research was conducted with the assistance of academic and mental health consultants who were led by Dr. Ann Wolbert Burgess of Boston City Hospital and Boston University (now at the University of Pennsylvania). The National Institute of Justice (NIJ) awarded a grant to Dr. Burgess to pursue the project with her FBI colleagues. The research resulted in the development of valuable investigative techniques, as well as insights into the personalities of these killers. This body of knowledge served to enhance training and consultation functions. The staff of the BSU was often called upon to address criminal justice and behavioral science conferences and symposia on violent crime matters.

In addition to their training, research, and consultation functions specifically designed to help law enforcement officers deal more effectively with violent crime, members of the Behavioral Science Unit traveling throughout the country had occasion to observe a variety of State and local programs designed to deal with violent crime problems and to identify the best. Ideas such as former Los Angeles

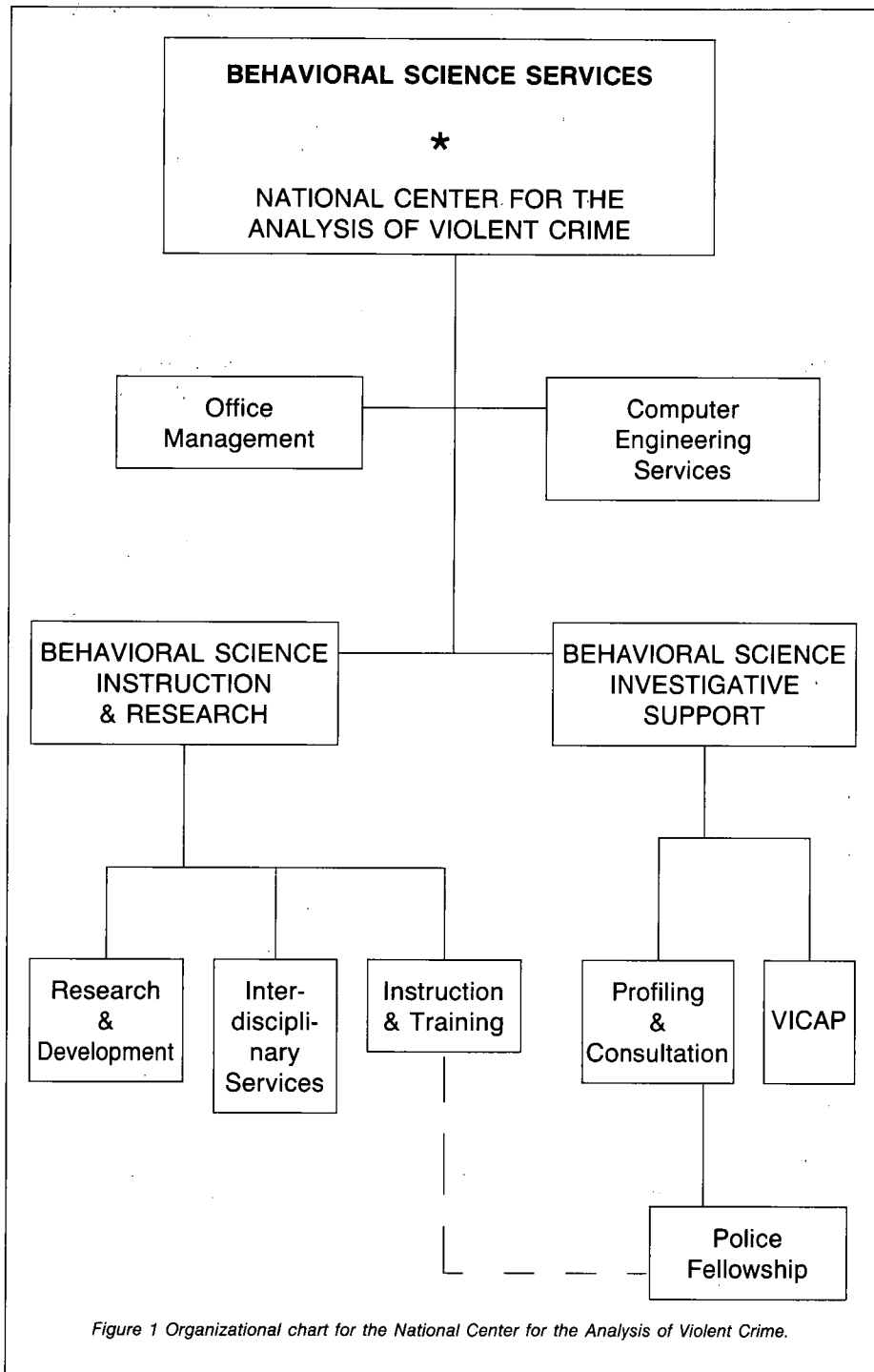


Figure 1 Organizational chart for the National Center for the Analysis of Violent Crime.

Police Department Commander Pierce R. Brooks' Violent Criminal Apprehension Program (VICAP) and the Arson Information Management System (AIMS), codeveloped by Dr. David Ilove, were identified, and their founders invited to the FBI Academy for consultation. Such a meeting was held with the Criminal

Personality Research Project Advisory Board in November 1982, and resulted in the concept of a National Center for the Analysis of Violent Crime (NCAVC). The main idea of this center was to bring together the fragmented efforts from around the country so that they could be consolidated into one national

resource center available to the entire law enforcement community.

In addition to the Attorney General's emphasis on the problem of violent crime, the 98th Congress of the United States had shown interest in specific violent crime issues, such as "missing and murdered children," "sexual exploitation of children," "unidentified dead bodies," and "serial killers."⁸ For instance, in 1983, Senator Arlen Specter, Chairperson of the Subcommittee on Juvenile Justice, Committee on the Judiciary, U.S. Senate, with the strong support of Senator Paula Hawkins, held hearings as a means of gaining information from violent crime "experts" upon which to base new legislative initiatives and funding decisions. The goal was to strengthen the criminal justice system's capabilities to deal more effectively with a breed of human predator that often seemed to travel throughout the country with relative impunity, coldly murdering vulnerable women and children for no apparent motive.

Since 1982, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) had been investigating the possibility of awarding a grant to a diversified group of individuals made up of criminal justice professionals, academicians, writers, and other interested persons in order to establish a pilot VICAP program. Together with the National Institute of Justice, OJJDP funded a meeting of interested parties which was held in the summer of 1983 at Sam Houston State University's Center for Criminal Justice, located in Huntsville, TX. At the conclusion of the 2-day meeting, and after several presentations on violent crime topics, the participants unanimously agreed that a National Center for the Analysis of Violent Crime should be established. Furthermore, they agreed that it should be administered by the FBI's Behavioral

"The NCAVC's role... is to serve as a law enforcement clearinghouse and resource center for the most baffling and fearful of the unsolved violent crimes...."

Science Unit and physically located at the FBI Academy. It was to be a law enforcement-oriented behavioral science and data processing resource center to consolidate research, training, and consultation functions for the purpose of providing assistance to Federal, State, and local law enforcement agencies who were confronted with unusual, bizarre, and/or particularly vicious or repetitive violent crime.

Speaking at the National Sheriff's Association Annual Conference in Hartford, CT, on June 21, 1984, President Ronald Reagan announced the establishment of the NCAVC with the primary mission of identifying and tracking repeat killers.⁹ It was described as a joint project of the Department of Justice and the FBI.

In June 1984, the NCAVC was given life as a pilot project supported with NIJ funds furnished by way of an interagency agreement between the NIJ and the FBI. In October 1985, the total cost of funding the center was absorbed in the annual budget of the FBI.

As it was originally conceived, the NCAVC consisted of four programs—Research and Development, Training, Profiling and Consultation, and VICAP. These four basic programs constituted the backbone of the NCAVC and continue to exist today; however, the FBI has found it administratively feasible to divide the programs within two Behavioral Science Units.

In January 1986, the original Behavioral Science Unit which administered the NCAVC was split into two units, with each unit responsible for the administration of two of the four NCAVC programs. The Behavioral Science Instruction and Research (BSIR) Unit continues the traditional training functions of the original Behavioral Science Unit, as well as administers the Research and Develop-

ment and the Training Programs of the NCAVC. The Behavioral Science Investigative Support (BSIS) Unit administers the Profiling and Consultation and the Violent Criminal Apprehension Programs of the NCAVC. The chief of the BSIR is the administrator and the chief of the BSIS is the deputy administrator. The organizational chart of the NCAVC is set out in figure 1.

The overall goal has been to reduce the amount of violent crime in American society. The NCAVC's role in this regard is to serve as a law enforcement clearinghouse and resource center for the most baffling and fearful of the unsolved violent crimes, such as homicide, forcible rape, child molestation/abduction, and arson. The NCAVC collects and analyzes violent crime data and provides assistance to law enforcement agencies in their attempts to identify, locate, apprehend, prosecute, and incarcerate the persons responsible for these and other violent crimes and to develop new programs for the prevention of violent crime victimization.

The NCAVC represents a new and powerful weapon in the law enforcement arsenal to combat violent crime. Its research efforts are bringing forth new insights into violent criminal behavior and personality. Its training programs are disseminating the latest violent crime information and investigative techniques. More and more cases are being successfully analyzed, and criminal profiles are being constructed with remarkable accuracy. Imaginative investigative and prosecutive strategies are being developed, resulting in earlier detection and arrest and more-certain conviction and confinement. VICAP is operating to link unsolved violent crimes to one another from throughout the country and to provide assistance in the coordination of complex interagency investigations.

The latest advancements in computer engineering are being applied to violent crime problems with promising results.

The concerted efforts of the U.S. Congress, the Department of Justice, and Federal, State, and local criminal justice agencies to bring violent crime under control have made a difference in America. They have contributed to slowing the downward spiral and increasing the risk for the violent offender. The National Center for the Analysis of Violent Crime was born out of these national efforts and represents the new feeling in America. We are not only going to fight back—we are going to win.

FBI

Footnotes

¹ Federal Bureau of Investigation, *Crime in the United States—1984* (Washington, DC: U.S. Department of Justice, 1985).

² James Q. Wilson, *Thinking About Crime* (New York: Basic Books, 1975), p. 5.

³ Supra note 1.

⁴ R. M. Holmes and J. E. DeBurger, "Profiles in Terror: The Serial Murderer," *Federal Probation*, vol. 49, 1985, pp. 29-34.

⁵ *Final Report of the President's Task Force on Victims of Crime*, by L. H. Herrington, Chairperson (Library of Congress Cataloging in Publication Data Report No. 82-24146) (Washington, DC: The White House, 1982), p. vi.

⁶ Report of Attorney General's Task Force on Violent Crime, Washington, DC, 1981.

⁷ "Crime Scene and Profile Characteristics of Organized and Disorganized Murderers," *FBI Law Enforcement Bulletin*, vol. 54, No. 8, August 1985, pp. 18-25.

⁸ U.S. Congress, Senate, Committee on the Judiciary, *Patterns of Murders Committed by One Person, in Large Numbers with No Apparent Rhyme, Reason, or Motivation*. Hearings before the Subcommittee on Juvenile Justice of the Committee on the Judiciary, 98th Congress, 1st sess., June 1983, (Serial No. J-98-52) (Washington, DC: U.S. Government Printing Office).

⁹ B. T. Roessner, "President Extols 'War on Crime,'" *The Hartford Courant*, June 21, 1984, pp. A1, A14.

NCAVC'S Research and Development Program

By

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Research is often regarded as either a complex and arcane art form or a simple review of literature. Consequently, it is frequently considered to be a luxury that an organization can do without. In the Behavioral Science Services/National Center for the Analysis of Violent Crime (NCAVC) at the FBI Academy, the Research and Development Program is an integral part of the process of analysis of violent crime. Since the inception of crime scene analysis—also called profiling—much of the original information that was used to profile the offender of violent crimes was taken from the existing research. However, most of that research was oriented to the academic community and provided little that was useful to the type of profiling done by members of the NCAVC.

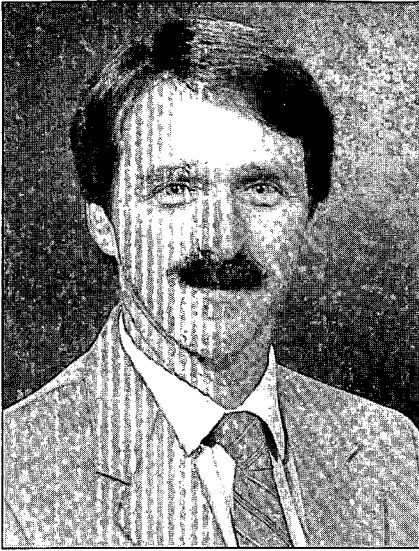
As the number of cases submitted to what was then called the Behavioral Science Unit (BSU) for profiling increased, the necessity for additional relevant data became obvious. Information was needed about the offender, his methods of operation, his victim selection, his personality makeup, and his view of himself. Moreover, by 1978, BSU members were profiling more than unsolved homicides; they were also profiling rapes, arsons, extortions, and other violent and nonviolent offenses.

In 1979, the BSU received approval to institute the Criminal Personality Research Project (CPRP), in which the unit members conducted preliminary research on violent offenders. Equipped with a protocol that covered most aspects of the offense and many facets of the offender's personality, the Special Agents conducted extensive interviews of incarcerated violent offenders.

It was through the CPRP that researchers outside the FBI became involved in the unit's violent crime

research. As interviews were conducted of rapists and murderers, some of the findings were presented to various academic and professional groups. Among those interested in the research was Dr. Ann W. Burgess of the Boston City Hospital. Her enthusiasm to continue the research on violent offenders led her to obtain several grants from the Department of Justice to conduct research with the FBI. Members of the NCAVC have been collaborating with Dr. Burgess in the research studies in some of these grants, the first of which was obtained in 1982.

Using a refined version of the first protocol, BSU members and Dr. Burgess continued the study of serial murderers (so called because they killed several victims over a period of time). Another grant was awarded for research on serial rapists and child abductors/molesters. Results from the first grant are being published in profes-



Special Agent Ault

sional journals, including the special issue of the *FBI Law Enforcement Bulletin* in August 1985. Results of the rape study will be published in the near future.

Current Research

The function of the Research and Development Program in the NCAVC is to generate interest in research, provide administrative support for approved research projects, and to assure that the results are consistent with the methodology.

The studies of violent offenders and violent crimes are not the only projects that the NCAVC has conducted. In 1985, a rape survey was completed which inquired into the attitudes of police toward rape. Police are often depicted in popular literature as insensitive or even hostile to rape victims. The results of the study on police attitudes toward rape determined that police are *not* insensitive to the plight of rape victims. Moreover, police strongly view rape as a serious crime deserving severe punishment. The value of this study is found in the contribution of empirical research that corrects popular misconceptions and reveals what the police themselves think about other aspects of the criminal justice system which prosecutes the offenders.

Another research project accomplished by the NCAVC involved an inquiry into risk-taking and life-experience stress by police officers. The purpose of the study was to ascertain the relationship of recent life

experiences—such as divorce, marriage, change of environment—and load stress to risk-taking. Among the results, the researcher found that even though police officers with greater negative life experiences (divorce, death in the family, etc.) took more risks, they did not necessarily fail to achieve their goal more. That is, they may take more risks to achieve a goal, but those risks will not necessarily result in failure.

Still other important research includes studies on arson. The capability exists in the NCAVC to analyze multiple arsons. One NCAVC member developed a computer-assisted system to collect, organize, and analyze information that is important in the evaluation of multiple arson cases. Called the Arson Information Management System (AIMS), it provides computer assistance to fire departments and police to help them develop strategies to predict and prevent multiple incendiary crimes. The latest application of computer analysis of arson is set out in a study based on information received from the Prince Georges County, MD, Fire Department. The results of the study provide significant information on profiles of offenders and their motives for the offenses. Providing the law enforcement community accurate information about motives of perpetrators enables investigators to conduct logical, motive-based investigations. The importance of this type of accurate information cannot be overstated, and the results of these studies will be published in future issues of the *FBI Law Enforcement Bulletin*.

“Providing the law enforcement community accurate information about motives of perpetrators enables investigators to conduct logical, motive-based investigations.”



Left: Special Agent Robert K. Ressler consults with the project staff of the Criminal Personality Research Program at Boston City Hospital. Pictured are: Dr. Ann W. Burgess (at computer) and (standing from left) SA Ressler, HollyJean Chaplick, Marianne Clark, and Peter Gaccione.

Below: Checking a reference are SA Ault and Cindy Lent.



Research is also currently conducted in other topics such as the history of psychological services in policing and the administrative goals of the NCAVC. These projects will be finished in the near future, and their conclusions published as they are completed.

Yet another important area for research is terrorism. An NCAVC member will soon be publishing the results of several years of research into training programs that are designed to enable individuals who may be held as hostages in terrorist—or other—situations to cope more effectively with the stress of their captivity. This research emphasizes hostage survival.

The future itself is a study for the NCAVC. The anticipation of future problems in law enforcement is not being neglected. Using Delphi methodology, a member of the NCAVC is now completing a serious study that attempts to determine the directions of law enforcement in the next 20 years.

Future Research

The future also holds promise for other research topics. Using unique—yet valid—methods for research, members of the NCAVC can address such areas as public corruption, fugitives from justice, jury selection, child molestation, terrorism, and extortion. In fact, areas in the criminal justice system still needing research are limitless.

The changing image and mission of the FBI in the past 10 years have provided the National Center for the Analysis of Violent Crime with an unparalleled opportunity to dig into the foundations of violent and nonviolent crimes with the hope of discovering clues about the behavior of offenders that can be applied in a practical fashion to investigations. Members of the NCAVC hope to continue searching to support investigations into violent crime.

FBI

Criminal Profiling

A Viable Investigative Tool Against Violent Crime

Quickly apprehending a perpetrator of a violent crime—rape, homicide, child abduction—is a major goal of all law enforcement agencies. Unlike other disciplines concerned with human violence, law enforcement does not, as a primary objective, seek to explain the actions of a violent offender. Instead, its task is to ascertain the identity of the offender based on what is known of his actions. Described by one author as an emitter of signals during commission of a crime,¹ the criminal must be identified as quickly as possible to prevent further violence. While studies explaining why certain individuals commit violent crimes may aid them in their search, law enforcement investigators must adapt the study findings to suit their own particular needs. Criminal profiling is a tool law enforcement may use to combine the results of studies in other disciplines with more traditional techniques in an effort to combat violent crime.

The Profiling Process

The profiling process is defined by the FBI as an investigative technique by which to identify the major personality and behavioral characteristics of the offender based upon an analysis of the crime(s) he or she has committed. The process generally involves seven steps.

- 1) Evaluation of the criminal act itself,
- 2) Comprehensive evaluation of the specifics of the crime scene(s),
- 3) Comprehensive analysis of the victim,
- 4) Evaluation of preliminary police reports,
- 5) Evaluation of the medical examiner's autopsy protocol,
- 6) Development of profile with critical offender characteristics, and
- 7) Investigative suggestions predicated on construction of the profile.

The process used by the person preparing a criminal personality profile is quite similar to that used by clinicians to make a diagnosis and treatment plan: Data is collected and assessed, the situation reconstructed, hypotheses are formulated, a profile developed and tested, and the results reported back.

Criminal personality profiling has been used by law enforcement with success in many areas and is viewed as a way in which the investigating officer can narrow the scope of an investigation. Profiling unfortunately does not provide the identity of the offender, but it does indicate the type of person most likely to have committed a crime having certain unique characteristics.

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Profile Applications

One area in which criminal profiling (personality assessment) has been useful is in hostage negotiation.² Law enforcement officers need to learn as much as possible about the hostage taker in order to protect the lives of the hostages. They must be able to assess the subject in terms of his probable course of action and his reactions to various stimuli. In such cases, police obtain information about the offender through verbal contact with the hostage taker and possibly through access to his family and associates.

Criminal profiling techniques have also been used in identifying anonymous letter writers³ and persons who make written or spoken threats of violence.⁴ In cases of the latter, psycholinguistic techniques have been used to compose a "threat dictionary," whereby every word in a message is assigned, by computer, to a specific category. Words as they are used in the message are then compared to those words as they are used in ordinary speech or writings, and the vocabulary usage of a particular author or speaker may yield "signature" words unique to that individual. In this way, police may not only be able to determine that several letters were written by the same individual but also learn about the background and psychology of the offender.

Rapists and arsonists also lend themselves to criminal profiling techniques. Through careful interview of the rape victim about the rapist's behavior, law enforcement personnel may be able

to build a profile of the offender.⁵ The theory behind this approach is that behavior (sexual, physical, verbal) reflects personality, and by examining the behavior of the rapist during the assault, the investigator may be able to determine what type of person is responsible for the offense. Common characteristics of arsonists have been derived from an analysis of the Uniform Crime Reports.⁶ Knowledge of the arsonist's psychodynamics can aid the investigator in identifying possible suspects, predicting location of subsequent arsons, and developing techniques and strategies for interviewing suspects.

Criminal profiling has been useful in investigating sexual homicides because many of these crimes appear motiveless and thus offer few obvious clues about the killer's identity. In murders that result from jealousy or a family quarrel, or take place during commission of a felony, the readily identifiable motive generally provides vital information about the identity of the killer. Because many sexual homicides fail to provide this information, investigators must look to methods that supplement conventional investigative techniques to identify the perpetrator.

Case in Point

Criminal profiling uses the behavioral characteristics of the offender as its basis. Sexual homicides, for example, yield much information about the mind and motivation of the killer. A new dimension is provided to the investigator via the profiling technique, particularly in cases where the underlying motivation for the crime may be suddenly hidden from even the more-

“Criminal profiling uses the behavioral characteristics of the offender as its basis.”



On occasion, NCAVC profilers or major case specialists will conduct on-site consultations. Pictured from left are Special Agents Robert Hazelwood, Ray Phelps, James Wright (kneeling), Robert Ressler, and Alan Burgess.

experienced detective. The following case will illustrate this point.

During the fall of 1982, an urban Midwest police department detective telephonically contacted the FBI's Behavioral Science Unit at the FBI Academy asking for some assistance. The detective described in detail the rape/murder of a 25-year-old white married woman. The detective advised that the apartment where the victim was killed had been ransacked, but they were unable to determine at that time if anything was taken by the killer. In view of the fact that many leads were still outstanding and information concerning the autopsy, laboratory exami-

nations, background of the victim, previously reported neighborhood crimes, etc., was still pending, the detective was advised that a profile could not be provided at that time. After approximately 1 week, the detective forwarded the necessary information to the local FBI field office criminal profile coordinator. After reviewing the case for completeness, the profile coordinator forwarded the materials to the Behavioral Science Investigative Support Unit at the FBI Academy for analysis.

Color 8 x 10 crime scene photographs re-created the crime and revealed that the victim was killed in her living room, with no evidence of any struggle or defense attempts by her. The victim was lying face up on the living room floor. Her dress was raised up over her hips exposing her genital area,

and her panties were pulled down to her knees. The murder weapon (hammer) belonging to the victim was found in kitchen sink, and it appeared that the victim's blood had been washed off the hammer by the subject. Crime scene photographs further revealed that the subject opened dresser drawers and closet doors. Investigative reports indicated the victim's husband advised that jewelry belonging to victim was missing.

The victim and her husband had lived in the apartment for approximately 6 months, and neighbors and associates reported they were friendly and quiet and kept to themselves. The medical examiner concluded in his

“Profiling . . . does not provide the identity of the offender, but it does indicate the type of person most likely to have committed a crime having certain unique characteristics.”



Profilers in “think tank” session. Seated: SAs James Wright, Patricia Kirby, and Ronald Walker. Standing: Lt. Thomas Cronin, Chicago PD, Police Fellow (left) and SA R. Stephen Margician (right)

protocol that there was no apparent indication that the victim was sexually assaulted. Laboratory reports indicated that the victim had been drinking at the time of the assault, and there was no evidence of semen present in or on the victim or her clothing.

From the above information, the criminal profiler advised the detective that he had already interviewed the killer. The surprised detective was presented with the following probable crime scenario.

The victim was drinking with the offender prior to her death. An argument ensued, reaching a threshold where the offender could not take it any longer. Angered, he obtained a “weapon of opportunity” from a kitchen cabinet and

returned to the living room where he confronted the victim face to face and repeatedly struck victim about her head and face. After killing her, the offender realized that the police would surely implicate him as the obvious murderer. He then washed blood from his hands in the kitchen sink and also cleaned blood and fingerprints from the hammer. He rolled the victim over in a face-up position and “staged” the crime to appear the way he felt a sexually motivated crime should look. He conducted the staging by making it appear that the offender searched for money or personal property in the apartment.

Upon hearing this analysis of the crime, the detective exclaimed, “You just told me the husband did it.”

The detective was coached regarding suggested reinterview techniques of the victim’s husband. In addition, the detective was further advised that if the victim’s husband were given a polygraph examination, he in all probability would react more strongly to the known fact that he was “soiled” by his wife’s blood than to questions concerning his wife’s murder. The detective was told to have the polygraph examiner direct questions at the husband, acknowledging the fact that he got blood on his hands and washed them off along with the hammer in the kitchen sink.

About 5 days later, the detective called the criminal profiler to advise that the victim’s husband was charged with murder. According to the detective, the husband failed the polygraph and subsequently admitted his guilt to the polygraph examiner.

The Profiling and Consultation Program

The FBI's profiling program has grown considerably since the late 1970's from "informal" analysis and profiling during criminal psychology classes at the FBI Academy to the present formalized program. Currently, the program consists of one program manager and seven criminal profilers and crime analysts. These Agents were selected primarily for their investigative experience, expertise, and educational backgrounds. The Behavioral Science Investigative Support Unit has found that anyone seeking transfer into this highly specialized program must possess above all other attributes and accomplishments a strong investigative background that includes participating in, supervising, and managing major case assignments.

During 1985, the Criminal Profiling and Consultation Program received over 600 requests for profiling assistance. It is anticipated that once the FBI's Violent Criminal Apprehension Program (VICAP) is fully operational, the number of profiling requests will nearly double annually.

One key link to the success of the FBI's Criminal Profiling Program is its criminal profile coordinators who are located at every one of the FBI's 59 field offices. These highly trained and selected Agents are responsible for screening cases and for providing preliminary investigative suggestions to investigators. While the field coordinators do not have the authority to provide profiles to requesting law enforcement agencies, they are authorized to prepare preliminary "rough draft" profiles which are reviewed by the profiling staff at the FBI Academy prior to being disseminated to the requesting agency.

Criminal profiling is available to local, State, Federal, and foreign law enforcement agencies or departments. It should be noted that not every violent crime matter lends itself to the profiling process. The criminal profile coordinators in the FBI field offices determine during review of the case whether it can be profiled. However, while a case may not be suitable for profiling, the coordinator may still submit it to the Behavioral Science Unit for other types of services. Criminal profilers at the FBI Academy may assist the law enforcement community by providing interview/interrogation techniques, investigative suggestions and techniques, establish probable cause for search warrants as a result of National Center for the Analysis of Violent Crime violent offender research findings, assist prosecutors relative to prosecutive strategies, and possibly provide testimony as a witness for the prosecution or as an expert witness during the sentence phase of the trial. All cases must be submitted to the local FBI field office for review and administrative handling by that criminal profile coordinator.

Lt. Commdr. Vernon J. Geberth of the New York City Police Department wrote in his book, *Practical Homicide Investigation: Tactics, Procedures and Forensic Techniques*, "This program has proven to be beneficial to law enforcement and has provided homicide detectives with a viable investigative tool..."⁷

Criminal profiling will never take the place of a thorough and well-planned investigation nor will it ever eliminate the seasoned, highly trained, and skilled detective. Criminal profiling has, however, developed itself to a level

where the detective has another investigative weapon available to him in solving a violent crime. The offender, on the other hand, has an added worry that in time he will be identified, indicted, successfully prosecuted, and sentenced for his crime.

FBI

Footnotes

¹ M. Willmer, *Crime and Information Theory* (Edinburgh, England: The University of Edinburgh, 1970).

² M. Reiser, "Crime-specific Psychological Consultation," *The Police Chief*, March 1982, pp. 53-56.

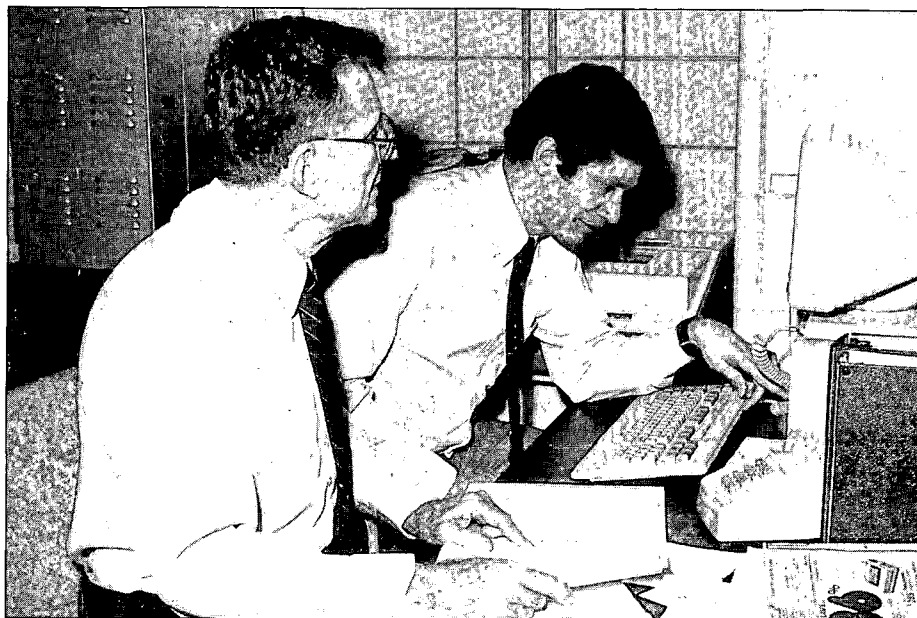
³ M. Casey-Owens, "The Anonymous Letter Writer—A Psychological Profile?" *Journal of Forensic Science*, vol. 29, 1984, pp. 816-819.

⁴ M. S. Miron and John E. Douglas, "Threat Analysis: The Psycholinguistic Profile," *FBI Law Enforcement Bulletin*, vol. 48, No. 9, September 1979, pp. 5-9.

⁵ R. R. Hazelwood, "The Behavior-oriented Interview of Rape Victims: The Key to Profiling," *FBI Law Enforcement Bulletin*, vol. 52, No. 9, September 1983, pp. 8-15.

⁶ A. O. Rider, "The Firesetter—A Psychological Profile," *FBI Law Enforcement Bulletin*, vol. 49, No. 6, June 1980, pp. 4-11.

⁷ Vernon J. Geberth, *Practical Homicide Investigation: Tactics, Procedures and Forensic Techniques* (New York: Elsevier, 1983), p. 399.



Right: Pierce R. Brooks (left), originator and first Program Manager of VICAP, and David J. Ilove enter crime report data into the VICAP computer system.

Far center: Mr. Brooks (left) and Special Agent Ressler (right)

Far right: Mr. Howlett (left) and Mr. Hanfland (right)

The Violent Criminal Apprehension Program

VICAP: A Progress Report

By

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Crime Analyst VICAP

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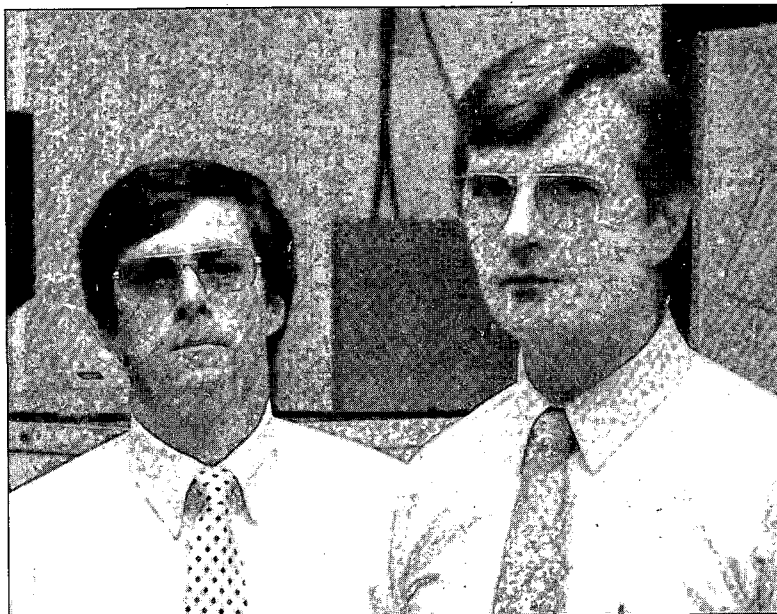
FBI Academy Quantico, VA

Origin of the VICAP Concept

On the afternoon of May 29, 1985, Pierce R. Brooks sat down in front of a computer terminal at the FBI Academy and saw his idea, which was some 27 years in the making, become a reality. On that afternoon, he watched as data from the first VICAP crime report were entered into the brand new VICAP computer system. Brooks, who had lived at the FBI Academy for approximately 9 months while serving as the first program manager of the FBI's new Violent Criminal Apprehension Program, was just 2 days from returning to his wife and home in Vida, OR.

In 1958, Pierce Brooks, already a 10-year veteran with the Los Angeles Police Department, had been assigned two "different" homicides among his many cases. He believed that both killers had killed before and decided to attempt to find out if similar murders had occurred elsewhere in the country. His available resources were sparse. There was no national information center which collected information on the modus operandi (MOs) of transient killers. There was a teletype system, but teletypes were easily lost and many were not even read. Brooks employed a new tact in the investigations; he

“...VICAP is a nationwide data information center designed to collect, collate, and analyze specific crimes of violence.”



began going to the city library and reviewing major city newspapers looking for stories describing similar cases.

The use of the library to search for similar cases during a homicide investigation in the late 1950's was a primitive forerunner of VICAP. It was that effort which spawned the idea that grew into today's reality.

VICAP and the FBI

During the 1970's, Brooks spoke with officials of the U.S. Department of Justice about his concept. Eventually, LEAA funds were approved to finance a task force to study the idea. Homicide investigators, crime analysts, and other criminal justice experts from over 20 State and local law enforcement agencies participated.

Coincidental with the activities of the VICAP Task Force were discussions by members of the FBI's Behavioral Science Unit (BSU) at the FBI Academy

regarding the development of a National Center for the Analysis of Violent Crime (NCAVC). The NCAVC was seen as a formalization and extension of the existing programs within the unit, as well as an attempt to identify other innovative concepts being developed around the country. The BSU programs had resulted from the work in the development of criminal personality profiling and the supporting research done by members of the unit in the area of violent crime.

A BSU staff member joined the VICAP Task Force, and the Behavioral Science Unit programs merged conceptually with VICAP. In 1984, the National Center for the Analysis of Violent Crime was formally established by an interagency transfer of funds from the National Institute of Justice to the FBI.

VICAP had until then been only a concept, and it was decided that the first year of operation would be considered a field test of all aspects of the program, including the VICAP Crime Report form,

the computer support system, and internal procedures. VICAP officially became operational on May 29, 1985, 2 days before the self-imposed deadline of June 1, 1985.

What is VICAP?

As envisioned by Brooks and implemented by the FBI with his assistance, VICAP is a nationwide data information center designed to collect, collate, and analyze specific crimes of violence. Currently, cases which meet the following criteria are accepted by VICAP:

- 1) Solved or unsolved homicides or attempts, especially those that involve an abduction; are apparently random, motiveless, or sexually oriented; or are known or suspected to be part of a series;

"By analyzing the case-related information submitted by law pattern characteristics exist among th



Right: Checking VICAP entries are Mr. Hanfland (standing), Constance Dodd (left), and Michael Mahieu (right).

Far center: Anna Boodee (seated left), Mr. Howlett (center), and Roland Reboussin (right).

Far right: Tracking criminals are major case specialists Winston Norman (left) and Terence Green (right).

- 2) Missing persons, where the circumstances indicate a strong possibility of foul play and the victim is still missing;
- 3) Unidentified dead bodies where the manner of death is known or suspected to be homicide.

It is important that cases in which the offender has been arrested or identified are still submitted so that unsolved cases in the VICAP system can be evaluated for possible linkage to known offenders. Also, it is anticipated that the VICAP system will be expanded to include rape, child sexual abuse, and arson cases within the next 12 to 24 months.

By analyzing the case-related information submitted by law enforcement agencies, the VICAP staff determines if

similar pattern characteristics exist among the individual cases in the VICAP system. The identification of similar patterns is made by analyzing MO, victimology, physical evidence, suspect description, and suspect behavior exhibited before, during, and after the crime.

The goal of VICAP is to provide all law enforcement agencies reporting similar pattern violent crimes with the information necessary to initiate a coordinated multiagency investigation which will lead to the expeditious identification and apprehension of the offender responsible for the crimes.

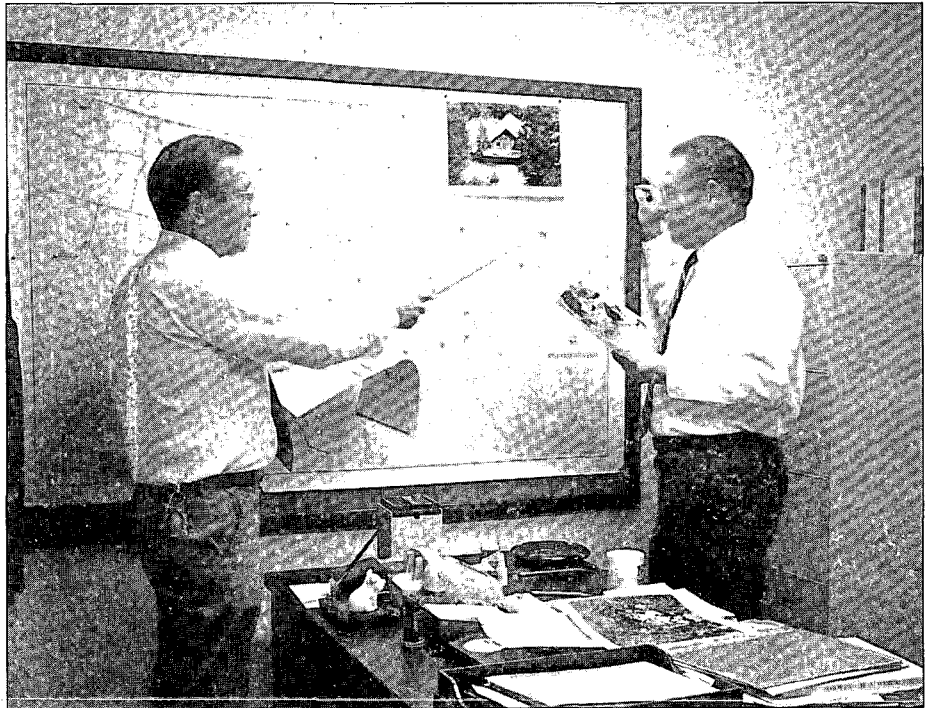
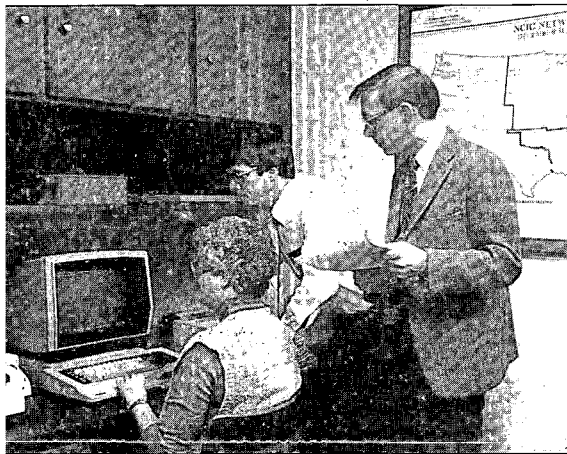
VICAP's First Year

The attainment of the first objective, becoming "operational" by June 1, 1985, and the entry of the first data into the computer were, of course, only the beginning. A very comprehensive,

three-part VICAP Crime Report form had been developed to collect the information necessary to support the operations of VICAP. The Bureau's profile coordinators from each of the 59 field divisions received in-depth training regarding the VICAP Program itself, as well as the use and completion of the report form. It then became the job of these individuals to provide training to State and local law enforcement personnel, especially homicide investigators, regarding VICAP and the submission of information using the form.

Perhaps the largest task was that of continuing the development of the computer programs necessary to allow the analysts to manipulate the vast amounts of data in a meaningful way.

enforcement agencies, the VICAP staff determines if similar individual cases in the VICAP system.”



The level of detail collected by the report form dictated that large and complex programs be developed. And the type of case matching demanded by VICAP had never been accomplished before on such a large scale. All of these factors combined to make the entire development process slow and occasionally frustrating.

A Major Revision

Approximately 6 months after VICAP began to receive cases for entry into the system, two things became evident. First, the number of cases being received by VICAP was fewer than originally anticipated. Second, developing a good understanding or overview of individual cases from information contained in the VICAP reports was difficult for the VICAP staff. The VICAP

Crime Report form was collecting information that was too detailed for its intended purpose of providing crime analysts with the information necessary to establish linkages among cases.

VICAP's purpose was not to investigate cases but to analyze them. In order to do so effectively, general patterns have to be discernible, and that is better done by establishing the general parameters of events rather than extremely specific reconstructions. Crime scenes are seldom exactly replicated, but general MOs are. Crime analysis and criminal investigation require different levels of specificity.

In addition, feedback regarding the report form was being received from the investigators who were completing the form. A vast majority commented that it was "just too time consuming." The value of VICAP and the benefits to be derived from completing the form were

not the issues. It was, however, becoming apparent that the time had come to carefully review and reevaluate the VICAP Crime Report.

In early 1986, the report underwent an extensive review, revision, and validation process. The revision was tested during controlled tests by over 30 experienced investigators attending the 144th Session of the FBI National Academy and modified further based upon their input. Finally, it was reviewed by nationally known homicide investigators who had both an extensive knowledge of VICAP and extensive experience completing the existing form. The final product of these efforts is the VICAP Crime Analysis Report form.

"VICAP and the National Center for the Analysis of Violent Crime have been developed to serve State and local law enforcement."

The VICAP Crime Analysis Report Form

The VICAP Crime Analysis Report form was released in July 1986. It is both shorter and simpler than the prototype. Most of the 15 pages to be completed are checklists, which can be answered in 15-20 minutes.

Information which was submitted to VICAP on the first form and which is already in the VICAP computer system will not be lost or need to be reported again. It will be converted automatically to be compatible with information reported using the new form.

From the perspective of the VICAP staff, the report is expected to be both more effective and efficient. Efficiencies will be gained in the review and data entry functions, as well as in the time required for computer processing of the data. The relative simplicity of the information, a brief narrative of the case, and the amenability of the data to analytical manipulation will all serve to enhance effectiveness.

Local law enforcement agencies have expressed concern with regard to the security of the cases they submit to VICAP. As originally planned, VICAP is a confidential system. Based upon Privacy Act guidelines, the substance of each case remains within the VICAP system and will not be disseminated without prior approval of the submitting agency. When cases are linked through VICAP, the investigators in the local agencies are given each others' names and telephone numbers so they can coordinate their efforts.

The availability of the VICAP Crime Analysis Report form will also be improved. It is the desire of the VICAP staff to have the report distributed to and stocked by every law enforcement agency in the country. The initial

distribution may be limited to jurisdictions over 50,000 in population, but as additional copies are printed, the distribution will widen.

If you need a copy or copies of the form and your department has not received them, contact either the nearest FBI field office or resident agency or write or call VICAP directly. The address is:

VICAP
NCAVC
FBI Academy
Quantico, VA 22135

Or call (703) 640-6131 and ask to be connected with VICAP.

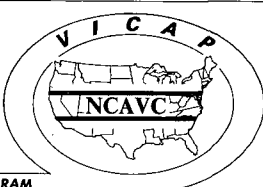
VICAP and the National Center for the Analysis of Violent Crime have been developed to serve State and local law

enforcement. VICAP is a no-cost resource to enhance the ability of law enforcement, nationally, to identify and apprehend the most violent of all criminals in society today—the serial murderer. If it helps just one officer identify and arrest just one serial murderer, how many lives will have been saved? We may not know the precise answer to that question, but if it's just one life, VICAP will have served law enforcement well.

FBI

FD-676 (Rev. 3-11-86)
OMB No. 110-0011

U.S. Department of Justice
Federal Bureau of Investigation



VIOLENT CRIMINAL APPREHENSION PROGRAM

VICAP
Crime Analysis Report

VICAP NCAVC FBI ACADEMY Quantico, VA 22135 (703) 640-6131

NATIONAL CENTER FOR THE ANALYSIS OF VIOLENT CRIME

DO NOT COMPLETE THIS REPORT WITHOUT FIRST READING INSTRUCTIONS

I. ADMINISTRATION

CASE ADMINISTRATION

FOR VICAP USE ONLY

1. VICAP Case Number: 2. FBI Case Number: 3. FBI Office: 4. VICAP Assignment:

- 5. Reporting Agency: 6. Address: 7. City: 8. County: 9. State: 10. ZIP: 11. Reporting Agency's ORI Number: 12. Reporting Agency's Case Number: 13. NCIC Number If Victim Is 1) Missing or 2) an Unidentified Dead Body: 14. Investigator's Name: 15. Investigator's Phone Number: 16. VICAP Crime Analysis Report Type: 17. Investigating Agency's Case Status:

CRIME CLASSIFICATION

- 18. This VICAP Crime Analysis Report Pertains to the Following Type Case (check one only): 19. Based on Your Experience and the Results of the Investigation of This Case, Do You Believe This Offender Has Killed Before? 20. There Is an Indication That This Case Is Related to Organized Drug Trafficking:

DATE AND TIME PARAMETERS

- 21. Today's Date: 22. Victim Last Seen: 23. Death or Major Assault: 24. Victim or Body Found:

If your victim is either a missing person or an unidentified dead body, respond to Items 44 through 48. Otherwise, go to Item 49.

- 44. Abnormalities of Teeth: 45. Glasses or Corrective Lenses Normally Worn by or Associated with Victim:

SCARS AND/OR BIRTHMARKS

- 46. Location of Noticeable Scars or Birthmarks (not tattoo):

TATTOOS

- 47. Tattoo Location: 48. Tattoo Designs:

OUTSTANDING PHYSICAL FEATURES

- 49. Did the Victim Have Outstanding Physical Features (crossed eyes, noticeable limp, physical deformity, etc.):

CLOTHING OF VICTIM

- 50. Generally Preferred Clothing Style (this item deals with general style of dress typically preferred by the victim, not a detailed clothing description): 51. Generally Preferred Predominant Color Tone of Clothing (check one only):

52. If This Victim Is a Missing Person or Unidentified Dead, Give a Detailed Description of Clothing:

MISCELLANEOUS

- 53. Victim's Residence (check one only): 54. Current Occupation(s):

II. VICTIM INFORMATION

VICTIM STATUS

- 25. This Is Victim of Victim(s) in This Incident. 26. Status of This Victim:

VICTIM IDENTIFICATION

- 27. Name: 28. Alias(es) (including maiden name and prior married names): 29. Resident City: 30. State: 31. ZIP: 32. Social Security Number: 33. FBI Number:

PHYSICAL DESCRIPTION

- 34. Sex: 35. Race: 36. Date of Birth: 37. Age (or best estimate) at Time of Incident: 38. Height (or best estimate): 39. Approximate Weight: 40. Build (check one only): 41. Hair Length (check one only): 42. Hair Shade (check one only): 43. Predominant Hair Color (check one only):

III. OFFENDER INFORMATION

OFFENDER DEFINED. As used in this VICAP Crime Analysis Report, "offender" includes arrestees, perpetrators, or persons the investigator has reasonable cause to believe are responsible for the commission of the crime.

OFFENDER STATUS

- 55. This Is Offender of Offender(s) in This Incident. 56. The Offender Is (check one only):

OFFENDER IDENTIFICATION

- 57. Name: 58. Alias(es) (including maiden name and prior married names): 59. Resident City: 60. State: 61. ZIP: 62. Social Security Number: 63. FBI Number:

PHYSICAL DESCRIPTION

- 64. Sex: 65. Race: 66. Date of Birth: 67. Age (or best estimate) at Time of Incident: 68. Height (or best estimate): 69. Build (check one only): 70. Hair Length (check one only): 71. Hair Shade (check one only): 72. Predominant Hair Color (check one only):

- 73. Was Wearing Glasses:
 - 1 Yes
 - 2 No
 - 99 Unknown
- 74. Facial Hair (check all that apply):
 - 1 None
 - 2 Mustache
 - 3 Beard
 - 4 Other
 - 99 Unknown
- 75. Appeared Generally Well Groomed:
 - 1 Yes
 - 2 No
 - 99 Unknown
- 76. Offender Wore a Disguise or Mask:
 - 1 Yes
 - 2 No
 - 99 Unknown

SCARS AND/OR BIRTHMARKS

- 77. Noticeable Scars or Birthmarks (not tattoos):
 - 1 Yes
 - 2 No
 - 99 Unknown

TATTOOS

- 78. Noticeable Tattoos:
 - 1 Yes
 - 2 No
 - 99 Unknown

OUTSTANDING PHYSICAL FEATURES

- 79. Other Outstanding Physical Features of the Offender Not Reported Above (crossed eyes, noticeable limp, physical deformity, etc.):
 - 1 Yes (describe): _____
 - 2 No
 - 99 Unknown

IV. IDENTIFIED OFFENDER INFORMATION

If you have an offender in custody or identified in this case, complete Items 80 through 84. Otherwise, go to Item 85.

OFFENDER BACKGROUND

- 80. Cities and States of Residence during Last 5 Years (exclude current city of residence):
 - 1) _____ 3) _____
 - 2) _____ 4) _____
- 81. List the States the Offender Has Visited during Last 5 Years (attach separate sheet if necessary):
 - 1) _____ 3) _____
 - 2) _____ 4) _____
- 82. Foreign Countries Lived or Traveled in:
 - 1) _____ 3) _____
 - 2) _____ 4) _____

PROPERTY OF OTHERS

- 83. Offender Was in Possession of Property of Others (check all that apply):
 - 1 Body Parts
 - 2 Clothing
 - 3 Credit Card(s), Checks, or other I.D.
 - 4 Jewelry
 - 5 Photo(s)
 - 88 Other (specify): _____

OFFENDER'S ADMISSIONS

- 84. Offender Admits Other Similar Crime(s) of Violence:
 - 1 Yes (attach details)
 - 2 No

V. VEHICLE DESCRIPTION

VEHICLE USED IN THIS INCIDENT

- 85. Is a Vehicle Known to Have Been Used in This Incident?
86. Did the Vehicle Belong to, or Was It Under the Civil Control of, the Victim?
87. The Vehicle Would Normally Be Described as Being:
88. The Vehicle Would Normally Be Described as Being:
89. License Number:
90. License State:
91. Vehicle Year:
92. Make:
93. Model:
94. Body Style:
95. Color:

VI. OFFENSE M. O.

OFFENDER'S APPROACH TO VICTIM AT TIME OF INCIDENT

- 96. The Victim or a Witness Reported That the Offender's Approach to Victim Was:
97. If the Offender Initiated Contact with the Victim by Means of Deception, Indicate the Type of Deception Below:
98. If the Offender Initiated Contact with the Victim by Means of Surprise, Indicate the Type of Surprise Below:

VI. OFFENSE M. O. (cont.)

- 111. The Murder or Major Assault Site Was Victim's Residence:
112. The Murder or Major Assault Site Was Victim's Work Place:
113. Potential Witnesses at the Time of the Murder or Major Assault:
114. Was the Site of the Offender's Initial Contact with the Victim the Same as the Murder or Major Assault Site?
115. Description of General Area of Initial Offender-Victim Contact:
116. The Neighborhood of Initial Offender-Victim Contact:
117. The Initial Offender-Victim Contact Was (check as many as apply):
118. Initial Offender-Victim Contact Was Victim's Residence:
119. Initial Offender-Victim Contact Was Victim's Work Place:
120. Potential Witnesses at the Time of the Initial Offender-Victim Contact:
121. Was the Site of the Victim's Last Known Location the Same as the Site of the Initial Contact between the Victim and Offender?
122. Description of General Area of Victim's Last Known Location:
123. The Neighborhood of Victim's Last Known Location Was Predominantly:
124. The Victim's Last Known Location Was (check as many as apply):

- 99. If the Offender Initiated Contact with the Victim by Direct and Immediate Physical Assault, Indicate the Type of Direct and Immediate Physical Assault (Below):
100. Last Known Location of Identified Victim or Location of Unidentified Dead Body Recovery Site:

EXACT GEOGRAPHIC LOCATION

- 101. Description of General Area of the Body Recovery Site:
102. The Neighborhood of the Body Recovery Site is Predominantly:
103. The Body Recovery Site Was (check as many as apply):
104. The Body Recovery Site Was Victim's Residence:
105. The Body Recovery Site Was Victim's Work Place:

LOCATION OF EVENTS

- 106. Potential Witnesses at the Time the Offender Left the Body at the Body Recovery Site:
107. Was the Murder or Major Assault Site the Same as the Body Recovery Site?
108. Description of General Area of Murder or Major Assault Site:
109. The Neighborhood of Murder or Major Assault Site is Predominantly:
110. The Murder or Major Assault Site Was (check as many as apply):

- 125. The Victim's Last Known Location Was Victim's Residence:
126. The Victim's Last Known Location Was Victim's Work Place:

EVENTS AT ASSAULT SITE

- 127. There is Evidence That the Offender Disabled the Telephone, Other Utilities, or Security Devices:
128. The Property at the Crime Scene(s) Was Ransacked, Vandalized, or Burned:
129. There Are Indications That the Offender Took Steps to Obliterate or Destroy Evidence at the Scene:

OFFENDER'S WRITING OR CARVING ON BODY OF VICTIM

- 130. Writing or Carving on Body:
131. Instrument Used to Write or Carve on Body:

OFFENDER'S WRITING OR DRAWING AT THE CRIME SCENE

- 132. Writing or Drawing at Crime Scene(s):
133. Instrument Used to Write or Draw at Crime Scene(s):

SYMBOLIC ARTIFACTS AT CRIME SCENE

- 134. Was There Evidence to Suggest a Deliberate or Unusual Ritual/Act/Thing Had Been Performed on, with, or near the Victim (such as an orderly formation of rocks, burnt candles, dead animals, defecation, etc.):

OFFENDER'S COMMUNICATIONS

- Item 135 deals with communications initiated by the offender with respect to the crime.
135. Was There Any Communication from the Offender Before or After the Crime?

VII. CONDITION OF VICTIM WHEN FOUND

BODY DISPOSITION

136. There Is Reason to Believe the Offender Moved the Body from the Area of the Death Site to the Area of the Body Recovery Site:
 1 Yes 2 No 3 Unable to Determine
137. Evidence Suggests the Offender Disposed of the Body in the Following Manner:
 1 Openly Displayed or Otherwise Placed to Inure Discovery
 2 Concealed, Hidden, or Otherwise Placed in Order to Prevent Discovery
 3 With an Apparent Lack of Concern as to Whether or Not the Body Was Discovered
 99 Unable to Determine
138. It Appears the Body of the Victim Was Intentionally Placed in an Unnatural or Unusual Position after Death Had Occurred (e.g., staged or posed):
 1 Yes 2 No 3 Unable to Determine
139. Body Was Discovered...
 1 Buried
 2 Covered
 3 In a Body of Water (stream, lake, river, etc.)
 4 In a Building
 5 In a Container (e.g., dumpster, box refrigerator)
 6 In a Vehicle
 7 Scattered (body parts)
 8 None of the Above
140. If the Body Was Discovered in Water, Was It Weighted?
 1 Yes — With What? 2 No

RESTRAINTS USED ON VICTIM

141. Was the Victim Bound?
 1 Yes 2 No (go to Item 146)
142. Article(s) Used to Bind or Restrain the Victim or the Body:
 1 An Article of Clothing
 2 Tape
 3 Cordage (e.g., rope, string, wire, wire, leather thong, etc.)
 4 Chain
 5 Handcuffs or Thumbcuffs
 88 Other (specify): _____
143. The Evidence Suggests That the Restraining Device(s) Was (check one only):
 1 Brought to the Scene by the Offender
 2 An Article Found at the Scene by the Offender
 99 Unknown
144. Parts of Body Bound (check as many as apply):
 1 Hands or Arms
 2 Feet, Ankle(s), or Legs
 3 Neck
 4 Arms Bound to Torso
 5 Hands and Ankle(s) Bound Together
 88 Other (specify): _____
145. The Bindings on the Victim Were Excessive (much more than necessary to control victim's movements):
 1 Yes 2 No 3 Unable to Determine
146. The Body Was Tied to Another Object:
 1 Yes 2 No
147. Was a Gag Placed in or on the Victim's Mouth?
 1 Yes (describe): _____ 2 No
 99 Unknown
148. Was a Blindfold Placed on or over the Victim's Eyes?
 1 Yes (describe): _____ 2 No
 99 Unknown
149. Was Victim's Entire Face Covered?
 1 Yes — With What? 2 No
 99 Unknown

VIII. CAUSE OF DEATH AND/OR TRAUMA (cont.)

160. Estimated Number of Stab Wounds: _____
161. Estimated Number of Cutting Wounds: _____
162. Number of Entry Gunshot Wounds: _____
163. Range of Gunfire:
 1 Not Applicable
 2 Distant (no stippling / tattooing)
 3 Intermediate (stippling / tattooing)
 4 Close (powder residue / tattooing)
 5 Contact

BITE MARKS ON VICTIM

164. Bite Marks Were Identified on the Victim's Body:
 1 Yes 2 No (go to Item 166)
165. Location of Bite Marks:
 1 Face
 2 Neck
 3 Abdomen
 4 Breast(s)
 5 Buttocks
 6 Groin
 7 Genitalia
 8 Thigh(s)
 88 Other (specify): _____

ELEMENTS OF TORTURE OR UNUSUAL ASSAULT

166. There Is Evidence to Suggest That the Offender Disfigured the Body of the Victim in Order to Delay or Hinder Identification of the Victim (burned body; removed and took hands, feet, head; etc.):
 1 Yes 2 No
167. Elements of Unusual or Additional Assault upon Victim:
 1 None
 2 Victim Whipped
 3 Burns on Victim
 4 Victim Run Over by Vehicle
 5 Evidence of Cannibalism / Vampirism
 6 Offender Explored, Probed, or Mutilated Cavities or Wounds of Victim
 88 Other (specify): _____
168. Body Parts Removed by Offender:
 1 None (go to Item 170)
 2 Head
 3 Scalp
 4 Face
 5 Teeth
 6 Eye(s)
 7 Ear(s)
 8 Nose
 9 Hand(s)
 10 Arm(s)
 11 Leg(s)
 12 Breast(s)
 13 Nipple(s)
 14 Anus
 15 Genitalia
 16 Internal Organs
 88 Other (specify): _____
169. Dismemberment Method:
 1 Bitten Off
 2 Cut — Skilled/Surgical
 3 Cut — Unskilled/Rough-Cut
 4 Hacked / Chopped Off
 5 Sawed Off
 88 Other (specify): _____

SEXUAL ASSAULT

170. Is There Evidence of an Assault to Any of the Victim's Sexual Organs or Body Cavities?
 1 Yes 2 No (go to Item 178) 3 Unable to Determine
171. Type Sexual Assault, or Attempt (check all that apply):
 1 Vaginal
 2 Anal
 3 Victim Performed Oral Sex on Offender
 4 Offender Performed Oral Sex on Victim
 99 Unable to Determine
 88 Other (describe): _____

CLOTHING AND PROPERTY OF VICTIM

150. Clothing on Victim When Found:
 1 Fully Dressed
 2 Partially Undressed
 3 Nude
 88 Other (specify): _____
151. There Is Evidence the Victim Was Re-dressed by Offender:
 1 Yes 2 No 3 Unable to Determine
152. There Is Evidence to Suggest That Any or All of the Victim's Clothing had been Ripped or Torn:
 1 Yes 2 No 3 Unable to Determine
153. There Is Evidence to Suggest That Any or All of the Victim's Clothing had been Cut from the Body:
 1 Yes 2 No 3 Unable to Determine
154. Items of the Victim's Clothing Were Missing from the Body Recovery Site:
 1 Yes (identify): _____ 2 No
 99 Unknown
155. Victim's Clothing (not on the body) Recovered at the Body Recovery Site Was:
 1 Piled Neatly
 2 Scattered
 3 Hidden
 4 Not Applicable
156. Based on the Investigation, There Is Evidence to Suggest That the Offender Took Small Personal Items (other than clothing) From the Victim (these items may or may not be valuable, e.g., photos, driver's license, real or costume jewelry, etc.):
 1 Yes (specify): _____ 2 No
 99 Unknown

VIII. CAUSE OF DEATH AND/OR TRAUMA

CAUSE OF DEATH

- If victim is a survivor, go to Item 158.
157. Medical Examiner's or Coroner's Officially Listed Cause of Death:
 1 Gunshot Wound(s)
 2 Stab Wound(s)
 3 Cutting or Incise Wound(s)
 4 Blunt Force Injury
 5 Strangulation — Manual, Ligature, Undetermined (circle one)
 6 Smothering
 7 Airway Occlusion — Internal
 8 Torso Compression
 9 Hanging
 10 Drowning
 11 Burns — Fire
 12 Burns — Chemical
 13 Burns — Scalding
 14 Hypothermia or Exposure
 15 Malnutrition or Dehydration
 16 Electrocution
 17 Crushing Injury
 18 Explosive Trauma
 19 Undetermined
 88 Other (specify): _____

TRAUMA

158. Major Trauma Location(s) (check as many as apply):
 1 Head / Face / Neck
 2 Arm(s) / Hand(s)
 3 Torso
 4 Leg(s) / Feet
 5 Breast(s)
 6 Buttocks
 7 Genitalia
 8 Anus
 88 Other (specify): _____
 99 Unable to Determine
159. Extent of Blunt Force Injury:
 1 None
 2 Minimal (minor bruising only, possibly caused by offender's slapping to control the victim)
 3 Moderate (injury inflicted which in itself could not have caused death)
 4 Severe (injury which in itself could have caused death, whether it was the cause of death or not)
 5 Extreme (injury inflicted beyond that necessary for death. Overkill)

172. Semen Identification in a Body Cavity of the Victim:
 1 No 2 In Vagina 3 In Anus 4 In Mouth 5 Unable to Determine
173. Evidence of Other Ejaculation:
 1 No 2 On Body of Victim 3 Elsewhere at the Scene 4 Unable to Determine
174. There Is Evidence to Suggest Postmortem Sexual Assault:
 1 Yes 2 No 3 Unable to Determine
175. Is There Evidence of Sexual Insertion of Foreign Object(s) (other than the penis) into the Victim's Body?
 1 Yes 2 No (go to Item 178)
176. Evidence of Sexual Insertion of Foreign Object(s) Still in Body When First Discovered (e.g., rocks, twigs, knife, clothing):
 (object) _____ (object) _____
 1 Vagina 2 Penis 3 Anus 4 Mouth 88 Other _____
177. There Is Evidence of Sexual Insertion of Foreign Object(s) into Victim's Body, but the Object Was Not in the Body When the Body Was First Discovered:
 1 Yes (describe object) _____ into _____ (body cavity)
 2 No
 3 Unable to Determine

IX. FORENSIC EVIDENCE

WEAPONS

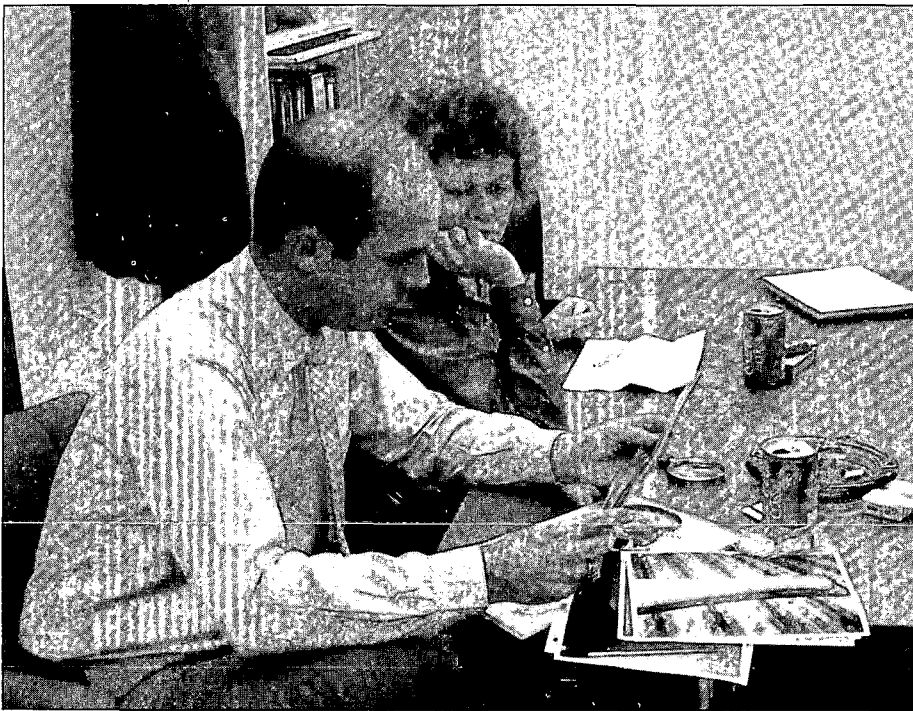
178. Weapons Used by Offender in This Assault:
 1 None
 2 Firearm
 3 Stabbing or Cutting Weapon
 4 Bludgeon or Club
 5 Ligature
 6 Hands or Feet
 88 Other Weapon (describe): _____
179. Assault Weapon(s) Used by Offender:
 1 Weapon of Opportunity (offender finds weapon at or near scene)
 2 Weapon of Choice (offender preselects weapon and brings to scene)
 3 Both 1 and 2 Above
 99 Unknown
180. Recovery of Assault Weapon(s) (check as many as apply):
 1 Not Recovered
 2 Recovered At Scene
 3 Recovered Elsewhere — Where? _____
181. Type Firearm Used:
 1 Handgun
 2 Rifle
 3 Shotgun
 88 Other (specify): _____
 99 Unknown
182. Caliber or Gauge of Firearm(s) Used: _____
183. Number of Grooves and Direction of Twist of Recovered Bullet or Firearm: _____
184. Size of Shotgun Shell Pellets Recovered or Used: _____

BLOOD

185. What Is the Offender's Blood Type?
 1 A 2 B 3 AB 4 O 99 Unknown
186. What Is the Rh Factor of the Offender's Blood?
 1 Positive 2 Negative 99 Unknown

The NCAVC Training Program

A Commitment to Law Enforcement



By
ROBERT R. HAZELWOOD, M.S.
*Special Agent/Program Manager
Training Program
Behavioral Science Instruction
and Research Unit
National Center for the Analysis
of Violent Crime
FBI Academy Quantico, VA*

Det. Sgt. Kevin Mullen, Boston PD, 1986 Police Fellow, confers with SA Ellen Kearns, Boston FBI Profile Coordinator, in a profile workshop during the recent Police Fellowship Retraining Seminar at the FBI Academy.

The training program of the National Center for the Analysis of Violent Crime (NCAVC) is responsible for all education and training associated with the NCAVC. This responsibility includes providing guest speakers, conducting specialized training for police and FBI Special Agents, and administering the NCAVC Police Fellowship in criminal personality profiling.

NCAVC educational and training efforts are directed primarily toward the law enforcement community. However, we are also interested in sharing whatever knowledge and expertise we

may possess with other members of the criminal justice system and those disciplines which have historically provided invaluable assistance to law enforcement (mental health, victim advocates, and various academic fields).

A Training Commitment

The NCAVC was established to provide the law enforcement community with a clearinghouse and resource center for unsolved violent crimes. It does so by collecting and analyzing violent crime data and providing



Special Agent Hazelwood

innovative investigative assistance, such as criminal personality profiling and the Violent Criminal Apprehension Program (VICAP). A natural extension of this assistance is to train law enforcement officers in, or at least acquaint them with, the application of behavioral science techniques to the investigation of violent crime. The NCAVC training program accomplishes this task in four ways: 1) Field police schools, 2) FBI Academy courses, 3) speaking engagements, and 4) NCAVC police fellowships.

Field Police Schools

Members of the NCAVC and specially trained Agents assigned to FBI field offices provide cost-free training in violent crime investigative methodology for law enforcement agencies throughout the United States. Such courses are 1 to 5 days in length and are conducted at sites selected by the requesting agency.

FBI Academy Courses

Courses 3 to 14 days in length are conducted at the FBI Academy and include speakers from a variety of disciplines. Officers invited to attend the courses do so at no expense to themselves or their departments.

Speaking Engagements

The NCAVC provides speakers for law enforcement and other professional organizational meetings or conferences. Since June 1985, NCAVC speakers have participated in national meetings of the International Association of Chiefs of Police, the National Sheriff's Association, the Harvard Associates in Police

Science, and the FBI National Academy Associates, to name a few. The NCAVC training program has also provided guest lecturers for courses offered at the Southern Police Institute, the Northwestern Traffic Institute, the Delinquency Control Institute, the Armed Forces Institute of Pathology, and the Federal Law Enforcement Training Center.

Police Fellowship Program

The NCAVC offers a 1-year fellowship in criminal personality profiling at the FBI Academy to selected officers. All expenses except salary and benefits are borne by the FBI. This program is discussed more fully below.

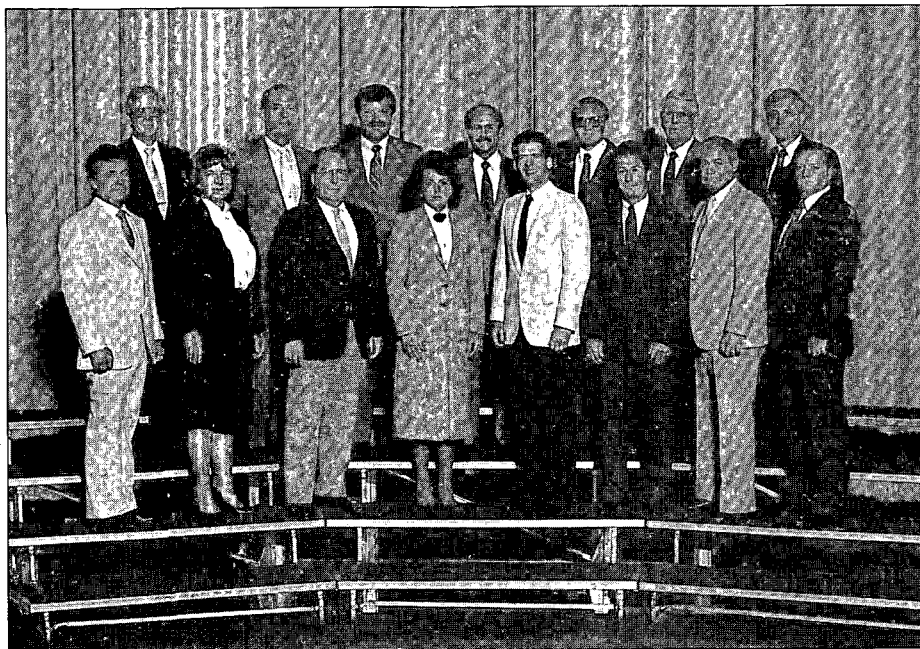
The NCAVC Police Fellowship

Developmental History

The police fellowship in criminal personality profiling predated the establishment of the NCAVC and evolved from FBI Director William H. Webster's mandate to provide intensive training on the behavioral analysis of violent crime to law enforcement agencies. It was determined that a 9- to 12-month program would be necessary to train and provide sufficient hands-on profiling experience to individuals who could then be expected to provide behavioral science expertise to their departments.

In 1982, at the direction of Assistant Director James D. McKenzie, Roger L. Depue, current NCAVC Administrator, asked several large police agencies if they would be interested in participating in such a program. The response was overwhelmingly positive. Assistant Director James D. McKenzie

"[Our commitment] is to train law enforcement officers in, or at least acquaint them with, the application of behavioral science techniques to the investigation of violent crimes."



Police Fellowship Recipients 1984-87

Top row (left to right): Thomas Cronin, Kevin Mullen, Robert Gebo, William Bradway, Steven Conlon, Edward Richards, Ralph Stone. Bottom row (left to right): Thomas Brennan, Joël Kohout, Eric Witzig, Dayle Hinman, Denis Cremins, Sam Bowerman, Carlos Avila, Raymond Pierce.

and Executive Assistant Director John E. Otto enthusiastically endorsed the newly designed fellowship program and recommended it to Director Webster, who quickly approved the program.

In September 1983, the Baltimore County, MD, Police Department was invited to participate in the fellowship, and in January 1984, Det. Sam Bowerman became the first police fellow. The number of fellowships offered was increased to four in January 1985. The 1985 fellows were Det. Denis Cremins of the Los Angeles Police Department, Det. Raymond Pierce of the New York City Police Department, Sgt. Edward Richards of the Texas Department of Public Safety, and Det. Eric Witzig of the Metropolitan Police Department, Washington, DC. Six fellowships were offered in 1986. The officers participating are Det. Sgt. William Bradway of the Michigan State Police, Agent

Steven Conlon of the Iowa Division of Criminal Investigation, Lt. Thomas Cronin of the Chicago Police Department, Det. Robert Gebo of the Seattle Police Department, Agent Dayle Hinman of the Florida Department of Law Enforcement, and Det. Sgt. Kevin Mullen of the Boston Police Department. Recipients of the 1987 fellowships are Sgt. Carlos Avila of the Los Angeles Sheriff's Department, Special Agent Joël Kohout of the Minnesota Bureau of Investigation, Cpl. Thomas Brennan of the Pennsylvania State Police, and Special Agent Ralph Stone of the Georgia Bureau of Investigation.

Selection Criteria

Agencies invited to nominate an officer for participation in the fellowship are chosen based on the number of sworn officers in the agency, the size of the population served, the amount of violent crime committed within the

agency's jurisdictional area, and the agency's willingness to allow the participant to provide behavioral science assistance to neighboring departments upon his/her return.

The NCAVC has set the following criteria for participants in the fellowship. The participant must:

- 1) Be a sworn law enforcement officer,
- 2) Have an outstanding investigative record,
- 3) Possess a bachelor's degree, preferably in the behavioral sciences,
- 4) Have proven abilities to address groups and articulate thoughts in writing,
- 5) Have a minimum of 3 years' experience in the investigation of major cases,
- 6) Be held in high esteem by fellow officers,
- 7) Agree to conduct crime analysis and prepare profiles for at least 3 years upon completion of the fellowship,
- 8) Be in excellent physical condition and be proportionate in height and weight, and
- 9) Agree to a complete background investigation by the FBI.

“ . . . since [June 1985], over 3,500 hours of training have been provided to more than 40,000 people . . . at more than 400 locations throughout the United States, Canada, Europe, and the Caribbean.”

Selection Process

The nominees are selected by their respective departments subject to final approval by the FBI. Many departments have added selection criteria to those items required by the NCAVC. The NCAVC does not participate in the selection process, unless requested to do so by the nominating agency. At the request of the nominating agency, members of the NCAVC will provide a briefing on the fellowship to department leaders and individuals who may wish to apply for the program.

Instructional Program

The NCAVC Police Fellowship consists of an academic phase and an application phase. During the first 3 months of the fellowship, the officers participate in educational and training courses at the FBI Academy, as well as elsewhere. The officers attend courses of instruction at the University of Virginia, the Armed Forces Institute of Pathology, and various police academies. Courses conducted at the FBI Academy include homicide and rape investigation, sexual exploitation of children, abnormal psychology, equivocal death evaluation, criminal personality profiling, and a myriad of other topics.

Although the police fellows are acquainted with the concept of criminal personality profiling during the first 3 months of the fellowship and do sit in on case consultations with investigative agencies, they are not assigned cases for analysis and profiling. The last 6-9 months of the fellowship are devoted primarily to developing the analytical

and profiling skills of the participants. In this phase of the program, they are assigned cases for analysis and profiling jointly with a more-experienced NCAVC profiler. All cases assigned to the police fellows are analyzed in group consultation. Such a group typically includes at least one NCAVC profiler, all police fellows, and frequently Dr. James Luke, consulting forensic pathologist. The case is presented to the group by the responsible police fellow and is then discussed extensively. The consultation groups operate very much like “think tanks” in that ideas are surfaced, debated, and discarded or adopted. This process is invaluable to the novice profiler and gives him/her the benefit of the experience and thoughts of others. Following the group consultation, the officer prepares a written profile for review by an NCAVC profiler and eventual dissemination to the requesting agency.

In addition to analyzing cases and preparing criminal personality profiles, the police fellows represent the NCAVC through speaking engagements, participation in research interviews of incarcerated violent offenders, and involvement in on-site major case consultation with other NCAVC members.

Obviously, the training received during the fellowship is extensive and time consuming, involving a substantial investment on the part of the FBI and the participating agencies. However, there are individuals who commercially conduct 2- to 5-day courses on profiling and advertise that attendees will be able to prepare profiles upon completion of the course. Experience has demonstrated that the length of the NCAVC

fellowship is not an unrealistic amount of time for an individual to study in order to become proficient in the art of profiling.

Conclusion

The NCAVC became operational in June 1985, and since that time, over 3,500 hours of training have been provided to more than 40,000 people representing the disciplines mentioned earlier in this article. This training has taken place at more than 400 locations throughout the United States, Canada, Europe, and the Caribbean. It was conducted by members of the NCAVC and Special Agent profile coordinators assigned to field offices of the FBI. These efforts serve as an example of the effectiveness of the NCAVC training program in disseminating information of investigative value in violent crime matters. They also serve to demonstrate the commitment of the FBI to its training mission in the law enforcement community.

FBI

Automated Crime Profiling

“. . . experts in criminal personality profiling are taking advantage of the existing technology of artificial intelligence . . . to capture the elusive decisionmaking rules associated with the profiling of serial violent criminals.”

By
DAVID J. ICOVE, Ph.D., P.E.
*Senior Systems Analyst
Behavioral Science Investigative Support Unit
National Center for the Analysis of Violent Crime
FBI Academy
Quantico, VA*

In the fall of 1983, Special Agents from the FBI's Behavioral Science Unit constructed a criminal personality profile describing an individual who could have been responsible for a series of fires at religious homes and houses of worship that summer in a posh New England community. The profile was prepared at the request of the community's police department, which later discovered that the FBI's profile not only accurately described the suspect in detail but also pinpointed his residence, based upon a series of intricate computer calculations using artificial intelligence technology. The suspect later confessed to the crimes.

This pioneering use of artificial intelligence technology in crime analysis and criminal personality profiling provided the groundwork for the present automation efforts at the FBI's National Center for the Analysis of Violent Crime (NCAVC).¹ In an active project at the NCAVC, experts in criminal personality profiling are taking advantage of the existing technology of artificial

intelligence, or AI as it is known to its users, to capture the elusive decisionmaking rules associated with the profiling of serial violent criminals.

This article is an overview of the ongoing research and development efforts by the NCAVC to automate the criminal personality profiling process. Future articles are planned to advise law enforcement researchers and investigators as to the success of this exciting and thought-provoking technology.

Violent Crime Model

The relationship of AI to the profiling process is best described using the "Violent Crime Systems Analysis Model." (See fig. 1.) This model was developed during the conceptualization and development of the NCAVC computer systems and traces the philosophical activities involved with the detection, prediction, and prevention of violent crime.

The model is divided into *reactive* and *proactive* investigative strategies.

Reactive strategies include crime scene investigative support during immediate response to incidents, while proactive strategies explore effective anti-crime programs to both deter and apprehend offenders.

Briefly, the model emphasizes the reporting of violent crimes (step 1) to the NCAVC for crime pattern analysis and classification. This information may come from written media accounts (step 2), crime scene processing (step 3), VICAP crime reports (step 4), or violent crime research findings (step 5). Crime pattern analysis (step 6) can determine if any case trends are detected in the profiled incident that have existed in the past, predict the probability of the occurrence of future incidents, and check for the possible identification of prior known/unknown criminal offenders based upon their past methods of operation.

Crime pattern recognition analysis can also classify incidents into naturally occurring groups, such as the type of



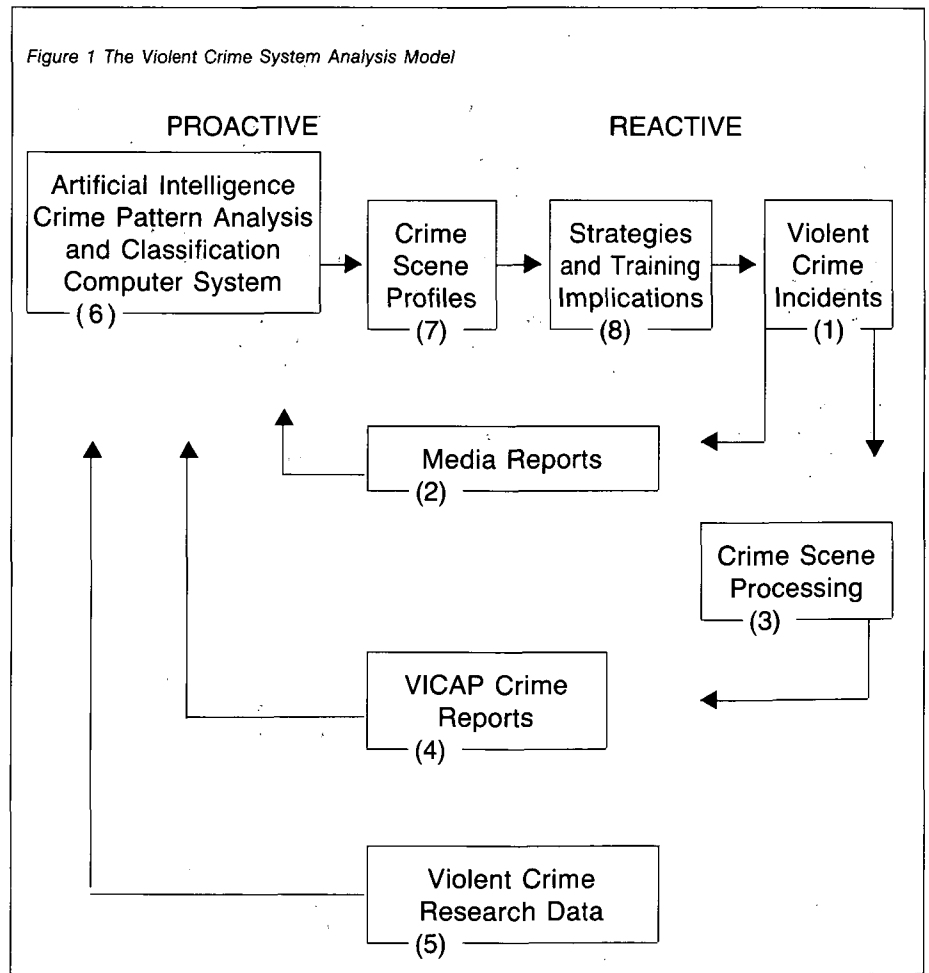
Dr. Icove

crime, motive, or temporal conditions. Furthermore, pattern analysis can reveal multidimensional trends and profiles in the crime data which in the past have gone undetected.

Based upon prior profiling experiences in combating violent crimes (step 7), effective prevention strategies are documented for future operational and training use (step 8). Using historical information, actual probabilities of success can be assigned to the suggestions of specific, proven prevention strategies.

The use of effective crime prevention strategies will minimize the risk of future violent crime incidents. Many strategies include operational, personnel, and physical security programs. However, once an incident occurs, the effective case management of the investigation must be carried out. The violent crime investigator at the scene summarizes the incident and submits a VICAP report. The feedback loop is then completed with an inquiry into the model of the encoded case data.

Figure 1 The Violent Crime System Analysis Model



“Computer technology is also necessary to support ongoing behavioral science research efforts.”

Several computer systems presently serve the needs of the NCAVC in support of the VICAP, profiling and consultation, and research programs. The computers are located at both Quantico, VA, and Washington, DC.

VICAP

The Violent Criminal Apprehension Program (VICAP) computer system is located at FBI Headquarters in Washington, DC, and stores information on unsolved homicide-related violent crimes reported to the NCAVC. VICAP crime reports are entered on-line from the NCAVC at Quantico, using a secure telecommunications network.

When a new case is entered, the VICAP computer system simultaneously compares and contrasts over 100 selected modus operandi (MO) categories of that case with all other cases stored in the data base. After overnight processing, a printed computer report is returned to the VICAP crime analyst handling the case. This report lists, in rank order, the top 10 “matches” in the violent crime databank; that is, the 10 cases that were

most similar to the new case. This crime pattern analysis technique, called template pattern matching, was specifically designed for VICAP and programmed by the FBI’s Technical Services Division. The VICAP computer system also produces selected management information system reports which monitor case activity geographically, with hope that it will eventually trace the travels of serial violent criminals across the United States.

Profiling

The profiling and consultation program uses a collection of crime pattern recognition computer programs on mini- and micro-computers at the NCAVC’s offices to detect and predict the behavior of violent criminals. The Arson Information Management System (AIMS) is a crime pattern analysis computer program used at the NCAVC which has enabled staff members to predict accurately the times, dates, and locations of future incidents, as well as the most probable residence of suspects.²

Computer technology is also necessary to support ongoing behavioral science research efforts. NCAVC staff members are encouraged to perform and publish research studies on all aspects of violent crime and rely upon computers at Quantico for their support. Some research projects include the use of portable computers carried into the field.

Artificial Intelligence Project

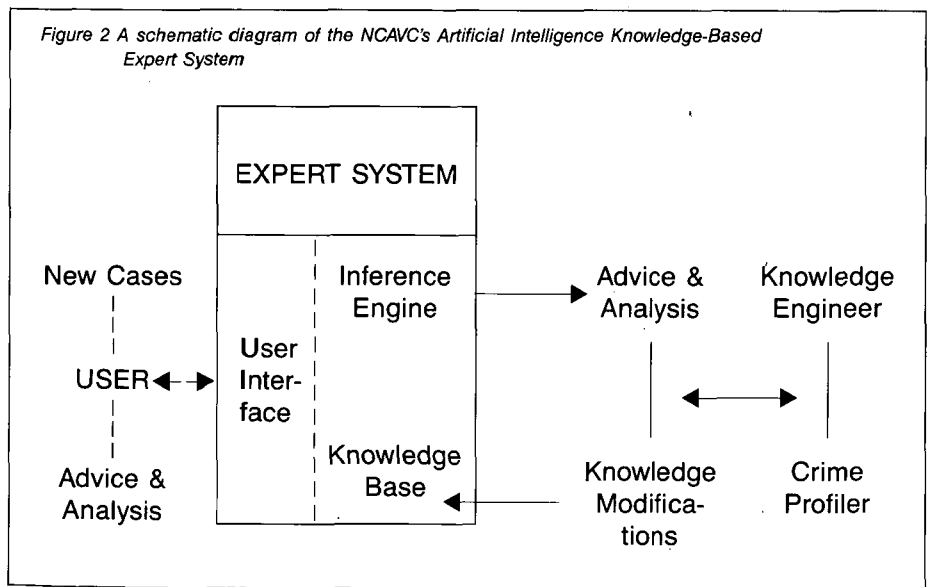
Using the insight and experience gained with VICAP and AIMS computer technology, the NCAVC staff is now developing a comprehensive AI knowledge-based expert system which will assist users of the NCAVC computer system in tracking and predicting violent crimes. Knowledge-based expert systems have proven effective in applying knowledge to solve problems that ordinarily require human intelligence.³ Figure 2 illustrates this system and the relationships of the various individuals in its design and use. It is anticipated the project will be completed in 2 years.

Following the diagram in figure 2, the *knowledge engineer* transforms prior experiences of the *crime profiler* and the results of *violent crime research* into a *knowledge base*. Using artificial-intelligence computer software, the knowledge base is transformed into *decision rules* defining an *inference engine*. The NCAVC investigators input new cases and receive consultation via a *user interface*.

The expert-based computer system under development will allow the NCAVC to:

- 1) Eliminate useless investigative paths which historically have proven fruitless in profiling and identifying the offender;
- 2) Preserve and recall knowledge of similar cases, criminal personality profiles, and research studies;

Figure 2 A schematic diagram of the NCAVC’s Artificial Intelligence Knowledge-Based Expert System





The NCAVC Computer Center

- 3) Display the hierarchy of complex criminal network problems from the general to specific level;
- 4) Develop and use decision rules which accelerate computation time, as well as allow the investigator to understand the problem better;
- 5) Receive advice and consultation from the expert system on new and existing cases based upon prior knowledge captured by the system;
- 6) Preserve information in an active form as a knowledge base, rather than a mere passive listing of facts and figures;
- 7) Train novices to think as an experienced crime profiler would; and
- 8) Create and preserve in an active environment a system that is not subject to human failings, will respond to constant streams of data, and can generalize large bodies of knowledge.

AI applications show great potential for solving complicated crime profiling and assessment problems. Research is currently being conducted in two such uses which will be integrated into the NCAVC's AI computer project.

Social network analysis is a behavioral science-oriented approach that describes the interaction patterns between people.⁴ This analysis can be used to identify possible courses of action an individual or group might take, as well as to surmise as to the hierarchical structure of an organization or group. Examples of the application of social network analyses include structures of organized crime syndicates, motorcycle gangs, and terrorist groups. NCAVC staff members are developing AI procedures to manipulate data and compute the probable hierarchies and interactions of complex organizations.

The behavioral analysis of threatening oral and written communications in extortions, bombings, and terrorist incidents is another viable application of artificial intelligence technology to real-world law enforcement problems.⁵

The NCAVC is actively researching and experimenting with computer-assisted linguistic analysis techniques to evaluate the content of these communications in an effort to determine the authorship profile and assess the viability of the threat.

Summary

Presented in this article have been the systems approach to the management of violent crime data and the development of an artificial intelligence crime profiling computer system for the National Center for the Analysis of Violent Crime. The major benefit of this effort is an effective management information system which will track the activities of the program, assess the impact of law enforcement efforts against violent crime, and introduce automated computer-assisted profiling technology.

FBI

Footnotes

¹ D. J. Icove, et al., *Incendiary Fire Analysis and Investigation*, Open Fire Service Learning Program (Lexington, MA: Ginn Publishing Co., 1984); D. J. Icove, V. B. Wherry, and J. D. Schroeder, *Combating Arson-For-Profit: Advanced Techniques for Investigators* (Columbus, OH: Battelle Press, 1980).

² J. L. Bryan and D. J. Icove, "Recent Advances in Computer-Assisted Arson Investigation," *Fire Journal*, National Fire Protection Association, vol. 71, No. 1, January 1977; D. J. Icove and H. L. Crisman, "Application of Pattern Recognition to Arson Investigation," *Fire Technology*, National Fire Protection Association, February 1975; "Arson: the Prevention Chain," National Clearinghouse for Criminal Justice Systems, U.S. Department of Justice, May 1980.

³ B. G. Buchanan and E. H. Shortliffe, *Rule-Based Expert Systems* (Reading, MA: Addison-Wesley Publishing Co., Inc., 1984).

⁴ R. H. Davis, "Social Network Analysis: An Aid in Conspiracy Investigations," *FBI Law Enforcement Bulletin*, vol. 50, No. 12, December 1981.

⁵ M. S. Miron and J. E. Douglas, "Threat Analysis: The Psycholinguistic Approach," *FBI Law Enforcement Bulletin*, vol. 48, No. 9, September 1979; U. Perret, "Computer Assisted Forensic Linguistic System 'TEXTOR,'" IEEE International Conference: Security through Science and Technology, September 1980.

VICAP ALERT



Benjamin Herbert Boyle

RACE: Caucasian; DOB: 7/22/43, Hobart, OK; HEIGHT: 5' 7"; WEIGHT: 170 lbs; HAIR: Red; EYES: Blue; COMPLEXION: Fair; BUILD: Muscular; SSAN: 443-42-4965; FBI NO.: 405 757 EA8; DRIVER'S LICENSE NO.: OK 443-42-4965 (Type: Chauffer).

Crime

Benjamin Herbert Boyle was arrested on October 17, 1985, and has since been in custody in Amarillo, TX, charged with the murder of a white female.

Background

Boyle was in the military from August 1960 to August 1963, and was discharged in Wheeler, IN. From 1969 to 1980, he indicated he lived in Colorado, where he owned an auto body shop. He moved to Las Vegas, NV, in February 1980, where he resided until November 1981, during which time he worked in an auto body shop. Another

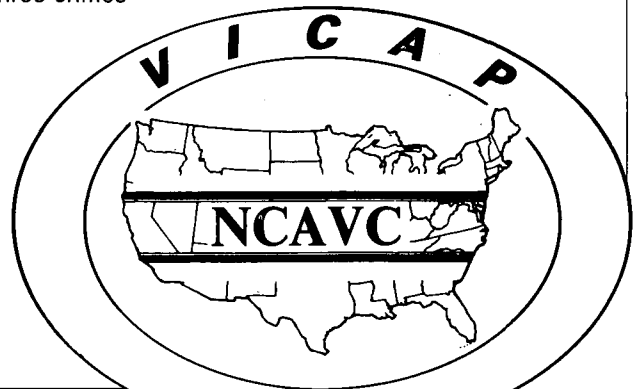
move in November 1981, took him to western Oklahoma. From that time until his arrest in October 1985, he was a truck driver for numerous trucking companies, making both local and cross-country hauls. (See map for routes of Boyle's travels.) During those years, he lived in Oklahoma, Texas, and Louisiana.

In addition to the murder charge in Amarillo, Boyle was convicted of attempted kidnaping in Colorado Springs, CO, and a warrant has been issued for his arrest in connection with a rape in Colorado.

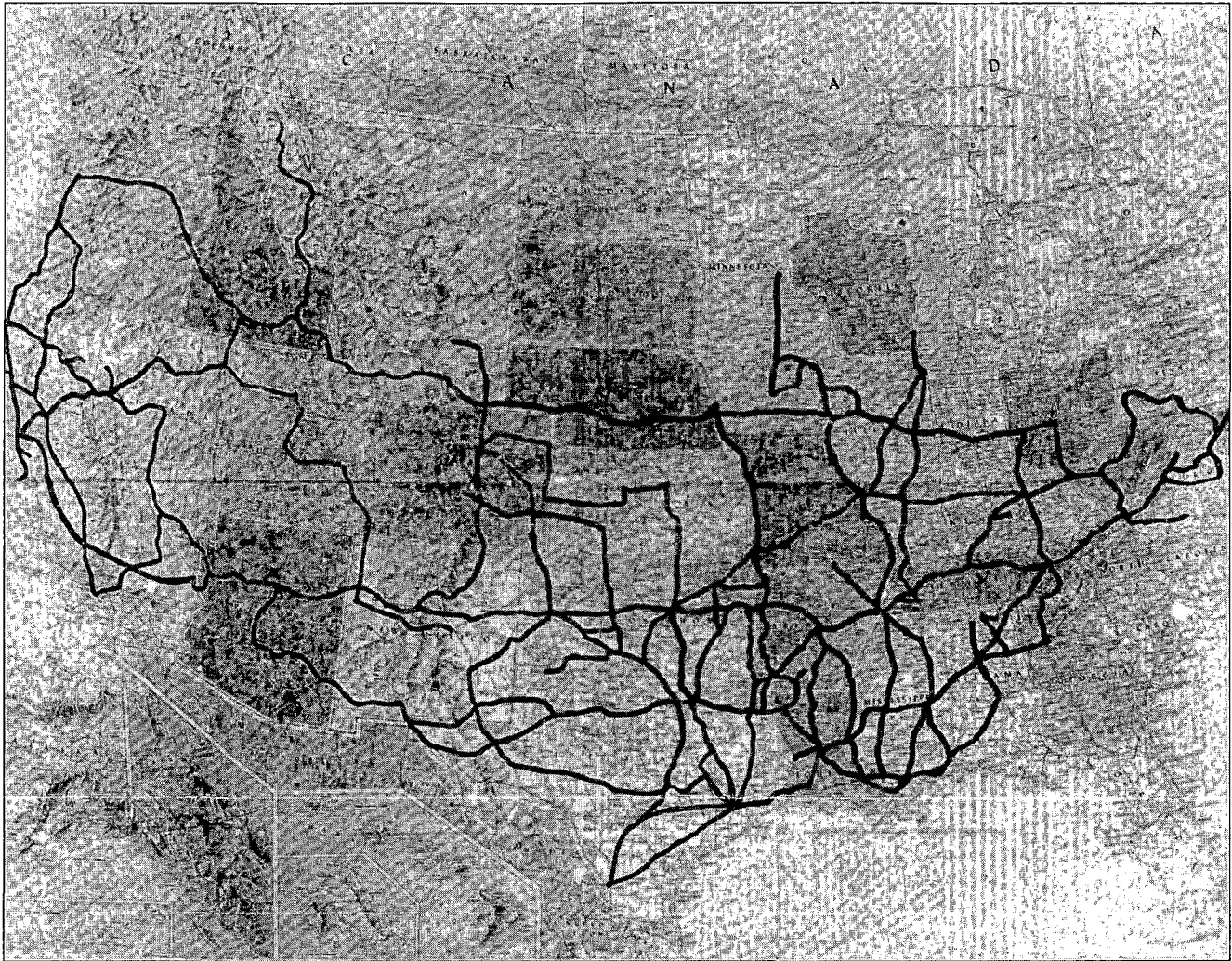
Modi Operandi

Described below are three crimes connected with Boyle.

#1 On November 20, 1979, Boyle attempted to kidnap a 28-year-old white female as she was walking along a residential area in Colorado Springs, CO. He tried forcing her into his personal automobile, but the victim pulled a small knife from her pocket, stabbed Boyle 5 times, and fled. Boyle pleaded guilty to attempted kidnaping and was given a 5-year probated sentence.



VIOLENT CRIMINAL APPREHENSION PROGRAM



#2 On April 18, 1982, Boyle allegedly picked up by force a 17-year-old white female hitchhiker from a major highway in Colorado Springs, CO. He reportedly pulled his tractor trailer off onto a side road, forced the victim to commit oral sex, vaginally raped her, and then took her back to the highway and released her. A warrant has been issued for Boyle's arrest in this case.

#3 On October 14, 1985, Boyle allegedly picked up a 20-year-old white female hitchhiker north of Fort Worth, TX. The victim's body was found the next day 14 miles north of Amarillo, hidden in a clump of bushes. She had been beaten with a blunt instrument, bound with gray duct tape, and left nude. The victim had been sodomized and semen

was found in her mouth. Cause of death was ligature strangulation. Fingerprints of Boyle were found on the sticky side of the duct tape.

In this last incident, Boyle reportedly was driving his distinctive truck—a fire-engine red, 1981 Peterbilt, with a conventional cab and twin chrome stacks.

Alert to Chiefs and Sheriffs

This information should be brought to the attention of all homicide officers. If unsolved cases in your department resemble Boyle's MOs or fit the time frame and routes taken by Boyle (see map pictured above), contact either the National Center for the Analysis of

Violent Crime, VICAP, FBI Academy, Quantico, VA 22135 (703-640-1127) or Sgt. Modeina Holmes or Sgt. Walt Yerger, Special Crimes Unit, Amarillo, TX (806-379-2230). When calling Amarillo, refer to file CAS #227,412.

Unusual Pattern

This pattern is classified as an accidental whorl and is given an outer tracing referenced to a meeting tracing. The impression has three well-defined deltas, and the accidental whorl is the only pattern which may possess more than two deltas.



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Not an order form

FBI

Law Enforcement Bulletin

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Washington, DC 20535

Name

Title

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Washington, D.C. 20535

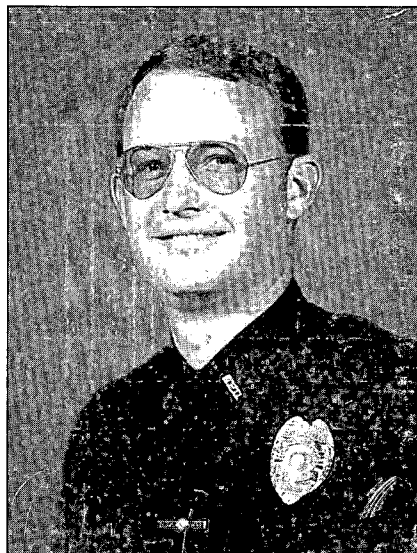
Official Business
Penalty for Private Use \$300
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NATIONAL CRIMINAL JUSTICE
REFERENCE SERVICE
BOX 6000
ROCKVILLE MD 20850

C 1

The Bulletin Notes

Officer George Stokesberry, Nampa, ID, Police Department, responded to a fire call on June 5, 1985, and rescued a couple from their burning apartment. The officer had to crawl through heavy smoke to save the sleeping wife. The Bulletin is pleased to join Officer Stokesberry's superiors in the Nampa Police Department in commending this lifesaving service.



Officer Stokesberry