

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

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).

SOURCE

The attached article was written by a graduate of the Command College, Peace Officer Standards and Training (POST), California.

Technical details, information sources, and data analysis are contained in a separate report that may be obtained by submitting a request to:

The Center for Leadership Development
Peace Officer Standards and Training (POST)
1601 Alhambra Blvd.
Sacramento, CA 95816-7083
Phone: (916) 227-7083

Please be sure to provide the name of the author.

SECTION I

INTRODUCTION

Background

Four years of economic decline have led to dwindling resources for the funding of law enforcement. Federal support to States and subsequent State support to local government is continually decreasing. As each budget year passes, more and more cuts are made in the capital outlay budget items of law enforcement, hoping that these cuts will avert the inevitable; cutting personnel. Approximately 82% of the law enforcement budget is now spent on personnel costs. 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.

Issues concerning budget reductions, lawsuits, social problems (i.e. the homeless, illegal immigration, abortion), 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 The challenges for police managers are to creatively balance the budget, stay one step ahead of the criminal element's technology, while maintaining service levels, with increased call loads and decreased budgets.

In one mid-sized California Police Department, the annual budget 1990/91 was \$14 million dollars. That city has continued to grow, increased police services yet

has a current budget for 1992-1993 of \$12 million dollars, \$2 million dollars less than two years prior. While several personnel were cut from the budget, the majority of the cuts for this two million dollars was in capital outlay. These are the technology items for law enforcement to do their job. Vehicles, computers, special equipment, aviation, communications and research and development.

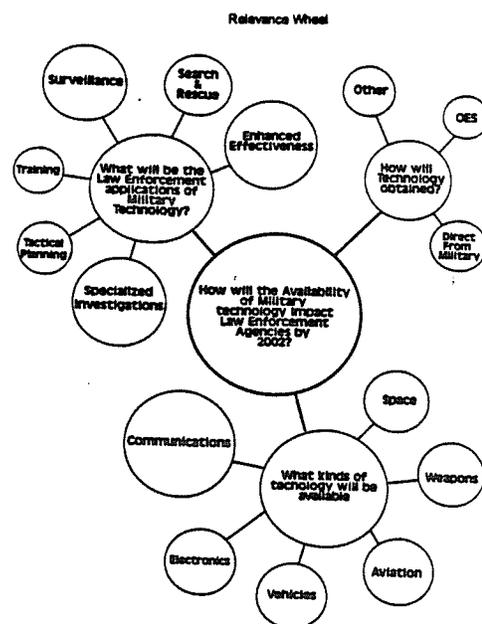
How will law enforcement continue to stay abreast with technological changes? Who will fund the research and development dollars so desperately needed to provide this technology? What would be the likelihood of the military and law enforcement forming partnerships for the purposes of research and development and collective purchasing of new technology to further enhance both discipline's effectiveness?

The United States spends 66% of its federal research and development dollars on defense, compared to 19% for Germany and 9% for Japan.² Significant dollars are represented by the present military commitment to research and development. The shared costs and benefits are certainly worth exploring.

What are the possibilities? What support would be needed? President Clinton has proposed a new strategic industrial policy that encourages government and industry partnerships-particularly in the area of technological innovation.³ Is this a clear message that these types of partnerships are in fact on the horizon?

This issue was selected because of certain future implications for 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.

The selection of the issue question, and associated sub-issues for this report was based on three criteria: first, that the issue will have a direct impact on mid-sized police departments; second, that the issue is, or could be, influenced by forces outside the organization; and third, that the issue is one from which a police department could establish policies to positively impact the future course of the organization. With that criteria established, informal contacts were made with fellow Command College students and graduates, as well as selected police command and executive level manager to discuss the potential issues for consideration. Additionally, using a **Relevance Wheel** (refer to Appendix A), the issue question was identified and refined- ***"How will the availability of military technology impact mid-sized law enforcement agencies in the year 2002?"***



Three sub-issues were also identified to better focus on what would most likely become the pressing issues associated with the question in the future. The three sub-issues identified are; 1) What kinds of technology will be available? 2) What will be the law enforcement applications of military technology? and 3) How will the technology be obtained? The focus of the article will be to overview of the futures study, preferred strategies and principle focus on the transition management aspect.

SECTION II

FUTURES OVERVIEW

Study Overview

The thrust of this research was to conduct a futures study. The design and purpose of the futures research was to scan the environment of 1992 to help plan for the future of tomorrow . On the surface, that appears to be a questionable task. There is no crystal ball which can accurately predict the future. The only thing which can be predicted is that there will be change. While no one can accurately state what that change will be, the use of futures forecasting techniques can provide *scenarios* - glimpses of possible futures - upon which planning can proceed. Scenarios are based upon forecasts of trends and events which bear on the issue being studied. Decisions can then be put in place today to mitigate a possible negative future, to achieve a desired future, or to prepare for a projected future. This study is intended to identify what those impacts could be and how they manifest themselves.

Key Findings

One theme dominated the findings as the next decade was projected; the continued

decrease in both law enforcement and military budgets will necessitate some form alternative funding and/or partnerships to spread the operational costs for technological items. "The challenge for police administrators will be to ensure that the new role of the police department as a partner in the community is reflected not only in the agency's goals but also in the way achievement of those goals is measured."⁴ The need for shared resources to maximize spending dollars brought to focus a need for creative partnerships between government and industry. This study found that an additional and overlooked area of partnership was in fact, government partnerships with government. The concept of shared resources and development costs more efficiently maximizes the tax dollar making the joint venture a win-win situation for all concerned.

Critical issues for both law enforcement and the military are the continuing decline of Cold War Activity and the reallocation and reprioritization of federal dollars to military. All of this, however may be potentially halted in the event the U.S. finds itself involved in another conflict similar to that of Desert Storm within the next five years. As a result of this, the potential could be to redirect exclusively, the research and development efforts of the military operations.

One of the areas that the research panel looked at was the potential impact of the consolidation of the military branches somewhere in the future of the next five to ten years. If this occurs, a key benefit to realize relative to the issue was instead of

separate independent R&D efforts going on, a more consolidated coordinated effort was felt would produce more rapid benefits for law enforcement.

Summary

The key to effective utilization of research and development funds is to identify the need, the applications, the end users and the potential for commercialization. These applications will enhance the effectiveness of the partnerships and allow the spending dollars to be focused and most productive. The military stands to benefit tremendously by the partnerships. Continued reductions in military spending and future budgets will necessitate a new approach to justifying R&D budgets. Sharing the technology with other governmental entities and private industry opens the doors for additional financial support.

SECTION III

HOW DO WE MAKE IT HAPPEN?

Preferred Strategy

The preferred strategy would be to create a consortium of military, law enforcement and other related organization representatives who have a financial or technological stake in the issue. 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 for this concept 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.

How Do We Manage The Process?

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. 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. Then 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."⁵ 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 framework 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

"It isn't the changes that do you in, it's the transitions"⁶ 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 transition of change is 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 of Police 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 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 Governor's

Office. With representation from Cal Chiefs and the Governor's assistance, a framework would include representatives 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. Additional support for this would be garnered through professional organizations; International Association of Chiefs of Police (IACP), Cal Chiefs & Sheriffs, 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.

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. 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 of military technology to law enforcement.

The legislation would create a partnership between the military and law enforcement for the purposes of sharing R & D and acquisition costs of military technology.

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 players who are critical to the change effort. From this group of key players, it is necessary to identify those critical to the insuring the follow through. We'll refer to them as 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. (See commitment chart)

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.

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

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 Officers Standards & Training

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 let it happen will be required. This can be furthered by having POST represents 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".

SECTION V

CONCLUSIONS

Why Is This Issue Important?

Law enforcement's challenge for the 90's is 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 2000.⁷ 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 funding of technological advancements and enhance effectiveness and efficiency of both partners 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. The emphasis of law enforcement is to spend smarter. Given the significant cuts in capital outlay funding,

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 current 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 aid in justifying their expense. Defense Secretary Les Aspin directed the Pentagon to produce a spending plan for the next fiscal year that is at least \$14 billion less than the budget for the current, according to Pentagon documents.⁸ This is an overall reduction in Military spending of 5%.⁹ Many law enforcement agencies currently avail themselves the opportunity for military technology in the way of surplus vehicles and aviation equipment. What is yet to be tapped is the military's vast research and development resources and the accompanying current technologies. Law enforcement agencies are looking to creative ways to stay current in technology and spend smarter.

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 using sophisticated sensor equipment, that maps and tracks activity on the ground. 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 are similar technologies.. What about this type of technology to track vehicles 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. The military uses battlefield simulation through computer based instruction. 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. 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, exceeding the capabilities of "state of the art - trunking systems".

If Effective, What Then In Ten Years?

In ten years if we are able to look back, did we accomplish the right thing? This is where we should be ten years from now.

We should have a partnership in place where there are methods/ structure for on-going continuous dialogue for coordination between law enforcement and the military in terms of both funding approaches and emerging technologies. There should be existing legislation and administrative procedures in place which facilitates the acquisition of military technology by law enforcement in a cost effective manner. Critical to this is a specific well defined roll for the R&D community so they can be in-tuned to emerging needs of law enforcement and help build the marketplace.

How Do We Make It Happen?

A five step strategic management plan is outlined below.

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.

What Are The Benefits?

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 They Relate to Management of the Internal and External Environment, " American Journal of Police, (Vol. X, No.4, 1991) p. 65.
2. Francois J. Castaing, Vice President of Vehicle Engineering for Chrysler Corp. Big 3, Military Swap Secrets at Expo, Los Angeles Times, February 25, 1993
3. Big 3, Military Swap Secrets at Expo, Los Angeles Times, February 25, 1993
4. Marcia K. Simmons, Evaluating the Effectiveness of Law Enforcement Agencies, Law and Order, September 1991
5. Dr. Lady Hanson, Phd., Organizational Development Class Lecture, Cal Poly, 1993
6. Managing Transitions: Making the Most of Change, William Bridges, Addison Wesley, 1991 p.3
7. California: Still the Future, Future Scan, No. 721, January 20, 1992
8. New York Times News Service, The Press Enterprise, February 4, 1993
9. New York Times News Service, The Press Enterprise, February 4, 1993