FORENSIC INVESTIGATION OF
STOLEN-RECOVERED AND OTHER
CRIME-RELATED VEHICLES
La justice sans la force est impuissante, la force sans la justice est tyrannique. [...] Il faut donc mettre ensemble la justice et la force, et pour cela faire que ce qui est juste soit fort ou que ce qui est fort soit juste.

Blaise Pascal, La justice et la raison des effets, Pensées (1670).

*Justice without force is powerless and force without justice is tyrannical. [...] Therefore, one must put justice and force together, so that what is just is strong or what is strong is just.*
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ERIC STAUFFER, MS
Atlanta, Georgia, USA

Eric Stauffer is a criminalist presently residing in Atlanta, Georgia. In 1998 he obtained his Bachelor of Science degree in forensic sciences from the Institut de Police Scientifique et de Criminologie of the University of Lausanne in Switzerland. In 1999 he moved to the United States and, two years later, obtained a Master’s Degree in forensic science from Florida International University in Miami, Florida. Mr. Stauffer is also a Fellow of the American Board of Criminalistics and a Certified Fire and Explosion Investigator.

After graduating with his Bachelor degree, Mr. Stauffer worked temporarily as a Crime Scene Officer for the Fribourg State Police in Switzerland. Simultaneously, he worked as a firearms and toolmarks examiner at the University. In 2001 he moved to Atlanta, Georgia and joined the private sector as a forensic scientist. As such, his duties included the examination of fire scenes (both residences and vehicles), stolen-recovered vehicles, the laboratory examination of physical evidence, and the review of crime scene investigations and forensic laboratory examinations. During the last several years, Mr. Stauffer has been studying police forensic and investigative procedures from different countries.

Mr. Stauffer is a recognized speaker and instructor in the field of forensic sciences and has presented his work at several conferences in both national and international forums. He has also published several articles in peer-reviewed journals, as well as book chapters. Since 2003, he has been a member of the International Association of Auto Theft Investigators.

MONICA S. BONFANTI, PhD
Police Cantonale Genevoise, Geneva, Switzerland

Since 2000, criminalist Dr. Monica S. Bonfanti has been employed as the Technical Chief of the forensic laboratory and crime scene unit (Brigade de Police Technique et Scientifique) at the Geneva State Police (Police Cantonale Genevoise) in Switzerland. She is in charge of all technical matters, investigates all types of cases, and is frequently called to major crime scenes in order to lead the crime scene officers. She also educates crime scene officers about the investigation of stolen-recovered vehicles.
In 1993, Dr. Bonfanti obtained her Bachelor of Science in forensic sciences at the Institut de Police Scientifique et de Criminologie of the University of Lausanne in Switzerland. While earning her PhD, she worked part-time for five years at the firearms and gunshot residue laboratory of the Zurich Police Department (Switzerland). She investigated numerous cases involving firearms, gunshot residue, and toolmarks in Switzerland and the Netherlands, where she worked at the Ministry of Justice in Rijswijk in 1993.

She has presented her work at several conferences in both national and international forums, as a member of the European Network of Forensic Science Institutes (ENFSI) and a Fellow of the working group on firearms and gunshot residue analysis. She published numerous articles about firearms, gunshot residue, and toolmarks, as well as a book chapter and a book on the same topics.

ALAIN G. BARBIER, MS
Interpol, Lyon, France

Mr. Alain Barbier is a Commissioner of the Belgian Federal Police seconded at the International Criminal Police Organisation (Interpol). As the Assistant Director, he is responsible for Database Management and Forensic Support. He first joined Interpol in the spring of 1999 as a Vehicle Crime Program Manager, Strategic Project Officer for the Police I-24/7 Telecommunication Network Deployment, and Advisor of the Executive Director for Police Services.

Mr. Barbier joined the police in 1988 and became a Senior Police Officer with the Belgian Federal Police. He also worked in Belgium as Platoon Commander and Program’s Chief for National and International Vehicle Crime.

Mr. Barbier holds a Masters in Law and Criminology from the State University of Liège, in Belgium, a Degree in Police Management and Administration from the Royal Gendarmerie Academy for Officers in Belgium, and a Masters in Military Science from the Royal Military School, in Belgium. He is also an expert in police management of crime phenomenon at national and international levels.

DIDIER BROSSIER
Institut de Recherche Criminelle de la Gendarmerie Nationale, Rosny-Sous-Bois, France

Adjudant-Chef Didier Brossier is the Chief of the Mechanical Identification Unit of the Vehicle Section (Unité d’Expertise Identification Mécanique du Département Véhicules) at the Institut de Recherche Criminelle de la Gendarmerie Nationale (IRCGN), located in Rosny-Sous-Bois near Paris, France.

He took his first position at the Gendarmerie with the mobile squad in Versailles Satory more than 30 years ago. In 1981, he was moved to the department station located in Montaigu and then in Monfort L’Amaury. After five years, he specialized in air transportation policing at the airport of Paris-Orly.
In 1991, he was attached to the Vehicle Section of the IRCGN. His first task was to create a database to identify the make/model of vehicles involved in hit-and-run road traffic accidents. His present duties include the identification of vehicles, particularly the ones that have been re-VINed. He also performs the restoration of VINs. Adjudant-Chef Brossier also specializes in the examination of vehicle license plates in order to determine their authenticity and, when applicable, the manner in which they have been counterfeited.

Adjudant-Chef Brossier is also a member of the European Working Group that designed the European Vehicle Identification Database (EuVID). EuVID is an electronic database that collates identification information on different types and models of vehicles.

JEAN-FRANÇOIS CHEVALLEY
Police Cantonale Vaudoise, Lausanne, Switzerland

Mr. Jean-François Chevalley is an inspector with the criminal police (police de sûreté) of the Vaud State Police (Police Cantonale Vaudoise) based in Lausanne, Switzerland. He has extensive experience investigating all types of crime and conducting interviews with suspects, victims, and witnesses.

He started his law enforcement career approximately 20 years ago as a uniformed officer for the city police of Lausanne. Later, he was able to join the investigation division. He obtained extensive experience through the juvenile squad, the narcotic squad, and the violent crime squad. In 1991, he traveled to New Scotland Yard in London to study the police methods used in England.

In 2001, he attained the position of inspector at the Vaud State Police, and his present duties involve the investigation of all types of violent crimes. He also acts as an investigation supervisor for other types of crime.

Besides his regular duty, Mr. Chevalley is also a member of the bomb squad (Groupe des spécialistes en dépiégeage) as a specialist in ammunition. He is also a member of the Disaster Victim Identification team, and as such, participated in extensive identification operations conducted in Thailand following the 2004 tsunami.

MARC DEMIERRE, BS
Police Cantonale Genevoise, Geneva, Switzerland

Mr. Marc Demierre is an investigator with the criminal investigation division (police judiciaire) of the Geneva State Police (Police Cantonale Genevoise) in Geneva, Switzerland. He began attending the police academy in January 2001. After completion, gained experience in the domestic crime and drug crime units before joining the crime scene (forensic) unit in January 2003. Mr. Demierre consults on many different types of crime scenes, including burglaries, stolen-recovered vehicles, and homicides. More recently, he has been promoted to deputy leader of the questioned documents unit.

Prior to his engagement with the police, he completed a Bachelor of Science in forensic science at the Institut de Police Scientifique et de Criminologie at the University of Lausanne in
Switzerland. During his studies, he held internships with the traffic unit of the Lausanne police department, the forensic unit of the Vaud State Police (Police Cantonale Vaudoise), and the forensic laboratory of the French Military Police, in Rosny-sous-Bois, near Paris, France. More recently, Mr. Demierre participated in an international police exchange and spent one month studying American police methods with the New York City Police Department Crime Scene Unit.

EMMANUEL FIVAZ, BS
Police Cantonale Neuchâteloise, Neuchâtel, Switzerland

Mr. Emmanuel Fivaz is a scientific inspector with the crime scene unit (service d’identification judiciaire) of the Neuchâtel State Police (Police Cantonale de Neuchâtel) in Switzerland. As a criminalist, he is often requested to examine stolen-recovered vehicles and specializes in lock examination. Similarly, he has extensive experience in the examination of vehicles used by criminals to carry out illegal activities such as homicides, robberies, or kidnappings.

In 1998, Mr. Fivaz obtained his Bachelor of Science in forensic sciences at the Institut de Police Scientifique et de Criminologie of the University of Lausanne in Switzerland. As a student, he conducted extensive research into the duplication process of automotive keys. His research concentrated on the persistent traces left by the mechanical process of key duplication.

After graduating, Mr. Fivaz worked for three years with the Zoug State Police in Switzerland as a criminalist with the criminal investigation division. He then joined the Neuchâtel State Police. He is currently in charge of the examination of questioned documents, and more particularly counterfeit identity documents.

MOIRA JOHNSON, BS
Australian Federal Police, Canberra, Australia

Moira Johnson is currently the Discipline Team Leader of Crime Scenes, Forensic and Technical Services with the Australian Federal Police (AFP) in Canberra, Australia. Prior to joining the AFP as a Senior Scientific Officer in 2002, Ms. Johnson was a police officer with the New South Wales Police Service for 14 years, with 11 years as a Crime Scene Investigator with the Forensic Services Group. In 2002, Ms. Johnson graduated with a Bachelor of Applied Science (Forensic Investigation) from the Canberra Institute of Technology.

As a crime scene investigator, Ms. Johnson has examined a large number of crime scenes ranging from burglaries to multiple murder scenes. She was a member of the Disaster Victim Identification Team that attended the Thredbo Landslide Disaster in 1997. Between November 2002 and April 2003, she was the Crime Scene Team Leader of the forensic team involved in the investigations of the Bali Bombings and the JW Marriott Hotel Bombing in Jakarta in August 2003.
In her current role, Ms. Johnson is responsible for the coordination of discipline training including general crime scene investigation, shoeprint, tire track, and toolmark examination and comparison, bloodstain interpretation, vehicle examination and identification, fire investigation, and post-blast scene examination. She is also responsible for writing and updating training and procedure manuals and maintaining quality assurance procedures within the section.

HORST KATTERWE, PhD
Bundeskriminalamt, Wiesbaden, Germany

Dr. Horst Katterwe is a forensic scientist with the Forensic Science Institute of the federal criminal investigation service (Bundeskriminalamt [BKA]) in Wiesbaden, Germany. He studied physics at the Technical University (Technische Universität [TU]) Berlin in Germany. He worked as a physical scientist first at the Institute of Physics at the TU Berlin and then at the University of Kaiserslautern, where he received his doctorate degree. In 1976, he joined the BKA as a forensic scientist and head of the Materials Technology division.

Dr. Katterwe is head of the cooperation of marks examiners between the German states and the federal government. He is a member and chairman of the steering committee of the ENFSI Working Group Marks. His research interests include marks examination and identification, testing of new casting materials, image processing, fracture matching, evidence interpretation, probability theory model calculations, and recovery of erased numbers in metallic and polymeric materials.

Dr. Katterwe is a member of the German Physics Society (Deutsche Physikalische Gesellschaft). He has been awarded “Best Presentation” by the Association of Firearms and Toolmarks Examiners in 1992, 2001, and 2004. In 1993, he received the prize of the academy of police commanders (Preis der Polizeiführungsakademie) for his forensic science research on “Entropy-Elasticity and Mechanical Memory” (restoration of erased numbers in polymers).

STEPHANE KUMMER
Police Cantonale Genevoise, Geneva, Switzerland

Mr. Stéphane Kummer is a crime scene investigator with the criminal investigation division (police judiciaire) of the Geneva State Police (Police Cantonale Genevoise) in Geneva, Switzerland. He has worked at the crime scene (forensic) unit (Brigade de Police Technique et Scientifique) since January 1994 and investigated hundreds of crime scenes including burglaries, homicides, stolen-recovered vehicles, rapes, and fires. He also specializes in forensic ballistics, examination of explosive devices, examination of mechanical devices, and identification of victims of mass casualties.

Prior to his engagement with the police, he obtained degrees in electronics and mechanical engineering. He also worked as an engineer in the space industry, studying and developing micro-mechanisms for communication and observation satellites.
Mr. Kummer held several internships at national and international levels. He worked with crime scene (forensic) units in the states of Fribourg, Neuchâtel, Tessin, Valais, and Vaud in Switzerland. He also completed a training internship in forensic ballistics with the Royal Military School (Ecole Royale Militaire) in Brussels, Belgium. He attended classes on selected topics at the Institut de Police Scientifique of the University of Lausanne. He holds the Swiss federal explosive handling permits B and P (permis d’emploi d’explosifs).

MIKEL LONGMAN, BS
Arizona Department of Public Safety, Phoenix, Arizona, USA

Mikel Longman is chief of the Criminal Investigations Division of the Arizona Department of Public Safety in Phoenix, Arizona. As a career law enforcement officer with extensive background in both patrol and criminal investigations, he served as the executive director of the Arizona Automobile Theft Authority. During his 30 years with the State of Arizona, Chief Longman has served in a variety of assignments including resident patrol officer on the Navajo Indian Reservation, supervisor of a motorcycle squad on the Phoenix Metropolitan Freeway System, Highway Patrol Officer in rural Arizona, and supervisor of an undercover narcotics squad. He served as a patrol district commander, motorcycle district commander, organized crime unit commander, and commander of the Arizona Vehicle Theft Task Force.

Chief Longman is a graduate of the FBI National Academy, has a Bachelor of Science in Public Safety Administration, and is an Arizona Peace Officer Standards and Training (POST) certified instructor. He is an active member in numerous fraternal and professional associations, including the Arizona and International Associations of Chiefs of Police, the North American Export Committee, where he serves as a board member, and the International Association of Auto Theft Investigators (IAATI), where he serves as 3rd vice-president. He is also a member of Police International Sonora/Arizona (PISA), the 100 Club, Associated Highway Patrolmen of Arizona (AHPA), Arizona Auto Theft Investigator Association, and the National Motor Vehicle Title Information System (NMVTIS) law enforcement response subcommittee.

ROBERT F. MANGINE
NorthAmerican Technical and Forensic Services, Las Vegas, Nevada, USA

Robert Mangine is a member of the American College of Forensic Examiners, a Certified Forensic Consultant, a Certified Fire and Explosion Investigator, and a Certified Automotive Locksmith. He has been involved in various criminal and homicide investigations with law enforcement agencies nationwide and was accepted in court as an automotive forensic expert on 42 occasions in seven US states and the District of Columbia. Mr. Mangine has extensive and ongoing training in forensic locksmithing, vehicle fire investigation, and steering column, ignition lock, and anti-theft system examination. He also received training in automotive mechanics from the US Department of Defense and in explosives/demolitions.
training while in the US Marine Corps. During his career, Mr. Mangine examined over 12,000 vehicles and conducted over 375 auto theft training seminars for insurance companies, law enforcement, military and federal agencies, and professional organizations.

Mr. Mangine studied criminal justice and security administration in college. Between 1975 and 1990, he was employed by several corporations to design and maintain security alarm systems and locking systems, and acted as a regional manager for investigations. He has also served as Assistant Director of Public Safety for Seton Hall University in South Orange, New Jersey.

In 1991, Mr. Mangine founded NorthAmerican Technical and Forensic Services in Frederick, Maryland. Twelve years later, the company relocated its headquarters to Las Vegas, Nevada, and currently has six automotive forensic examiners located around the United States. Mr. Mangine has also been a member of IAATI for more than ten years.

DIANA OMBELLI, BS
Sdu Identification, Haarlem, The Netherlands

Mrs. Ombelli joined Sdu Identification in Haarlem, the Netherlands, in 2001 as Head of the laboratory. Her duties involved the supervision of testing activities incoming raw materials, semi-manufactured products, and end products. Since 2002, she manages projects on the development and implementation of new identity documents and related IT systems. More recently she has been charged to handle issues concerning the ISO formatting and quality assessment of digital photographs to be saved on chip in electronic passports and identity documents.

Mrs. Ombelli graduated with a forensic science degree from the Institut de Police Scientifique et de Criminologie of the University of Lausanne, Switzerland. After graduation, she worked for three years as a forensic scientist at the Police Laboratory in Bern (Switzerland). Then, she worked at the Swiss Federal Aliens Office where she headed a feasibility study on national information desks for travel documents. Later, she coordinated the design and manufacture of a Swiss visa sticker issued electronically. In 2000, she had advisory roles in the Swiss Passport project and the Dutch project of new Travel Documents.

She is a member of the International Association for Identification and was the Swiss representative member of the New Technology Working Group within the International Civil Aviation Organization. In 2000 she was Chairwoman of the European Interpol Conference on Fraudulent Travel Documents.

MANUEL POZA
Police Cantonale Vaudoise, Lausanne, Switzerland

Mr. Manuel Poza is an inspector with the criminal police (police de sûreté) of the Vaud State Police (Police Cantonale Vaudoise) based in Lausanne, Switzerland. Since 2002, he has headed the stolen vehicles research team (Groupe Recherches Véhicules Volés [GRVV]).
Prior to his engagement with the police, Mr. Poza held an apprenticeship under a business employee in a bank. In 1986, he entered the police academy and joined the criminal police department after graduation.

After 10 years of experience in several different investigative divisions, Mr. Poza became affiliated with the GRVV, which is part of the white-collar crime investigation division. In 2002, he was promoted to head of the group. The GRVV investigates traffic of stolen vehicles, extortion, and blackmailing involving stolen vehicles. Since 2001 Mr. Poza has lead the interstate criminal police working group against crimes involving vehicles (Groupe de travail intercantonal des polices judiciaires suisses contre les délits véhicules).

JERRY RATCLIFFE, PhD
Temple University, Philadelphia, Pennsylvania, USA

Dr. Jerry Ratcliffe is an associate professor in the Department of Criminal Justice, Temple University, Philadelphia. Previously he served for 11 years as a police officer with the Metropolitan Police in London (UK) where he worked on patrol, in an intelligence and information unit, and with the Diplomatic Protection Group. He completed a BSc (Hons) in Geography at the University of Nottingham, but due to an ice-climbing accident left the police and remained in academia.

As a lecturer in policing (intelligence) at the New South Wales Police College in Australia, he ran graduate programs in criminal intelligence, and for a number of years coordinated Australia’s National Strategic Intelligence Course.

A Fellow of the Royal Geographical Society, he has a PhD in spatial and temporal crime analysis techniques (Nottingham). Dr Ratcliffe is the creator of HotSpot Detective, an add-on crime mapping and analysis program for MapInfo. He has published over 20 articles and three books: “Strategic Thinking in Criminal Intelligence” (Federation Press, 2004), “GIS and Crime Mapping” (Wiley, 2005), and “Policing Illegal Drug Markets” (Criminal Justice Press, 2005). He publishes and lectures on environmental criminology, intelligence-led policing and crime reduction.

SIMONE REYNOLDS, BS
Canberra Institute of Technology, Canberra, Australia

Simone Reynolds has been employed since September 2005 as a crime scene investigation teacher with the Canberra Institute of Technology in Canberra, Australia.

Ms. Reynolds graduated from the University of Canberra in 1995 with a Bachelor of Science with Honors in Medical Laboratory Science. Soon after graduating, she commenced employment as a microbiologist with the Australian Capital Territory (ACT) Government Analytical Laboratory and then the Therapeutic Goods Administration.

In 1999, Ms. Reynolds decided to take a different career path and commenced employment as a Scientific Officer (Crime Scene Investigator) with the Australian Federal Police Forensic Services. As a Scientific Officer, Simone has assisted with and managed a number
of serious crime investigations within the ACT and overseas. In 2002, she was a member of the disaster victim identification and investigation teams for the Bali bombings in Indonesia. Also the same year, she commenced work as an Assistant Quality Manager, which included the role of Occupational Health and Safety Manager within the Forensic Services.

FRANCESCO SAVERIO ROMOLO, PhD
Università degli Studi di Roma “La Sapienza”, Rome, Italy

Dr. Francesco Saverio Romolo is a Professor at the Università degli Studi di Roma “La Sapienza” in Rome, Italy. His present duties include cases and research programs in several areas of forensic chemistry, including analysis of explosives, gunshot residue detection, and analysis of drugs of abuse.

In 1990, Dr. Romolo obtained his Master of Science in Chemistry from the University “La Sapienza,” and three years later, he completed another Master of Science in Pharmacy at the same university. In 2004, he completed his doctoral degree at the Institut de Police Scientifique of the University of Lausanne, Switzerland. His thesis involved the examination of organic gunshot residue from lead-free ammunition and was received with the highest honors.

In 1993, he entered the Academy of the Italian National Police and attended the Course for Technical Directors. In 1997, he became Deputy Head of the Explosives Analysis Laboratory within the Criminal Police HQ of the National Police Department in Rome. In 2000, he became Head of the Gunshot Residue Analysis Laboratory. Dr. Romolo is also a guest lecturer and consultant for the University of Lausanne. He presented the results of his research in several international meetings and has authored many articles in international journals.

WILLIAM T. SMYLIE
Davie, Florida, USA

William Smylie was a highly decorated member of the Miami Police Department (MPD) in Miami, Florida for 25 years. He spent several years as a patrol officer before being promoted first to criminal investigator in 1974, and then to Sergeant/supervisor in vehicle theft. As one of the original founding members, he was assigned to the Miami-Dade Auto Theft Task Force from its inception as an investigative supervisor for the final 10 years of his Miami PD career.

Following a full service retirement in 1995, Mr. Smylie worked for the State Attorney’s Office in Miami for two years as a criminal investigator, assigned to the Miami-Dade Auto Theft Task Force. This was followed by employment as a Special Agent with the National Insurance Crime Bureau (NICB) for six years, assigned full-time to the Auto Theft Task Force until retirement again in late 2003.

A lifelong observer of the automobile industry and devoted student of automotive history, Mr. Smylie has instructed many classes over the years in vehicle theft investigation
and vehicle identification techniques. He has been qualified as an expert witness in state and Federal courts numerous times to testify regarding stolen vehicle detection and identification of professionally altered stolen vehicles during an investigative career spanning 33 years.

MARC STAUFFER
Phenix Assurances, Lausanne, Switzerland

Mr. Marc Stauffer is responsible for the special investigation unit at Phenix Assurances, an insurance company member of the Allianz Group, located in Lausanne, Switzerland. His duties include the investigation of suspicious claims for the entire Swiss territory. He has a daily involvement in the investigation of auto thefts and damages resulting from fire, natural elements, animals, and accidents.

Marc Stauffer studied at the Institut de Police Scientifique et de Criminologie of the University of Lausanne in Switzerland before joining the Vaud State Police as a Crime Scene Officer. During that time, he was able to investigate various crime scenes including stolen-recovered vehicles.

In 1972, he joined the insurance industry as a claim specialist and obtained the Swiss Federal Insurance Diploma (diplôme fédéral d’assurances). Following that achievement, he was able to obtain other positions within the insurance industry both as claim specialist and agent. In 1986, he joined Phenix Assurances first as the claim service direction inspector and then as the head of the information technology system. Finally, he was chosen to head the special investigation unit for the Swiss territory.

Mr. Stauffer regularly participates in seminars such as the ones organized by the IAATI and IASIU. He is also presently involved with the development of direct liaisons between the SIUs of the Allianz Group’s French-speaking countries.

GREG TERP, MPA
Miami-Dade Police Department, Miami, Florida, USA

Lieutenant Greg Terp has been the Commander of the Miami-Dade Multi-Agency Auto Theft Task Force since January 1996. He joined the Miami-Dade Police Department in 1976 and has worked in Tactical Operations, Canine, Explosive Detection, Bomb Disposal, and Investigations.

In 1993, Lt. Terp obtained his Bachelor of Arts in Criminal Justice from St. Thomas University in Miami, Florida. Two years later, he earned his Master’s Degree in Public Administration from the University of Miami.

Lt. Terp is actively involved in the fight against the theft of automotive vehicles. While leading his Task Force, he initiated the container imaging system Stolen Auto Recovery System (STARS) at the Port of Miami, which became fully operational by 2000. He is the current Chairperson of the North American Export Committee (NAEC). This committee, comprised
of international law enforcement and private industry professionals, works to find programs
and technology to address the growing illegal exportation of stolen vehicles. He is also a
member of other professional organizations such as the FBI National Academy Associates
(FBINAA), the International Association of Auto Theft Investigators (IAATI), The National
Motor Vehicle Theft Information System Law Enforcement Sub-committee (NMVTIS), the
Florida Anti-Car Theft Committee (FACT), and the Florida Auto Theft Intelligence Unit
(FATIU).

JEAN-FRANÇOIS VOILLOT, MS
Institut de Recherche Criminelle de la Gendarmerie Nationale, Rosny-Sous-Bois, France

Captain Jean-François Voillot is in charge of the serious crime unit of the national gendar-
merie forensic laboratory (Institut de Recherche Criminelle de la Gendarmerie Nationale [IRCGN])
located in Rosny-Sous-Bois near Paris, France.

After graduating from the French air force academy, Captain Voillot joined the national
gendarmerie in 1992. During his career, he was first assigned to an anti-riot platoon in
Marseille for four years. Then, he was promoted and became the head of the firearms
section of the national forensic laboratory (IRCGN).

After this four year assignment, he studied at the Institut de Police Scientifique et de Crimi-
nologie of the University of Lausanne in Switzerland and obtained a Master of Science in
forensic sciences. His thesis research involved the investigation of underwater crime scenes.
Upon his return to the French Gendarmerie, he commanded a company in the south of
France. Then, he was put in charge of the national serious crime unit at the IRCGN.
Throughout these various occupations, he received extensive training in underwater police
diving. Captain Voillot specializes in the underwater application of forensic principles.

GLENN WHEELER, BS
Bloomington, Illinois, USA

Mr. Glenn Wheeler earned his Bachelor of Science at the Lawrence Institute of Technology
in Southfield, Michigan. His career with State Farm Insurance Companies began in 1960,
and he retired after 43 years of service. During his tenure, he earned a Chartered Property
& Casualty Underwriter (CPCU), Associates in Management (AIM), and Claims Law des-
ignation. He spent his last 25 years with State Farm managing SIU operations, capping his
career as an SIU Corporate Consultant where he worked with SIU representatives in the
United States, Canada, and Mexico.

He teaches insurance contracts and identification and investigation of insurance fraud at
the corporate level for claims personnel, agency, and underwriting. He has instructed at the
Illinois and Michigan State Police Academies, New South Wales, Australia law enforcement
units, the National Insurance Crime Bureau (NICB), the International Association of Auto
Theft Investigators (IAATI) and the North Central Regional Chapter (NCRC) seminars.
Mr. Wheeler has been credited with being a founding father of the NICB Special Investigations Academy, responsible for helping develop the curriculum. Additionally, he chaired the North American Export Committee (NAEC) for two years. Under his leadership, by-laws were established for the fledging organization and Mexico was added as a partner. He is the current President for NCRC and serves on the Boards of IAATI and NAEC.
In these chapters, world-renowned experts have come together to provide a comprehensive guide to the forensic aspect of auto theft investigation. The authors’ approach to the subject matter is easily understood and practical for immediate use in your investigations. The information presented within is right on target to handle auto theft investigations worldwide. For what I believe to be the first time, the many different facets surrounding the forensic investigation of stolen-recovered vehicles have been pulled together in one volume.

The “traditional” role of the auto theft investigator has undergone a considerable transformation over the years. As anti-theft devices have become more sophisticated, so have the thieves in defeating them. Auto theft investigators have become far more aware of the value of forensic techniques in the investigation of stolen vehicles, recovered vehicles, organized auto theft rings and the investigation of crimes resulting from the theft and use of stolen vehicles.

The auto theft investigator is experiencing a major shift in emphasis; a departure from routinely handling auto theft reports within individual jurisdictions, emphasis is shifting to multi-jurisdictional and worldwide investigations. Of even greater importance, investigators are constantly working with professionals from many different agencies to pool their resources and expertise. This teamwork is vital to gain an upper hand on the vehicle theft problems facing the world today.

In an effort to achieve the highest degree of effectiveness in handling their responsibilities, auto theft investigators are encouraged to expand their knowledge base in the use of forensic auto theft investigation. This comprehensive publication contains a wealth of important information and reminds us that knowledge and education are still our most powerful tools in performing our jobs. After reading this publication, I have become an avid fan of the works that Eric Stauffer and Monica Bonfanti have organized for you, the reader. Thanks to Eric and Monica for focusing our attention on the vital forensic aspect of auto theft investigation.

Karen L. Metz
President IAATI, 2004–2005
Retired Ft. Lauderdale Police Officer
On March 25, 1912, a De Dion-Bouton was violently stolen from its chauffeur in Montgeron, France, by Jules Bonnot and his gang (known as *la bande à Bonnot*), a group of French anarchists reputed for stealing cars. The *Société Générale* (a national bank) was then robbed and the culprits used the car to escape. This is one of the numerous vehicles stolen or car-jacked by the Bonnot Gang. As a matter of fact, carjacking, the act of violently stealing an occupied car, started with the crimes committed by these gangsters. However, the simple theft of vehicles did not originate with Jules Bonnot. In fact, it started as early as when the first vehicles were produced.

Today, auto theft is a hot topic as it concerns many citizens and affects the entire society. In the United States alone, one million vehicles are stolen every year. The city of Modesto in California holds the sad and impressive US record for the highest rate of stolen vehicles (more than 1,500 per 100,000 people) in 2004. The theft of automotive vehicles also dramatically increased in Europe in the early 1990s after the fall of the Berlin Wall and the opening of Eastern Europe. In France, Germany, and some other Western European countries, the rate of auto theft became unbearable and forced manufacturers and insurance companies to work together with law enforcement agencies to impose radical measures. In Europe, more than one million vehicles are stolen every year, the same figure as in the United States, while Australia “only” sees about 100,000 vehicles stolen every year. Nowadays, the business of auto theft is a colossal one and organized-crime groups have taken control of it.

The repercussions of this crime are very serious and influence everyone’s life. Governments have responded to crime by writing laws and enforcing them through a justice system, charged with the prevention and repression of criminal activities. This is conducted in order to protect law-abiding citizens and to ensure a safe society. With the scientific and technical advances in forensic sciences and criminal investigation techniques since the beginning of the century, it would appear logical that all possible means be applied to the investigation of auto theft and more particularly, stolen-recovered vehicles. Unfortunately, it is not so. Many entities do not grant much importance to this crime, assuming it as a petty one. They are incorrect and oblivious to its modern violence. Additionally, it has major consequences for the financial platform and for the general population’s feeling of safety or lack thereof. The repression of this crime greatly suffers from this unfortunate attitude. Not only is auto theft a very serious crime, but also it is a crime that can be thoroughly and scientifically investigated by collecting available forensic evidence.
The crime of auto theft has evolved over time. It is nowadays a commonly encountered crime, which presents strong ties with drugs of abuse, firearms, and human trafficking as well as terrorism. The latter is probably the most concerning topic for law enforcement agencies from around the world. There is strong evidence that terrorist groups are financed by the international trafficking of stolen vehicles. Anti-theft technology present in modern vehicles has also forced thieves to adapt and, as a result, auto theft becomes more violent on a daily basis.

There have been very few books dealing with the investigation of auto theft, and those are now mostly outdated. While there are many books on crime scene investigation and general forensic sciences, there are none dealing specifically with the forensic examination of a vehicle, stolen-recovered or more simply crime-related. The goal of this book is not only to fill this gap, but also to provide much more comprehensive information surrounding the investigation of auto theft. We hope that this volume will provide the most valuable information to conduct proper examination of stolen-recovered and crime-related vehicles.

This work is primarily intended for crime scene investigators, criminalists, police officers, and, of course, auto theft investigators (both public and private). The book is also ideal for personnel in training. It provides seamless transitions that will ensure the student a broad understanding of the topic. Experienced investigators will also be able to glean new information and obtain a different perspective on the overall issues, because the information presented in this publication is unique and internationally relevant. Other police investigators, private investigators, insurance adjusters, claim representatives, students in forensic sciences, and attorneys will find the information presented here useful and interesting, even if it does not directly cover the scope of their work. Some parts of this book can be directly used to describe how to examine a vehicle. Other chapters are more about the concepts behind the issues presented, and they provide the reader with the proper reference in order to perform the “how-to”.

We also feel optimistic that this book will revive the motivation of law enforcement personnel, particularly higher management, in investigating auto theft. There is so much that can be done that is not presently done. The reasons are probably numerous, but mostly we think that it is due to a lack of means dedicated to the crime of auto theft and a lack of education regarding what can be obtained from the examination of stolen-recovered vehicles. We ask law enforcement personnel to encourage supervisors and politicians in combating the larceny of vehicles.

We tried to make this book as international as possible. The result: 22 authors from the United States, five European countries, and Australia. When studying police and forensic methods from foreign countries, one might discover better solutions and consequently want to change how things are done in his or her jurisdiction. This is the goal behind the international character of this book. While it is difficult to keep a perfect uniformity between these different approaches and writings, we hope that this will be largely overcome by the gain in the information provided. We have gathered some of the foremost experts in their
specialties, many of whom have dedicated their lives to combating auto theft by improving police investigations and forensic sciences.

When planning the book, we understood that the topic of auto theft investigation could easily span several volumes with hundreds of pages. While we generally tried to confine the work to the forensic aspect of the investigation, we were also compelled to include some more traditional investigative portions, offering a broad view of possible problems and solutions. Additionally, because this book is available to the public at large, including the culprits stealing vehicles, we could not include the full breadth of information that would serve the investigators. However, whenever possible, we indicated to the reader where this secured information could be obtained. We are confident that readers will understand the need for these limitations and be patient with them.

Chapter 1 defines and presents the problem of auto theft. It is followed by general concepts of interviewing people and gathering circumstantial information (Chapter 2). Then, the reader is taken into the heart of the book: the examination of vehicles, treated in detail in Chapters 3 and 4. A basic review of the different physical evidences and their forensic value is presented in Chapter 5. Chapter 6 tackles a very specific issue—vehicle identification. This is followed by a chapter on recovery of erased serial numbers. Chapters 8, 9, and 10 deal with locks, keys, and anti-theft systems, along with issues specifically related to vehicular crime scenes. Then, the analysis of vehicle fluids, which can bring pertinent information to the investigation, is covered (Chapter 11). This is followed by two chapters dealing with the examination of vehicles discovered under particular circumstances: burned (Chapter 12) and underwater (Chapter 13). Chapters 14 and 15 present the criminalistics approach to the examination of vehicle tags and license plates, two topics often ignored. The proper methodology to perform a thorough search of a vehicle is presented in Chapter 16. Chapter 17 considers the specific involvement of auto theft in terrorism—a very current topic. Chapters 18 and 19 present the investigation of auto theft from both public and private perspectives. The manner in which vehicles are tracked is introduced in Chapter 20. Chapter 21 describes modern mapping techniques used to analyze auto theft and help in its reduction. Finally, Chapter 22 presents the work Interpol has put in place to fight against vehicle theft on an international level.

We hope you appreciate the attention to scientific detail and international perspectives presented here. We strongly believe that the investigation of auto theft—specifically stolen-recovered vehicles—can only improve in time. We have faith that this work will aid the fine police and private investigators from around the world in their dedicated fight against auto theft.
The most difficult part of the acknowledgments is not to forget anyone. Unfortunately, *errare humanum est* (to err is human) and we apologize to the person(s) whom we forget to thank.

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If the publisher were the only entity involved in the creation of this book, the results would be a very nice looking hardback of approximately 600 blank pages. Fortunately, this book has much more to offer and the only people responsible for that are the contributors. Each contributor must be thoroughly credited. You have done such a terrific job that there are no words that can properly express the amount of gratitude we owe you. This book would be absolutely nothing without your contribution. You delivered the highest quality of material possible and we are very proud of you. Thank you so much! This is no small achievement. Now, you can return to your family and enjoy life again!

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Eric Stauffer
Monica S. Bonfanti