RONALD F. BECKER

# THE UNDERWATER CRIME SCENE

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*By*

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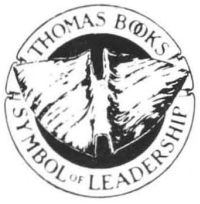


CHARLES C THOMAS • PUBLISHER
*Springfield • Illinois • U.S.A.*

*Published and Distributed Throughout the World by*

CHARLES C. THOMAS • PUBLISHER
2600 South First Street
Springfield, Illinois 62794-9265



*1995 by* CHARLES C. THOMAS • PUBLISHER

ISBN 0-398-05979-9 (cloth)

ISBN 0-398-05980-2 (paper)

Library of Congress Catalog Card Number: 94-48036



*Printed in the United States of America*
*SC-R-3*

**Library of Congress Cataloging-in-Publication Data**

Becker, Ronald F.
The underwater crime scene : underwater crime investigative techniques / by Ronald F. Becker.
p. cm.
Includes bibliographical references and index.
ISBN 0-398-05979-9 (cloth). -- ISBN 0-398-05980-2 (paper)
1. Underwater crime investigation. 2. Police divers.
3. Underwater archaeology -- Methodology. I. Title.
HV8080.D54B43 1995
363.2'5 dc20 94-48036
CIP

*To*
*My father Glenn C. Becker, 1918–1994, and*
*my son Gavin Dixon Becker, born October 8, 1994*

# FOREWORD

As a police administrator charged with the responsibility of investigating and solving criminal offenses, I am constantly in search of better methods for collecting, processing, and preserving evidence for successful criminal prosecution.

In a city that is literally surrounded by lakes and rivers, and ever increasing development in these areas, I am particularly interested in the recovery of evidence from these waters. Over the last twenty years, there has been very little change in the way underwater recovery of evidence has taken place. The traditional practice of dive teams has been to race to find what is being searched for and quickly recover it without regard for any trace evidence value or preserving the area where it was discovered.

In their zeal to succeed in locating what was being searched for and hopefully catch a criminal or corroborate a statement from a suspect, there has been little emphasis placed on a methodical and thorough examination of the underwater scene or the evidence recovered. The assumption has been that no forensic or trace evidence remains on an item after it is submerged in water, therefore, no need to preserve or process the item as though there were. This book does an excellent job of challenging those assumptions and clearly points out that these assumptions are erroneous.

In recent years, there has been great advancement in the processing, and collection and preserving of evidence discovered on land. This book points out that we now have the technical ability to replicate what we use in our land-based investigations and transfer them to the underwater crime scene. As every criminal investigator and evidence collection expert knows, successfully recovering evidence requires very delicate and precise handling of the crime scene to ensure that the evidence is properly preserved for later examination.

This book explains many techniques and methods to be employed by the underwater evidence search team to enable them to accurately pre-

serve and recover many types of evidence from underwater. Mr. Becker did an exceptional job of combining the techniques used by field and marine archaeologists, criminalists, and forensic scientists to what may emerge as a new field of study. Mr. Becker has presented this material in such a way that this book is a very practical and useful guide that should be employed by every law enforcement agency, fire rescue dive team, and any other investigator who becomes involved in the recovery of evidence from underwater.

Police administrators have an obligation and should have the desire to provide the most up-to-date material for their criminal investigators and this book by Ron Becker certainly meets that criteria.

Bruce Mills
*Deputy Chief*
*Austin Police Department*
*Austin, Texas*

# PREFACE

All of us who watch the Discovery channel on television know earth is the water planet. The United States has water shrouded boundaries on three sides and inland waterways too numerous to measure. More and more human activity is taking place on America's waterways as we become fully franchised citizens of planet ocean. As our waterborne activities increase, so do the problems associated with enforcing laws on the nation's most popular playgrounds.

Legislatures have passed laws governing citizens' conduct on our diverse waterways and police have met the challenge of enforcing those laws. When crime is committed in, on, or around open water the police have no trouble employing traditional investigative techniques designed to assist in the apprehension of offenders.

Everything taught in investigators' schools and police academies pertaining to crime scene management and processing is seen as inapplicable when dealing with evidence retrieved from underwater. Because of this technical void, most underwater evidence is "salvaged" as opposed to processed. In many instances fire departments have primary responsibility for underwater evidence salvage. Salvage is a process of retrieval that has little concern for the impact of the recovery technique on the item being recovered. Courts, prosecutors, and police have become content with the salvaging of underwater evidence.

Since 1963, a small group of dedicated archaeologists, with a love for the sea and scuba diving, has given birth, nourished, and raised underwater investigation to a science. By utilizing the same type of concepts and techniques as field archaeologists, these individuals have been able to retrieve the remains of ancient ships and their cargoes. Because of painstaking application of patience, scientific method, measurement, photography, sketches, and recovery marine archaeologists have been able to reconstruct vessels and their cargoes from retrieved bits and pieces. They have devised a technology all their own. They have devised a language all their own. They have devised tools and equipment all

their own and have discovered a past that the sea has been extremely reluctant to give up.

The work of the marine archaeologists is very similar to that of the police investigator. A trained police investigator can readily see that many of the concerns and objectives of the marine archaeologist are synonymous to the concerns and objectives of the police investigator, the only difference being that of the medium in which each operates.

It is the purpose of this book to bring together the science of the marine archaeologist to the needs of police agencies that have responsibility for providing law enforcement on America's waterways. Much evidence is lost, unrecognized, or mishandled and rendered unusable at the time of trial because of improper handling during the underwater recovery process. Underwater scenes can and should be graphically located, geographically and temporally just as dry land crime scenes are. Chains of custody and demonstrative evidence should be utilized in the presentation of evidence resulting from underwater investigations as they are in any other investigation.

My involvement as a dive specialist with local search and rescue efforts has allowed me to develop an understanding of the restraints operating on police agencies in the training and equipping of search and rescue teams. My practice as a lawyer provided the technical understanding for evidentiary predicates for evidence and the latitude allowed evidence retrieved from waterways. The numerous product defect cases handled by my firm during my practice as a personal injury lawyer gave me an introduction into basic engineering and mechanics. My experience as a police investigator developed an appreciation for the investigative techniques used by police in processing dry land crime scenes. Instructing criminal investigation and introductory forensics courses has contributed to my appreciation of the types of evidence being lost or mishandled in most evidence "salvage" operations. My amateur status and interest in underwater excavations showed me that there is a scientific alternative to what is presently being done. All these experiences have prepared me to write a book dealing with retrieving and processing underwater evidence.

Many experienced investigators will question the practicality of conducting a comprehensive underwater investigation in conditions offering limited visibility or dangerous currents. Admittedly, all the techniques offered in this book cannot be employed in every situation where evidence is attempted to be retrieved from its underwater resting place.

In the future, whenever conditions allow, it will be a mistake to simply

salvage evidence when a more scientific approach could have been taken. Investigators in the future will have to qualify the recovery procedures employed and where less was done than could have been, explanations will be expected.

The day of the salvage approach to retrieving evidence ends with this book and a new era of investigative dive specialist is about to dawn. Your interest in this new era of police investigation will allow you to participate in that dawning.

R.F.B.

# ACKNOWLEDGMENTS

Diving has been a lifelong passion that has culminated in the writing of this book. All the organized dive schools have contributed to the knowledge imparted to me and necessary for me to safely pursue sport and public utility diving. Discussions with the Austin, Texas Special Response Team were always illuminating and the insights provided by Senior Sergeant Harold Piatt were especially helpful and added a practical flavor to a cerebral endeavor. Deputy Chief Bruce Mills of the Austin Police Department introduced me to Senior Sergeant Piatt and his special response team, which was invaluable in gathering material included in this book. Marty Lee of Boerne, Texas provided the illustrations that have added a living dimension to the text.

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# THE UNDERWATER CRIME SCENE

# Chapter 1

# INTRODUCTION

## MAN AND THE SEA

More than 70 percent of the earth's surface is covered with water. Since earliest time humans have been drawn to the earth's waters for trade, transportation, recreation, and food. Greeks, as early as 4500 B.C., were free diving in the Mediterranean. Accounts of Heredities, the Greek historian, describe the efforts of free divers in salvaging sunken treasure (Diole', 1951). Entry into the underwater realm was undoubtedly linked with the transit of goods by vessel. Ocean trade and war gave rise to the need for salvage activities. Free diving was limited in depth and duration. It was inevitable that efforts would be made to use "machines" to allow divers to increase both depth and duration. Aristotle wrote in 330 B.C. of divers using a diving bell made of leather and later of pitch bound wood (Diole', 1951).

Today, divers using compressed air can safely dive unfettered to depths of one hundred feet. In the last thirty years, technology and education have moved diving from the purview of the strong and courageous and placed it in the world of recreation and sport.

## UNDERWATER ARCHAEOLOGY AS A SCIENCE

In the world of science, underwater archaeology is in its infancy. The popularizing of wartime diving by the media gave rise to a national curiosity about navy "frogmen," and to a 1960s television program called "Sea Hunt." Interest increased with the Jacque Cousteau television specials and a James Bond film called "Thunderball." People were no longer content watching others dive. Sport diving was born and its popularity has continued to grow. That growth and development has been closely linked to the fledgling science of underwater archaeology.

It was not until 1974 that academe was ready to embrace underwater archaeology. In that year the University of California at San Diego

became the first to offer an undergraduate degree in underwater archaeology. Today there are only seven universities in the world offering a graduate curriculum in underwater archaeology (Marx, 1990).

Utilizing excavation techniques similar to those used in land excavations, these new scientists have been able to recover artifacts from sunken cities and reconstruct much of that city's history and culture. They have been able to excavate entire vessels, and from their cargoes, deduce place of origin, trade routes, and personal information about crew and passengers. Contrary to popular belief, many artifacts survive better in water than on land.

Many field archaeologists were of the opinion that marine archaeology would never meet the rigors of the science of archaeology. Critics viewed early underwater archaeological activity as a salvaging or looting of artifacts. The artifacts that were being recovered by these "treasure hunters" were not being properly handled, processed, or preserved and in short order deteriorated and became useless (Taylor, 1965). No information was being gathered in situ. It is the field archaeologist's belief that it is her responsibility to record the location of each artifact or piece of artifact because, as in a criminal investigation, what may have little relevance or significance now, may prove invaluable later. It took time and attention to detail but a slowly evolving science emerged from the watery depths applying the same techniques that field archaeologists applied. The underwater archaeologist is in every sense of the word an underwater investigator. These individuals now have the keys to unlock the richest museum in the world.

## LAW ENFORCEMENT AND UNDERWATER EVIDENCE

People flock to recreational waterways in vast numbers. As the number of people using recreational waterways increases so do the number of accidents, drownings, violent crimes, and homicides. Criminals often seek a watery repository for weapons and other evidence of wrongdoing. It has become an integral part of the police function to provide resources that can be deployed to retrieve this evidence. Historically, fire departments have provided these services to the police since they already had firefighters who were trained in search and rescue diving. It was believed that no special skills other than diving were required to provide these services. The handling and processing of underwater evidence was a salvage operation.

The first accounts of a dedicated (specific as to function) police underwater evidence recovery team appeared in Dade County, Florida. The Dade County Underwater Recovery Unit began in 1960 and has had the responsibility for 28 cities, 400 miles of inland canals, over 400 rock quarries and 75 miles of bay front (Robinson, 1969).

As we view existing dedicated dive recovery operations, it is apparent they have evolved and been criticized much the same as early underwater archaeologists. Police recovery of underwater evidence could also be criticized for an absence of scientific rigor, focusing on salvage rather than recovery and reconstruction.

What information is lost in the salvage process? What might be inferred from measurement, sketches, and photographs, if not at the time of discovery, perhaps later? What parts of the story remain untold because of a failure to properly handle and package evidence, thereby preventing forensic examination? What value is salvaged material if it cannot be entered into evidence because of a failure to connect the evidence with the defendant? If a piece of evidence were located on land, no competent investigator would pick it up, hold it over his head and say "I've found it." Contrary to popular belief, forensic evidence is not necessarily lost when it has been immersed in water.

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# Chapter 2

# LEGAL LIABILITY AND THE UNDERWATER RECOVERY PROCESS

Police retrieval of underwater evidence is a relatively new proposition. In the aftermath of the Branch Dividian siege in Waco, Texas, a basement area had gathered sufficient water to require the services of a dive recovery team to determine if there were submerged bodies; unfortunately no divers were available. In those departments that have recovery teams, much concern has arisen regarding the cost benefit analysis. Few departments have dedicated dive operations (teams that provide only dive services) separately funded. In many instances, departments have used special team personnel (S.W.A.T.) and funds for their diving needs. Often responsibility for dive activities falls to any officer with dive experience. Administrators who do not dive have limited understanding of the recovery process. The presumption is that a diver is a diver. Sport divers have little preparation for limited/no visibility diving (black water diving) and may be as susceptible to risk in that milieu as are nondivers.

## VICARIOUS LIABILITY

A municipality or a police department may be held responsible for the injurious conduct of its police officers if the municipality or department contributed to or condoned the conduct that gave rise to that injury (*Monell v. New York Department of Social Services,* 436 U.S. 658, 1978). This type of responsibility is referred to in the law of torts as vicarious liability, i.e., an employer's responsibility for the conduct of his employee. The conduct required in suits alleging vicarious liability may be as a result of municipal and departmental policies (*Springfield v. Kibbe,* 480 U.S. 808, 1987).

## SUPERVISORY LIABILITY

From a lawyer's perspective, suing a police officer is not as financially rewarding as finding a method whereby the department and/or the municipality may be joined as parties, thereby increasing the depth of the pocket from which a verdict may be satisfied. Departmental supervisors are considered to be representatives of the department and the municipality. If a supervisor condones or contributes to conduct of one of his subordinates who caused injury, the municipality and department may now also be held responsible (*Oklahoma City v. Tuttle,* 474 U.S. 808, 1985). This type of responsibility is referred to in the law of torts as supervisory liability.

In discussing issues of vicarious and supervisory liability, the parties usually involved are an injured citizen and an injuring police officer. However, the same conduct on the part of a department that could give rise to an injury to a member of the public, may also give rise to injury to police and more specifically to injuries incurred during underwater dive operations. Municipalities and departments have learned painful and expensive lessons in negligence lawsuits. Departments and municipalities have been found negligent in situations where citizens have been injured as a result of a lack of police training that was the proximate cause of that citizen's injury. Attention must be paid to the cases that have held departments and municipalities liable for failing to provide officers necessary equipment or training to safely fulfill the responsibilities levied upon them by their supervisors and departments (*City of Canton, Ohio v. Harris et al.* 489 U.S. 378, 1988). Departments that require officers to respond to a dangerous situation without the necessary equipment, supervision or training may be responsible for that officer's injuries. In those states without the exclusive remedy of workmen's compensation laws, departments and municipalities may be parties to negligence suits brought by injured officers. In those states with workmen's compensation laws, gross negligence may still allow suits by injured officers.

If a department has determined there is a need for an underwater recovery team, it must consider the inherent risks associated with that decision. In arriving at that decision municipalities and department administrators must commit themselves to providing the necessary tools, supervision, and training. Absent that commitment, the associated risks of underwater recovery are too high.

## STANDARD OPERATIONS AND PROCEDURES MANUALS

It is axiomatic in the law enforcement business that if it is not in the Standard Operations and Procedures Manual (S.O.P.), it does not exist. When confronted with a lawsuit, a department's success or failure may often depend on the contents of that manual. When examined from a legal perspective, that manual should be viewed as canonical. The department is often stretched upon a rack of its own manufacture when the department's Standard Operations and Procedures manual is exposed to the light of day. Every aspect of the law enforcement function should be described in that manual in current and specific detail. There is no avoiding S.O.P. manuals. If a department does not have one, you lose. If it is not current, same result. If it is not complete, liability may result. If the operations manual does not reflect that all personnel understand and agree to abide by the contents, liability may attach. When kept, maintained, and applied correctly, the lives of citizens are protected. When kept, maintained, and applied correctly, the lives of police officers are protected. When kept, maintained, and applied correctly, departments and municipalities will prevail in lawsuits based on vicarious liability and negligence.

## S.O.P. MANUALS AND UNDERWATER RECOVERY

All departments have an operations manual. The quality of that manual will depend upon the commitment of the municipality and department in providing information, rules, guidelines and training to all personnel. The department must have a lawyer familiar with criminal law, constitutional law, civil rights law, and tort law as a constant resource, overseer, and collaborator in the maintenance of the operations manual.

That manual as it pertains to the underwater recovery team must address the following:

### 1. Selection Criteria

All employment criteria must be nondiscriminatory, merit-based, and open to all officers who meet that criteria. Any physical, experiential, or mental requirements must be job-related. The burden of proving that relationship rests upon departmental policy makers. All criteria must be free of gender, race, or age bias.

Historically, special teams have been the purview of young male

officers; that should not be viewed as a precedent. There is little in the world of the underwater investigator that is dependent on strength. Patience, imagination, and thought are the tools of the underwater recovery specialist. Women have certain definite physiological advantages for underwater work: less air consumption, and greater resistance to cold. Virtually everything handled in the water becomes buoyant or can be made so, therefore abrogating the need for applications of strength. An appropriate adage for underwater work might be "work smart, not strong."

**2. Certification**

Basic swimming skills will be necessary to obtain dive certification. Advanced certification in search and rescue demands more from a diver. As a dive master, required competency in the water is again increased. By requiring each team member to obtain dive master certification from an accredited dive organization, the department will have acquired the necessary swimming skills for team performance. All divers should have advanced open water certification, search and rescue certification, dive master certification, experience in underwater photography, and black water training. It would increase the versatility of the team if one diver was rated as an instructor with black water and salvage certification. Having a team member with an instructor's rating will allow inservice training and periodic checkout dives to be conducted with little cost to the agency.

**3. Histories of Claustrophobia**

Limited visibility may adversely affect those individuals uncomfortable in closed places. There will be situations where divers may be required to enter sunken vessels or vehicles, both such environments may pose problems for the claustrophobic.

**4. Type "A" Personalities**

Type "A" personalities gravitate to special mission teams. Action-oriented persons are an advantage in those situations where special tactics may need to be employed. Underwater, strategy is more important than tactics, and patience is an absolute necessity. Type "A" personalities may be an asset to tactical operations, but they are a liability to underwater operations.

**5. Basic Math and Measurement Skills**

Much of what we discuss in subsequent chapters will involve applied math in interpreting dive tables, underwater direction finding, land and underwater use of measuring devices.

**6. Histories of Vertigo**

Looking down from the surface after entering water with unrestricted visibility gives one the sensation of height. Individuals fearing heights may be placed in an untenable position when entering deep clear water.

**7. Medical Histories of Heart Disease**

Although physical exertion underwater is generally unnecessary, stress is an integral part of the underwater evidence recovery process. Although stress is a part of all police work, it can be seriously magnified when encumbered by limited visible support personnel. Individuals with histories of coronary problems may be placed in an inhospitable environment where recourse to medical assistance is distant.

**8. Diving During Pregnancy**

There is limited empirical data pertaining to the effects of nitrogen absorption and increased atmospheric pressure on the unborn fetus. In the absence of definitive data it is better to be cautious and ban diving during pregnancies.

**9. Medical Histories Involving Inner Ear Problems**

Changing atmospheric pressures requires an adjustment of pressure within the ear. Often this adjustment does not occur spontaneously and requires the diver to assist manually to clear the pressure by holding his nose and gently blowing through his nose, gradually increasing the force with which he is blowing his nose until the ears equalize the pressure. Persons with inner ear problems may have difficulty equalizing that pressure or may aggravate a preexisting injury when attempting to do so.

**10. Alcohol or Drug Use**

The same restrictions regarding alcohol and drug use that the department has adopted obviously apply to all aspects of police work. The underwater recovery team member may be on call or conscripted during off-duty hours. Any alcohol consumption prior to diving will impair the

judgement of the diver, placing the diver and the team at risk. The underwater world is less forgiving of mistakes. Prescribed medications and over-the-counter pharmaceuticals are tested at surface atmospheric pressure. The effects of drugs at depth under pressure, recombining with nitrogen are generally unknown.

**11. Physical Requirements**

Instead of height to weight ratios which have been applied discriminatorily in the past, it would be more useful to apply a percentage of body fat measurement for physical fitness. Again it is important to stress that any such physical requirements be job-related and the burden is upon the employer to demonstrate that relationship.

**12. Testing**

Each diver having been tentatively selected for the dive team regardless of certification should perform an in-water test to allow an evaluation of that individual's response to stress in the water. At the time of selection and every six months thereafter all underwater recovery team members should be required to qualify through a refresher of basic diving skills which should include: (1) mask clearing at depth; (2) buddy breathing at depth; (3) mouthpiece removal and reinsertion at depth; (4) mask removal and replacement at depth; (5) emergency ascent with air; (6) emergency ascent without air; (7) removal of buoyancy compensator and air supply and surfacing; (8) removal of buoyancy compensator and air supply and replacing same; (9) boat entries; (10) land entries; (11) drown proofing; (12) 250 meter uninterrupted freestyle swim; (13) 25 meter underwater swim; (14) demonstrate accepted rescue techniques for assisting injured or unconscious divers.

**13. Fitness Reports**

Semiannual fitness reports should be performed and maintained for each diving member. No diver should be allowed to participate in a recovery operation after a diveless period in excess of 90 days. Checkout dives should be performed and documented for each diver who has been out of the water for 90 days.

The foregoing are examples of minimum policy and procedure considerations that should be included in Standard Operations and Procedures Manuals pertaining to dive recovery operations and teams. Failure to include underwater recovery operations in the Standard Operations and

Procedures Manual can be catastrophic in two ways. Not only can failure to specify expectations and responsibilities result in unnecessary and costly litigation, but officers who know what is expected of them are more likely to be able to meet those expectations. Team leaders will have objective criteria upon which to make selection and disciplinary decisions.

Operating manuals are being viewed by the courts as contracts between citizens, police, police departments, and municipalities; they are documents of accountability. Failure on the part of departments and municipalities to fashion workable standard operations and procedures manuals and to meet the terms of these "contracts" may result in suit, injury, or death.

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# Chapter 3

# BEGINNING THE INVESTIGATION

## GATHERING INFORMATION

The focus in land investigations is on witnesses. Witnesses are as important to the underwater recovery team as they are to any investigative effort. When dealing with drownings or abandoned evidence, where witnesses are available, the dive team should not rely on investigators to gather information pertaining to the "last point seen." The dive team has responsibility to establish independently the last seen point. A thorough examination of possible witnesses by a member of the dive team may provide "last point seen" data overlooked or misinterpreted by the investigating officers. That information may reduce the time and effort expended in the search of the applicable areas.

In drownings, the victim is often found on the bottom within a radius from the last seen point which is equal to the depth of the water. For example, if the victim were drowned in 30 feet of water, the body may be found on the bottom within a 30 foot radius from the point on the bottom directly below the "last seen point" topside. In establishing the "last seen point" it is often helpful to place a diver or a boat in the water and allow the witness to direct the diver to the "last seen point." All interviews should be conducted at the scene approximating the location of the witness at the time of the sighting. The effectiveness of developing a "last seen point," and the futility of not using one, was demonstrated when a boat was sunk in a lake surrounded by a residential community. The first divers on the scene inquired of individuals at the scene the general area in which the boat sank, then cleared the area of all civilians. They searched for five days without success. A second team was later dispatched and began canvassing the houses overlooking the area in question. Utilizing a boat placed on the lake as a reference point various witnesses placed the point at some distance from that first determined to be the "last seen point." The sunken boat was discovered shortly after the new search began. The difference in the approaches of the two dive teams was

that the first divers were relying on conjecture fueled by haste, rather than using a search strategy beginning with interviews based on a floating reference point. Although the second team spent a day in seeking and interviewing witnesses, their total on site time was two days culminating in a successful operation as opposed to the five fruitless days spent by the first team.

All information gathered from witnesses or other investigators is geared to provide information that will assist in the recovery of physical evidence. Witnesses differ in perspective and investigators may color that information through their own perspectives. Any information provided by investigators pertaining to the search area should be corroborated if possible. Obviously it will take additional time to reinterview those witnesses, but time spent pinpointing the search area is time well spent. Information gathered by the dive team's intelligence officer should be documented and provided to the officers in charge of the investigation. Although the recovery of drowning victims gets the most media exposure, underwater recovery teams spend most of their time in the water seeking evidence usually in the form of a weapon, stolen property, or abandoned drugs.

As waterway recreation and transportation expands, so will crimes committed on those waterways. Police divers provide a large range of recovery services including but not limited to:

boat arsons
suicides
homicides
drownings
abandoned contraband
abandoned weapons
abandoned vehicles
vehicle entombment
vessel and aircraft crashes and contraband attached to keels.

## THE UNDERWATER CRIME SCENE

The first step in any underwater investigation is to locate the underwater crime scene. It is helpful to think of the recovery of underwater evidence as an extension of the overall investigation. By perceiving the recovery operation as an integral part of the overall investigation, it is but one short step to viewing the underwater operation as the processing

of a crime scene. If the offense suspected is such that it would precipitate a crime scene analysis, then the underwater counterpart of that investigation should be conducted as meticulously.

As in any investigation, a search cannot begin until a reasonable search area has been delineated and all information that might reduce the size of the search area is gathered and considered. Much underwater time and frustration can be avoided by not entering the water too soon.

In most instances of police diving the life of the victim is not in question. Bad weather and surface conditions should be considered before anyone is ordered into the water. Barring a hurricane, the bottom conditions tomorrow will be virtually the same as today. Postponing the dive until better diving conditions are available should be a constant consideration in the mind of the team leader. There is no evidence so important that it warrants risking the life of a diver.

Divers are often requested to recover an item of evidence that is partially visible or has already been located. Where the resting place of the item sought can be ascertained from the surface, it is not necessary to initiate search procedures. In those instances where it is incumbent upon the recovery team to conduct the search the following general procedures should be employed.

## SEARCH BRIEFING

Once the area of the search has been described a search briefing should be conducted describing the methods to employ and the roles for each participant. Often dive teams are eager to get into the water and lack of planning results in an initial search that proves fruitless, resulting in a duplication of time and effort.

An integral part of the briefing is documenting the dive. The following information should be obtained and documented for inclusion in the dive report:

a. witnesses interviewed: names, addresses and telephone numbers
b. dive team members
c. date
d. time
e. location
f. persons present
g. purpose of search