118750

COMMISSION ON PEACE OFFICER
STANDARDS AND TRAINING

COMMAND COLLEGE
CLASS SEVEN

WHAT TECHNOLOGIES WILL BE AVAILABLE TO SWAT TEAMS BY THE YEAR 2000?

Don McDonald
Undersheriff
El Dorado County Sheriff's Department
Placerville, California

December 1988

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WHAT TECHNOLOGIES WILL BE AVAILABLE TO SWAT TEAMS BY THE YEAR 2000?

Don McDonald

EXECUTIVE SUMMARY

Law enforcement over the past years has successfully met the threat of the violent criminal through the development of special enforcement teams such as SWAT (Special Weapons and Tactics). Today's teams, however, have little in common with their early predecessors with regard to their appearance, tactics and resources. There is little doubt that in the years to come, SWAT teams will continue to change as new innovations and resources become available. The main focus of this monograph is to study these future resources and specifically answer the question "What technologies will be available to SWAT teams by the year 2000?" This question was subjected to a "futures research" process which was initiated by selected literature review and personal interviews with SWAT team experts. Various trends and potential events that could impact on the issue of SWAT technology were forecast. This information was then used to develop three different future scenarios. A "desired future" was then selected upon which to base various policies.

Next, the monograph identified and analyzed individuals and groups known as "stake holders" who have high interests in the desired future, presented the mission of law enforcement and SWAT, suggested three strategy alternatives, and offered a planning system.

Finally, a transition plan was created to bridge the gap between our present state and the desired future. This plan called for the assistance of the California State Sheriffs' Association and the California Police Chiefs' Association to form a special committee to carry out the objectives of the chosen strategy.

This study will provide law enforcement managers with insight as to the future technological needs of SWAT required to meet the potential of tomorrow's violent criminal.

WHAT TECHNOLOGIES WILL BE AVAILABLE TO SWAT TEAMS BY THE YEAR 2000?

I. BACKGROUND

Some twenty-five years ago law enforcement found itself face to face with an emerging new breed of criminal. The hijacking of aircraft, indiscriminate bombing campaigns, assassination of police officers and barricaded suspects is now well-known to law enforcement personnel. These criminals, with their distorted sense of values and logic and with little or no regard for human life, would plague American citizens and test the capability of law enforcement to respond to this new threat. These criminals would challenge and defy not only local law enforcement, but State and Federal jurisdictions as well. The violent offender now motivated by political and pathological objectives, as well as criminal is sending his message to law enforcement.

The early 1960's saw an alarming increase in crimes in which criminals would make unprovoked sniper attacks on unarmed citizens as well as the police; crimes where heavily armed persons would barricade themselves in buildings and threaten to kill any officer who dares to arrest them, and crimes in which airplanes would be hijacked. The ritualized massacre of hundreds of innocent citizens is all too well known.

The number of these violent crimes has grown

steadily since most are given front-page coverage by the mass media. The role of the mass media seems to have significantly influenced this new breed of violent offender. In many cases, for example, hostage takers would demand prime-time media coverage to publicize their cause. The mass media which thrives on violence is always quick to comply. As law enforcement struggles with this emerging trend in violent crime, lives of police officers, citizens and suspects are lost. Patrol officers who found themselves confronting suspects with fire power far superior to their own were quick to realize that special training, equipment and abilities would be necessary to equalize this threat. Fortunately progressive law enforcement administrators would also identify these needs. A new strategy was needed to respond to this new type of violent offender: thus, the emergence of SWAT teams.

In the mid-60s the Los Angeles Police Department was the first to organize special enforcement teams called SWAT (Special Weapons and Tactics). These early teams were formed by police officers who had expertise in the use of more sophisticated weapons, especially high-powered rifles. Often these were officers who enjoyed some form of big game hunting. At this time police budgets did not support the expense of a special team; therefore, officers would use their personal weapons in situations that required special tactics. Weapons, however, were not the only obstacle that had

to be overcome. Training, equipment, policy analysis, personnel selection and public image were among a few of the issues that needed immediate attention if special weapons and tactics were to become a reality in the future.

In spite of these obstacles, resourceful police agencies obtained needed equipment from a variety of sources, including the U.S. military. Dedicated officers donated their free time, and training programs were established. Policies were hammered out and special enforcement teams were tested in the field responding to violent situations. By the late 60s and early 70s special teams had proven themselves to be effective against hostage takers, snipers and barricaded offenders. SWAT not only gained widespread support of law enforcement administrators but the public as well. The successful resolution of high risk violent incidents, the rescue of hostages, and countless lives saved proved that SWAT is a viable option for police agencies.

As law enforcement administrators throughout the country became aware of SWAT's effectiveness, plans to incorporate teams within their own jurisdictions were implemented. As SWAT teams justified their existence, little by little funds became available enabling them to replace personal weapons with a state-of-the-art arsenal, purchase equipment, and provide professional training.

Not only are SWAT teams being used as an effective resource against violent criminals but also in the apprehension for service of high risk arrest and search warrants, especially the arrest of narcotic dealers and growers. For example, in recent years, narcotic dealers have established "rock houses." Rock houses are fortified to prevent police entry. Likewise, marijuana growers have taken steps to protect their crops with heavily armed guards and booby traps. The use of SWAT teams has been successful in penetrating "rock houses" and destroying marijuana crops.

As a result of SWAT's evolution, today's teams barely resemble their predecessors. They wear different clothing, carry lighter, more effective weapons, their training is extensive and their tactics are refined and precise. Although law enforcement SWAT teams are a relatively small share of the market, technology has definitely entered the arena. Teams are taking advantage of hi-tech items such as firearms with laser sights, diversionary devices, nomex utilities, lightweight body armor, computers, and in some cases, robotics.

But even with the rapid advances of SWAT teams and their resources, we are just now on the doorstep of even higher technology and possibilities. Considering the advancement and changes SWAT teams have made in the last 10-20 years, one wonders what the future of these

teams will be 10-12 years from now.

SWAT teams are used for two basic missions: (1) to resolve barricaded subject incidents, including those who have taken hostages and (2) to execute high risk arrest and search warrants. To illustrate a large department's typical use of this resource, the following chart was prepared from statistics obtained from the Los Angeles County Sheriff's Department.[1]

TABLE 1

SWAT Team Utilization Chart

Year	Total Call-Outs	Barricaded and Hostage Situations	High Risk Warrant Service
1984	113	58	55
1985	96	37	59
1986	121	50	71
1987	87	33	54
1988 (1st 10 Months)	92	36	56

The purpose of this study is to address the issue of future technology as it applies to the missions of SWAT. With this information, law enforcement managers will be given insight into future SWAT team capabilities and be provided a foundation upon which future plans can be based.

[1] Statistics obtained from the Los Angeles Sheriff's Department on 11/14/88.

SCOPE OF PROJECT

This paper: (1) explores future technologies that may become available to California SWAT teams by the year 2000; (2) describes through the use of futures scenarios, how these technologies may be adapted; (3) identifies several policies and procedures that will be necessary for implementation of the chosen strategy and (4) presents a transition plan for California law enforcement decision makers to consider should they want to move into the desired future.

OBJECTIVE ONE

II. OBJECTIVE ONE

STATEMENT

Objective one is to use future research methodologies to study and validate the general issue. The outcome of this study will result in the development of three future scenarios. The general issue of this research is as follows: What technologies will be available to SWAT (Special Weapons and Tactics) teams by the year 2000.

During the initial review of background material, discussions with colleagues, and personal reflection, the following related issues from the past were identified:

1. How will law enforcement meet the potential threat of the violent criminal?
2. What are the legal issues of using SWAT teams in law enforcement?
3. How will SWAT team members be selected, trained and managed?
4. What resources are available?
5. How will SWAT teams be financed.

Using the same process to structure the general issue, the following issues related to the present were identified:

1. How will SWAT teams keep current with technology?
2. What level of training is adequate?

3. How will the pressures of numerous critical incidents be managed with SWAT team members to prevent stress and "burn out"?
4. Has the liability issue of SWAT stabilized?
5. How will the changing tactics of criminals affect SWAT team operations?

The issues were then subjected to a preliminary screening as an approach to structuring the general issue for future research. The criteria was a judgment concerning the degree of relatedness. This resulted in the following list of <u>future</u> issues which essentially define the parameters of the general issue being studied.

1. Will additional less-than-lethal weapons become available in the future?
2. What will be the level of criminal sophistication in the future?
3. Will SWAT teams remain an effective tool against the future criminal?
4. How will future technology change SWAT team operations?
5. What technology will become available for SWAT teams?
6. Will resources be available to support technological research?

METHODS: IDENTIFICATION

The formation and design of this futures study is

based upon a multi-faceted course of study that was developed and presented through the California Command College, an executive development program sponsored by Peace Officer Standards and Training (POST).

In order to identify, develop and evaluate information related to the general issue, the following methodologies were applied:

1. A combination of:
   -- literature scanning
   -- brainstorming
   -- personal reflection
   -- personal interviews
2. Two-phase modified conventional delphi
3. Trend forecasting matrix
4. Event forecasting matrix
5. Cross-impact analysis matrix
6. Development of three futures scenarios

METHODS: IMPLEMENTATION

LITERATURE REVIEW

The first goal of the process was to develop a comprehensive list of all relevant material on the subject. The bibliography provided in this monograph is by no means exhaustive but does provide insight as to the complexity of the topic under study. The review of literature consisted primarily of the following sources:

1. The Peace Officer Standards and Training (POST) Library in Sacramento, California;
2. The Los Angeles Police Department library in Los Angeles, California;
3. The Federal Bureau of Investigation (FBI), Quantico, Virginia;
4. National Institute of Justice (NCJRS), Rockville, Maryland;
5. Personal library.

INDIVIDUAL INTERVIEWS

Personal interviews were conducted with various authorities in the field of SWAT team operations. These individuals were selected for their expertise and to add diversity to the study. These interviews allowed for continual refinement of the issues and assisted in identifying primary trends and events which serve as a base for this future study. The experts interviewed are listed below in the order of their initial contact:

1. Kenneth Kontos, Supervisory Special Agent, Federal Bureau of Investigation, Quantico, VA.
2. Clint Vanzandt, Supervisory Special Agent, Federal Bureau of Investigation, Quantico, VA.
3. Russell Walkowich, Sergeant, United States Park Service, Washington, D.C.
4. Don Jelinek, Lieutenant, United States Park Service, Washington, D.C.

5. Daniel Frank, Ph.D., Program Manager, U.S. Department of Commerce, National Bureau of Standards, Gaithersburg, Md.
6. Ernie O'Bogle, National Institute of Justice, NCJRS, Rockville, Md.
7. Pat Martins, Officer, Los Angeles Police Department, Los Angeles, CA.
8. Jeff Rogers, Lieutenant, Los Angeles Police Department, Los Angeles, CA.

In addition, the following individuals provided information for this study through telephone interviews and/or by providing written information.

1. Jim Roth, Lieutenant, El Dorado County Sheriff's Department, Placerville, CA.
2. Robert Scanlon, Lieutenant, Bergen County Prosecutor's Office, Hackensack, NJ.
3. Jerry Harper, Assistant Sheriff, Los Angeles County Sheriff's Department, Los Angeles, CA.
4. William Tofoya, Supervisory Special Agent, Federal Bureau of Investigation, Quantico, VA.
5. Mike McCrystle, Special Agent, Federal Bureau of Investigation, Sacramento, CA.

SYNOPSIS OF INTERVIEWS

Having the opportunity to interview various experts in the field of SWAT team operations provided valuable insight into the main issue of this monograph.

Although these experts were located in various areas of the United States and from different jurisdictions, their concept of future trends were consistent. The major areas as defined by these individuals were as follows:

1. Computer technology.
2. Robotics.
3. Less-than-lethal weapons.
4. Training.
5. Communications.
6. Body armor.
7. Tactics of the criminal.
8. Weapon technology.

Most agreed that there is presently little use of computer technology with regard to SWAT operations but speculated that computer adaptation would soon be widespread. Computer usage could include both the hostage negotiation and tactical aspects of SWAT. Hostage negotiators would benefit from intelligence information regarding hostage takers such as psychological profiles and could use a nationwide network to supply information regarding known criminals. Information and data would be available to assist SWAT teams in assessing the potential for the suspect to become violent and generally provide a complete profile of the suspect.

The tactical aspect of SWAT would make use of

computers from programs designed to provide information about building structures, floor plan and construction materials. Computers could provide information regarding the desired type of weapon for successful assault and provide further data to locate the best point of entry. Computer systems should be portable and available at police command post locations. Additionally, computer systems can be used for record-keeping, training programs and equipment inventory.

Most experts also see the use of robotics as a viable option for SWAT teams. Although the financial impact is cause for concern with regard to the widespread use of robotics, it was felt that due to the human life element, the future would see robotics used in a variety of violent situations. Therefore, it was suggested that robots may be used in place of SWAT members for surveillance, tactical entry, room clearing and attic searches.

The experts indicated that it is unlikely that robots would be armed with deadly weapons: however, it would be within reason for their equipment to include less-than-lethal weapons, communications, and surveillance devices. It was suggested that equipment such as robotics could be shared by adjoining departments to mitigate the fiscal impact.

With regard to less-than-lethal weapons, experts suggested that future technology could result in a

substantial positive impact on SWAT operations. They see a need for future development of tear and nerve gas which will have the ability to incapacitate within seconds with full recovery within 30 minutes, but without the dangerous side effects of most gas in use today.

Many other less-than-lethal weapons in use today, such as "flash bangs" and "thunder strips", are said to be quite effective. However, less-than-lethal weapons are still in their infancy and presently are not very effective.

Experts also discussed the future of less-than-lethal weapons capable of emitting sound waves which would temporarily alter a suspect's brain waves rendering him momentarily incapacitated.

Experts were also quick to point out that no trend exists to replace deadly weapons with less-than-lethal weapons. They felt that less than lethal weapons might give SWAT a tactical advantage over violent offenders when deadly force was not required or warranted.

Future training trends included everything from the use of live ammunition to computer-assisted scenarios. All experts agreed that training requirements will increase within the next five years and that due to the high cost of training, SWAT programs will probably see more regional training to help share the expense. Most stressed the necessity to

keep accurate training records through the use of a computer. They felt this was an important factor due to the ever present and increasing civil liability issue.

Experts cited communications as the number one problem area in need of technological advancement. They indicated that the future would bring communication systems that will feature dedicated frequencies immune from the pitfalls of today's system. For example, today's systems are not secure from eavesdroppers, and communication loss due to battery failure. Communication devices are needed that are capable of not only dependable hand-free voice transmissions but also of sending visual communications as well as position locations to a central command post.

The group of experts also sees new technology adapted to body armor. Body armor is now more protective and lighter than previous models, and future models will include air conditioning and heating features. With this additional comfort, SWAT members can become more efficient and have less fatigue in prolonged extreme weather conditions.

Criminal tactics have changed over the past years, and although the experts agreed that there is a trend towards violent criminals who use "rock houses" to protect themselves from police intrusion, they see a

little movement towards criminals progressing to chemical, biological or nuclear attacks within the United States. Most agreed that attacks on human targets, such as hostage taking, will continue and probably escalate in future years.

The final area the experts commented on was weapon technology. They see that there will be future advancement in laser and night-sighting systems as well as sights which transmit a video image of the target to a command post viewer. As mentioned previously, the group does not see armed robots; however, they speculate that it is a possibility, particularly with regard to robots armed with less-than-lethal weapons. Command remote and synchronized firing is also a future possibility; however, caution must be used when considering taking on-scene human response away from the tactic. The experts felt that the human element of life and death judgments should not be diluted.

Weapons in general, they forecast, will not undergo much change except to become lighter, more dependable and possibly in calibers not available today.

There was an overall consensus that SWAT teams are an integral part of law enforcement's ability to deal successfully with the violent criminal and will continue to be so in the future. Experts had concerns, however, that since much of the technology that will

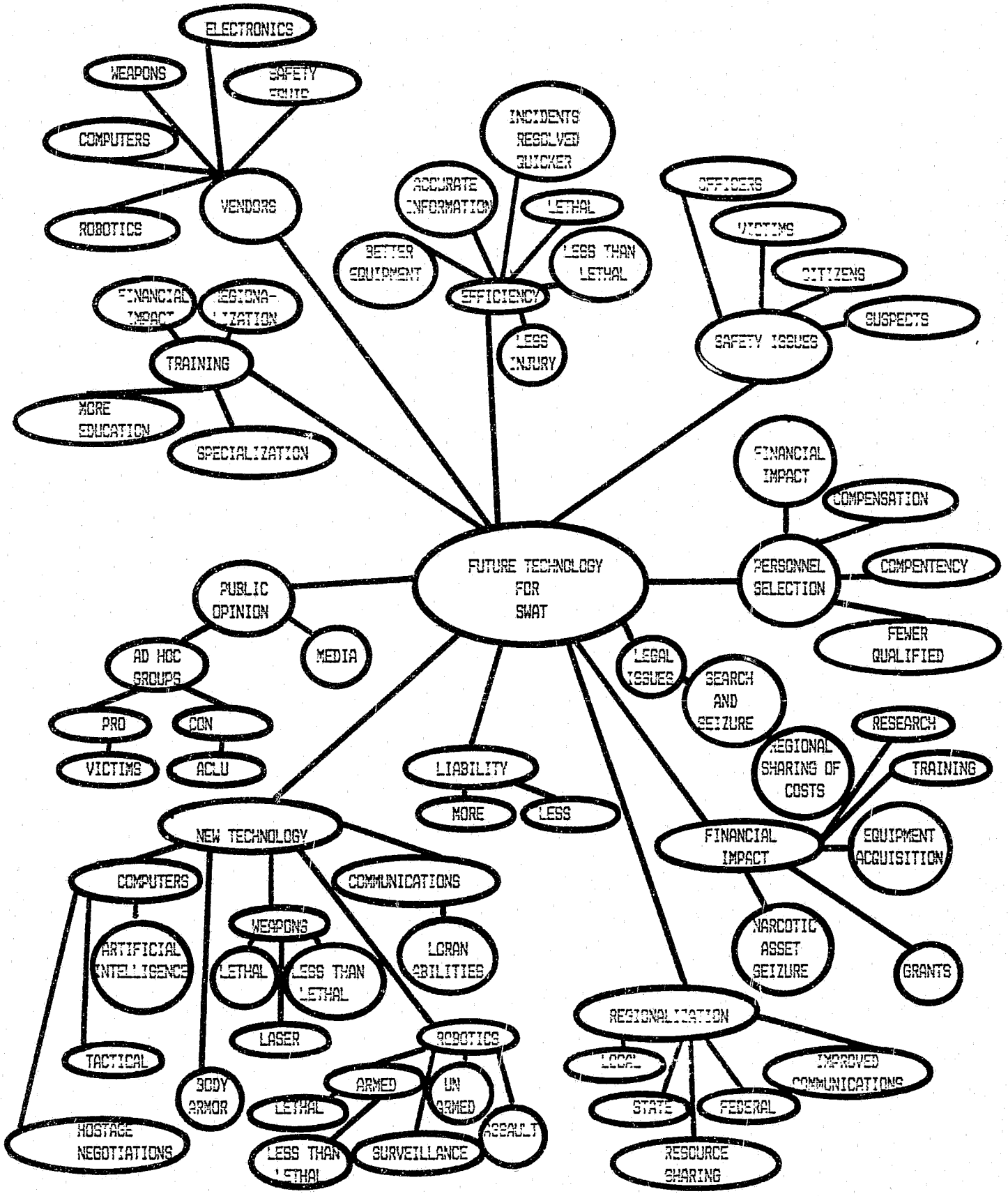
become available in the future will be costly, it may not be made available to SWAT teams. Regionalization of team training and the sharing of equipment, such as is done with bomb squads, may play an important role in small to medium size departments acquiring future technology.

FUTURES WHEEL

The futures wheel exercise is a tool used to explore the relevance of an issue and focus on related trends. This exercise enables participants to brainstorm the main issue and expand it in any relevant direction. The futures wheel exercise is illustrated on the following page.

TABLE 2

FUTURES WHEEL



TWO PHASE MODIFIED CONVENTIONAL DELPHI

TRENDS

As a direct result of background research involving a combination of literature scanning, brainstorming, personal reflection and personal interviews, a slate of 10 trends and 10 events were established. These trends and events were the basis for the delphi instruments in which the experts participated.

The experts were requested to evaluate each of the 10 trends using a trend evaluation form (Appendix A). They were given instructions to first consider today's value of each trend at the level of 100. Then, with a number either higher or lower, to give an estimate at what level they felt the trend was five years ago, where they think it "will be" 10 years from now, and finally at what level they think it "should be" 10 years from today.

The 10 trends they were asked to evaluate were as follows:

1. SWAT team use of "less-than-lethal weapons."
2. Liability issues of SWAT team uses.
3. SWAT team training.
4. Robotics used in tactical situations.
5. Use of computers in hostage negotiations (i.e., psychological profile, intelligence, etc.).
6. Use of computers in tactical situations (i.e., building analyzation, artificial intelligence, etc.)

7. Regional SWAT team association.

8. Terrorist attacks on human targets.

9. Communication technology for SWAT incidents.

10. Criminal use of "fortified" houses (i.e., rock houses).

Once each trend was evaluated, the second phase was to give priority to each so that a consensus could be reached as to the five most relevant trends. The following chart represents the consensus of the group's median ratings for each of the five selected trends.

TABLE 3

TREND EVALUATION CHART

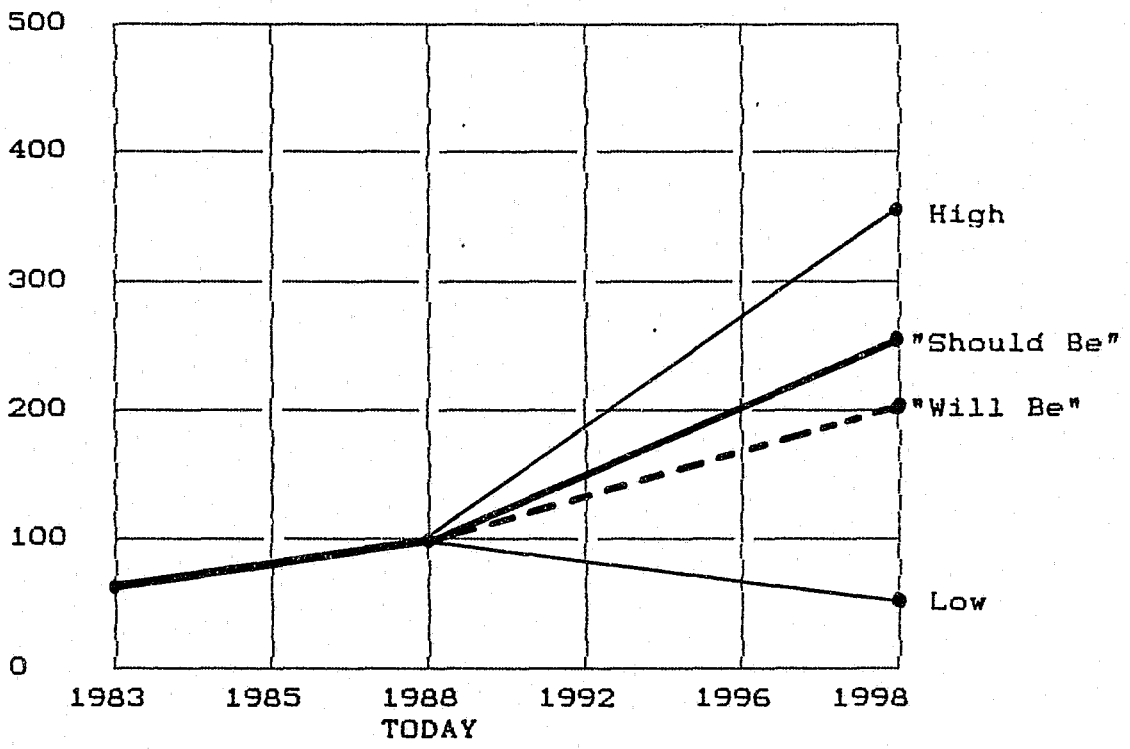
TREND STATEMENT	LEVEL OF THE TREND (Ratio: Today - 100)			
	5 Years Ago	Today	"Will Be" in 10 Years	"Should Be" in 10 Years
1. SWAT team utilization of "less than lethal weapons.	75	100	200	250
2. Robotics used in tactical situations.	10	100	200	300
3. Utilization of computers in hostage negotiation (i.e., psychological profile, intelligence, etc.)	10	100	300	500
4. Utilization of computers in tactical situations (i.e., building analyzation, artificial intelligence, etc.)	25	100	250	400
5. Communication technology for SWAT incidents.	75	100	200	350

The following graphs represent each of the five selected trends. Each graph displays at what level the trend was estimated to be five years ago, where the

trend "will be" in 10 years, and where the group thought the trend "should be" in 10 years. In addition, the extreme high and the extreme low estimates are shown.

TABLE 4

TREND 1: SWAT TEAM UTILIZATION OF "LESS THAN LETHAL" WEAPONS



Trend #1 indicates a wide range of opinion between the high and low estimates. The group was diverse as opinions varied from the idea that all less-than-lethal means should be exhausted before using deadly force to the idea that nearly all SWAT incidents involves armed and dangerous suspects, and officer safety should not be compromised.

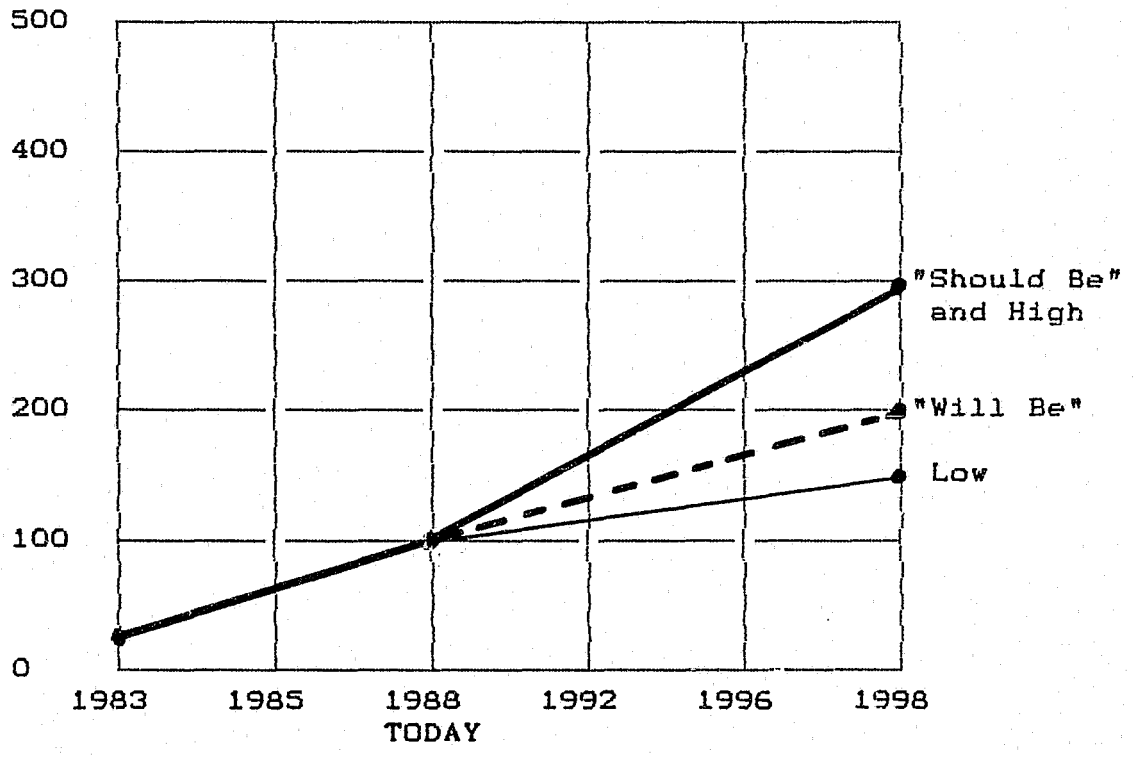
The group did, however, estimate that the use of less than lethal weapons will increase by 100 percent

within the next 10 years and in their estimate "should" increase 250%. The majority opinion was likely based upon future advances in and availability of less-than-lethal weapons such as diversionary devices, tear gasses and other disabling weapons.

Group consensus was that these less-than-lethal weapons were important to SWAT's arsenal as their usage was obviously less restrictive than that of deadly force and in most cases effective in resolving the incident.

TABLE 5

TREND 2: ROBOTICS USED IN TACTICAL SITUATIONS



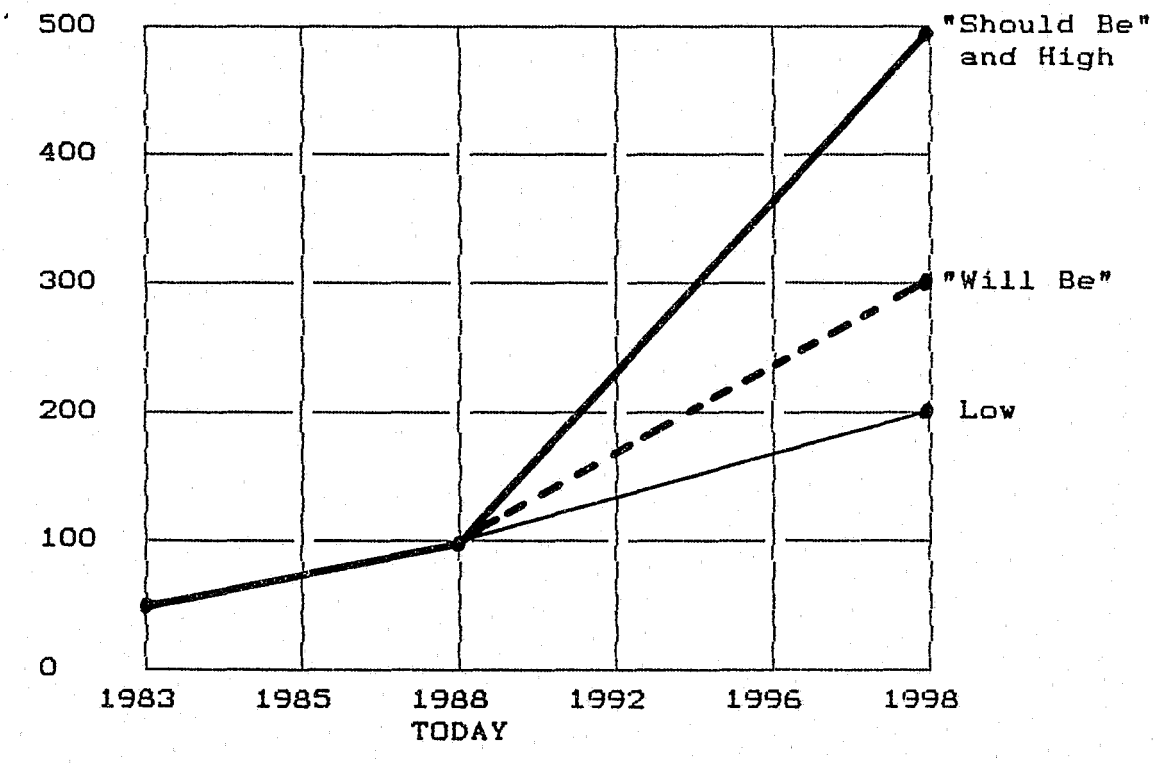
Although trend #2 shows an estimated 100 percent increase in the use of robotics in tactical situations within the next 10 years, it is felt that absent the financial ramifications of their acquisition, this

estimate would be much higher. The graph reflects this in the range between "will be" and "should be."

The group was of the opinion that although few robots are currently used, their value in saving officers' lives cannot be overlooked. Within the timeframe of this study, robotics will be a working part of SWAT operations.

TABLE 6

TREND 3: UTILIZATION OF COMPUTERS IN HOSTAGE NEGOTIATIONS (I.E., PSYCHOLOGICAL PROFILE, INTELLIGENCE, ETC.)

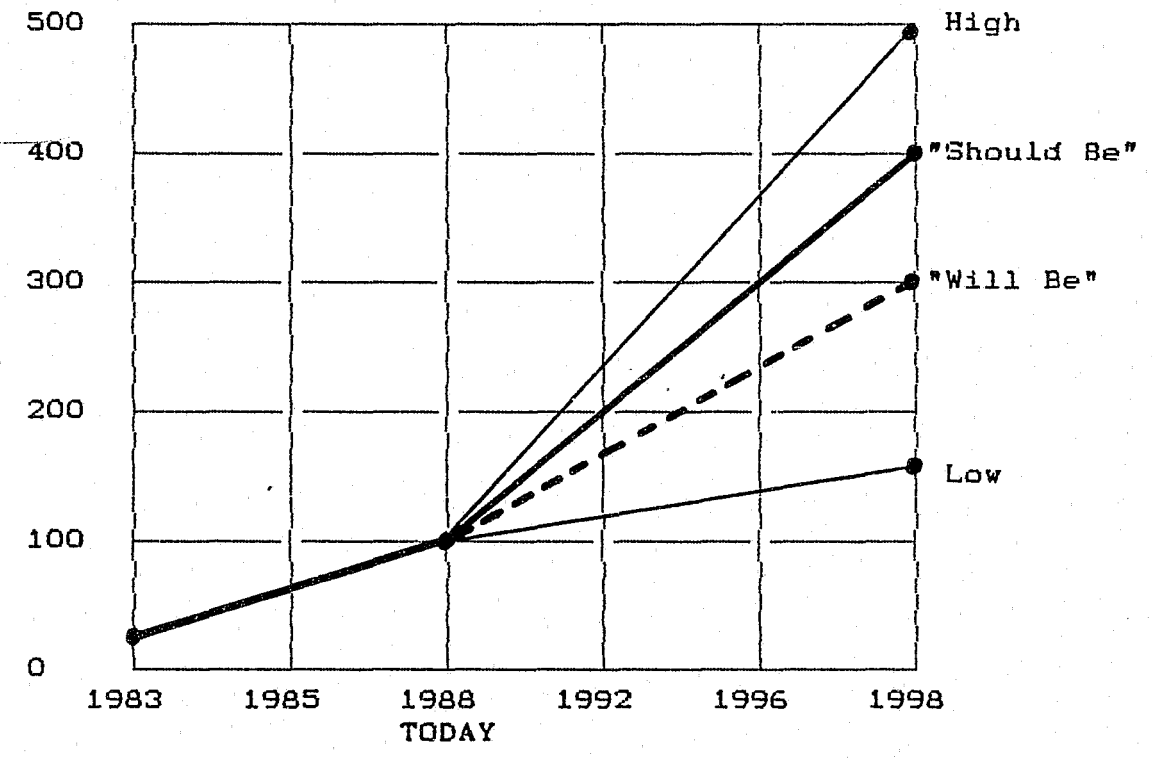


Trend #3 three shows a 200 percent increase in the use of computers for hostage negotiations purposes; however, group consensus indicates that their use should be 400 times what it is today. The value of computer assistance is well known and respected today

which allows for a projection such as this one to be high.

TABLE 7

TREND 4: UTILIZATION OF COMPUTERS IN TACTICAL SITUATIONS (I.E., BUILDING ANALYZATION, ARTIFICIAL INTELLIGENCE, ETC.)

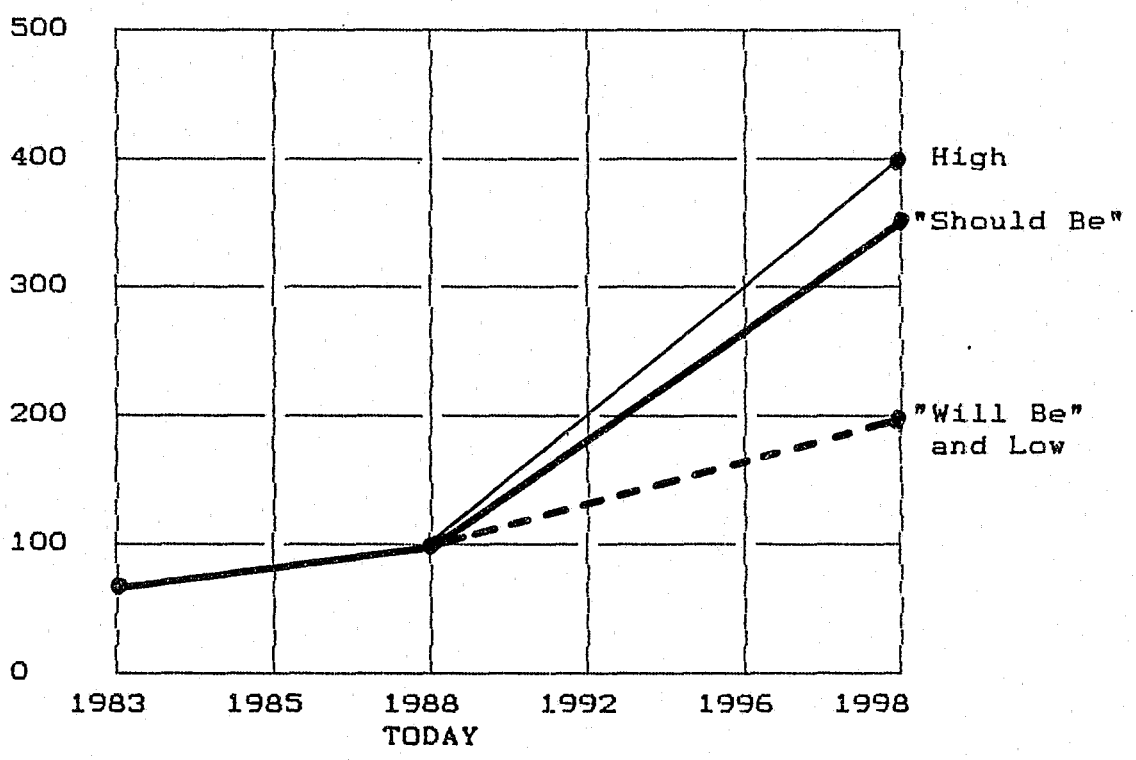


Trend #4, like trend #3, projects a 200 percent increase in the use of computers in tactical situations within the next 10 years. The experts rated the "should be" mark 100 percent less than the equivalent in trend #3, because the group felt there could be greater use of computers for negotiation than in tactical situations.

There was diversity among the group as evidenced by the range between the high and low estimate.

TABLE 8

TREND 5: COMMUNICATION TECHNOLOGY FOR SWAT INCIDENTS



The entire group agreed that there is a need for advanced technology in the area of communications for SWAT incidents. They expect that the trend will only increase 100 percent in the next 10 years although a 250 percent increase would be more appropriate. be.

EVENTS

As with the foregoing trends, potential events were also established. The group of experts were asked to evaluate these events using an event evaluation form (Appendix B). They were asked to begin by making a determination of what year the particular event could first possibly occur. Then, using a scale of 0 - 100,

they were asked to place a value to represent the probability of the event's occurrence by the year 1995 and a second value for the year 2000. Once this was completed they were asked to place a rating from -10 to +10 (minus indicating a negative effect, a zero indicating no effect, etc.) to indicate how they felt should the event occur, its effect on the issue, and its effect on law enforcement in general.

The 10 events the group was asked to evaluate were as follows:

1. Terrorist use of chemical/biological tactics in the United States.
2. Terrorist use of nuclear weapons in the United States.
3. Devices are developed with the capability of "sniffing" the air to detect explosives, neutrons, etc.
4. A tear gas which disables within 4-5 seconds and without traditional side effects is developed.
5. A weapon which uses sound waves to disable suspects is developed.
6. Regional (city, county, state) SWAT teams are organized.
7. Laser weapons replace traditional firearms.
8. Air conditioned/heated body armor available for SWAT teams.
9. Loran technology is adapted to SWAT operations (allows visual display at command post of team members/location).
10. Computerized laser-assisted technology available for SWAT tactical training.

Again, as with the trends, priorities were placed on each event and a consensus was determined as to the

five most relevant events. The following chart represents the consensus of the group's median ratings for each of the five events.

TABLE 9

EVENT EVALUATION CHART

EVENT STATEMENT	PROBABILITY				
	Year That Probability Exceeds Zero	By 1995 (0-100)	By 2000 (0-100)	Net Impact on the Issue Area (-10 +10)	Net Impact on Law Enforcement (-10 +10)
EVENT 1-Terrorist use chemical/biological tactics in United States	1989	30	70	-10	-9
EVENT 2-A tear gas which disables in 4-5 seconds and without the traditional side effects is developed.	1990	60	100	+7	+7
EVENT 3-A weapon which utilizes sound waves to disable suspect is developed	1995	75	95	+8	+7
EVENT 4-Loran Technology is adopted to SWAT operations	1993	75	90	+5	+1
EVENT 5-Computerized laser assisted technology available for SWAT tactical training	1992	80	100	+5	+2

With the exception of event #1 it is interesting to note that they all show a better than 50 percent probability of occurring by the year 1995 and all above 90 percent probability by the year 2000. Consistent also was the data indicating that should these four

events occur, they would have a positive impact on both the issue area and on law enforcement in general.

Contrast these with event #1 showing a 30 percent probability by the year 1995 and a 70 percent probability by the year 2000. This event's occurrence would obviously have a negative impact on the issue area as well as on law enforcement in general.

These estimates tend to support the belief that police jurisdictions place high importance on the value of SWAT operations and support the development of technologies which aid their development.

CROSS-IMPACT ANALYSIS

With trend development and critical event probability established, a cross-impact analysis was initiated using a cross-impact analysis form. Administrators familiar with futures research recognize that events should be considered in the context of related trends. The result of this analysis will be the recognition of any events which may trigger or have an effect on another event's occurrence.

Speculation regarding an event's occurrence and its effect on given trends, whether it be positive, negative or neutral, is important when formulating policy. Through this process, the following two questions were asked over and over again: (1) If this

event (i.e., event #1) actually occurred, what would be the new probability of another event (i.e., event #2) at the moment of greatest impact, and (2) If this event (i.e., event #1) actually occurred, how great a change, if any would it have on the projection of a trend (i.e., trend #1) at the point of greatest impact? These influences are termed "cross-impact."

TABLE 10

CROSS-IMPACT EVALUATION FORM

Suppose that this event,— with this probability— actually occurred. .....How would the probability of the events shown below be affected?

		EVENT #1	EVENT #2	EVENT #3	EVENT #4	EVENT #5	TRENDS #1	TRENDS #2	TRENDS #3	TRENDS #4	TRENDS #5
#1	30	X	0	0	+10	+50	-5	+75	+10	+80	+10
#2	60	+25.	X	0	0	0	+50	0	0	0	0
#3	75	+15	0	X	0	0	+75	+25	0	0	0
#4	75	0	0	0	X	0	+25	0	0	0	+90
#5	80	0	0	0	0	X	0	0	0	+75	0

Given the five selected events, this cross-impact analysis shows event #1 with the greatest impact.

Although its probability of occurrence is relatively low, it would cause the necessity of events #2 and #3 to increase. With the exception of trend #1, all other trends would be positively affected by event #1's occurrence. That is to say that each of the trends would become even more important and, their value would enhance. It is noted that the remaining four events have little or no effect on each other but show some positive effects to the selected trends.

SCENARIO DEVELOPMENT

Scenarios are integrated mechanisms designed to bring together and synthesize large quantities of both hard and soft data that cannot be handled systematically by any other means. The purpose of scenarios is to present alternatives or choices for strategic planners.

Basically a scenario can be one of three modes:

1. Exploratory

   -- play out
   -- surprise free

2. Normative

   -- favored and attainable
   -- feared but possible

3. Hypothetical

   -- worse case
   -- best case
   -- odd case
   -- random case

Accordingly, three separate scenarios have been

developed based upon the analysis of the experts' evaluation of the trends and events and on the cross-impact analysis.

THE "EXPLORATORY" SCENARIO

1988-2000

California law enforcement administrators are feeling a sense of accomplishment as they enter the year 2000 since there has been a decrease over the past 10 years in violent crimes such as terrorism and hostage taking. As administrators and SWAT leaders make an assessment of the last decade, they cite advances in technology as the primary reason for success in controlling this particular crime element. Computer technology usage increased some 200 percent since 1988 giving SWAT negotiators and tactical leaders an edge over terrorists and hostage takers. Computers have now given SWAT insight into negotiation strategy and critical building analysis.

Administrators also point out that the availability of various less-than-lethal weapons give support and options to SWAT tactics not available to teams in the late 80s. Now with more resources, SWAT can more frequently resolve incidents without resorting to deadly force. One such resource was developed in the late 1990s. An assault gas which acts within five seconds with full recovery within 30 minutes and with

no harmful side effects is now in widespread use among SWAT teams.

However, thankful for their availability and limited usefulness, SWAT leaders are somewhat disappointed with the slow development in the field of robotics over the past 10 years. Although today's uses include monitoring, surveillance and duties such as room and attic clearing, SWAT leaders had hoped they would have the availability of a sophisticated robot capable of building entry and weapon assaults. In any event, administrators indicate robots have saved officer's lives, thus giving law enforcement another tactical edge over the violent criminal.

Another less obvious but essential element of SWAT's continued success is improved communications. One of the leading complaints of the late 1980s among SWAT members was inadequate communications. Today's radios are smaller, more powerful and more secure from unauthorized monitoring than earlier styles. Officials say SWAT tactics have slowly changed over the past 10 years towards more reliance on computer knowledge, use of less-than-lethal weapons, and to some extent use of robots. These improvements have given SWAT teams an advantage over the criminal and have resulted in less risk to the officers.

THE "NORMATIVE" SCENARIO

1988 - 2000

Entering a new decade, the year 2000, and starting his new assignment as a lieutenant, Hogan is enthusiastic. He has called a meeting of the SWAT team of which he is the commander and talks of their future and where he sees the team by the year 2010. Hogan hears a whispered comment and a little laughter in response to his comments and realizes he has a skeptic within his ranks.

Lt. Hogan stops for a moment from his narration to remind the team that in 1988 when he first became a member of SWAT, he also thought little about future trends and would not have believed what was in store for SWAT. Lt. Hogan recalled that in 1988 SWAT was at the edge of being the recipient of high technology. Lt. Hogan was interrupted by the sound of the dispatcher's voice advising them of a hostage incident currently in progress: A robbery had gone bad and a pregnant woman had been taken hostage. This drill is nothing new to this well-organized and disciplined team. Within minutes, Lt. Hogan's team is on the scene with containment, and the negotiation process starts.

From Lt. Hogan's mobile command post, Hogan's staff activates the tactical computer and obtains a visual display of the scene. Lt. Hogan performs a roll call and verifies on-screen locations of each tactical member. Technology developed in the late 1990s gives

Lt. Hogan the advantage of not only monitoring the locations of each member but he can also selectively view the scene through individual micro-cameras carried by tactical members.

By this time, background information has been fed into the negotiator's computer. Instantly, they have identified the suspect as an escapee from a nearby mental institution and are provided a psychological profile. They learn that the suspect was previously involved in a barricaded situation two years ago where negotiations were unsuccessful, and he had to be subdued with gas. Armed with this information, hostage negotiators begin their calculated efforts to talk the suspect into releasing his hostage and surrendering himself.

As negotiations continue, SAM, SWAT's tactical robot is readied for action. SAM is armed, not with lethal weapons, but with less-than-lethal weapons. One weapon, a sound disabling device will probably not be used today because of the hostage, however, the gas dispersal unit will likely be the choice.

Developed in 1995, this advanced gas has proven to be effective within five seconds and has literally no harmful side effects, not even to pregnant women. Remotely operated from the command post, SAM is activated and directed into the building. Lt. Hogan feels chills as he recalls the countless times it was

he instead of SAM who made the initial building entry. Once inside, SAM silently releases its gas assault and within seconds SWAT has rescued the hostage and taken the suspect into custody.

On the short ride back to the station, Lt. Hogan reflects again on the many advancements he has seen in his SWAT career and wonders how SWAT ever survived without the availability of computers, Loran communications, and robots like SAM.

THE "HYPOTHETICAL" SCENARIO

1988 - 2000

About to retire, Officer Robbins can't believe what has happened to law enforcement in the past 10 years. Being a senior member and technical advisor for the Department's SWAT team, he wonders how much longer SWAT can continue to be a viable weapon against the violent criminal. He tells his friends "technology has passed us by." Although not a SWAT member at this time, Officer Robbins remembers SWAT's early formation years--years when the criminal had access to and availability of weapons and resources far better than that of law enforcement. Today, in the year 2000, it appears that history has repeated itself.

Officer Robbins had high hopes a few years back that robots would be designed to give SWAT a new weapon. But they were too costly he was told, and the

maintenance would be equally too expensive. Officer Robbins could only think of the many times that he almost lost his life doing something that could easily have been done by a robot. Robbins is glad he is not used for building entry any longer.

Officer Robbins is well aware of the fact that since 1997 there has been a substantial increase in the number of criminals who use either chemical or biological methods to carry out their attacks. He feels the frustration of the active SWAT members as they must try to carry out their duties with the odds heavy on the side of the criminal.

Computers are another "sore spot" with Officer Robbins. They are used for inventory and training records, but the networking between law enforcement agencies of intelligence information regarding terrorists and hostage takers has been blocked by liberal court rulings. A plan Officer Robbins helped develop in 1990 to computerize hostage negotiations intelligence information fell to its demise at the hands of the court's interpretation of the right to privacy laws. One thing Officer Robbins is glad of is that he is soon to retire. With him he will carry fond memories of his years with SWAT and the disappointment of such few technological advancements during the waning years of his career.

OBJECTIVE TWO

III. OBJECTIVE TWO

STATEMENT

The second objective is to develop and implement a strategic management process to include:

1. strategic decision-making.
2. strategic planning.
3. policy considerations.

Because strategic planning is not linear, the above three elements are interactive in the process. The anticipated outcome of this process is a strategic plan which will connect the analysis-defined present to the selected scenario-defined future.

METHODS IDENTIFICATION

In order to meet the above stated criteria, the following methods will be used:

1. SMEAC model
   - Situation
   - Mission
   - Execution
   - Administrative
   - Control
2. WOTS-UP Model
   - Weaknesses
   - Opportunities
   - Threats

Strengths

Underlying planning

3. SAST (Strategic Assumption Surfacing Technique)

4. Modified Policy Delphi

METHODS IMPLEMENTATION

Situation - Environment

During the mid-1980s it became increasingly apparent that law enforcement placed a high value on the capabilities of special enforcement teams such as SWAT. In their early formation years, their principal objective was to resolve hostage and barricaded subject situations. Today, their expertise has been expanded for use in literally all high risk situations, such as arrest and search warrant service.

Much of the change was brought about by a criminal element who, throughout the years, has become more aggressive and violent. Criminals such as narcotic dealers who "fortify" themselves in "rock houses" and use booby traps to protect their illegal crops from other criminals as well as the police are now well known to SWAT teams.

Because of the sophistication of these law violators and their capability to acquire state-of-the art weapons, SWAT teams of today look nothing like their predecessors of the 1960s.

Law enforcement SWAT teams have adequately

maintained a level of success with these threats. They have made advances in their tactics, equipment, training and overall abilities. Law enforcement, however, should not be complacent. Absent the foresight to plan for the future and keep up with advancing technologies could mean the difference between life and death.

Although many law enforcement agencies have taken advantage of high tech systems such as computer-aided dispatch systems and in-car computers for patrol, we are really just at the edge of technologies that can enhance the law enforcement effort, particularly that of SWATs.

Identified earlier in this monograph were certain trends and events pertaining to the issue of SWAT team future. With the exception of the possibility of increased terrorist activity in the United States (Event #1), the trends and events (should they continue or occur) would be important opportunities for California SWAT teams. The positive impact of these trends and events would lead SWAT teams into a future they will need to continue to meet the threat of the violent criminal. In order to bridge the gap between the environment described in this monograph and the future described in the normative (best case) scenario, the following analyses are presented. This process should facilitate a better understanding of how law enforcement can develop techniques to bring about a

desired future state.

POLICY CONSIDERATION

The normative scenario depicted in the first objective illustrates that SWAT's capabilities will change substantially with the advent of advanced technologies and computerization.

To facilitate these positive and progressive changes and for law enforcement to realize the greatest potential, the following policies are submitted for consideration:

1. Law enforcement should actively promote affiliations with private sector industries engaged in the development of high tech computers, weaponry, robotics and communications.
2. Law enforcement should realize the financial impact of advanced technologies and plan accordingly.
3. Law enforcement should lobby available sources for financial aid for acquisition of SWAT technologies.
4. Law enforcement should form alliances with allied SWAT teams to study future needs and provide information to police administrators.

STAKEHOLDER IDENTIFICATION AND ANALYSIS

Stakeholders are any vested person or group whose

behavior is affected or whose behavior affects the issue. Among stakeholders is a subculture known as snaildarters, an individual or group that blocks or thwarts the direction of the issue or organization. Stakeholders and/or snaildarters can be internal or xx
external to the organization. Their efforts to support or oppose can be overt or covert. Snaildarters can be counted on to have one or more opinions about the impact that a new direction, strategy or program will have on the issue. An organization formulating any strategic plan must identify the individuals or groups and have a clear understanding of their opinions and/or assumptions. This is a critical aspect of the strategic planning process.

During the monograph process, a list of 28 (Appendix C) was generated. The list was then distilled down to 15 which were considered critical to the issue of this monograph.

The following is a list of perceived assumptions of the most significant stakeholders/snaildarters:

1. Ad-hoc advocate groups

   a. May be "pro" or "con":
      - citizens for law and order
      - NAACP

   b. "Pros" will encourage the technological advances that give SWAT the advantage over the criminal.

   c. The "cons" will be opinionated in opposition as to police tactics and equipment.

d. Either may use a single incident to promote his/her cause.

2. American Civil Liberties Union

a. Will challenge technologies as excessive use of force (i.e., robotics, sound disabling weapons, etc.)

b. Will challenge computer networking and information under the right to privacy.

c. Will challenge SWAT tactics by focusing on issues of single incidents.

3. California Police Chiefs' Association

a. Concerned with liability issues.

b. Will support new technologies.

c. Will be concerned with cost of technology and training.

d. Appreciates the need for research and development.

4. California State Sheriffs' Association

a. Concerned with liabilities issues.

b. Will support new technologies.

c. Will be concerned with cost of technology and training.

d. Appreciates the need for research and development.

5. Community

a. By and large will support SWAT tactics and technological advances.

b. Wants law and order.

6. City/County administrators

a. Will be concerned about civil liabilities of SWAT.

b. Will be concerned about cost of new technologies.

c. Will be concerned about how to deal with other interest groups after city/county dollars vs. funds to support SWAT teams.

d. Will need education regarding SWAT operations and uses.

7. Criminals

a. Will support ACLU actions.

b. Will make full use of technologies available to them.

c. Will fear the uses of some technologies such as robotics, advanced gases, and development of sound disabling weapons.

8. Judges

a. Concerned about the rights of the victim.

b. Concerned about the rights of the criminal.

c. Must labor with the issues of right to privacy, excessive force, etc.

d. Will generally support SWAT operations.

9. Local law enforcement agencies

a. Will be concerned about the high cost of new technology and training.

b. Will want to take advantage of all technologies available to resist criminal efforts.

c. Will be concerned about civil liabilities.

10. Local politicians (i.e., Board of Supervisors)

a. Will generally support SWAT technologies, however, will labor with funding.

b. May force law enforcement to prioritize the budgeted funds to acquire technologies.

c. May need education regarding SWAT's operation.

d. Will receive pressure from other interests fighting for dollars.

11. Media

a. Will generally be supportive of SWAT technology.

b. Will sensationalize SWAT tactics, i.e., use of robotics.

c. May be an advocate of ACLU is isolated areas.

d. Can influence other stakeholders.

12. SWAT team members

a. Will support advanced technologies.

b. Will feel they are and should be a priority.

c. Will be dedicated to assist with research development.

d. Some may not possess necessary skills and/or education.

e. Some may be reluctant to change.

13. Sworn mangers

a. Will want and encourage technologies for SWAT.

b. Will struggle with managing funds for all enforcement duties.

c. Will be concerned about liability issues.

d. Some may still want to do it the "old way".

e. Some may not possess the necessary skills and/or education.

14. Taxpayers

a. Will want the protection but will not want to put out extra money to pay for SWAT technology.

b. Will not want increased taxes.

c. Always concerned about the high cost of city/county government.

d. May or may not oppose the use of state or federal funds.

15. Technology researchers

a. Will be interested in researching technologies where the money is.

b. Needs to know what the SWAT needs.

c. Can be the key to SWAT technology.

16. Victims

a. Can assist in SWAT's advancement efforts.

b. Will support SWAT.

c. May volunteer assistance.

17. Weapons industry

a. Will need to be informed of SWAT's needs.

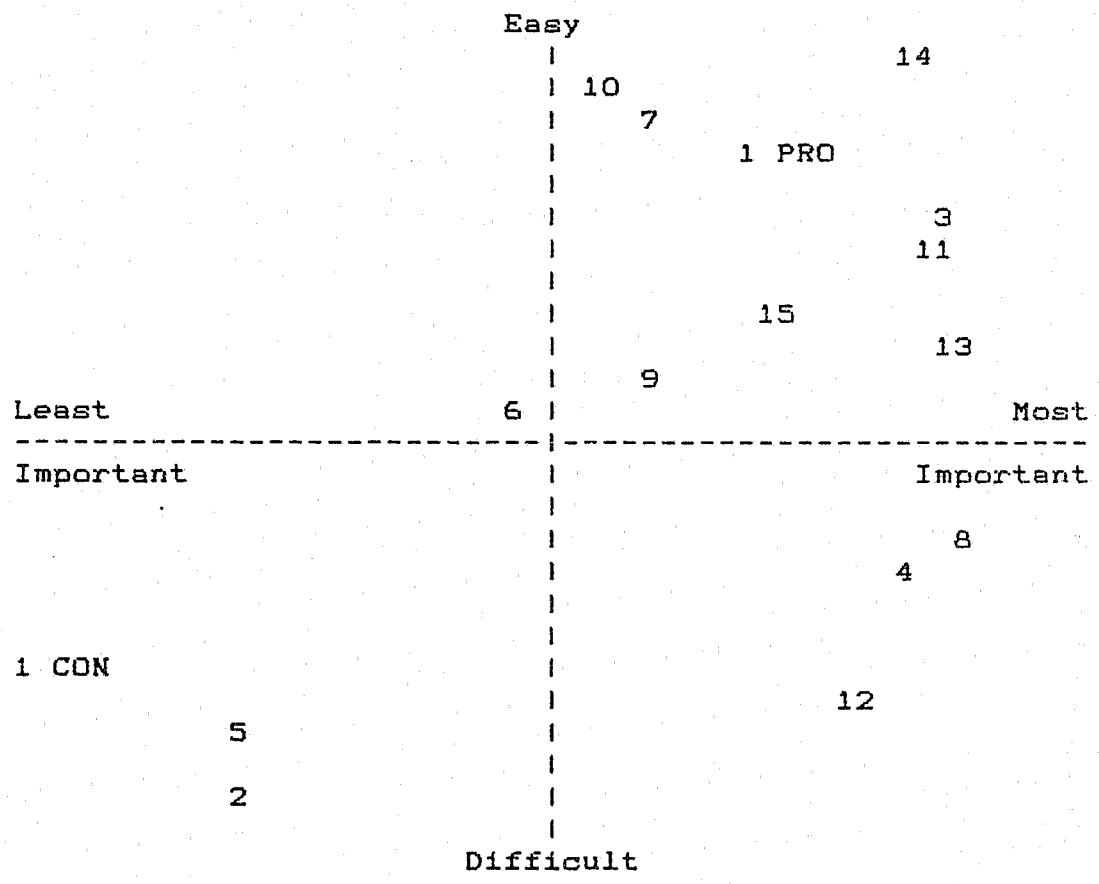
b. Will work with development of SWAT weapons.

c. Will support SWAT technology.

The following graph is an illustration as to an assessment of the stakeholder's ease or difficulty that will be encountered in obtaining their support.

TABLE 11

STAKEHOLDER ASSESSMENT



Stakeholders:

1. Ad-hoc advocate groups
2. American Civil Liberties Union
3. California Police Chiefs' Assn.
4. California State Sheriffs' Assn.
5. Community
6. City/County administrators
7. Criminals
8. Judges
9. Local law enforcement agencies
10. Local politicians
11. Media
12. SWAT team members
13. Sworn managers
14. Taxpayers
15. Technology researchers
16. Victims
17. Weapons industry

WOTS-UP ANALYSIS

Wots-up is an analysis of an organization's weaknesses, opportunities, threats and strengths that must be dealt with internally (in this case the organization is law enforcement as a whole).

The Wots-up analysis is designed to aid a strategist in finding the best match between the internal capabilities within any organization that will impact on the issue.

Definition of terms:

Opportunity - any favorable situation

Threats - any unfavorable situation

Strengths - a resource or capability used to achieve objective

Weaknesses - limitations, faults, defects

Opportunities	Threats
- Robotics - Tactical computers - Negotiation computers - Enhanced communications - Loran technology - Less than lethal weapons - Laser technology	- Liability issues - Court rulings limiting law enforcement's use of computer information - Biased press releases - Budget restrictions - Competition with private enterprise for technology research - Technology rapidly changing - Growth of domestic terrorism
Strengths	**Weaknesses**
- Lives can be saved (officer safety) - Incidents can be resolved more quickly - Information can be shared - Artificial intelligence can - be used - Progressive law enforcement attitude - Community support - Better control over SWAT incidents	- Law enforcement is slow to change - Lack of expertise in computer operations - No united law enforcement effort toward SWAT technology - Inability of law enforcement to promote off-setting revenues

MISSION STATEMENTS

Basic law enforcement mission:

The basic mission of the police shall be to maintain order, prevent crime, apprehend criminals and provide protection of life and property to the citizenry.

Mission statement with the focus on the main issue:

It shall be the mission of law enforcement to provide SWAT teams with the most advanced technological advantage necessary to carry out their duties.

EXECUTION

Strategies:

Alternative #1: Develop a statewide task force comprised of SWAT team representatives with the following objectives:

1. To receive and disseminate information between SWAT teams.
2. To act as a liaison between SWAT teams and private enterprise (e.g. researchers, manufacturers).
3. Provide assistance in the evaluation and testing of new technology.
4. To advocate the advancement of new SWAT team technology.

Alternative #2: Encourage the formation and expansion of regional SWAT team organizations

throughout the state. Each region would exchange information regarding training, tactics and technology. As issues are identified, (such as new technology) communications between associations would occur and support would be gained. Each association would use its independent resources to enhance technological advances.

Alternative #3: Obtain the support of the California State Sheriffs' Association and the California Police Chiefs' Association to form a joint committee responsible for the technological development of SWAT teams.

This committee would identify and evaluate SWAT team needs and would provide a base of support. They would convert these technological needs into reality through the use of their organization's resources and contacts. These resources and contacts could be helpful in lobbying for adequate research, development and funds to acquire advanced technology for SWAT teams.

ANALYSIS OF ALTERNATIVES

Stakeholders and assumptions were analyzed as to their position relative to each alternative. The results were as follows:

TABLE 12

STAKEHOLDER	ALTERNATIVE NUMBERS		
	1	2	3
1. Ad-hoc advocate groups	Split	Split	Split
2. American Civil Liberties Union	Against	Against	Against
3. California Police Chiefs' Assn	Neutral	Neutral	For
4. California State Sheriffs' Assn	Neutral	Neutral	For
5. Community	For	For	For
6. City/County administrators	Against	For	For
7. Criminals	Against	Against	Against
8. Judges	For	For	For
9. Local Law enforcement agencies	For	For	For
10. Local politicians	Against	Neutral	For
11. Media	Neutral	Neutral	Neutral
12. SWAT team members	For	For	For
13. Sworn managers	Neutral	For	For
14. Taxpayers	Against	Neutral	For
15. Technology researchers	Neutral	Neutral	Neutral
16. Victims	For	For	For
17. Weapons industry	Neutral	Neutral	Neutral

These results were then plotted on graphs to indicate the consensus of the certainty or uncertainty of the assumption and the importance of the stakeholders. Refer to the importance and certainty graphs in Appendix D.

These alternatives were then evaluated as to their

merit. The following chart illustrates the key points for and against each one.

TABLE 13

ALTERNATIVE NUMBER	PROS	CONS
#1	-Focused objectives -Provides for time to accomplish task -Staffed by knowledgeable experts in the field -Task force members have expressed interest in objectives -High potential for success	-Difficult to organize -Difficult to equalize all all organizations' representation -Manpower resources -High cost (no funding) -Improper organization and leadership could cause failure -Many logistics to overcome -Too bureaucratic
#2	-Provides good communications between SWAT teams -Focused interests and goals -Expert input -Wide range of organization involvement -Remains local	-No real organized effort towards issue -No funding -No central leadership or direction -Communications between organizations not certain -No joint resource -Better utilized for training/ tactic information exchange
#3	-Provides for input from all agencies in state -Associations already in place and functionary -Interest in issue is high among both associations -Many resources available -Cost of alternatives would be low -Experts in field would be available -Adequate communication resources -Provides leadership	-Organization may have other priority interests -No budget for committee

RECOMMENDED ALTERNATIVE

After giving consideration to the above data and evaluations, it was decided that alternative #3 was the favorable alternative and therefore recommended. This alternative is not only consistent with the mission as

it relates to the issue of this monograph, but it is also consistent with the basic law enforcement mission.

It is felt that this alternative has the best chance for success and longevity as it would be a positive committee of well-established organizations rather than a newly formed task force or association. These organizations would naturally lend credibiity to the committee objectives as well as possess the necessary tools and resources to guide SWAT teams into the chosen future.

Establishing a committee sponsored by these two organizations would give all California law enforcement jurisdictions opportunities for input as well as direct feedback as the committee carried out its task.

Although alternative #3 should lend itself well to the issue, thought should also be given to alternative #2 as an enhancement. Associations such as these are currently in use in some areas. These associations could be used as a resource for the committee, established in alternative #3, as an information and evaluation source.

ADMINISTRATION AND LOGISTICS

In order to initiate the chosen alternative, it will be necessary to gain the support and commitment of the California Police Chiefs' Association and the California State Sheriffs' Association. To do so, it

is suggested that individual SWAT leaders inform each of their respective department heads of the opportunity to guide the future of California SWAT teams through the use of the recommended committee. This effort should result in department heads supporting and making recommendations to their respective organizations for the formation of such a committee.

Once the concept has been accepted by the two organizations, leaders should meet to discuss and agree upon their appointed representatives. These representatives (the committee) should be given the latitude to accumulate data relating to SWAT needs and ideas from a variety of sources. They should be given the responsibility to research technological sources and analyze its appropriateness for future SWAT use. With this information, the committee should make recommendations as to an action that can be taken to promote the development of the desired technology.

The organizations may also want to address the possibility of using retired association or retired law enforcement members to assist on the committee. These individuals could lend support within the localities they reside.

PLANNING SYSTEM

In making an assessment of the general law enforcement and SWAT team operation environment and specifically considering the evaluated trends and

events, it is projected that turbulence will be encountered. Specifically, it is projected that within the issue area there will be considerable changes that will occur, for example, a move towards the use of robotics, computers and sophisticated equipment.

Also, in making a study of the WOTS-UP analysis, i.e., threats and opportunities, it is believed that they are somewhat predictable, for example, the stated threats and weaknesses as they apply to law enforcement.

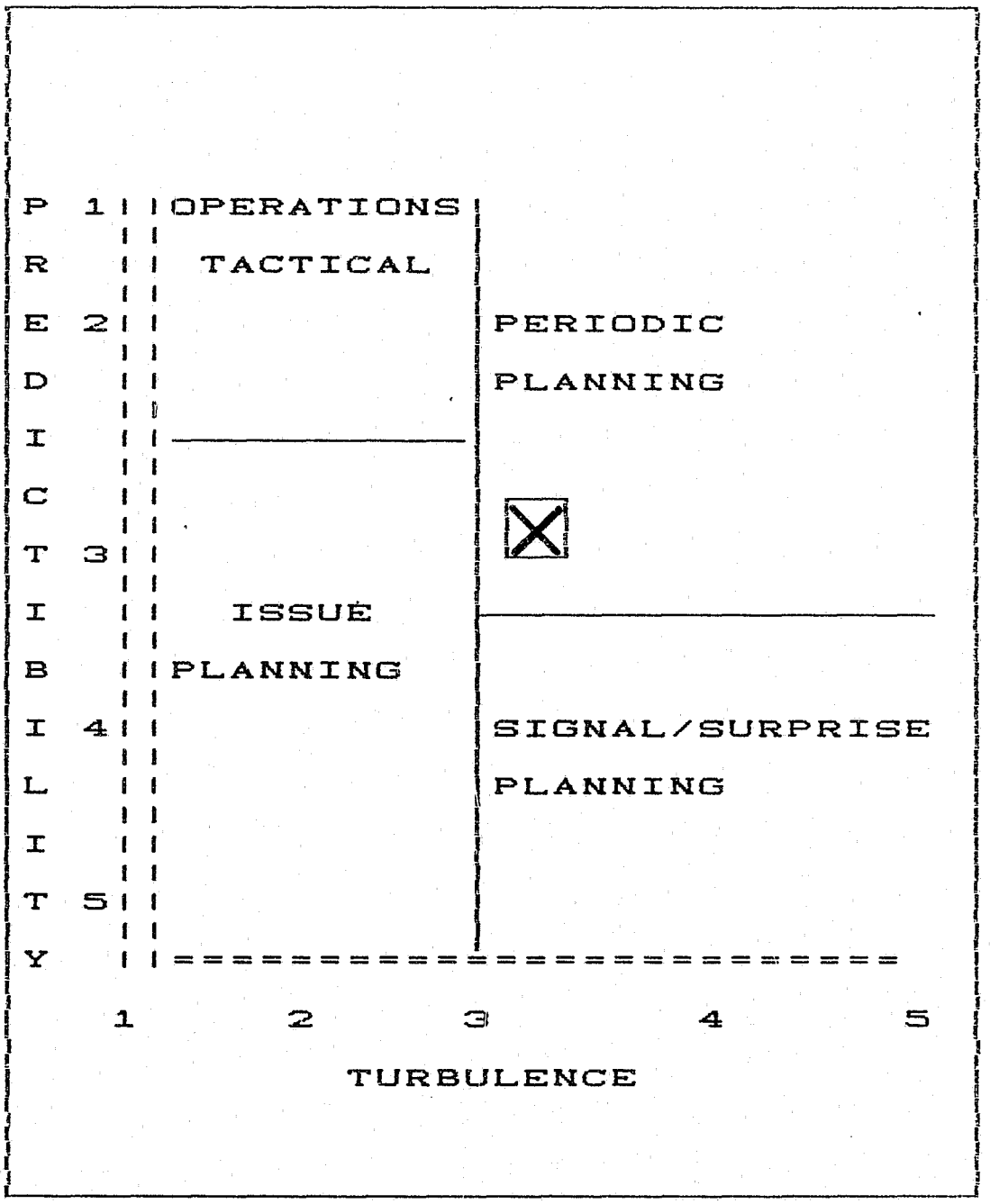
With attention drawn to the planning system matrix illustrated below, it can be seen that the "turbulence" factor falls between "changes on a regular basis" and "many changes," a rating of about 3.5 on the scale. On the other hand, "predictability" is estimated to fall in the mid-range or a rating of 3. This places the recommended system in the "periodic planning."

This system of planning calls for periodic updates of trend analyses, a comparison with the past and adjustments made accordingly.

Since this rating does not fall solidly within the parameters of periodic planning, issues planning and/or signal/surprise planning should be considered as back-up as the case warrants. These back-up systems can also provide a check and balance to ensure that periodic planning is on track with the overall plan.

TABLE 14

PLANNING SYSTEM MATRIX



OBJECTIVE THREE

IV. OBJECTIVE THREE

STATEMENT

In this third stage, the objective is to develop a transition process by which the plan identified in objective #2 can be managed to bring about the desired future scenario.

In order to accommodate this process and to avoid a generic law enforcement general approach, this monograph will focus on the resources of an average sized California law enforcement agency with an existing SWAT team.

The goal of this transition plan is to facilitate moving from the present to the desired future.

METHODS: IDENTIFICATION

1. Critical mass analysis
2. Readiness/capability charting
3. Implementation analysis

METHODS: IMPLEMENTATION

CRITICAL MASS

The stakeholders listed below were identified as critical players in the implementation of the process:

1. American Civil Liberties Union
2. California Police Chiefs' Association
3. California State Sheriffs' Association
4. County Administrative Officer
5. County Board of Supervisors

6. Media
7. SWAT team members
8. Sworn managers
9. Technology researchers
10. Weapons industry

In order to assess each of the above stakeholders' perceived level of commitment, the following commitment analysis chart was completed. This chart illustrates the perceived present position vs. the established movement necessary to create the best environment for the change to occur.

TABLE 15

COMMITMENT PLAN

Critical Mass	Type of Commitment			
	Block the Change	Let Change Happen	Help Change Happen	Make Change Happen
ACLU	X=====> O			
Calif Police Chiefs' Assn.		X==========> O		
Calif. State Sheriffs' Assn.		X==========> O		
County Administrative Officer		X=====> O		
County Board of Supervisors		X=====> O		
Media		X=====> O		
SWAT team members			X======> O	
Sworn Mangers		X==========> O		
Technology Researchers			X======> O	
Weapons Industry			X======> O	

X = Present Position O = Desired Position

AMERICAN CIVIL LIBERTIES UNION (ACLU)

This stockholder will initially want to block any change. It will express concerns with regard to civil rights, right to privacy, misconduct and excessive use of force. It may be possible, however, to move its attitude from the "Block the Change" category and into the "Let Change Happen" or neutral area.

This difficult task could be accomplished through a positive communication process in which the ACLU's concerns are properly addressed. By meeting the ACLU midway and being "above board" at all times, it may mitigate their "Block the Change" stance.

To ignore the ACLU would ensure its opposition.

CALIFORNIA POLICE CHIEFS' ASSOCIATION
And The CALIFORNIA STATE SHERIFFS' ASSOCIATION

These two groups would most likely fall into the "Let Change Happen" category until the issue was brought before them. It is believed that with a proper and convincing presentation to their respective boards, they could easily be moved to the "Make Change Happen" arena.

It is felt that these professional law enforcement administrators would readily see the benefits of assisting themselves through the formation of the recommended committee.

COUNTY ADMINISTRATIVE OFFICER and the COUNTY BOARD OF SUPERVISORS

These two stakeholders possess like concerns and would not necessarily be against any change but would have some opposition to the financial impact and (to some degree) the liability. It will be important to acquire their cooperation and assistance. This can be accomplished through proper education of the issue's impact on citizen/officer safety and its deterrent to the violent criminal.

MEDIA

The media, for the most part, will be in the neutral zone, but, should not be taken for granted as a supporter. Keeping the media informed as to advancements, technologies and the impacts can cause a position reaction. With little effort, the media could easily be moved to the "Help Change Happen" category. Their influence on other stakeholders could be critical.

SWAT TEAM MEMBERS

Although it is felt that the majority of this group would fall into the area of "Help Change Happen," there may still be some who, for various reasons, may resist the change. To move this group solidly into the "Make Change Happen" category they should all be involved to some degree. They should be kept well

informed, given opportunities to provide feedback, and know they are supported by top managers.

SWORN MANAGERS

This group is one of the most important. With their many other duties and priorities, they are likely to fall into the "Let Change Happen" category. Their support to the extent of "Make Change Happen" will be necessary for success, as someone from this sworn managers rank must take the lead. Interest and commitment can be gained through education and involvement. SWAT leaders and team members can be paramount in this task.

TECHNOLOGY RESEARCHERS And The WEAPONS INDUSTRY

Without these two stakeholders, technology and change would obviously be unavailable. It is perceived that in today's market they are in a position to help change happen but have the potential to make change happen. Their position can be changed through the efforts of the suggested committee. They can be given input, assistance, and information regarding the market for their technology.

READINESS CAPABILITY CHART

The following chart serves as a means of comparing each member of the selected critical mass as to their

respective readiness and capability to change.

TABLE 16

READINESS/CAPABILITY CHART

Fill in the following chart as it applies to your situation. In the left-hand column, list the individuals or groups who are critical to your own change effort. Then rank each (high, medium, or low) according to their readiness and capability with respect to the change.

	Readiness			Capability		
	High	Medium	Low	High	Medium	Low
1. ACLU			X		X	
2. Calif Police Chiefs' Assn.		X		X		
3. California State Sheriffs' Assn.		X		X		
4. County Administrative Officer			X		X	
5. County Board of Supervisors			X		X	
6. Media	X			X		
7. SWAT Team Members	X			X		
8. Sworn Managers		X		X		
9. Technology Researchers		X		X		
10. Weapons Industry		X		X		

TRANSITION PLAN

The strategic plan (alternative #3 in objective #2

hinges on the establishment of a joint committee of the California Police Chiefs' Association and the California State Sheriffs' Association. It is obvious that an initial moving force will be necessary to cause this occurrence. For this to be accomplished, interested SWAT team members or ranking managers of any California law enforcement jurisdiction should take a lead role.

It is highly probable that if a single agency promotes the suggested plan among their counterparts, enthusiasm and commitment will grow within their ranks. As this occurs, a certain amount of information regarding the strategic plan would naturally flow to the top of their organization, the decision-makers of the Chiefs' and Sheriffs' Association. The initial ranking manager (as referred to above) would evolve into the position of the "transition manager." His/her responsibility ultimately will be to gather adequate data to make a presentation to each of the associations in order to cause the desired committee to be formed.

The committee, once formed, should establish its own goals and objectives consistent with the strategic plan and issue of this monograph.

A system of feedback to the respective agencies as well as access to the committee for input purposes should prove to be a simple matter of each agency following the chain of command through its department

head. Other portions of this plan should include assignment of the responsibility to inform and educate city and county government officials in an effort to maintain and enhance their support. This effort would likely be relegated to the department head.

METHODS USED TO SUPPORT TRANSITION

The planned implementation of the strategy involves several distinct methods. Foremost in this plan is an overall effort to make all persons involved acutely aware of any proposed change along with ongoing information throughout the transition. The goals of this effort will be to relieve anxiety and uncertainty of those involved to ensure a better success. This effort will also accommodate an avenue for input and feedback as the transition progresses. Other methods will involve the use of video tape, press releases and special inter-office memos related to the transition. These will be used for two reasons. First, it will be necessary to reach a wide variety of individuals and groups with information that is accurate and consistent. Second, this information will be presented by a relatively large group of individuals. This method best accommodates the particular needs and adds interest to the communication. Face-to-face conversation will be used in those cases where it is felt that personal contact is essential to obtain commitment. Through personal contacts it is felt that

a certain rapport can be built and any fears or apprehensions can be alleviated.

Through the above means, we should be able to accomplish the necessary awareness, training and participation and develop the required level of commitment to ensure a successful transition.

CONCLUSION

V. CONCLUSION

It seems, traditionally at least, that law enforcement lags several years behind private enterprise with respect to technological advances. Also, in many ways law enforcement reacts to forces rather than taking a lead role in directing change--not because of any lack of insight, commitment or talent but in most cases due to fiscal restraints.

In the midst of an era of a rapidly changing environment, it has become increasingly essential for law enforcement managers to be proactive and innovative, and indeed it has. Evidence of this forward thinking can be found in the methods of this monograph. In objective #1, a modified delphi technique was used to surface and analyze relevant trends and events. A cross-impact analysis was used to assist in the development of future scenarios.

Objective #2 used a variety of methods to identify strategies, stakeholders and a desired planning system, and objective #3 leads us through a transition plan which will take us from our present state to the desired future state.

With the establishment and formation years ago of SWAT teams, California law enforcement has long accepted the challenge it received from the violent criminal. Early challenges were made through the use of threats towards innocent hostages, assaults with

sophisticated weapons, bombs and hijackings. One can speculate as to what tactics tomorrow's violent criminal will exercise, but two facts remain true: the trend towards violent crime continues to rise, and law enforcement must not become complacent towards its potential.

Now with new systems and technologies at law enforcement's fingertips, it is time to send a message back to the violent criminal. The identified technologies that will be available to SWAT teams by the year 2000 are, at the very least, encouraging. Imagine, for a moment, the shock and fear on the criminal's face when a robot rather than a human crashes through the door and causes his surrender. You only need imagine for a short time, because as this scenario becomes a reality, you will be viewing the criminal's reaction via the video transmission on the command post's monitor.

There are, however, some issues related to this monograph that remained unsolved. Financing and liability top the list. Financing for technology, both in the initial cost as well as maintenance and required training, will need to be resolved. Also as technology advances, the question of whether it will increase or decrease law enforcement's liability must be answered. It is just yet another of the many challenges, or should we say "opportunities," facing California law enforcement.

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APPENDICES

APPENDIX A

TREND EVALUATION FORM INSTRUCTIONS

ISSUE: WHAT TECHNOLOGIES WILL BE AVAILABLE TO SWAT BY THE YEAR 2000?

A trend is an indicator that may be used to project data. The purpose of the trend evaluation form is to estimate the past, current and future level of a trend.

These estimates are your personal subjective opinions of how you feel about the trend as it relates to the above-stated issue.

To use the form you should consider today's value level of the trend at 100. Then base your estimates using a higher or lower number to represent the level you feel it was 5 years ago, where you think it will be 10 years from now, and where you think it should be (or where you would like it to be) in 10 years.

As an example you may feel the trend was at a lower level 5 years ago and rate it at "25". Then you may feel that the trend will increase to double in 10 years making the value "200" for the "will be" column. However, you may also feel that you would personally want the trend to be the same in 10 years as it is today, thus making it a "100" in the "should be" column.

Your personal estimates of these trends will be kept confidential. Your help and cooperation with this project is certainly appreciated.

APPENDIX B

EVENT EVALUATION FORM INSTRUCTION

ISSUE: WHAT TECHNOLOGIES WILL BE AVAILABLE TO SWAT BY THE YEAR 2000?

An event is a single occurrence that could affect the above issue either positively or negatively.

In completing this form, please start by making a determination of what year the particular event could first possibly occur. Then using a scale of 0 - 100, place a value to represent what you feel is the probability of its occurrence by the year 1995 and a second value for the year 2000. An example could be that you don't think the event could possibly occur (maybe due to bureaucracy or fiscal restraints) until 1990. You also could feel that it has about a 90% chance of occurring by the year 1995, however, also that if it hasn't occurred by then, the chances would diminish to only a 20% possibility by the year 2000.

In the last two columns place a rating from -10 to +10 (minus indicting a negative effect, zero indicating no effect, etc.) to indicate how you feel should the event actually occur, its effect or impact on the issue and on law enforcement.

Your personal responses on this evaluation form will be kept confidential.

Thank you for your time in assisting with this project.

APPENDIX C

STAKEHOLDERS

1. Ad-hoc advocate groups
2. American Civil Liberties Union
3. Attorneys
4. California Police Chiefs' Association
5. California State Sheriffs' Association
6. Chemists
7. Community
8. Computer manufacturers (software/hardware)
9. City/County administrators
10. Criminals
11. Electronic industry
12. Federal law enforcement agencies
13. Judges
14. Local law enforcement agencies
15. Local politicians (i.e., Board of supervisors)
16. Media
17. Military
18. P.O.S.T. (Peace Officer Standards and Training)
19. Police associations (i.e., POA/DSA)
20. Research organizations
21. State and federal politicians
22. State law enforcement agencies
23. SWAT team members
24. Sworn personnel
25. Taxpayers
26. Technology researchers
27. Victims
28. Weapons industry