

144733

**THE FUTURE OF LAW ENFORCEMENT & MILITARY
TECHNOLOGY PARTNERSHIPS**

by

SAMUEL L. SPIEGEL

**COMMAND COLLEGE CLASS XVI
COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING
(POST)
SACRAMENTO, CALIFORNIA
June, 1993**

144733

**U.S. Department of Justice
National Institute of Justice**

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by
California Commission on Peace

Officer Standards and Training

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

16-0323

This Command College Independent Study Project is a FUTURES study of a particular emerging issue in law enforcement. Its purpose is NOT to predict the future, but rather to project a number of possible scenarios for strategic planning consideration.

Defining the future differs from analyzing the past because the future has not yet happened. In this project, useful alternatives have been formulated systematically so that the planner can respond to a range of possible future environments.

Managing the future means influencing the future--creating it, constraining it, adapting to it. A futures study points the way.

The views and conclusions expressed in the Command College project are those of the author and are not necessarily those of the Commission on Peace Officer Standards and Training (POST).

TABLE OF CONTENTS

Section I	Introduction	1
	Issue Question	3
Section II	Future Study	
	Introduction	5
	NGT Panel	5
	Identification of Trends	6
	Trend Forecasting	8
	Identification of Events	16
	Event Forecasting	17
	Cross Impact Analysis	25
	Turbulent World Analysis	27
	Scenarios	38
Section III	Strategic Plan	
	Introduction	47
	Mission Statement	48
	Situational Analysis	48
	Environmental Analysis	49
	Alternative Strategies	61
	Stakeholder Analysis	62
	Preferred Strategy	65
	Implementation Plan	66
	Summary	68

Section IV Transition Management
Introduction70
Commitment Strategy72
Transition Management Structure77
Technologies and Methods79
Summary83

Section V Conclusion84
From Here To There87

Endnotes90

Bibliography91

Appendices
Appendix A - Interview Criteria92

SECTION I
INTRODUCTION

Issues concerning budget reductions, lawsuits, social problems..... and other forms of organizational change have placed more challenge, opportunity, and stress upon the police chief of today than perhaps in any other era of history.¹

Four years of economic decline have led to dwindling resources for the funding of law enforcement. As each budget year passes, deeper cuts are made in law enforcement capital outlay items hoping that these cuts will avert the inevitable by police managers; reducing critical personnel. A major problem facing law enforcement will be how to deliver police services in an ever increasing society dependent upon technology in the face of the prospect of continued budget/funding problems.

With the four-year fiscal decline, agencies have been forced to cut budgets to the bone. These cuts have elevated the total percentage of police budgets in personnel costs, when in fact , the overall budgets of most agencies have slowly declined over the past four years. In one mid-size California Police Department the budget was 14 million dollars in 1990. That city has continued to grow, with increased demand for police services and has a current projected budget for 1992-1993 of 12 million dollars. While several personnel were cut from the budget, the majority of the reduction for this two million dollars was in capital outlay. These dollars represent the vehicles, computers, special equipment, aviation,

communications, and research and development required in the law enforcement environment of today and in the near future.

The current emphasis in law enforcement today is to **spend smarter**. Law enforcement managers strive to creatively reallocate resources and personnel, but continue to be challenged by increasing demands for additional services. Given the potential significant cut in future capital outlay funding, other resources need to be explored and developed if law enforcement is to continue to provide effective police service.

The military may be one such resource. They too are experiencing political pressure to cut spending and spend smarter. With the current de-escalation in the Cold War, this pressure is increasing. The need for the military to balance its spending may well rely upon partnerships with other public agencies that will provide justification for continued development of technology.

Many law enforcement agencies currently avail themselves the opportunity for military technology in the way of surplus vehicles and some aviation equipment. Law enforcement and military partnerships began over a decade ago with the assistance of the military in tracking air smuggling activities at the U.S. borders. Since that time, numerous task forces of federal, state and local authorities have been created for such things as narcotics trafficking, money laundering, fugitive details, disaster planning and most recently, civil disobedience planning.

Through the Federal Emergency Management Agency, FEMA, the military is required to assist with local disasters when specific criteria are met. FEMA has played a major roll in bringing military planning and resources to assist law enforcement with its mission. Most recently, this assistance was seen in the hurricane disasters in Florida and Hawaii, flooding in California and civil unrest in Florida and California. Various factions of the military have participating in either an active role by providing personnel, or support roles such as training, planning and transportation.

What has yet to be tapped is the military's vast research and development resources and the accompanying current and future technologies. Defense laboratories too, are searching for a domestic mission that will give them financial support to sustain their futures. Law enforcement agencies are looking to creative ways to stay current in futures technology and spend smarter.

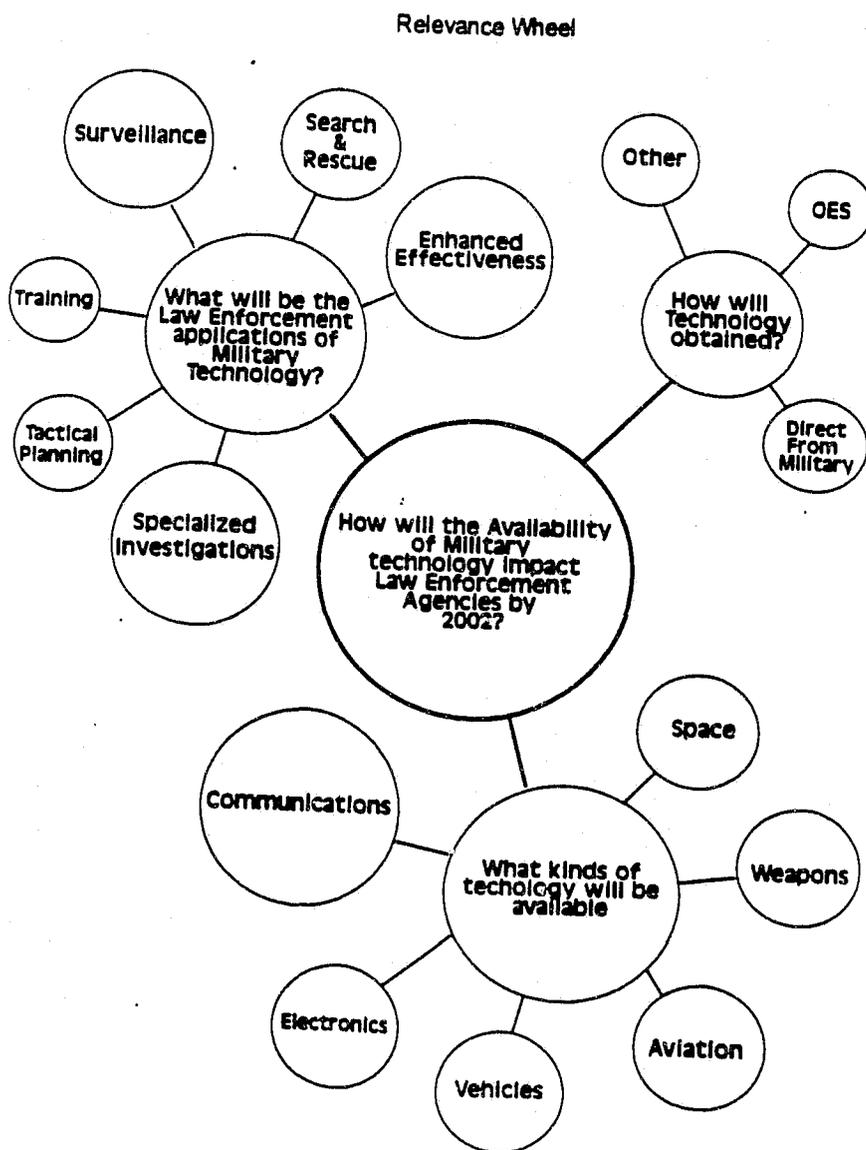
THE ISSUE QUESTION FOR THIS RESEARCH PROJECT IS:

"How will the availability of military technology impact mid-sized law enforcement agencies by the year 2002?"

This issue was selected because of potential future implications to law enforcement. It's importance has been established through an extensive review of available futures file literature, discussion, and interaction with law enforcement and military professionals and community members and an interest held by the researcher.

A relevance wheel was designed to determine the sub-issues that would most likely become the pressing issues associated with the question in the future. The three sub-issues identified are:

- What kinds of technology will be available?
- What will be the law enforcement applications of military technology?
- How will the technology be obtained?



SECTION II
FUTURES STUDY

Introduction

As part of the futures research process, this section examines trends and events relevant to how the availability of military technology impacts law enforcement.

With these trends and events, when the events occur and the sequence in which they occur, create a variety of alternative futures.

For purposes of the study, the model agency is a mid-sized department of 100-350 sworn personnel. The project methodology utilized a panel of seven member, each having managing or policy making experience in law enforcement, city government or the private sector. Additionally, a series of interviews were conducted with defense industry and military personnel.

Nominal Group Panel (NGT)

The identification and prioritization of the trends and events was accomplished through use of this Nominal Group Technique (NGT) panel. The NGT panel included a police administrator from a mid-size agency in San Bernardino County, a police manager from a mid-size agency in Orange County, a police manager from a mid-size agency in Riverside County, an analyst from a mid-size law enforcement agency in San Bernardino County, a supervisor from a Law Enforcement Aviation Unit in San Bernardino County, a police administrator from a mid-sized law enforcement agency in Riverside County and a supervisor from a Disaster Preparedness Assignment in Riverside County. Military representation was

originally included in the NGT panel, however the L.A. riots caused a rescheduling of the panel meeting and the military representatives could not meet the panel's schedule. Recognizing that the input of the military would be crucial to the forecasting process, a structured interview was developed, (Appendix A) and subsequent interviews were conducted. The interviews including the following: A Lieutenant Colonel from the California National Guard, a Lieutenant Colonel from the Pentagon, Department of Military Support, an Administrative assistant from the Under Secretary of Defense for Acquisition and DARPA, Defense Advance Research Project Agency, a California State O.E.S. Administrator and an government anti-terrorist instructor.

The NGT panel was assembled and first addressed the issue and sub-issues so everyone understood the context of what they were about to deal with. A copy of the relevance wheel was distributed to the panel. They then turned their attention to the trends that would impact those issues. The seven panel members silently generated trends for approximately ten minutes. The trends were then discussed and consolidated where they were overlapping or similar.

Identification and Definition of Trends

One of the first tasks of the NGT panel was to rank from the list of candidate trends. They brainstormed 20 trends.

Candidate list of trends

1. Budgets of Military
2. Frequency of Civil Disobedience

3. Level of Cold War Activity
4. Use of Military Technology to monitor border activity
5. Level of joint effort by Local, State, Federal and Private Industry in areas previously allocated to local Law Enforcement only.
6. More open law enforcement organizations
7. Traffic congestion, growth issue
8. Resistance of private industry accepting tech. that interferes with their business
9. more intelligence units being developed in L.E.
10. Public outcry against military spending
11. Technology available to outside
12. Technology developed to deal with overcrowding jails
13. Diversified air/ground mobility in L.E. because of military technology
14. Federal involvement in Narcotics interdiction
15. increased public exposure to military technology
16. More minority involvement in policy making
17. Political haggling over military spending
18. Continued brush fire conflicts (Government / Private Industry competition)
19. Specialization vs. generalization
20. L.E. acceptance of non-lethal weapons

Using a series of criteria, the panel ultimately selected five trends which were deemed most useful and relevant to the issue. The following is a list and definition of those trends.

Trend 1 Budgets of the Military

Both military and local law enforcement funding comes from tax generated revenues. The trend involves the strength of the overall economy and it's effect on funding the military agencies from these tax revenues.

Trend 2 Frequency of Civil Disobedience

This trend was defined as community actions displaying disapproval of public policy or actions. The trend focuses on that disapproval that exceeds passive resistance.

Trend 3 Use of Military technology to monitor border activities.

This trend enjoins military technology in actively monitoring narcotics and smuggling activities at the U.S. borders.

Trend 4 Level of Cold War Activity

The "Cold War" is in a de-escalation mode at present. The effects of the Cold War as it relates to military spending, research & development, and staffing is of issue in this trend.

Trend 5 Level of Joint Efforts by Local, State, Federal & Private Industry in Areas previously allocated to Local Law Enforcement only.

This is the unified approach to the field of law enforcement. The overlapping of local, State, Federal and private industry in law

enforcement services and technology was previously secular and proprietary. As an example this a movement for the last ten years to have joint local, state and federal Narcotics task forces and Federally funded "feed and seed" programs that are designed to attach specific crime problems in neighborhoods.

The panelist were then asked to forecast these trends using the trend evaluation form. They forecast each trend level for the period 1987, 1995 and 2002. They also forecasted a "will be" trend level and a "should be" trend level.

Table 1.

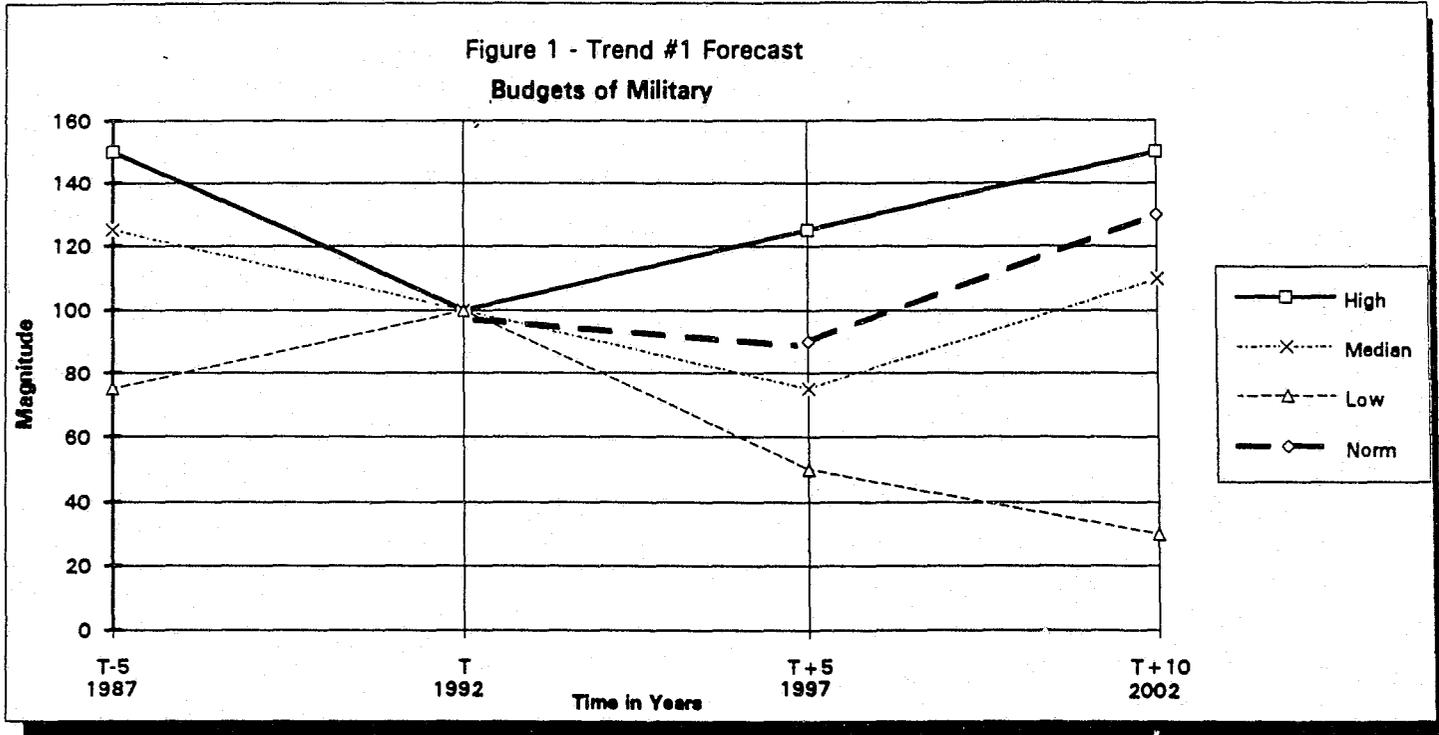
	TREND STATEMENT (Trend Evaluation Table) Panel Median Forecasts	Level of the Trend (Today = 100)			
		5 Years Ago	Today 1992	5 Years From Now	10 Years From Now
T1	Budgets of Military	125	100	75/90	110/130
T2	Frequency of Civil Disobedience	50	100	140/115	150/90
T3	Use of Military Technology to monitor border activities	50	100	120/170	150/210
T4	Level of Cold War Activity	200	100	90/80	80/75
T5	Level of joint efforts by Local, State, Federal Private Industry in areas previously allocated to local Law Enforcement only	25	100	125/140	150/170
WM Be/Should Be					

The trend data supplied by the panel was used to identify the panel median forecasts and was then converted to a table. Using the table, a graph was prepared of each trend identifying the median nominal trend level; the highest trend level; the lowest trend level; and the median "should be" trend level.

The author recognized that the absence of the invited military personnel presented a problem of having data from primarily one point of view. Subsequent to gathering this, interviews were conducted with military and related personnel in a structured interview format. (Appendix A)

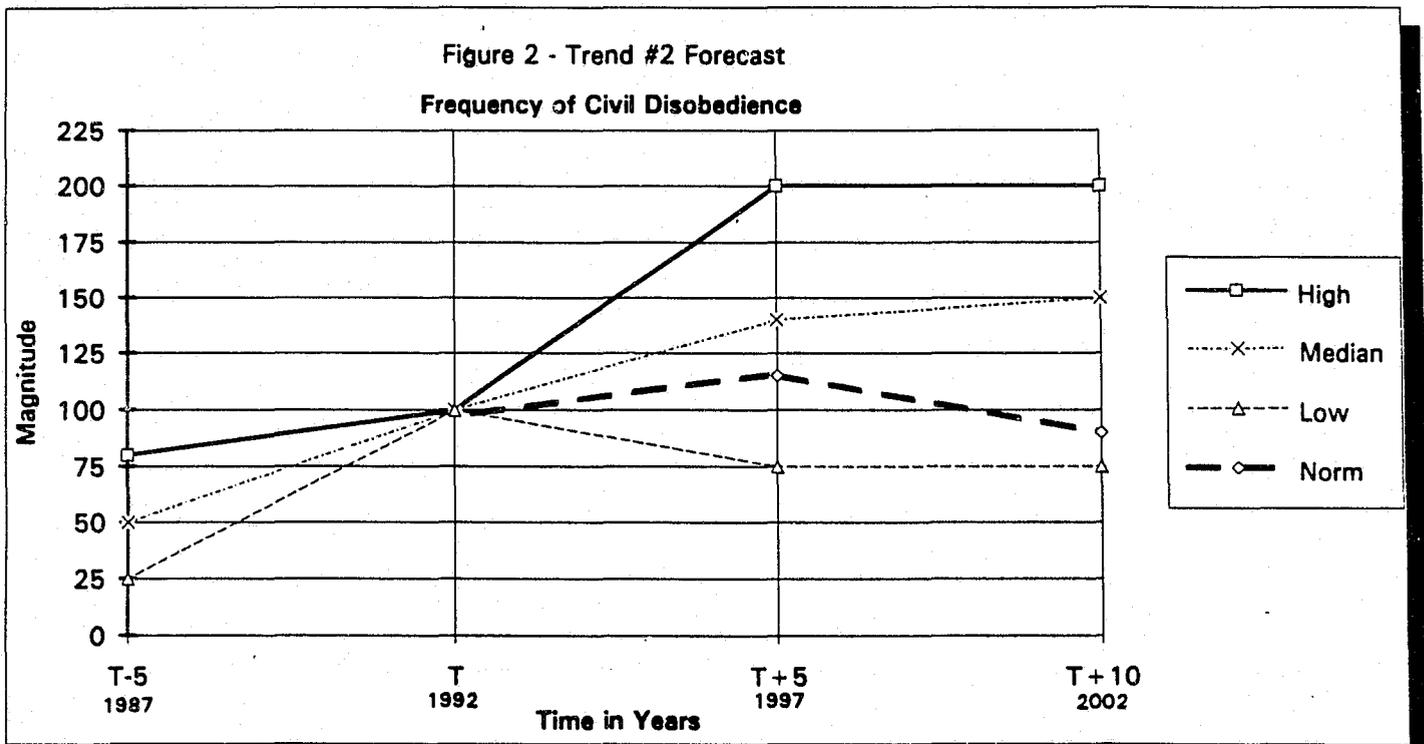
The summary of their information on the basic questions relating to military and law enforcement technology partnerships, paralleled the data produced by the NGT panel.

Trend One: Budgets of the Military



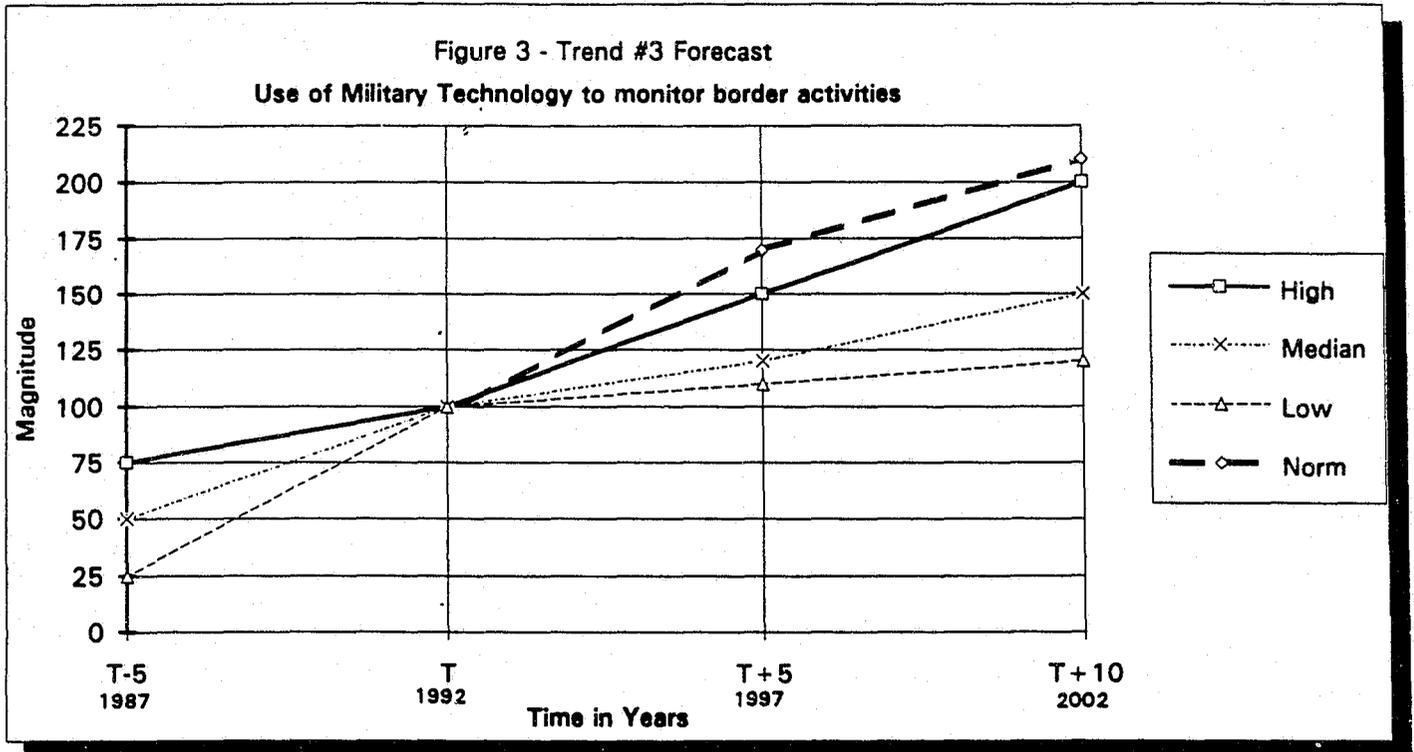
The panel believed that these budgets had diminished from five years ago to that of 1992. The present de-escalation of the Cold War has increased the pressure to down size the military. Further attempts to balance the federal deficit would be impacted greatly if military spending could be reduced. They further indicated that this decrease will continue through five years from 1992 and eventually increase above 1992's budget level, ten years out. The interviews of military personnel supported the panel's belief that reduced military appropriations would lead to sought after partnerships with other government and private entities.

Trend two: Frequency of Civil Disobedience



The panel estimated that Civil Disobedience has doubled today from that of five years ago. However, this estimate is believed to be prejudiced as the LA riots are less than a week old and members of the panel still had personnel committed to that area. This accounts in part for the high projections for 1997 and 2002. This would indicate a large commitment of technology and personnel for future budget years. The military interviews were consistent with that of the panel.

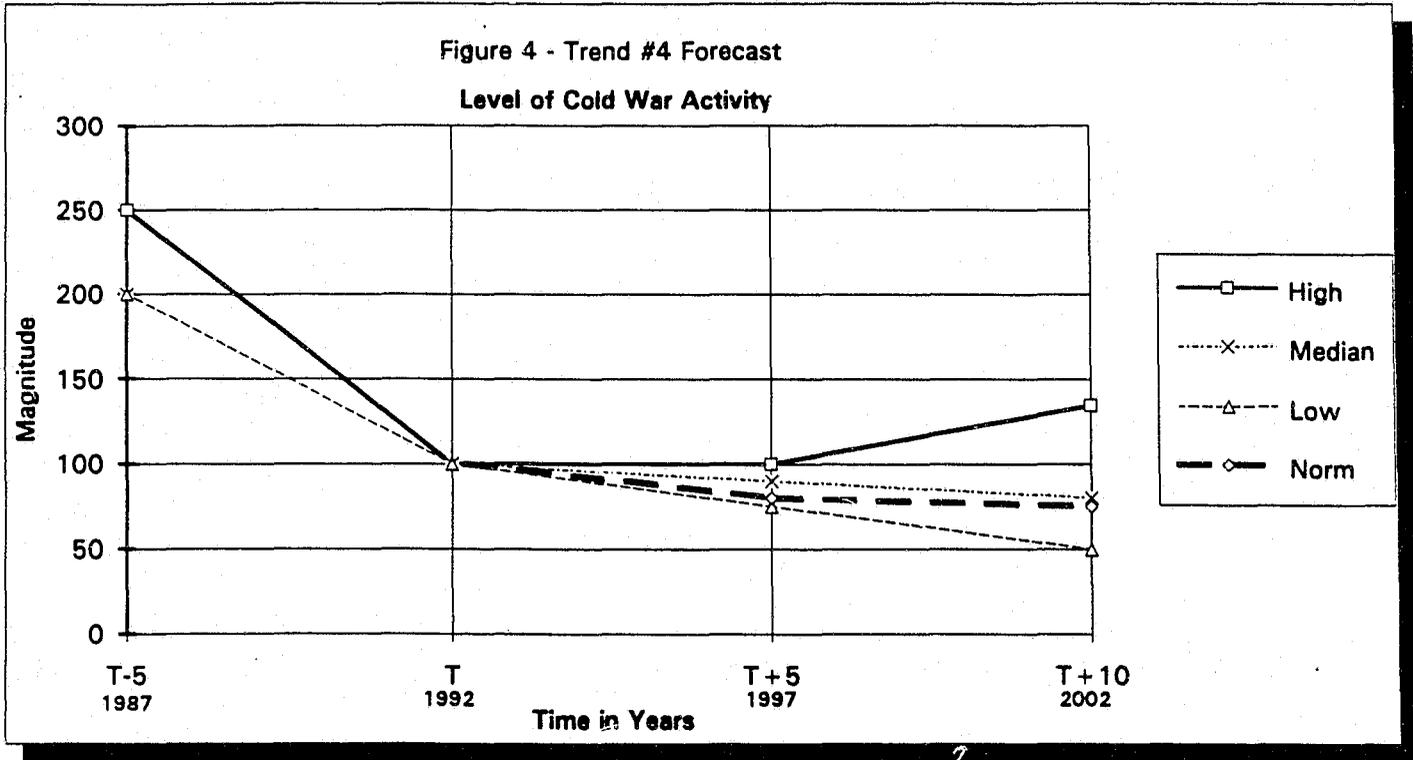
Trend Three: Use of Military technology in monitoring border activity.



The panelists believed that this trend would increase three-fold by the year 2002. The five year was two and half times greater commitment than that of today. The trend overlaps with trend five, (Level of Joint Efforts..), in that the military partnerships with local law enforcement was seen by the panelists as a significant probability. The panelists felt that since the military is currently involved in assisting in tracking aircraft that are suspected narcotics trafficking, the actual commitment of technologies for ground support will increase. Military interviews supported this only as it related to the protection of the borders. The position of

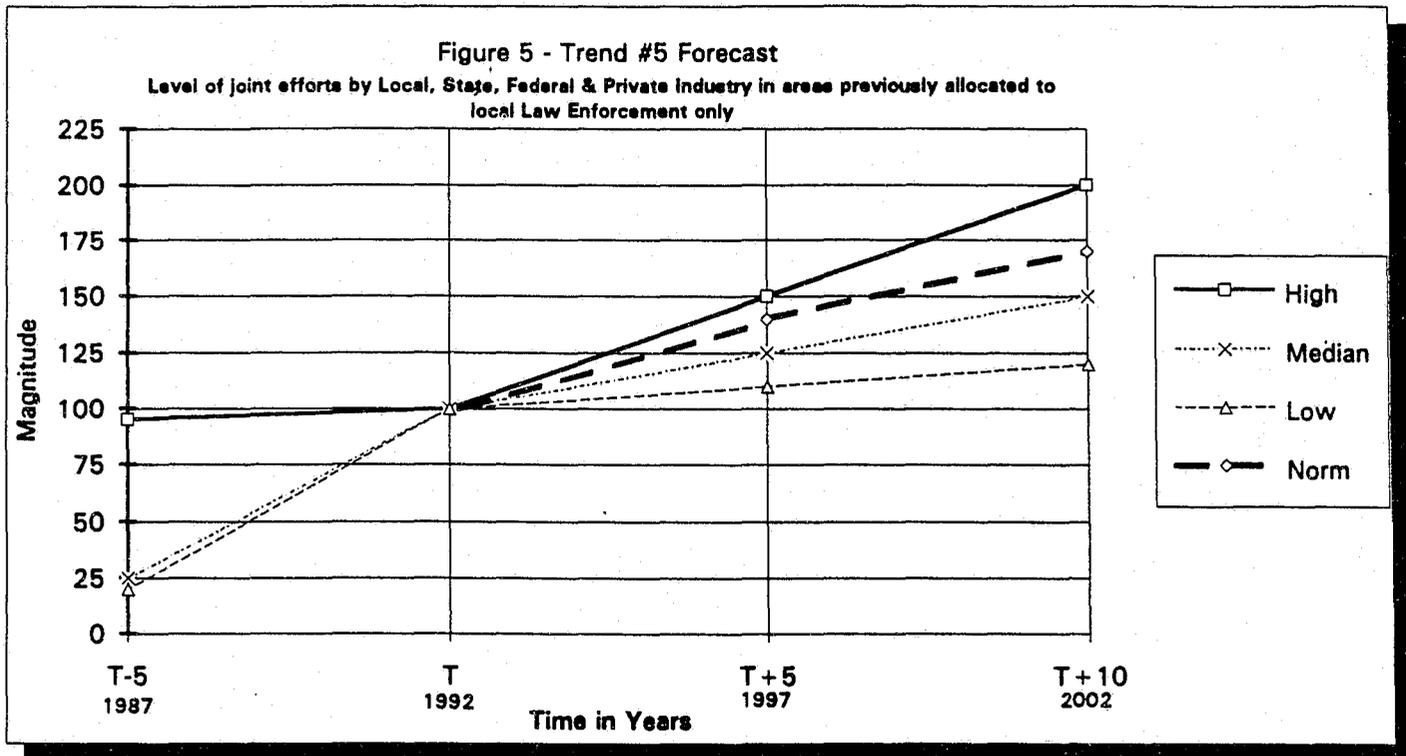
military drug intervention is still not settled.

Trend four: Level of Cold War Activity



All panel members felt that this was a much more significant trend five years ago. With 1992 being half of that five years ago; along with the continued decrease five and ten years out, Glasnost is alive and well. The concentration of the military to this front is seen by the panelists as considerably less now and in years to come. Continued support for democratic reform and potential offering of financial support offering by the U.S. strengthened the panel's belief that this activity was diminishing rapidly. The military interviews were non positioned on this trend.

Trend five: Level of joint events of Local, State, Federal and Private Industry in areas previously allocated to local law enforcement only.



The panelists believes this trend will reflect new partnerships between government and private industry. This steady increase is a significant one based upon the three fold increase from five years ago to 1992 and a steady increase that continues through 2002. These partnerships were seen by the panelists as opportunities to expand expertise while saving money in duplication of efforts. The military interviews strongly supported the panel's belief in the growing partnerships.

Identification and Definition of Events

The NGT panel then brainstormed a candidate list of events. These 21 events are listed below.

Candidate List of Events

1. U.S. involvement in new war
2. The military discovers a new non-lethal weapon
3. The Columbian narcotics cartel war comes to the U.S.
4. Major breakthrough in communications by military
5. Consolidation of military branches
6. Terrorist detonate nuclear device in U.S.
7. Police facility destroyed by civil disobedience
8. Democratic President elected
9. Military involvement in prisoner processing
10. Major U.S. city goes private for police services
11. POST mandates training in civil disobedience
12. Federal civil rights case decision mandates police & military share resources
13. Natural disaster causes long term use of military supplies
14. Visibility of police acquisition of military surplus
15. Iran War
16. POST & CSTI develop a class in "How to access Military technology"
17. President assassinated by foreign power
18. Investigation of military involvement in L.A. riots
19. Consolidation of narcotics cartels
20. Legislation mandates regionalization of law enforcement in California

21. Private industry files class action suit to block transfer of military technology

Using a series of criteria they selected five specific events which they found most useful and relevant to the issue. The panelist individually selected their top ten events and they were weighted and tallied to identify the top five events for the group.

Event 1 U.S. involvement in a new war.

This event was defined as the outbreak of military hostilities between the United States and a foreign country.

Event 2 The military discovers a new anti-personnel non-lethal weapon.

This event was defined as the discovery of a anti-personnel non-lethal weapon that impairs the functioning of humans without causing lasting physiological damage.

Event 3 The Columbian Drug Cartel War comes to the U.S.

This event was defined as the turf war between the controllers of the illicite cocaine manufacturing and distribution. The U.S. experiences execution of Judges and other individuals involved in prosecution of drug dealers.

Event 4 Major breakthrough in communications by military.

This event was defined as the discovery of a new science; technology and it's development for communications.

Event 5 Consolidation of military branches.

Budget reductions and changes in geo-political environment result in consolidation of Army, Navy, Marines & Air Force. The consolidation, while possibly politically motivated, is thought to maximize spending, increase research and development efficiency and streamline operations.

The panelists were then asked to forecast the events on an Event Evaluation Form.

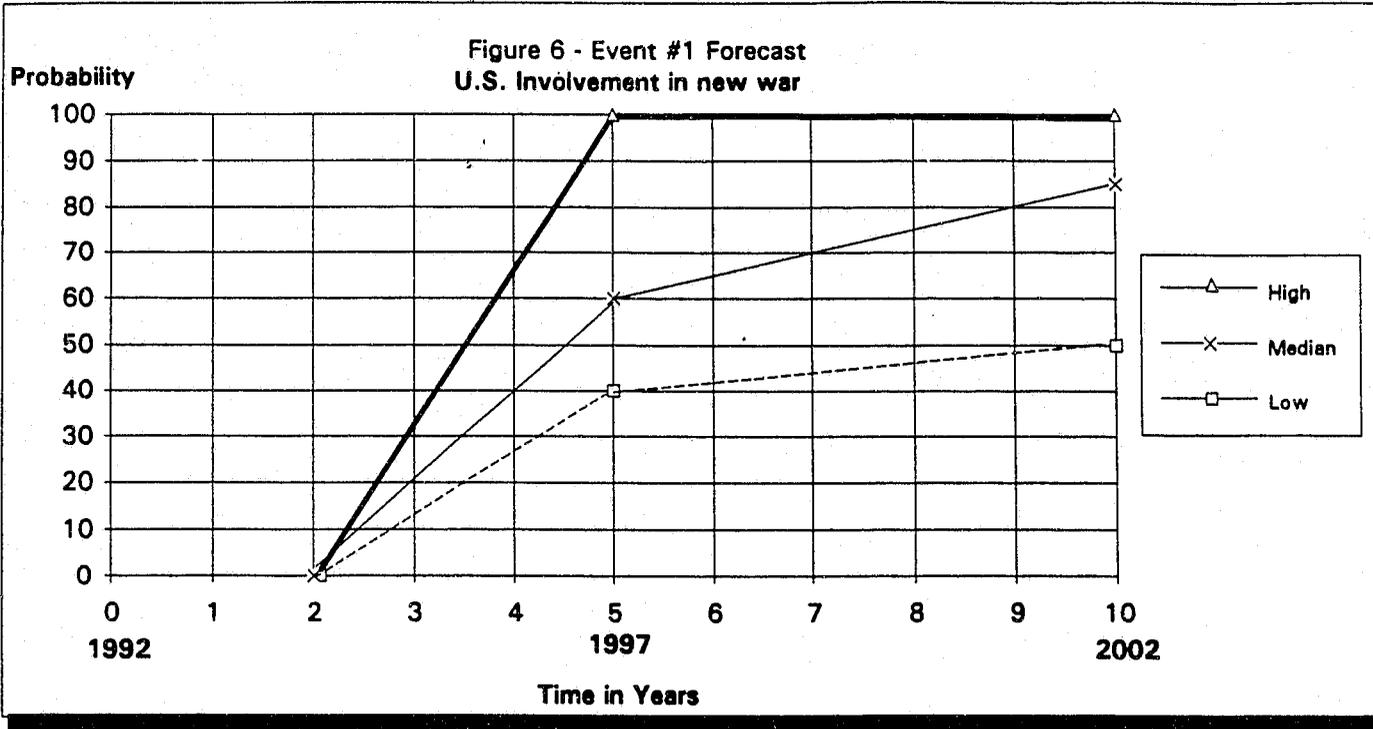
They were asked to estimate how many years until the probability of this event first exceeded zero. They were asked to give a probability of occurrence at five years and at ten years. They were also asked to estimate the impact on the issue if the event occurred; be it positive or negative.

Table 2.

EVENT STATEMENT (Event Evaluation Table) Panel Median Forecasts		Probability			Impact on the issue area If the Event Occurred	
		Years Until P>0	Five Years From now (0-100)	Ten Years From now (0-100)	Positive	Negative
					(0-10)	(0-10)
E1	U.S. Involvement in new war	2	60	85	0	7
E2	The Military discovers a new useful non-lethal weapon	1	50	70	10	0
E3	The Columbian narcotics cartel war comes to the U.S.	2	55	70	10	0
E4	Major breakthrough in communications by military	1	70	90	10	0
E5	Consolidation of military branches	3	30	35	3	4

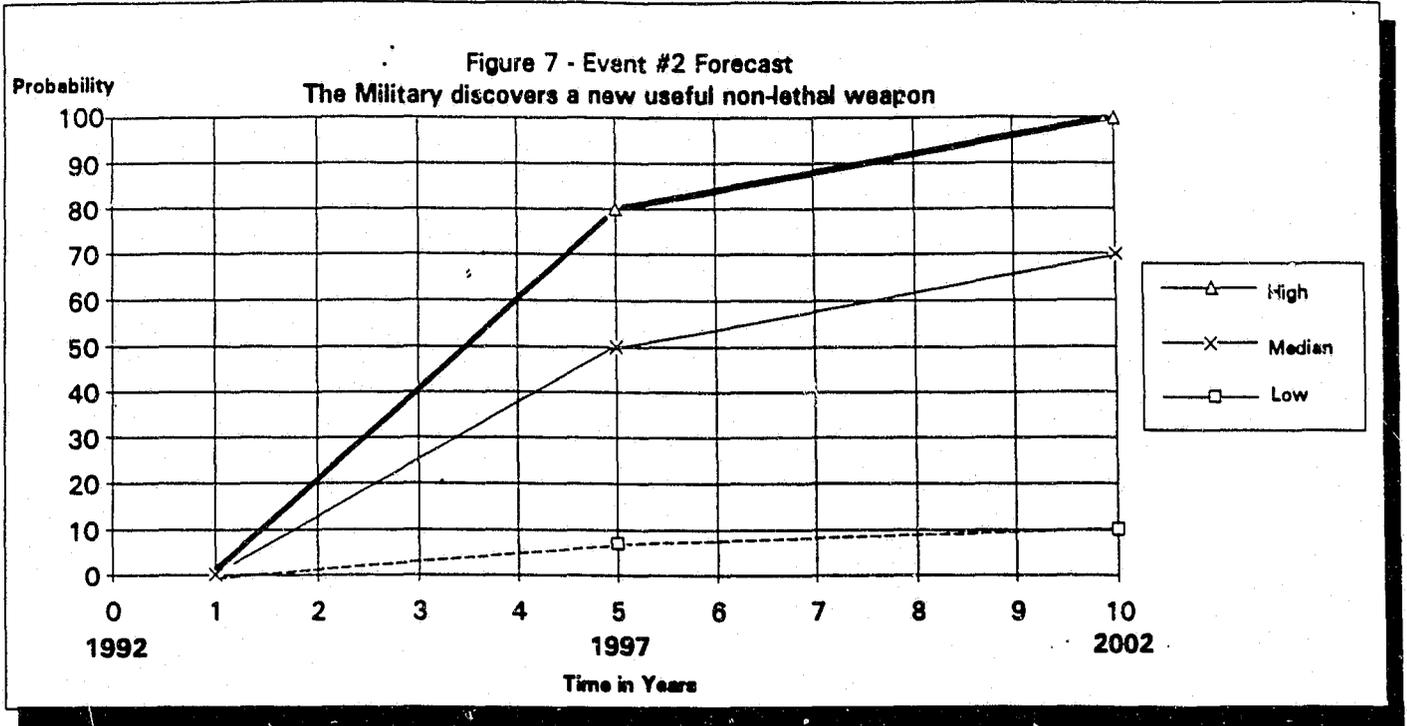
The event evaluation forecast data provided by the panel was then used to create a table of the median forecasts. A graph was prepared for each event displaying the highest forecasts, the median forecast and the lowest forecast from the panel. The "Years until P>0 is a consensus of the NGT panel.

Event one: U.S. Involvement in a new war



The panel forecasted that the probability first exceeded zero in 1994. The five year probability was between forty and ninety eight percent. At ten years the probability had risen to between fifty and ninety eight percent. The projection indicates the threat of war is very serious. The panel felt that a new war would require the military to focus exclusively on conflict situations causing the exclusion of any potential joint efforts in assisting law enforcement in domestic tranquillity. Further that the commitment of military resources to a war would diminish the availability of the technology and minimize the need for law enforcement / military partnerships to balance the justification for military budget spending. The military personnel were reluctant to offer a position on this.

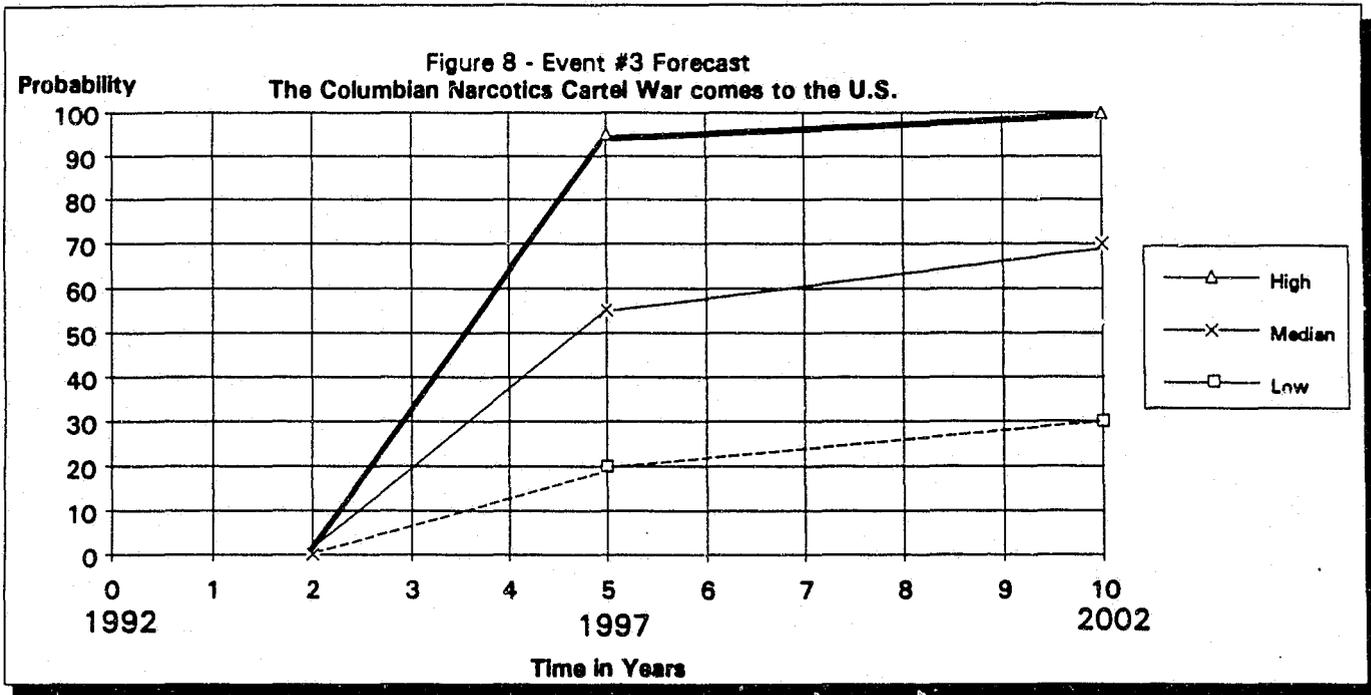
Event Two: The military discovers a new useful non-lethal weapon



The panelist's forecasted that the probability first exceeded zero was within one year. Thereafter, there is a wide difference. This indicates that the panelists are split in their belief that the device could be invented and/or utilized in law enforcement. The high indicates eighty percent at five years and one hundred percent at ten years. The median held a parallel to the high, from five through ten years, ranging from fifty percent to seventy percent. This event would have a strong positive effect on the issue as law enforcement would welcome such technology with open, although skeptical, arms. The skepticism is seen as law enforcement's need to adjust to new "non-lethal" weaponry to counter "lethal" weaponry. While most of those military personnel interviewed evaded this event,

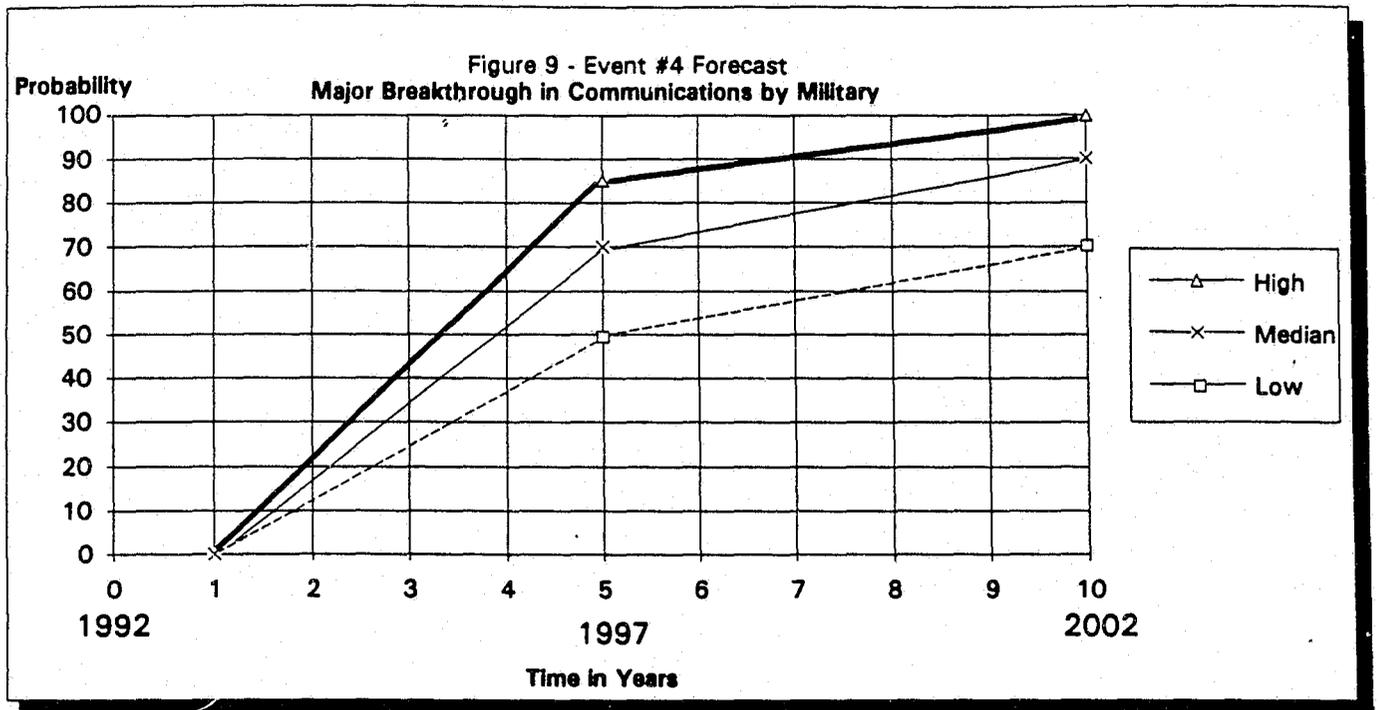
one military expert offered that this type of technology already exists, but has yet to be declassified.

Event Three: The Columbian Drug Cartel War comes to the U.S.



This event is projected to occur within the two years. The median probability shows fifty-five percent at five years and seventy percent at ten years. While this will have a negative effect on the issue at first, the positive will continue with a plus ten projection. Once engaged, the war on familiar grounds and with laws lacking extradition restraints should prove helpful in the war on drugs.

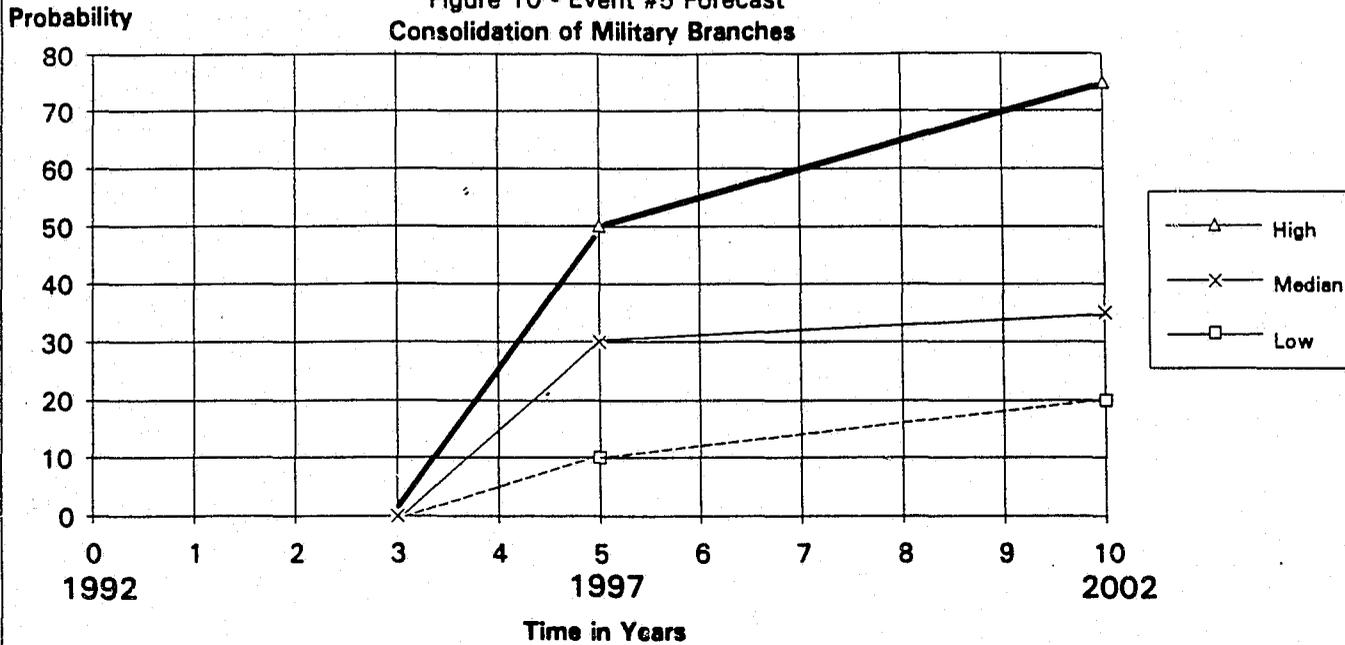
Event Four: Major breakthrough in communications by the military



The probability of this at five years ranged from fifty percent to eighty four percent. The advent of major breakthroughs in communications would support more efficient law enforcement and smarter spending for a joint communications endeavor between military and law enforcement.

Event Five: Consolidation of the Military

**Figure 10 - Event #5 Forecast
Consolidation of Military Branches**



The probability ranges from ten percent to fifty percent at five years and twenty to seventy five percent at ten years. This indicates the panelists uncertainty that consolidation will occur with the probability only modest by the end of the tenth year. The effect of this is seen as equally positive and negative since the consolidation could concentrate research & development, reduce military spending while it could additionally eliminate jobs. The true effect of the event will be known after the political haggling over the monies saved and how they'll be spent. One alternative is to create economic stimulation and more jobs. The interviews with military personnel did not support this. While some could see the potential for minimal consolidation, the reality forces being combined at present structure was viewed as unlikely.

CROSS IMPACT ANALYSIS

A basic cross-impact evaluation was then prepared using the data provided by the panel. The researcher and one NGT panelist performed a cross impact analysis of the identified trends and events. The purpose of the cross impact analysis is to determine how each forecasted event, if it occurred, will impact the other events and trends. The impact is recorded as a percentage change, positive or negative. Additionally, an estimate of the years to maximum impact is also forecast. The following table represents the median estimates - Table 3.

Table 3.

BASIC CROSS-IMPACT EVALUATION MATRIX																
	Impacting Event (Actors)	IMPACTED EVENT (Reactors)					IMPACTED TRENDS (Reactors)					Impact				
		E1	E2	E3	E4	E5	T1	T2	T3	T4	T5					
E1	U.S involvement in New War.	X	2 1	0	2 1	0	-25 1	10 1	-25 1	25 1	5 1	7				
E2	The Military Discovers a New Useful Non-Lethal Weapon.	0	X	0	0	0	0	0	0	0	0	0				
E3	The Columbian Narcotics War comes to the U.S.	0	0	X	0	0	-5 1	20 1	100 1	0	0	3				
E4	Major Break Through in Communications by Military.	0	0	0	X	0	5 3	0	0	5 1	0	2				
E5	Consolidation of military branches.	0	10 2	0	0	X	20 4	0	0	0	0	2				
Events & Trends Reactors		0	2	0	1	0	4	2	2	2	1					
T1	Budgets of Military	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Percentage Change (+ or -)</td> <td>_____</td> </tr> <tr> <td>Years maximum impact</td> <td>_____</td> </tr> </table>											Percentage Change (+ or -)	_____	Years maximum impact	_____
Percentage Change (+ or -)	_____															
Years maximum impact	_____															
T2	Frequency of Civil Disobedience															
T3	Use of Military Technology to monitor border activities															
T4	Level of Cold War Activity															
T5	Level of joint efforts by Local, State, Federal Private Industry in areas previously allocated to local Law Enforcement only															

An analysis of the cross-impact matrix revealed that all of the events had little to no impact on other Events with the exception of (E1) "U.S. involvement in New War, (E5) "Consolidation of Military Branches" and (E2) "The Military Discovers a new useful non-lethal weapon."

The greatest impact on the events and trends would be the E1. The involvement in a new war would probably re-prioritized the research and development of technologies to address specific wartime needs. This in turn would slow the partnership efforts between law enforcement and the military. The war would have a negative effect on the military budget, T1, reduce the ability of the military to monitor the borders, T3, increase the potential for additional Cold War activity T4, and reduce, through re-prioritization, the ability for the military to actively pursue joint ventures, T5.

The consolidation of Military would have minor positive impact in that it may speed the discovery of the non-lethal weapon.

The only other major impact was that of (E3) "The Columbian Cartel Drug War comes to U.S" impacted (T3) "Military technology used to monitoring smuggling & border activity" by increasing the awareness of the need for military intervention in the war on drugs and that the borders of the U.S. are our most vulnerable point of entry.

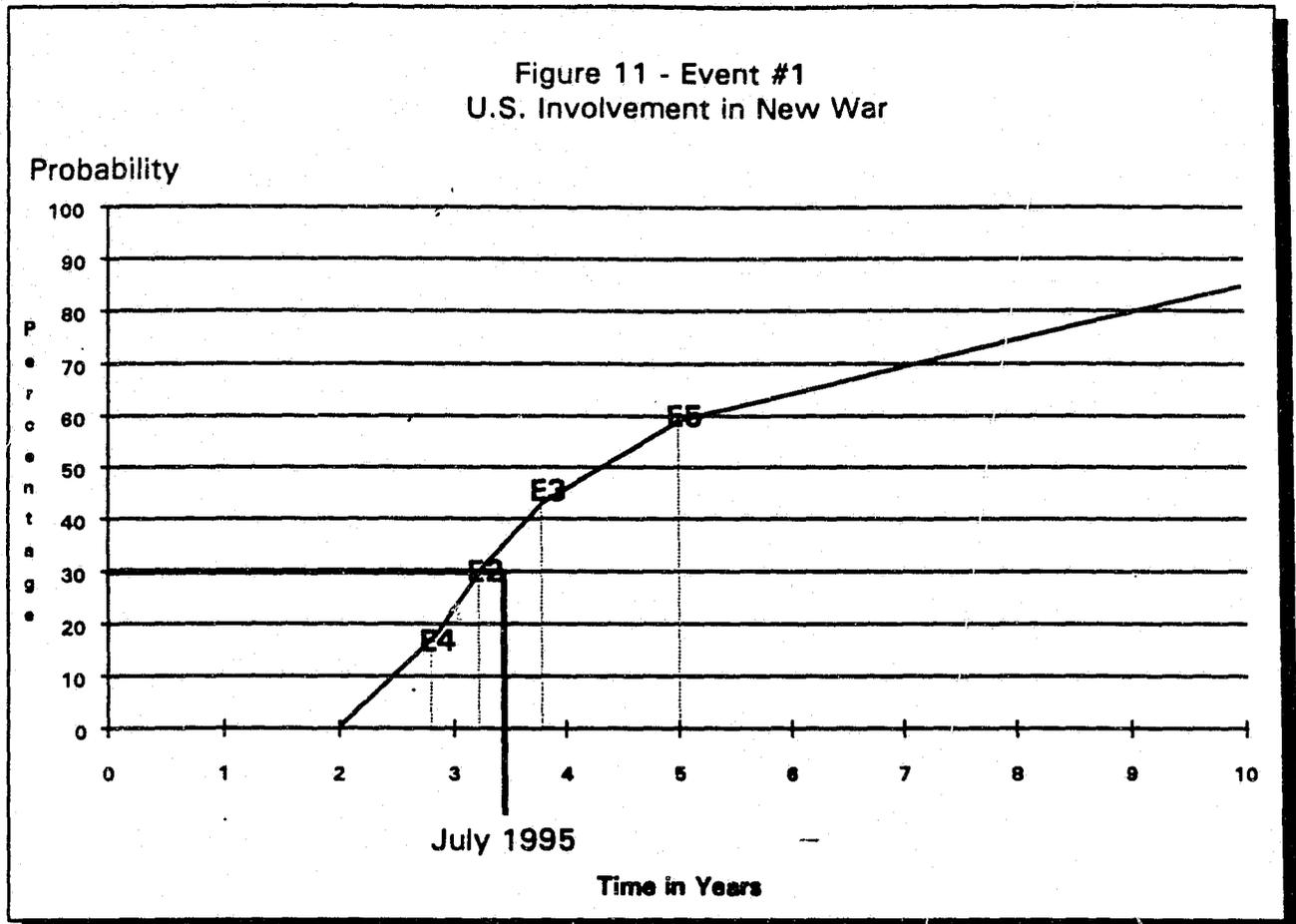
Turbulent World Analysis

A turbulent world situation was graphed to determine when events would occur. A turbulent world for this purpose is when any event reaches 30%. Graphs were prepared for each event and each trend showing the impact and sequence of each event on every other event and each event on each trend. The purpose of creating a turbulent world is to develop a baseline that would determine if the event were to occur, what impact would it have on the time-line of the other events.

Events

The graphs depict each individual event by percentage of probability. Based upon the other events and trends, a forecast is made as to when the event would occur in a turbulent world situation.

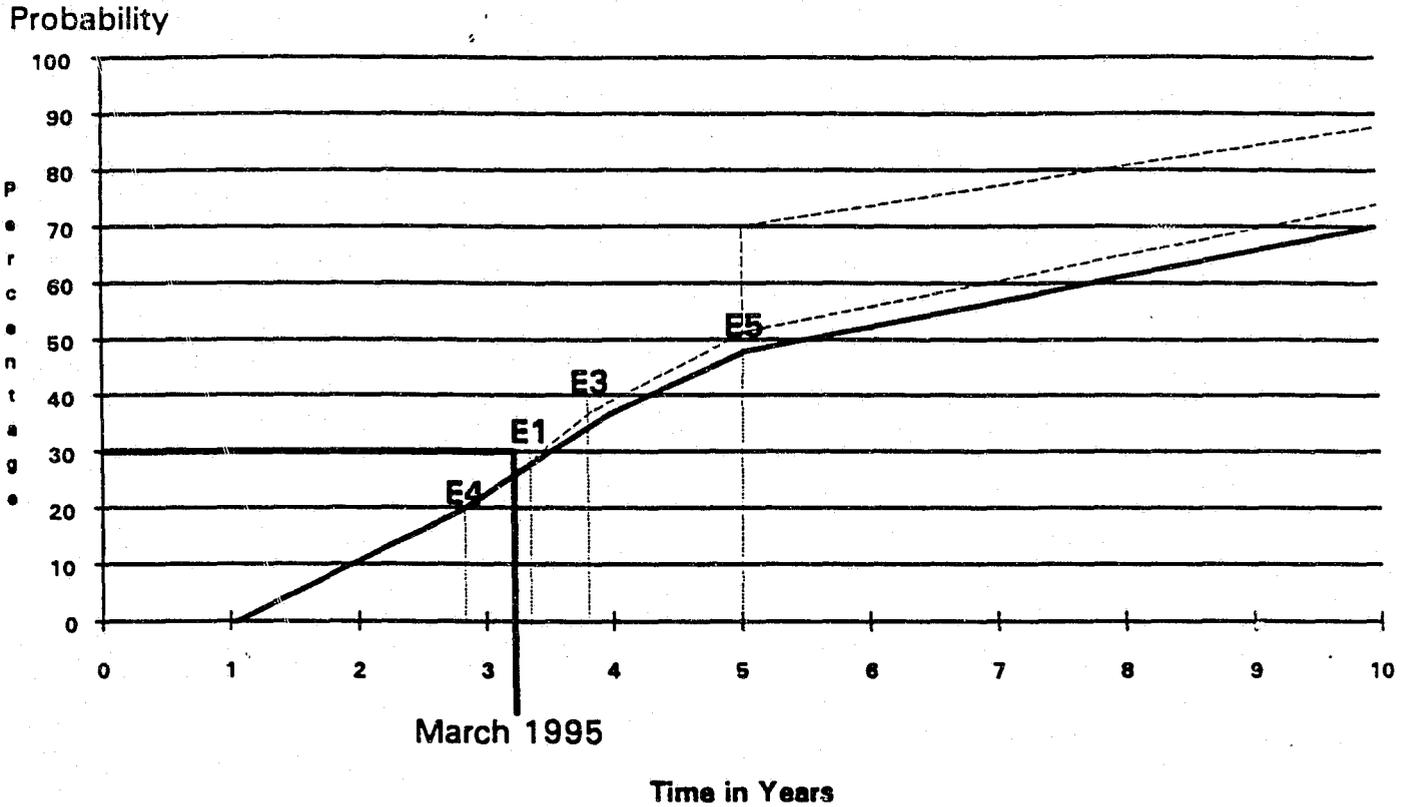
Event One: U.S. Involvement in New War



The involvement in a new war would probably re-prioritize the research and development of technologies to address specific wartime needs. This in turn would slow the partnership efforts between law enforcement and the military. The war would have a negative effect on the military budget, T1, reduce the ability of the military to monitor the borders, T3, increase the potential for additional Cold War activity T4, and reduce, through re-prioritization, the ability for the military to actively pursue joint ventures, T5.

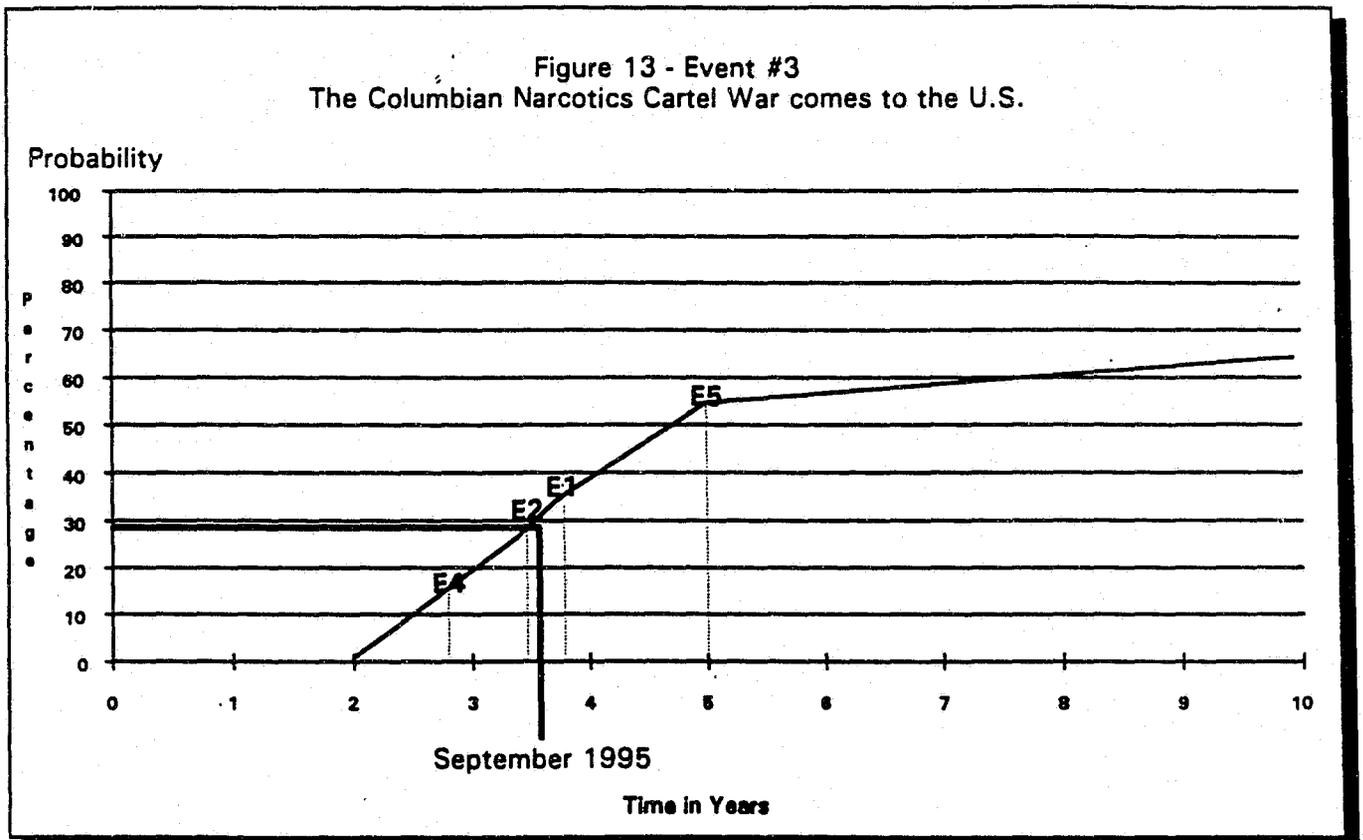
Event Two: The military discovers a new useful non-lethal weapon

Figure 12 - Event #2
The Military Discovers a New Useful Non-Lethal Weapon



In the turbulent world situation, the first event to occur that impacted E2 was E3, "Narcotics War comes to U.S" This impact raised the probability slightly. However, E5, "Consolidation of the Military", raised the probability significantly.

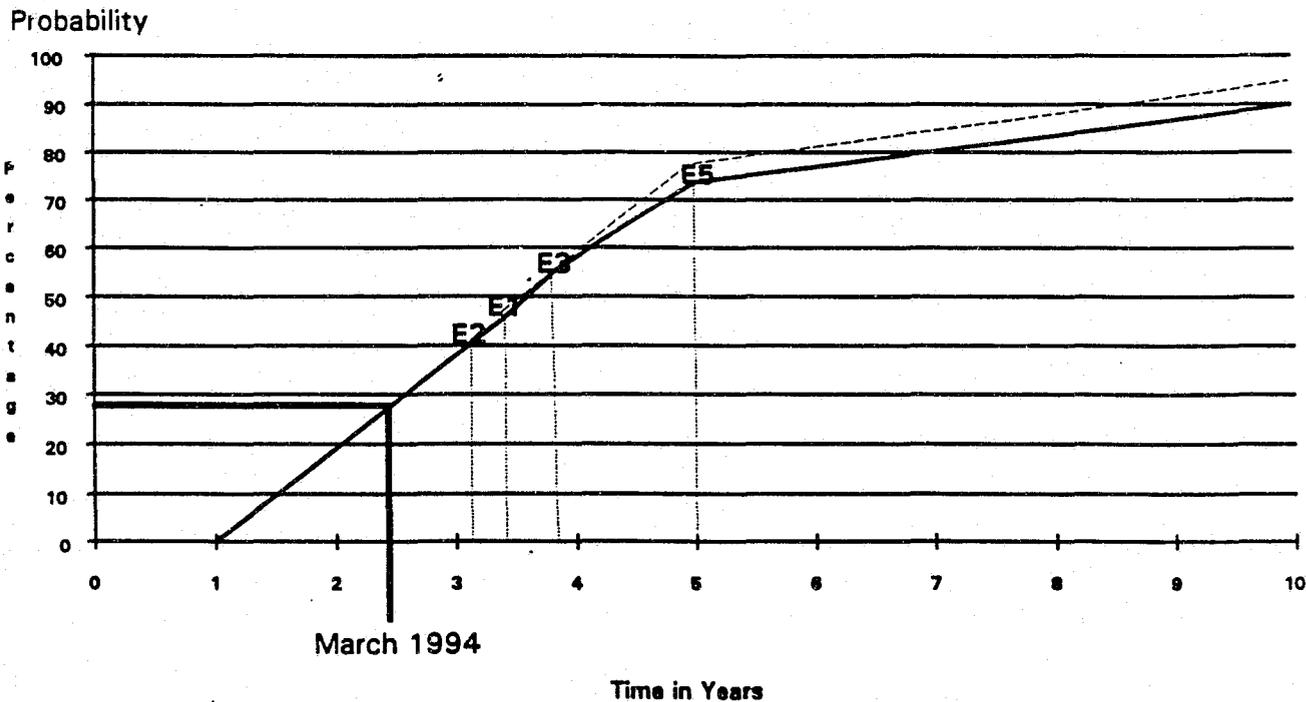
Event Three: Narcotics War comes to U.S.



In this case, E4, " Communications breakthrough", occurred before E3, March 1994. The Cartel war coming to the United States had little impact on the other events in relation to time.

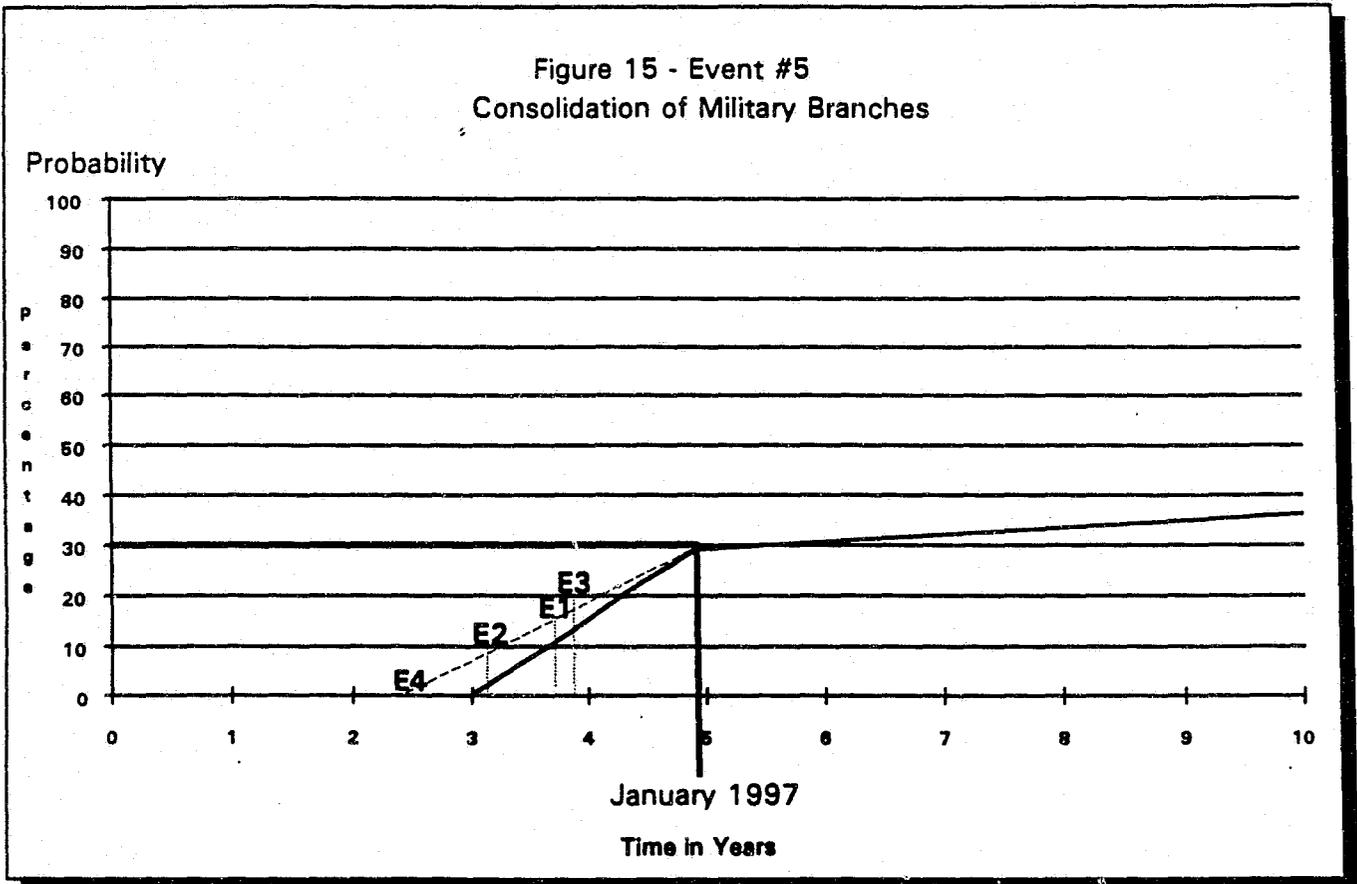
Event Four: Communications Breakthrough

Figure 14 - Event #4
Major Break Through in Communications by Military



Only a minimal effect was made in probability increase with E1, US involvement in a new war, impacting; "The discovery of a communications breakthrough". While this type of communications technology and exploration is long awaited, if had little if any effect on the other events and caused no time movement.

Event Five: Consolidation of Military

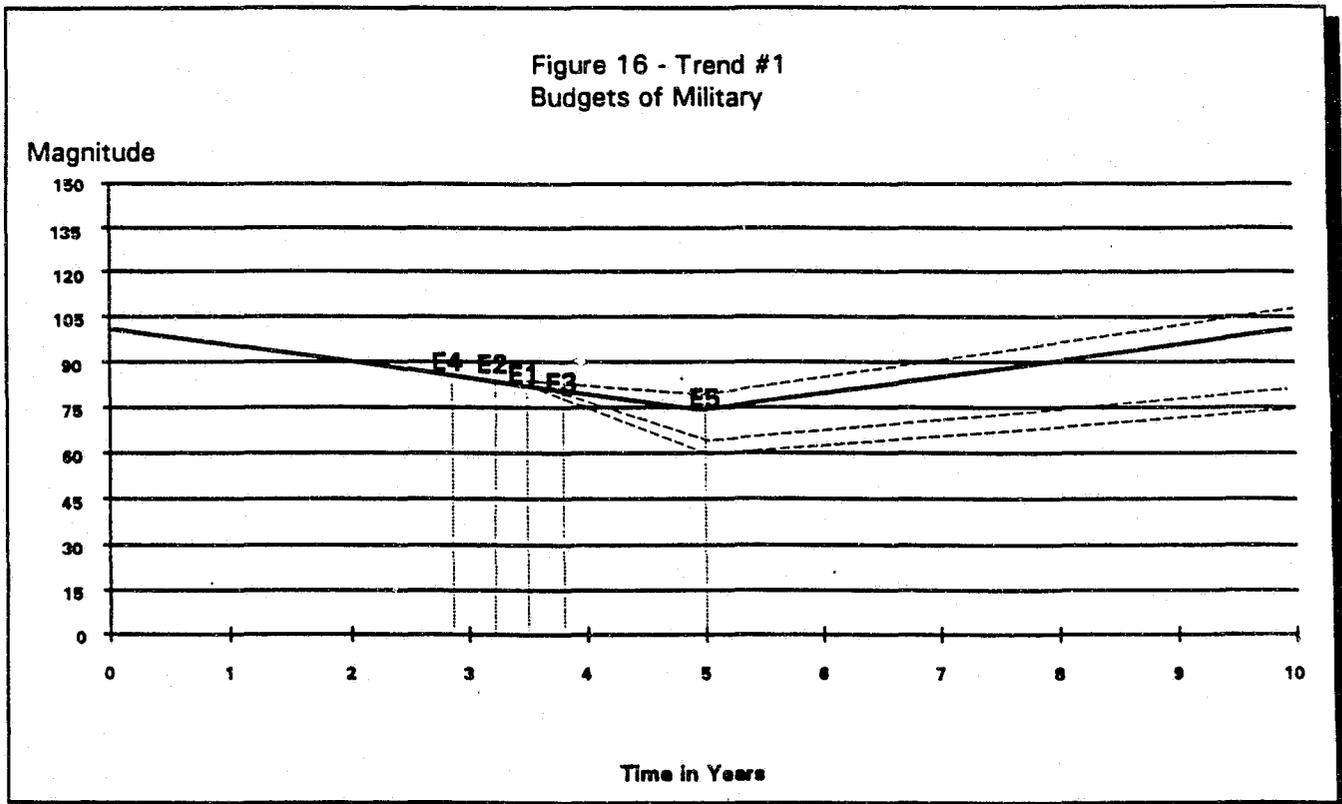


While other events reflected some minimal change in time as a result of the occurrence of other events, there was no notable impact on Event 5.

Trends

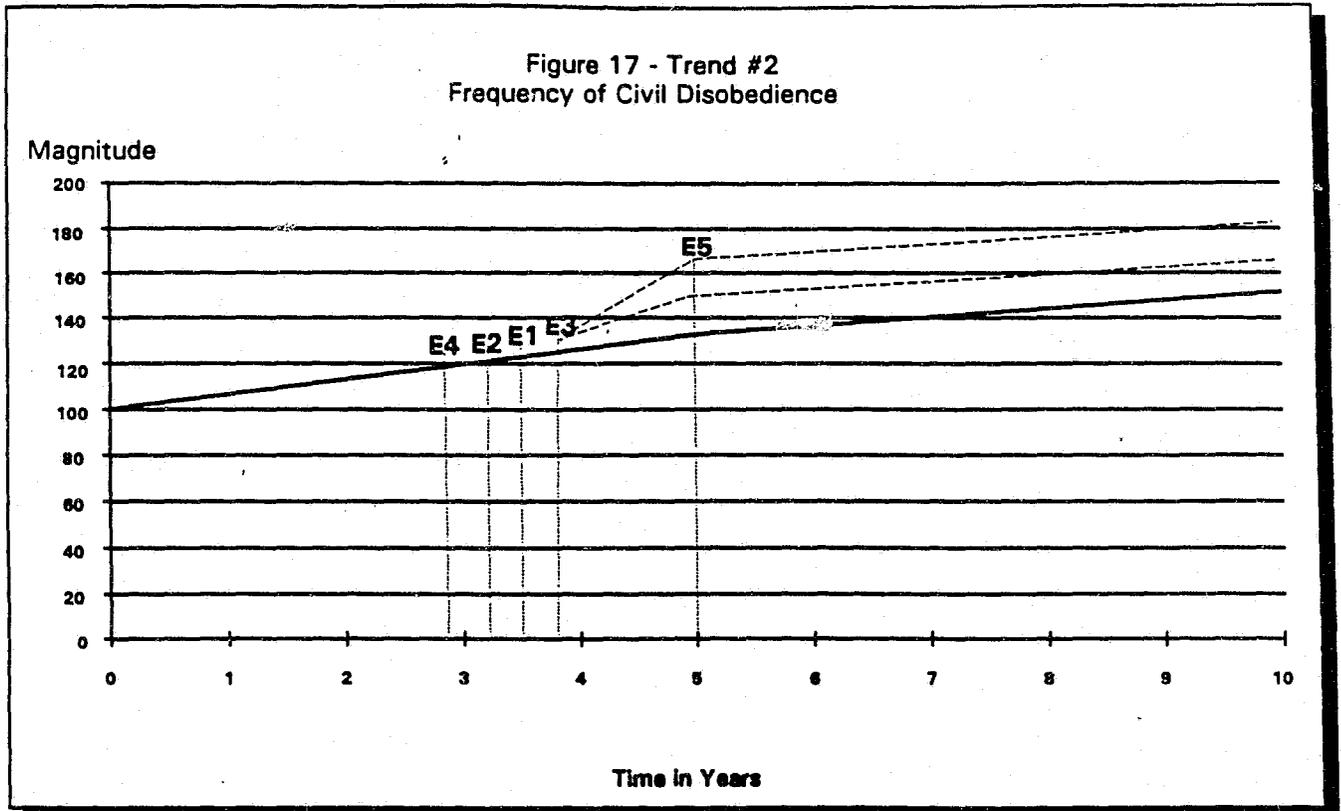
These graphs depict the magnitude of each event as it relates to the individual trend and the subsequent impact to it's timing. (refer to dotted lines).

Trend One: Budgets of Military



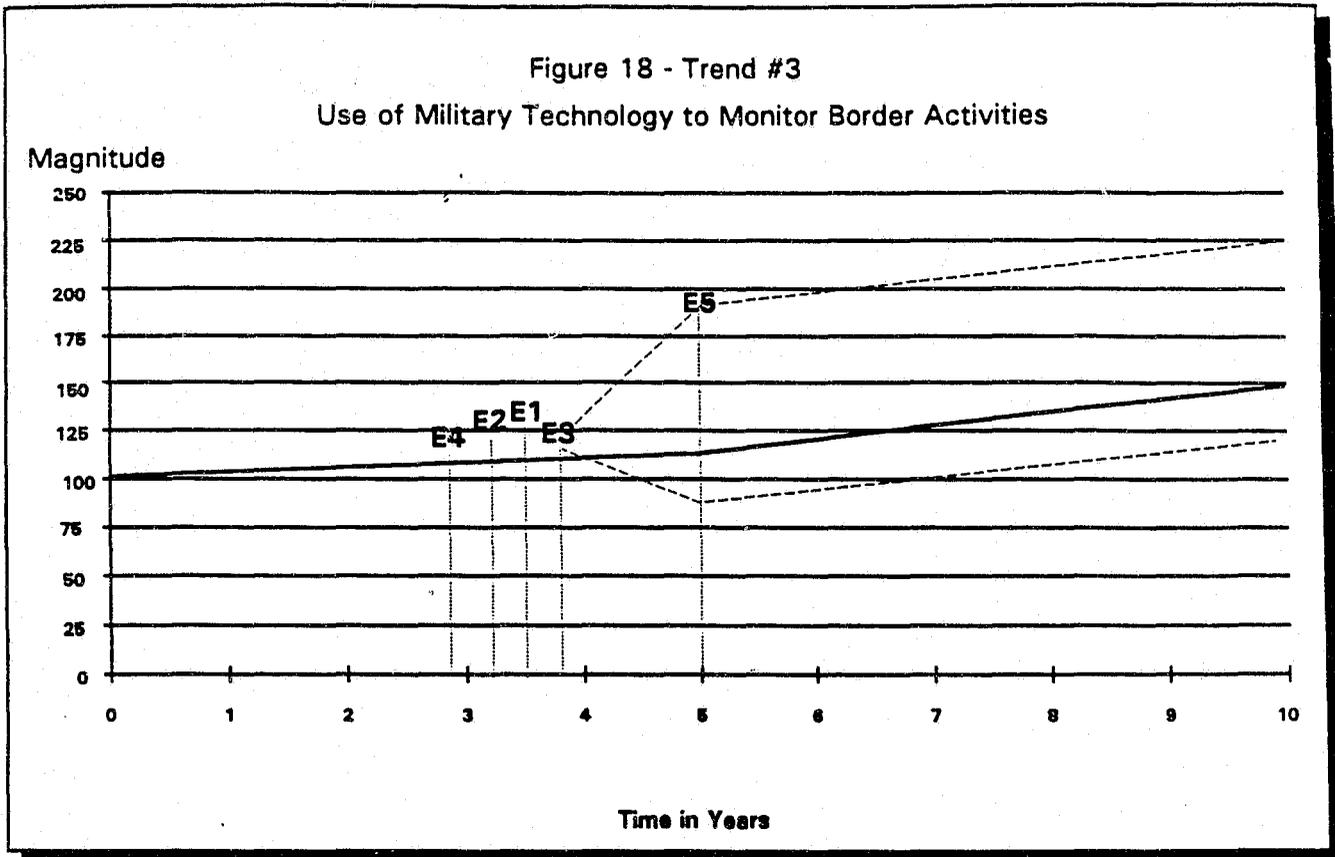
Of all the trends, this showed the most movement impact. Having been lowered by E1 & E3; E5, "Consolidation Of the Military", forced the return to panel median. As the other events occurred, the magnitude adjusted accordingly. For example, E1, U.S. involvement in a new war, would most likely raise military budgets, while E2, discovery of a new non-lethal weapon, did nothing for the budget and further projected a lesser magnitude.

Trend Two: Frequency of Civil Disobedience



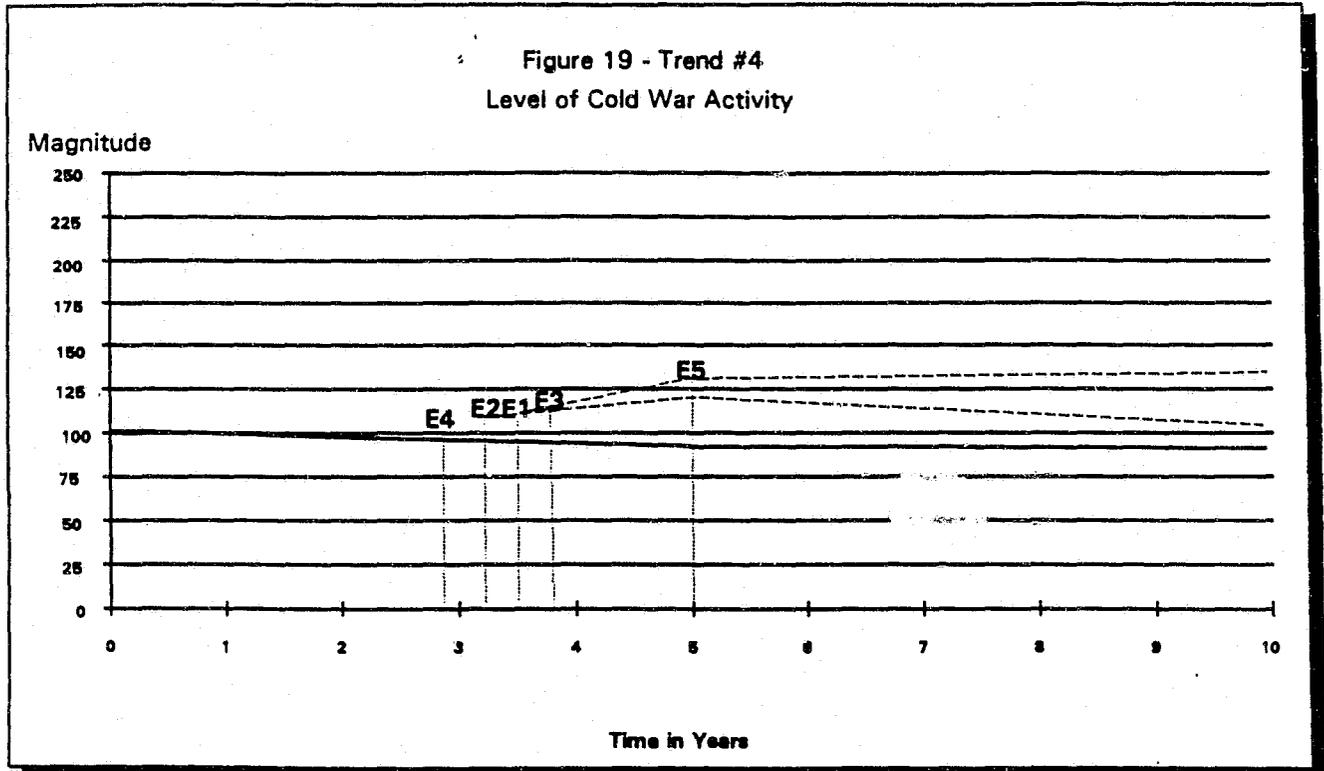
Both E1, U.S. involvement in New War, and E3, "The Columbia Drug Cartel War comes To the U.S.", impacted the magnitude by increasing it.

Trend Three: Military Technology used to monitor border activity



E3, "Columbian Drug War in U.S.", was a major actor on this trend. While E1, "U.S. Involvement in a New War" brought the magnitude down, the "Columbian Drug War in the U.S." brought it up significantly.

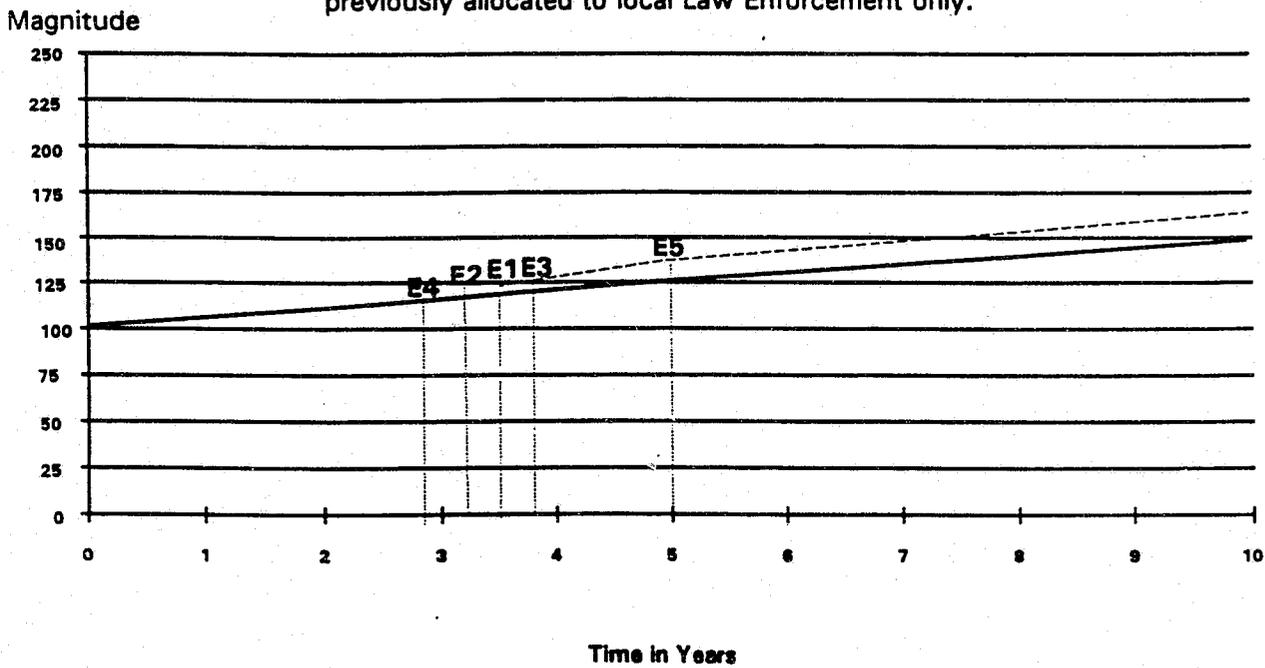
Trend Four: Level of Cold War Activity



E1, "U.S. Involvement in a New War", significantly impacted this Trend. All other impacts were minor.

Trend Five: Level of joint events by Local, State, Federal & Private Industry in Areas previously allocated to local law enforcement only.

Figure 20 - Trend #5
Level of joint efforts by Local, State, Federal and Private Industry in areas previously allocated to local Law Enforcement only.



E1, "U.S. Involvement in a New War", was the only actor in this trend. It moderately increased the magnitude of the trend.

Scenarios

The final phase of this chapter is the development of scenarios - glimpses of possible futures - which are developed based upon the previous study of the trends and events. Scenarios are imaginative pictures of what could be. The purpose of the scenarios is to provide planners and policy makers of today with some windows on what the future may hold. The scenarios reference the Corona Police Department; a mid-sized law enforcement agency. For the purposes of this study, mid-sized law enforcement agency is one of 100 - 350 sworn personnel. Three modes of future scenarios will be presented: The Exploratory (Nominal) - "Surprise Free"; the Hypothetical - "What If"; and the Normative - "Desired and Attainable."

Scenario One

Exploratory - "Most Likely"

Looking from the period of 1992

Four years of economic decline have led to dwindling resources for the funding of law enforcement. As each budget year passes, more and more cuts are made in the capital outlay items hoping that these cuts will avert the inevitable, cutting personnel.

Approximately 82% of the law enforcement budget is now spent on personnel costs. Frustrated police administrators grapple with ways to reduce costs and still deliver police services. With the four year fiscal decline, agencies have been forced to cut budgets to the bone. These cuts have elevated the total percentage

of personnel costs, when in fact , the overall budgets of most agencies have slowly declined over the past four years.

In Corona California Police Department, a budget just two years prior was 14 million dollars. That city has continued to grow, increased police services and has a current projected budget of 12 million dollars. While several personnel were cut from this budget, the majority of the windfall for this two million dollars is in capital outlay. These dollars represent the vehicles, computers, special equipment, aviation, communications, and research and development required in the law enforcement environment of today and in the near future. With decreasing revenues and greater demands for service, alternative revenues and partnerships are being closely examined.

The U.S. military is facing a similar economic dilemma. As the Cold War winds down, and democracy spreads, the threat factor that has previously justified the continued expansion of military, its research and development and ultimate technologies, has dwindled. Future funding to stay at pace with these technologies is getting harder to justify. The Military is also looking for alternative ways of funding their continued R & D.

The idea of law enforcement working toward shared technology with the military has been blocked for years. The finger pointing of the 1992 Los Angeles riots is an example of the diversion. Still, the cause of the second riot, (summer of 1993) is in question. Some blame the military for overreaction and others blame LAPD

for underestimating the severity of the second uprising. The primary complaint against the military alleged that they were not prepared again.

Since 1997 the military has been actively monitoring smuggling and border activity. The communication between the military and locals is improving but has taken five years to mend the wounds of the 1992 riots. The civil disobedience has continued across the United States since these riots.

Law enforcement has turned its focus to the needs of the community. Community Policing has taken a strong hold on changing the way service is delivered to its customers. There is a greater emphasis for law enforcement to "spend smarter". Given the significant cuts in capital outlay, other resources need to be explored and developed. The military is one such resource. They too are experiencing political pressure to cut spending and spend smarter. With the continuing de-escalation in the Cold War, this pressure is increasing; the need for the military to balance its spending may well rely upon the partnerships they enjoy to justify their expense.

Scenario Two

Normative - "Desired & Attainable"

Looking from the period of 1922

Police agencies in the 1990's are looking for ways to "spend smarter". With dwindling revenue resources and four years of economic decline, more and more cuts are being made in the capital outlay items hoping that these cuts will avert the inevitable cutting of personnel.

The capital expense items needed for law enforcement have for years taken a back seat to the long needed change in police philosophy. This philosophy was that of a high personnel, hands on - labor intensive organization to a computer managed, technologically applied assistance. Community Policing has begun to restore the confidence of the public in their Police Departments. But the long years of neglect have put the technological items needed to do the job behind the power curve.

Law Enforcement is looking for alternatives to funding these technologies.

Vehicles, computers, special equipment, aviation, communications and research and development is so far behind, that to fund a "catch up" period through a grant would be cost prohibitive.

The idea of "partner" relationships and shared technology with the military has great potential. The military's breakthrough in communications in 1997 has opened a realm of policing. This new technology will enable greater mutual aid cooperation between agencies and allow access and cross over partnerships between local, state, federal and private industries in handling areas that previously were allocated to local law enforcement only.

While civil disobedience has continued across the United States, the military has been doing research on a new non-lethal weapon; however it won't be available until the turn of the century.

The delay in perfecting this device is partially attributed to the financial commitment of the military to fighting the Columbian Drug Cartel Wars that have

taken to the streets of the U.S. since March of 1995. And yet another foreign war will take additional commitment and resources in July of this same year.

Since July of 1995 the military has been actively monitoring smuggling and border activity. This has come on the heels of the consolidation of the all Military branches in January of 1997. Given the current economic picture, and having a nation just now recovering from five years of economic disaster, the need for the military to balance it's spending may well rely upon the partnerships they enjoy to justify their expense. This will be the boon to law enforcement, and all can spend smarter.

Scenario Three

Hypothetical - "What If"

The year is 2002. The "C.L.E.A.R. FutureS" (California Law Enforcement Association for Research Futures Study) group is meeting in San Marcos to footprint the group Strategic Plan for the next ten years. The meeting chaired by the honorable Wayne Boucher, will begin with an overview of the last ten years.

The former Strategic Plan is being evaluated along with the Groups progress in uniting a formerly divided state of "individual" law enforcement agencies and philosophies.

In 1993 a Blue Ribbon committee of Command College Students, Graduates and Staff assembled for three days in Pinole, California to organize what is now known

as C.L.E.A.R. FutureS. After creating a mission statement, goals and objectives, this group met repeatedly to map out a strategic plan to guide the future of California Law Enforcement. The Program's first three years, through 1996, was funded by the California Commission on Peace Officer Standards & Training. Private Industry has since funded the Group which is now regarded as one of the foremost "think tanks" in the Nation.

The following is an excerpt of the meeting that covered the Strategic Plan Review of "Commitment to Effective Utilization of Resources"

In 1992 this Strategic Planning Team looked at the economic decline facing the State of California. Many police agencies were faced with significant budget cuts due to dwindling revenue resources. Most agencies had cut capital outlay items to the bone in an effort to retain funding for personnel. The staffing needs of most of these agencies continued to grow as California continues to attract a burgeoning population.

The focus was to find a way to "spend smarter", get to the sources of design, research and development and to seek a way to create a buying power that could reduce per unit costs in these capital outlay items. Those things reviewed were items that could aid in the delivery of service for search and rescue, communication, aviation, weapons, vehicles, computers, artificial intelligence and space.

Once the list was determined, it was easy to focus on a source: the Military. Because the government, through its militaries, has worked on these technologies for over ten years and the private sector is looking to the capitalizing of its technological efforts, made the focus on military the most viable for the partnerships. The question was, **How can law enforcement avail themselves military technology?** The Team set out to bridge the gap and found several federal legislators that were interested in seeing the Military retain its funding for research and development while aiding law enforcement in their daily jobs. The result was legislation that granted authority for military spending and buying power to be used by local and state law enforcement. It additionally called for the integration of C.L.E.A.R. Futures to the Military's Strategic Planning Unit for Futures Study, (MS - PUF.S.) Together, these groups examined the availability of military technology and generated a source for shared funding and distribution criteria.

The federal legislation of this one act aided in the events that occurred during the ten years in question. In March of 1994, the military made a significant communication breakthrough. It developed a laser technology that allows for the protection of satellite technology while enhancing the protected use of satellites for voice communication. Because of the newly enacted legislation, this new technology was made available to law enforcement. The cost savings and improved communications made the Civil Disobedience of the middle 90's a short lived mar in our Nations history. In March of 1995 the military developed a new non-lethal weapon: This again was of great assistance in the handling of the civil disobedience.

In July 1995, the U.S. became involved in "Desert Storm 2". Military technology spending, while primarily committed to the War, was still allocated to the joint Military and Police research and development projects.

In September 1995 the Columbian Drug Cartel War came to the U.S. While this "War" caught the local law enforcement under staffed, the close working relationship and improved communications ability of Military and Police aided in the successful and speedy end to this conflict.

The example of the ability for police forces and military to work together under a unified command renewed an old concept of consolidation of the Military. It still took two additional years, until January 1997 for the legislature to adopt laws that mandated the consolidation of the military and the staffing of our border by the military. This additional security is believed to be the very essence of eliminating the threat of the recent Cartel War ever entering the U.S. again. The review went on for several days. The Commitment to Effect Utilization of our Resources Team had accomplished a monumental task.

What is now before them is the future..... And the future is Now!

Summary

The findings of the NGT panel and interviews with military personnel and trainers, reflect trends and events that are most realistic. The trends identified fiscal and social paradigms facing the future of law enforcement. These will affect it's ability

to deal with dwindling revenue resources and the challenge to progress to the cutting edge of technology. The events are those expectations that will influence the trends of law enforcement in their quest for creative acquisition of technology. The issue question was, **How will the availability of Military technology impact mid-sized law enforcement agencies by the year 2002?** Analysis indicates that the trends and events discussed here are going to be critical to future issues not only for law enforcement, but also for the military.

The need for creative buying, increased buying power and bottom line, "smarter spending" will be the focus of the future. If law enforcement chooses to cultivate partnerships with military and private industry, the technological advances of the future will be the tools by which we guide our development with greater service to our communities.

To accomplish this, a plan of action must be formulated that not only addresses the financial need for partnerships, but also examines and considers the impact of the partnership in our society. To strategically plan ahead, map the course and direction and enjoin as many stakeholders as possible, will be the challenge and the beginning of a new era of partnership between government, industry and the private sector.

SECTION III
STRATEGIC PLAN

Introduction

This section focuses on the development of a **strategic plan** that favorably impacts the selected future scenario - *the Normative Scenario*. Nominal Group Technique (NGT) and Forecasting processes were previously used to identify possible futures as they relate to this issue - **"How will the availability of military technology impact mid-sized law enforcement agencies by the year 2002?"** Following a detailed analysis of current trends and potential future events, the panelists selected five trends and five events they felt had high probabilities of occurrence and which would have the greatest impact on the availability of military technology to the law enforcement community. The panel then forecast how these trends and events would impact each other and the issue, providing data upon which scenarios for the future could be generated.

Three possible future scenarios were developed from the NGT and Forecasting data. These scenarios represent what will likely occur if nothing unusual happens to alter the present course of the issue, what might occur if the trends and events reach their worst case potential, and what will happen if the issue is managed to create the "most desirable" future.

Conclusions drawn from the process suggest that by acting now, it will be possible to develop the inroads to achieve the partnership for shared technologies between

law enforcement and the military. The strategic plan will provide the basis for preparing police agencies to establish strategies which will aid them in creating partnerships with the military for acquisition of military technologies.

Mission Statement

Macro Mission Statement (for the purposes of this study)

The Corona Police Department will protect and serve the citizens of the City of Corona. The Department's philosophy will be embodied by Community Policing. It will enjoin a Partnership of the community and the Police to Pro-actively Prevent Crime.

Micro Mission Statement (for the purposes of this study)

The Corona Police Department will aggressively seek, identify and utilize military technology to enhance the effectiveness of law enforcement, more efficiently apply limited fiscal resources and improve coordination between Law Enforcement and the Military.

Situational Analysis

An evaluation of the current situation must be an integral part of any strategic plan. For this study, the situational assessment process used is referred to as WOTS-UP Analysis, an acronym for Weaknesses, Opportunities, Threats, Strengths--Underlying Planning. The model agency will be evaluated from a perspective of "threats-opportunities" in the external environment and a "strengths-weaknesses" review of internal conditions. The impacts of the social, technological, economic and political environment that surrounds the model

department were considered in structuring the discussion. A number of the issues presented not only have an impact on the City or it's Police Department, but directly on all law enforcement agencies.

Environmental Analysis

The environment is the external atmosphere in which the Corona Police Department functions.

Opportunities

1. De-escalation of the Cold War

The de-escalation of the Cold War has increased demand upon the military and politicians to cut military spending.

The military is closing bases of operation in an mandated attempt to reduce spending. As this continues, the need for greater justification of spending will increase.

Working with law enforcement and spreading the R&D costs of tax dollars is a viable justification and may very well be the saving grace of R&D monies.

2. Public support for smarter spending

The public is demanding cuts of governmental spending.

With a current recession, and long term recovery period projected, the bailouts by state and federal governments

to local government is being scaled back. The public will look to those agencies and entities who have "sold" their smarter spending plan to their constituents.

3. Vast military technology, research and development

The military spends millions of dollars on technological research and development. Many of these technologies have application in the field of law enforcement. Sharing the costs not only assists the military in justification of their spending but also puts law enforcement at the forefront of technology with a greater pool of researchers offering resolution to the challenges that face the urban crime fight. With greater quantities of purchase, the over-all cost per unit will be reduced and thereby present a potential cost savings to both military and law enforcement.

4. Computer age generated new arena's making the "old" military

technology obsolete. This would bring new meaning to "state of the art" equipment. Previously, law enforcement has received technology somewhere behind big business. The more rapid the development in information systems, the more rapidly obsolete the military technology becomes, which is not obsolete for law enforcement.

5. **Regionalization of law enforcement resources**

Maximizing the R&D dollars, law enforcement can look to shared technologies and equipment. Regionalization would further the effective utilization of these resources.

6. **City Council support**

The "spending smarter" approach in acquisition of military technologies would be easily supported by the City Council.

Threats

1. **Private industry fears undue competition**

Private industry could look upon the joint ventures or partnerships of military and law enforcement as unfair competition. Additionally, vendors could see it as a competition if law enforcement was to acquire great quantities as a "first in line" receiver and ultimately, sell these technologies as surplus at some later date themselves.

2. **Private contractors**

The political interests will surround the private industry contractors. Concern for their potential earnings in the public / government sector outside of military may be viewed as a

threat due to the new partnerships in R &D, minimizing the number of duplicate contracts offered.

3. **"Hawks"**

Maintaining control and stockpiling of supplies and technologies will be a strong obstacle to overcome. This is the very essence of control in the military by "Hawks". To give up or reduce these stockpiles will require considerable negotiation.

4. **Bureaucracy to facilitate acquisition of technology**

The mechanism to acquire the technology could, in and of itself, fall to the political forces for personal agenda of our elected officials. If a system is created that is so entrenched in bureaucracy, then the acquisition process could be more costly in time than the intended savings. If the cost effectiveness is eliminated, the technological advantage will have to stand on it's own and will likely lose the military support, as they have nothing to gain by the partnership.

5. **Declining revenues City wide**

The cost for obtaining new technologies will be difficult to justify in an environment of declining revenues, even when saving money.

6. Police Association in constant leadership turnover

This creates a less than supportive approach to new programs absent "additional benefits" to it's members. From a labor standpoint, the Association will continue to look for ways to add additional benefit for the employee.

The next step in the WOTS-UP analysis, (Weaknesses, Opportunities, Threats Strengths, Underlying Planning), is the internal environmental atmosphere of the Corona Police Department, a mid-sized law enforcement agency located in the City of Corona, California.

The City of Corona is a mid-sized community of a mixed residential, industrial and commercial makeup. It is located at a major Southern California transportation corridor interchange of the State Highway 91 and Interstate 15. The population is 93,000 of mixed ethnic origin. The city encompasses 31 square miles and is being actively sought by developers to annex additional contiguous unincorporated land. The City is served by a 200 member police department of which 114 are sworn officers. The Chief of Police is appointed by the City Manager with the approval of a five member council.

Strengths

1. Young, energetic and enthusiastic Department.

The youthfulness of the members of the organization makes it receptive to change. The idea of partnerships in research, changing

technologies and creative application are all capable attributes for effecting change within and by the Corona Police Department.

2. Community policing organization

This is a philosophical approach to the serving of "our" community.

This philosophy encompasses the effective utilization of the revenues and resources. The community not only supports but is now demanding this philosophy in daily service.

3. Proactive Department

The Police Department is proactive in it's response to community needs. To this end, there are endless opportunities to apply additional technologies to bettering service to the community.

4. Strong reputation within the Law Enforcement Community

The strong reputation as a progressive and stable organization will make the Corona Police Department an excellent prospect for developing the partnership program that will ultimately utilize these technologies.

Weaknesses

1. Overly cautious change agents

There exists within every organization, the doubting ones. Those cautious management members who desire a "sure thing." "Let

someone else test the waters". This caution can create obstacles that need addressing in the transition of new programs that embrace the new technologies.

2. Inter-Department competition of resources and programs

With declining revenues, city wide, the resources made available through the military will be looked at as needed in additional areas beyond the Police Department. The concern would be squabbling over allocation for these technologies or previously committed budget dollars.

3. Fiscal restraints have limited training abilities

New technologies could increase the need and costs for training. In a declining revenue environment, increasing costs to apply the technologies would be an obstacle to consider.

Stakeholder Analysis

An assumption can be defined as a basic, deep rooted, often unstated values and beliefs that individuals or groups have about the world. Specific stakeholders and their individual assumptions relative to this issue are identified herein.

Assumptions

1. The Office of the City Manager, City of Corona

- a. Will support alternative financing and acquisition methods for capital outlay items.
- b. Will have concerns about maintenance costs of additional technologies.
- c. Will perceive public acceptance and support of alternative financing and acquisition.
- d. Will be looking at the application of these technologies throughout other city departments.

2. Corona City Council

- a. Will be looking for political support through decreased spending. They will view the acquisition of these technologies "good decision making" that will garner political support.
- b. The public in general, would accept and support the council in their decision to actively seek these revenue saving technologies.
- c. "Personal agenda", i.e. self serving needs and grand-standing by Council members will most certainly be behind some of the support for these technologies and equipment.
- d. There will be concern and caution about venturing into "military" technologies as they may be viewed as "Big Brother" technologies.

3. Police Department Managers

- a. Will be concerned with the cost of maintaining
- b. Will be concerned with the cost of training
- c. Will be concerned with what level of budget commitment is necessary.
- d. Will be concerned with competition from other agencies and departments for the technologies and equipment.

4. Department of Defense

- a. Will have concerns of releasing technology and equipment. There will be a need for greater classification/declassification of such items.
- b. Will look to the political trade offs for law enforcement to acquire new technologies. This could garner them additional spending support for military programs and technologies.
- c. Costs for distribution will be of concern for the D.O.D. and will, preferably be passed on to the end user.
- d. Procurement procedures/processes will have to be developed and entail a cost factor which would additionally be passed on.

5. Commission on Peace Officer Standards & Training

- a. POST will desire a lead roll in coordinating training programs for acquisition and utilization of new technologies. They will supports efforts to assist O.E.S. in regionalization of these resources.
- b. New technologies will necessitate additional POST training.

6. Senate Sub-Committee on Military Appropriations

- a. Will have concerns of releasing technology outside the "military family".
- b. Will look for trade offs or added support from State and local constituency to fund the acquisition of new technologies.
- c. "Hawks" have traditionally supported the stockpiling of technologies and equipment. The subcommittee will align itself behind those positions they usually support; some supporting "hawks" and some supporting "doves".
- d. The sub-committee be concerned with the financial impact of future military funding. This may be viewed as an opportunity to gain greater financial support.

7. California State Office of Emergency Services (O.E.S.)

- a. Will want control and distribution of the technologies within the state of California.
- b. Will seek regionalization of all technology acquisition under the guise that the Office of Emergency Services is an extension of the Governor's Office and is responsible for state wide mutual aid planning and disaster response.

8. Private Industry.

- a. Will cry "unfair competition", believing that law enforcement will now enter into a stronger buying position, limiting their need to deal with

local vendors.

9. American Civil Liberties Union

- a. Will be concerned about "Big Brother" technologies for law enforcement.
- b. Will support the "Unfair" competition position of private industry. They will use this to further their position of "Big Brother".

10. Military Branches

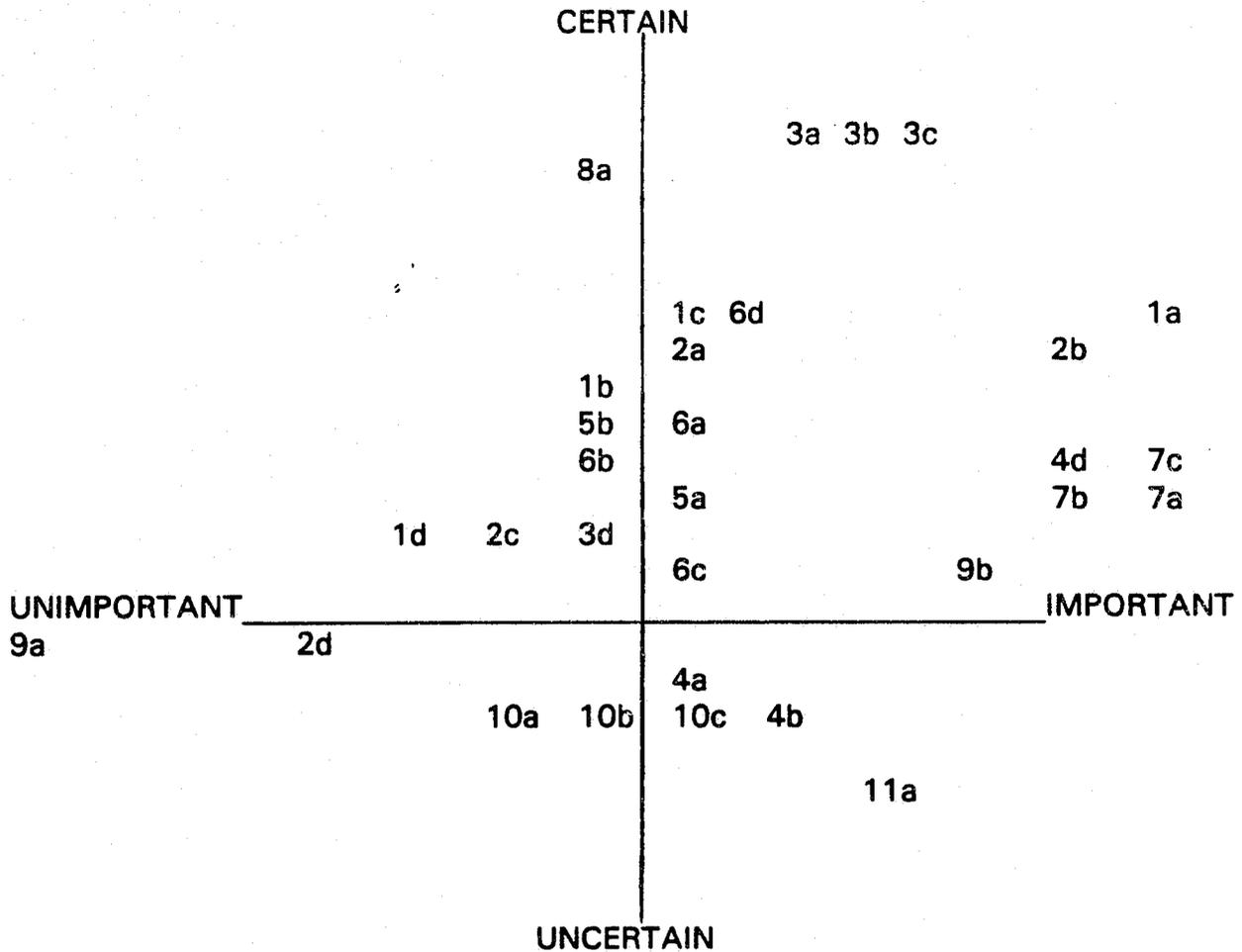
- a. Will be supportive of clearing stockpiles to allow new acquisition.
- b. Will be concerned about losing equipment readiness.
- c. Will be concerned over future acquisition budgets. How much additional R&D monies will they get if they agree to assist law enforcement?

11. Other Governmental Intelligence Agencies (snaildarter)

- a. Agencies such as the CIA may view the shared technologies with law enforcement a threat to their missions and success of covert operations.

The stakeholder analysis involved identifying the key stakeholders who are impacted or have the ability to be impacted by the issue. These assumptions were mapped based upon the degree of importance of each assumption of the stakeholder and the level of certainty that the assumptions are in fact correct.

ASSUMPTION MAPPING



Legend:

- | | |
|-------------------------------|--|
| 1. Office of the City Manager | 6. Senate Sub Committee on Military Appropriations |
| 2. Corona City Council | 7. California O.E.S. |
| 3. Corona Police Department | 8. Private Industry |
| 4. Department of Defense | 9. A.C.L.U. |
| 5. P.O.S.T. | 10. Military Branches (snaildarter) |
| | 11. Other Governmental Intelligence Agencies |

Note: Letters (a, b, c) correspond to stakeholder assumptions

Developing Alternative Strategies

A list of alternative strategies was generated. Through a rating process the alternatives were narrowed to three for detailed analysis. "Pros" and "cons" were identified for each strategy. In addition, each strategy was discussed with relation to how it would be perceived by the stakeholders.

Policy #1: Federal legislation is enacted that establishes a partnership of Law Enforcement and the Military for the purposes of sharing research and development and costs for the acquisition of state of the art technology. This legislation mandates formulation of a process for the acquisition of equipment with priority to law enforcement agencies.

Pros

This policy allows law enforcement to deal direct with the military. It will further the endeavor to maximize resources while encouraging "smarter spending" for both Federal and Local Government. This will promote more cooperative partnerships between military and local government.

Cons

The political influences by special interest groups would be concerned with law enforcement's direct access to the military. The form of allocation could circumvent the State structure. Private industry is financially impacted in that the opportunities that presently exist for

R&D work in the local areas would be diminished by utilizing the military R&D network. The policy could be viewed as exclusionary to other governmental agencies, other than law enforcement, that may benefit from the technologies.

Stakeholder perception

The Department of Defense and Senate Sub-Committee on Military Appropriations, would be both supportive and opposed to this policy. Depending on the wording and trade offs in the legislation, these two groups could go either way. Strong support would be garnered from the City, Police, POST, and the public. The remaining stakeholders would view the legislation as a wait and see, believing that something additional could come after the initial drafting of the legislation.

Those stakeholders adversely affected by specific allocation to law enforcement, would oppose this. These entities are represented by those who sell or deal in technologies that are sold to the military or who contract services to the military. They would vehemently fight any legislation close to the proposed policy. The ACLU would fight for the private industry affected by the "discriminatory" authorization for law enforcement priority. The military branches would subtly oppose most legislation of this nature while continuing to support "stockpiling" of technologies for readiness purposes. They would be considerably more flexible if could insure or secure additional

guarantees for budgetary support of new technologies. The strong influence of the intelligence community, possibly the CIA would hold the snaildarter. This unpredictable position would vary depending upon the personal agenda of the elected official involved in "supporting" the "security of the US. As long as assurances could be made and "trust" or belief in the controlling of the technology, the intelligence community could possibly win over this potential opposition.

Policy #2 The State Office of Emergency Services serves as an authorization and allocation authority for the distribution of technology.

Pros

This would allow a more efficient distribution system. It encourages regionalization and promotes technological advancement in law enforcement. It will additionally create a stronger resource pool at the State level which would aid in mutual aid and disaster preparedness.

Cons

This would increase the bureaucracy for acquisition. It creates too much controlling authority at state level. It additionally impairs the power of local law enforcement to set agency specific technology goals. The cost for the State to administer documentation of the program would in probability be passed on to the local agencies thereby increasing costs of operation.

Stakeholder perception

Generally, most stakeholders would support the O.E.S. policy for California. The City and Police Department would view this as, "better than nothing". While the bureaucracy increases as additional levels of governmental approval are needed, at least the O.E.S. will be mindful of the need to distribute and share the technologies.

Policy #3 Create a law enforcement consortium to review military technologies and establish an acquisition process.

Pros

The would provide input and consideration of various sized law enforcement agencies. It would reduce capital expenditures for law enforcement. Resource regionalization would and could be assessed while minimizing state control and additional bureaucracy

Cons

This lacks insight to the "Big Picture". Without legislative support the recommendations and procedures are useless. It lacks military input and forces regionalization concept for resources.

Stakeholder perception

The City, Police Department and POST would support this, (POST of course would expect to regulate the training relative to the technology), looking strongly at the input and consideration of varied law enforcement stakeholders. The expected reduction in capital outlay expenditures will lend more support of these stakeholders. The military branches, Department of Defense and Senate Sub-Committee will only support this if the initial guidelines are established with their special interests in mind.

Preferred Strategy

The preferred strategy would be to create a consortium or partnership of stakeholders. This would garner a broader range of support and examine the potential for greater applications of the technology for law enforcement. The preference would be to assemble supporters in this group. There will need to be input from the military as members of the consortium. To effectively accomplish this, some pre-planned interviews and "exploring" for support would be appropriate to identify appropriate military representation. Based upon the findings and recommendations of the consortium, federal legislation would be needed to guarantee the prioritized allocation to law enforcement. The method of distribution and allocation is best left to the recommendation of the consortium. While bureaucracy may be increased, it may well be the "bitter with the sweet" that is

needed to accomplish the goal.

The acquisition of military technologies will benefit the majority of these stakeholders. Taking responsibility for spending smarter would be at the forefront of this strategy. The goal to maximize dollars spent on technology would present itself through this recommendation. The military federal tax dollars, having been spent on technologies that are still current, could now be maximized by passing the spent dollars in research and development on to another user, law enforcement. The enhanced technological advancement of law enforcement through maximized tax dollar spending will garner the greatest support of the public and the politicians.

Implementation Plan

To successfully implement the strategy, action plans, time lines and resource requirements need to be developed. There must also be a system to monitor and evaluate the plan. The most important phase of the implementation plan is the communication of the plan. Absent effective communication and support of the participants; strategies, action plans, time lines and resource allocation will fall by the way side.

Phase One:

Establish a core group of planners to identify and cultivate the formulation team for the consortium. This would be done by request of the local Chief of Police through

Cal Chief's Association to the California State Governors Office. With the Governors assistance, a framework of representatives would be expected from California State O.E.S. and the California National Guard. Additionally, contract firms currently providing technology for the military may be included in this group to explore seed monies for application of current technologies.

From the list of stakeholders, identify key people that can develop support and have the commitment to see the entire process through. Establish and refine the remaining objectives in this plan to allow a smooth transition, objective to objective to implementation. Meet and develop time lines for the remaining objectives. Estimated time for completion of phase one is six months.

Phase Two:

Identify the military technologies. Utilize the military representatives and contacts to establish the realm of technologies and initial application to the plan. Formulate an allocation and distribution plan. Examine the possibilities of military control, state control and regionalized allocation. Strong consideration must be given to locating and transportation of the technologies. Estimated time for completion nine months.

Phase Three:

Re-evaluate the stakeholders affected by the plan. Establish strategies appropriate to newly identified or changed position stakeholders. Estimated time for completion is three months.

Phase Four:

Develop a communication plan to effectively communicate the Mission and strategies and it's implementation. Establish an evaluation process for the plan.

This will include milestones, periods of assessment and evaluation. Estimated time for completion is four months.

Phase Five:

Re-assess the needs and objectives. Adjust as necessary. Insure that the plan is a living plan, not cast in concrete, but a plan to be used in guiding the acquisition of military technologies and effectively maximize the spending of the community's tax dollars. Assessment to begin one year after implementation.

Summary of Strategic Plan

Action plans, time lines and resource requirements form the basis for implementation of strategic plans. The greatest challenge to effecting change is to manage it's transition. Change itself cannot be managed, only transition can effectively be directed and guided. Implementation of a new plan represents change and is best managed through an implementation plan.

The picture must be as clear as possible to assess and develop a strategic transition from analysis, strategies and planning to the actual implementation. The examination of weaknesses, threats, opportunities strengths and underlying planning is the frame work for the picture. To fill in the image, alternative strategies and policies must be examined and selected. The effectiveness of a

strategic plan can only be measured by the end results. To "get from here to there", one must be able to implement the strategies and assure that guide to achieving the final goal is an implementation plan that is sensitive to the needs of all the stakeholders, understanding that their own organizational strategies must also be accommodated. This is the *transition* from where we are, moving to where we want to go.

SECTION IV
TRANSITION MANAGEMENT

Introduction

This phase of the study focuses on organizational transition of not only the Corona Police Department, but also law enforcement, military and the federal legislature.

The description of transition management is "getting from here to there" The success or failure of the change process depends on the management of the transition state - the state in between the current and desired states: The state where the actual change process takes place. It is during this phase that a commitment plan is developed, action plans are implemented, and a structure to manage the *change transition* selected.

The acquisition of current military technologies will benefit the majority of these stakeholders. Taking responsibility for spending smarter would be at the forefront of this strategy. The goal to maximize dollars spent on technology would present itself through this recommendation. The military federal tax dollars, having been spent on technologies that are still current, could now be maximized by passing the spent dollars in research and development on to another user, law enforcement. The enhanced technological advancement of law enforcement through maximized tax dollar spending will garner the greatest support of the public and the politicians.

The selected strategy would be implemented in five incremental phases. The Chief would appoint a lieutenant to manage each implemented phase, providing him/her with the necessary support staff and resources. The Chief of Police and Implementation Manager bring together a consortium. The preference would be to assemble supporters in this group. There will need to be input from the military as members of the consortium. To effectively accomplish this, some pre-planned interviews and "exploring" for support would be appropriate to identify appropriate military representation. Based upon the findings and recommendations of the consortium, federal legislation would be needed to guarantee the prioritized allocation to law enforcement. The Chief, through his political influence and position, lobby and rally law enforcement to seek a legislative mandate that creates a partnership between the military and law enforcement for the purposes of sharing R & D and acquisition costs of military technology.

The support for this would be garnered through professional organizations; International Association of Chief of Police (IACP), California Chiefs & Sheriffs Association, California Peace Officers Association and Police Officers Research Association of California. Together they obtain the Legislative support and sponsoring of a bill to effect this plan.

The method of distribution and allocation is best left to the recommendation of the consortium. While bureaucracy may be increased, it may well be the "bitter with the sweet" that is needed to accomplish the goal.

Commitment Strategy

The first phase of a transition management plan is to develop a commitment strategy. The strategy involves a series of action steps necessary to gain the support of key stakeholders who are critical to the change effort. From this group of stakeholders it is necessary to identify the critical mass. The critical mass consists of those individuals or groups whose active commitment is necessary to provide the energy for the change to occur.

As part of the development of a commitment plan, the following persons were identified as the critical mass, or key players required to bring about the desired change, and the current level of their commitment, if any. Additionally, the minimum level of commitment from each player is also defined, as well as, the planned approach that might be used to achieve this minimum commitment level.

1. Chief of Police

For the past seven years the Chief of Police has enjoyed very high community support and confidence. He is well liked and respected by his law enforcement peers and by most political officials and business leaders in the community. Of special mention is the close and cooperative relationship between the Chief and the City Council. He is perceived as an accomplished department head, as well as an experienced community leader. He most actively involved in community affairs and numerous service clubs and is continually sought after for leading philanthropic goals for organizations. Additionally, the Chief has a demonstrated record of positive action on behalf of his employees. Not surprisingly, he is openly

supportive of the plan. Because of his popular support, he is identified as a primary change agent, and the key player that must make it happen.

Despite his open support, however, a plan of this magnitude could intimidate elected officials; i.e., the City Council. Keeping the Council actively aware of the progress of the plan will be crucial to insure that the appearance of public support for the Chief does not threaten that of the Council.

2. California Governor's Office of Emergency Services (O.E.S.)

O.E.S. is the primary controller for mutual aid resources in the State of California. Their responsibilities stem as a Division of the Governor's Office and additionally coordinate efforts with the California National Guard. Therein lays the pool of resources beyond that of law enforcement. O.E.S. has long pushed for regionalization efforts of law enforcement to insure effective utilization of resources. The Law Enforcement Division of O.E.S. would stand to benefit from the plan. This Division would help in carrying the support through the Governor's Office. It is assumed that O.E.S.'s present commitment is supportive and that they will want to participate (help) in the change effort. They may however be interested in being the controlling agency within the state. This may well be the recommendation of the consortium. Either way their support will be needed to effect the change. This is the appropriate level of commitment. The expertise and credibility of O.E.S. with the Guard will be of great benefit to achieve the desired change.

3. California Peace Officer Standards & Training (POST)

POST is the authority on standards and training in the State of California. It's initial commitment level will be minimal. Adding technologies and new equipment requires additional training. With the bleak financial picture, the change may be viewed as an additional drain on services that are already spread thin. Moving their commitment level to a level that it happen will be required. This can be furthered by having POST representatives on the consortium. Being involved at the ground level will allow input and provide room for adjustment and addressing POST's concerns as the implementation plan is developed.

4. Department of Defense (D.O.D.)

DOD represents the "military" as a whole. The opposition raised against this plan will be primarily one of not wanting to give up stockpiles of supplies. The perceived "strength" in stockpiling is pervasive in the military. This is where the strategic planning with the military must occur. Additionally, they will be specifically concerned with releasing technology and equipment. There will be a need for greater classification/declassification of such items. To move DOD from Block to Help it Happen, will necessitate working together to obtain "political" trade offs. If the DOD was viewed as a partner in law enforcement's "War on Drugs" or "Keeping our Children Safe" or "D.A.R.E.", the public is most likely to strongly support their efforts. Such a position would be one that most political officials would gladly rally to the cause as it represents the support of home life for the family. DOD would have to commit to coordinating military resources. Law

Enforcement gains from their existing technologies, and future technologies as DOD becomes "partners in the fight against crime". The return for DOD is future funding for research and development for the technologies that will benefit both the military and law enforcement. This will be the wagering that will sell the R&D budgets to congress. Seeing this advantage for future funding, DOD will be moved from Block to Make it Happen.

5. **Senate Sub-Committee on Military Appropriations**

This will be the political hurdle that will need much the same convincing as DOD. They will have concerns of releasing technology outside the "military family". SSCMA will look for political trade offs to acquire new technologies. This is the where the "War Hawks" have their most influence. The issues of stockpiling become even greater with this group. However, if DOD buys in and can get some, "assured" support from elected officials, the Sub-Committee would be in a position to Help it Happen. This will require backgrounding the entire committee to determine where the greatest influence, support and opposition will come from.

6. **Military Branches**

Since the end of the Cold War, there has been increased pressure put on the military to reduce inventories, facilities and budgets. As more military bases close, the public is looking to the dollar savings and asking where is it going?

Military Branches most likely will be supportive of clearing "old" stockpiles but be concerned about losing equipment readiness. Concerns over future acquisition

budgets and R&D monies will rise with the proposed change. Utilizing the same approach as DOD and Senate Sub-Committee on Military Appropriations, the "let it happen" position of the military will need to move to "Help it Happen". This again, can be accomplished politically, through elected officials support and the Co-Op of Military and Law Enforcement in the "War against Crime".

COMMITMENT CHART

KEY PLAYERS	BLOCK	LET HAPPEN	HELP HAPPEN	MAKE HAPPEN
Chief of Police				X----->O
California State Office of Emergency Services			X----->O	
California Commission on Peace Officers Standards & Training		X----->O		
Department of Defense		X-----	-----	----->O
Senate Sub-Committee on Military Appropriations		X-----	----->O	
Military Branches		X-----	----->O	

X - Present position

O - Desired position

Transition Management Structure

Having identified the present environment, the planned change and the desired future state, the task is now to design the management structure needed to facilitate the transition period. The implementation plan, however, involved five distinct incremental change efforts. Clearly, the Chief is the primary change agent in phase one. His political influence and position are vital to the negotiation and intervention strategies. Even though his total commitment level is required during all phases, he has no direct responsibilities when the specific legislation is designed and implemented. Additionally, like any CEO of a large organization, the Chief has a number of change efforts in progress that he is responsible for, yet not directly involved with during their implementation. It seems appropriate to delegate the responsibility for the management of this transition period to a qualified internal staff person.

The implementation plan does discuss the reassignment of a Lieutenant to manage, full time, the transition period. As the project manager, this lieutenant would be empowered with interdepartmental executive authority, giving him the necessary clout and respect to get the job done. The Chief would continue his day-to-day operations as department head, acting as a consulting resource for the project manager.

Although awarded with the implementation responsibility, the project manager would be dependent upon both an internal and external support structure. Again, the implementation plan discussed the specific internal department resources that

would be made available, including the limited staff, supplies and facilities.

Externally, the project manager would depend upon the assistance and support from representatives of the critical mass. As an example, support staff of the DOD, POST, OES, the Military Branches and several Senate Aids would assist with the drafting and processing of the legislation.

In the overall structure, there are two different institutions operating simultaneously. One internal within the Police Department and one is external in terms of bringing together stakeholders, reaching consensus and collective planning and building of cooperative relationship. The selected transition management structure then, is not a single distinct institution, but rather a hybrid of two alternative structures. Initially, the structure is that of an internal project management group, coordinated by one selected manager reporting directly to the Chief of Police. As each phase of the plan is implemented, the management group structure mutates as it takes in new members representing the other major constituencies involved in the change. The structure's style becomes more participatory as it involves more elected officials.

This management structure is appropriate for a number of reasons. This issue involves change both within and outside of the law enforcement organization. Accordingly, the persons involved with making the change happen are both within and outside of the organization. The management structure, then, must be able to adapt and function both within and outside the organization. This structure is designed to do so, while continuing to maintain a leadership role in the process.

This management structure is also appropriate because it is unique to only the transition period, unlike that of the present or future state of affairs. The separate state of conditions, tasks and involved resources during the transition period mandates this alternative structure. Lastly, with this style of structure, the planned change can take place with little, if any, impact on the routine day-to-day operations of the organization.

Technologies and Methods

This change effort involves the letting go of traditional concepts regarding military technologies. Most present public agency benefit packages address only the basic medical, educational, and retirement needs of perspective and existing employees. The development of a partnership between military and the local law enforcement represents a major change. It is this change that can manifest itself as anxiety, uncertainty or resistance in those involved with the change. Rethinking the manner in which military research and development is funded can open opportunities as well as create some caution and apprehension.

The proposed implementation plan and recommended management structure forces collaborations between individuals and between organizations of different orientations. This environment can foster misinformation or confusion as to the objectives and direction of the plan, complicating the implementation process.

Accordingly, education and communication have been identified as the core of the recommended negotiation and intervention strategies to implement the transition

plan. Derived from these strategies, listed below are some of the specific educational and communication tools which support the implementation plan.

A. Educational/Informational Report Development

The consortium should develop a document or report about this issue. This is a specific educational intervention tool representing the research and findings that have prompted the change effort. It should be a published report which simply states what the problem is, what is the present state, what is the desired future state and the intended transition plan. This document would be a starting point for overcoming resistance and encouraging support for the change effort through unbiased informational data. The document would be designed to inform the reader. Resistance to change is often the result of the lack of specific information. This was noted during the assessment of the commitment level of certain members of the critical mass.

The document also has value because it represents the problem in a physical sense. Law enforcement is unable to keep current with changing technologies especially in light of recent dwindling revenue sources. The military is facing continued reductions in financial allocations as it's forces are reduced and facilities closed. Reducing the problem, and the solution to a paper document makes both things that can be touched, read and reviewed. The report will be an essential tool for the Chief as he negotiates support from the other members of the critical mass.

B. Team Building Workshop

The implementation plan is bringing together individuals and groups who have not worked together before, especially with such narrow focus. The scheduling of a team building workshop for the consortium, would be beneficial to the success of the plan. The workshops would be designed to foster collaboration and communication between the members, and instill a strong sense of direction during the transition period. These workshops would also be the ideal environment for creating a responsibility chart to delineate the tasks and responsibilities of all the involved members. Again, the intent is to employ technologies or methods that encourage cooperation and commitment through communication and information.

C. Progress Reporting

It will be essential for the project management to continually update the members of the critical mass as to the status of implementation plan during the transition period. This will help insure their continued level of support and to manage any anxiety or uncertainty that may emerge. This can be accomplished in a variety of ways.

The consortium should produce regular status reports for the involved members. These should not be detailed accounts, but more in the form of one page briefing sheets with "bullets" of information designed to update the reader. Not only will this practice serve to reaffirm the member's commitment, but it keeps the reader contemporary with the issue.

The project manager may conduct one-on-one meetings with selected individuals who need a higher degree of attention due to their position or possible changing level of their commitment. This may involve the participation of the Chief using his position in a "role modeling" approach to demonstrate the priority and relevance of the current change activity.

The consortium itself should conduct scheduled progress meetings. These meetings serve to update midpoint goals, keep communications flowing, and reemphasize objectives. Again, enhancing communications and information will help manage the uncertain and anxious feelings resulting from the transition.

D. Public Information Media Campaign

As mentioned, the success of the entire transition plan hinges on public acceptance. The strategy takes advantage of the present popular support of the Chief and local politicians. This popular support should be used as a vehicle to inform and educate the public and political constituents of the importance of this plan and its necessity. To that end, the consortium should design an informational media campaign to garner political support. An informed public will provide needed support for the challenges of political foes.

Summary

Critical to implementing the strategic plan - ***Development of military - law enforcement partnerships*** - is the process of "getting from here to there", or moving from the present state to the desired future. The selected preferred strategic plan, however, is just the first step in a series of sequential strategic plans that will be developed to move the models agency closer to the goal of a partnership with the military in research and development and ultimate acquisition of technologies. The success or failure, of the change process depends on how well the transition process is managed. The transition management plan includes design consideration for the unique environment of each individual organization. The three distinct but interdependent segments that accomplish this are; 1) The identification of those individuals necessary to initiate the change, their current level of commitment and means to gain or alter commitment suggested. 2) The structure(s) necessary to manage the change effectively are identified. 3) Methods and tools to minimize the negative impacts on the organization are presented.

SECTION V

CONCLUSION

Law enforcement's challenge for the 90's is to stay one step ahead of the criminal element, continue preventative programs to turn the tide on criminal conduct and delivery higher levels of service to their communities.

All of these challenges require extraordinary commitment from law enforcement employees and an even greater financial commitment. According to a California Department of Finance Report, "California's Growing Taxpayer Squeeze," the ratio of taxpayers to state service recipients will deteriorate from 1.2:1 in 1980 to .97:1 in 1995 to .8:1 by 2000². As law enforcement continues to face dwindling resources and increased demands for services, alternative fundings and/or partnerships must be examined to meet the fiscal challenges that face us.

The U.S. military is facing similar financial challenges. The current de-escalation of the Cold War has led to continued disarmament and increased calls for reduced military spending. Additionally, the military has begun closing military facilities and reducing forces both foreign and domestic. What will become of the military's budgets and ability to remain the respected military force in the World?

With both law enforcement and military facing similar fiscal restraints, a partnership of the two could greatly affect the technological advancements and enhanced performance as a result of these technologies. There is a vital need

economically, for the conversion of military defense oriented industry. Industry's fear is that absent the defense contracts, the jobless rate will climb. Create a new partnership and business may well climb. The technologies need not be lost. Defense of country starts at home; on the street. The applications of the defense technologies could be endless.

Interviews revealed a vast field of technology application and duplication of needs between military and law enforcement. The military is fond of calling this category "C31", and it is a portion of public safety that gets far too little attention.

One aspect may involve increased use of satellites for public safety applications. While many cities are getting into various GIS configurations, the military has gone beyond GIS into terrain mapping technologies which could have some impact on law enforcement. If they can program a cruise missile to follow course and terrain, even avoiding obstacles, then perhaps a partnership could adapt that type of technology for use in tactical situation response.

Another C31 technology which may have application for law enforcement is known to the military as JSTARS. In effect it uses technology similar to that used in AWACS, but for ground action direction. A converted Boeing 707 flies over the area of hostility, and using sophisticated sensor equipment, maps and tracks activity on the ground. Through use of real time data links they share this with ground tactical commanders so that they can work up a proper battle plan. The same information is shared via telemetry with AWACS and even incoming air-

ground attack plans. Why couldn't law enforcement work with DOD to adapt and evolve a system which could link, in real time, surveillance information from law enforcement airships, to ground vehicle? Real time video, tracking, etc.

Lojack and Teletrac can turn on a gauge or lights in a vehicle display unit. What about this type of technology to track stolen vehicles, those involved in a crime? What about laser target designation? If an airborne law enforcement unit could laser designate a wanted person or vehicle, a satellite or aircraft based surveillance system could track on it - - no more high speed pursuits.

Situational training for law enforcement is time intensive and requires a multitude of role players. Even under the best "village" circumstances, realism is lost. The military uses battlefield simulation through computer based instruction. This is obviously an area in which POST is headed with great fervor, but the military still has a technological lead. This same technology has application as patrol vehicle simulation. Computer game manufacturers are currently developing simulators for law enforcement, but again, this technology is light years behind that of a fighter jet simulator.

Vendors are marketing embryonic version of shooting decision making training simulators. What about using military technology for full environment simulators? The officer is surrounded by the sights and sounds of the setting, then confronted with a situation.

Artificial intelligence - virtual reality is yet another potential technology for law enforcement and military to share. Particularly in the complex information processing tasks given their computer, the ability to move from sheer number crunching, beyond the relational database, to artificial intelligence. There may well be application for law enforcement in subjects such as pattern recognition or processing/comparing MO's and characteristics on a regional or even national basis.

Improved voice communications via satellite is desperately needed for law enforcement. Frequency-hopping has become the new standard in military radios. This system apparently is more appropriate for privacy than even the better digital encryption available to public safety at present and exceeds the capabilities of "state of the art - trunking systems".

From Here To There

The first step in getting from here to there is to establish a core group of planners to identify and cultivate the formulation team for a consortium. From the list of stakeholders, identify key people that can develop support and have the commitment to see the entire process through.

Second, is to identify the military technologies. Utilize the military representatives and contacts to establish the realm of technologies and initial application to the plan. Formulate an allocation and distribution plan. Examine the possibilities of

military control, state control and regionalized allocation.

Third, is to re-evaluate the stakeholders affected by the plan. Establish strategies appropriate to newly identified or changed position stakeholders.

Fourth, is to develop a communication plan to effectively communicate the Mission and strategies and it's implementation.

Fifth, is to re-assess the needs and objectives. Adjust as necessary. Insure that the plan is a living plan, not cast in concrete, but a plan to be used in guiding the acquisition of military technologies and effectively maximize the spending of the community's tax dollars.

The win-win of a law enforcement / military partnership in technological research and development, is that both entities face tremendous financial obstacles. The continued trend to cut military budgets and the dwindling resources for local law enforcement place both of us in the same situation. How best do we maximize the dollars allocated and efficiently continue delivering the service levels demand by our customers?

The win for law enforcement is obviously two fold. First and foremost, is the advancement in technology. Secondly, though is the ability to purchase the technology at a more competitive rate. Since the quantities and R&D costs of technologies would be borne by the military and many law enforcement agencies,

the military would additional benefit from the reduced per unit and shared R&D expenses. This same rationale carries over to the defense industry as an incentive to expand their operations into a broader based utilization of technologies. These are the very kinds of partnerships that President Clinton praised in his new strategic industrial policy that encourages government and industry partnerships - particularly in the areas of technological innovation.

To develop a partnership and expect the transfer and sharing of technologies and monies, a clear statement of priority from national leadership will be necessary. Through legislation, or Presidential directive, a partnership in the our communities can be shared with the federal government. Through these partnerships, the goals of both military and law enforcement can be accomplished with greater fiscal responsibility and enhanced effectiveness and efficiency.

What is before us is the future.....And the future is now!

ENDNOTES

1. Jack E. Enter, "Police Administration in the Future: Demographic Influences as They Relate to Management of the Internal and External Environment," American Journal of Police, (Vol X, No. 4, 1991) p. 65.
2. California: Still the Future, Future Scan, No. 721, January 20, 1992

BIBLIOGRAPHY

1. Bridges, William "Making Sense of Life's Transitions", 1980
2. Bridges, William "Managing Transitions: Making the Most of Change", 1991
3. Enter, Jack E. "Police Administration in the Future: Demographic Influences as They Relate to Management of the Internal and External Environment."
American Journal of Police. Vol. X No. 4, 1991. pp. 65-81
4. French, Wendell L., Bell Jr., Cecil H., Zawacki, Robert A., "Organization Development" 1989 pp. 79-84
5. Lau, James B., Shani, A.B. (Rami), "Behavior Organizations: An Experiential Approach" 5th ed. 1992 pp 99-106
6. Simmons, Marcia K. "Evaluating the Effectiveness of Law Enforcement Agencies, Law and Order, September 1991

APPENDIX A

I.S.P. Questionnaire:

Candidate: _____ **Agency** _____

How will the availability of Military technology impact mid-sized law enforcement agencies by 2002?

What kind of technology will be available?

What will be the law enforcement applications of the technology?

How will the technology be obtained?

What types of partnerships will be required to allow the shared technologies?

What will the obstacles be to developing the partnerships?

Additional Comments or Insight: