AEROSPACE REPORT NO. ATR-76(7901-08)-1

EQUIPMENT SYSTEMS IMPROVEMENT PROGRAM

SYSTEM ACCEPTANCE ACTION PLAN

September 1976

Law Enforcement Development Group



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Prepared for

National Institute of Law Enforcement and Criminal Justice LAW ENFORCEMENT ASSISTANCE ADMINISTRATION U.S. DEPARTMENT OF JUSTICE

The Aerospace Corporation (

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Law Enforcement Development Group THE AEROSPACE CORPORATION El Segundo, Calif. 90245

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Prepared for NATIONAL INSTITUTE OF LAW ENFORCEMENT AND CRIMINAL JUSTICE Law Enforcement Assistance Administration U.S. Department of Justice

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EQUIPMENT SYSTEMS IMPROVEMENT PROGRAM

SYSTEM ACCEPTANCE ACTION PLAN

Approved

John O. Eylar, Jr., General Manager Law Enforcement and Telecommunications Division

ABSTRACT

The Equipment Systems Improvement Program was established by the National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration to provide an integrated approach to equipment-related research and development. The Aerospace Corporation is under contract to provide technical direction for this program. Both the Institute and Aerospace are aware of the importance of disseminating the results of the program as quickly as possible to all interested parties. Accordingly, a plan is presented in this document which is intended to ensure the orderly and timely dissemination of the results of the Equipment Systems Improvement Program research and development projects to a rather large and diverse audience. The types of information and materials to be prepared by Aerospace, mechanisms for dissemination, and funding and scheduling considerations for Aerospace support of the dissemination function are discussed in the plan.

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FOREWORD

A considerable portion of the national resources allocated to the fight against crime through research and development and the application of technology to law enforcement needs is administered through the Equipment Systems Improvement Program. In its role as technical director of the program, The Aerospace Corporation is aware of the importance of the task of assuring the acceptance and availability of the systems developed under the program. The most important aspect of this task is the timely and orderly dissemination of information about the projects under the program.

The System Acceptance Action Plan presented in this document represents the culmination of efforts carried on throughout Fiscal Year 1976 by Aerospace to identify effective means for disseminating the results of the equipment research and development projects under the Equipment Systems Improvement Program. Added emphasis was given to the need for such a plan when it was discovered in January 1976 that of 46 Aerospace technical reports which had been delivered to the Law Enforcement Assistance Administration and which had been identified as suitable for dissemination, only four had been made available as loan documents through the National Criminal Justice Reference Service and none had been published and made available for distribution.

The development of this plan represents only one phase in Aerospace's efforts to assure system acceptance and availability. Aerospace will continue, as it has done in the past, to make every effort to identify and utilize the most effective means for disseminating information to the large number of individuals, organizations and agencies which have an interest in the results obtained in the Equipment Systems Improvement Program.

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SUMMARY

The National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration (LEAA) established the Equipment Systems Improvement Program to provide an integrated approach to equipment-related research and development in order to satisfy the equipment improvement needs of the law enforcement and criminal justice communities. The Aerospace Corporation is under contract to provide technical direction for this program. Since a considerable portion of the total national research and development effort related to law enforcement technology is supported through this program, it is important that the results of the program be disseminated in a timely and orderly fashion to a large and diverse audience which includes segments of private industry, government, universities, and the law enforcement community.

A System Acceptance Action Plan has been developed which is intended to ensure the orderly and timely dissemination of the results of the research and development projects under the Equipment Systems Improvement Program in order to promote the acceptance and availability of the systems developed in these projects. The plan is primarily concerned with the types of information and materials to be prepared by Aerospace and the mechanisms by which these materials may be disseminated, but funding and scheduling considerations for Aerospace support of the dissemination function are also discussed.

Distribution of contractually defined technical reports, which comprise a major portion of the Aerospace deliverables, is the principal mechanism available for dissemination of detailed findings of the Equipment Systems Improvement program. Several of these reports, some of which have already been delivered to LEAA and some of which are scheduled for delivery during FY 76T and FY 77, are identified in the plan as being suitable for dissemination,

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and it is recommended that all the designated reports be entered in the National Criminal Justice Reference Service data base and be made available through its interlibrary loan system. It is also recommended that these reports be distributed to interested individuals and agencies, and various mechanisms available to LEAA for this purpose are discussed.

Another recommended mechanism for the dissemination of information is the preparation of papers for presentation at professional society meetings or for publication in the journals of professional societies. Several papers are proposed for development during FY 76T and FY 77, and the title, the expected completion date and appropriate audiences are provided for each.

It is proposed that Aerospace develop and maintain by updating when major events occur or at six month intervals, an Information Brief for each project under the Equipment Systems Improvement Program. Each brief will be a summary information package containing the project title, objective(s) and background, development concept(s) and status, major accomplishments and reports, and names of person(s) to contact for additional information. The primary use of these briefs will be to provide an effective medium for responding to requests for general information on the development projects. It is also recommended that they be distributed to the LEAA Regional Offices and that they be used by LEAA personnel as background information for press releases and in preparing articles for the various LEAA publications.

The Equipment and Technology Center (ETC) was established by the International Association of Chiefs of Police to provide law enforcement agency administrators and purchasing officials with reliable and objective information on law enforcement equipment. It is proposed that Aerospace maintain liaison with the ETC and prepare articles and reports for its publications. The types of articles or reports which might be provided by Aerospace include: short,

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informative summaries of the Equipment Systems Improvement Program projects; in-depth articles describing equipment or techniques being developed in those projects; state-of-the-art reviews; survey reports; and field test results.

In the past Aerospace has, when appropriate, utilized specialized dissemination mechanisms, such as sponsoring symposiums, establishing working group arrangements with forensics labs, presenting demonstrations of improved equipment systems, preparing films on equipment developments and preparing training materials. These and other specialized mechanisms will be utilized in the future. In particular, information channels to private citizens, such as public service television, must be investigated in anticipation of disseminating information about equipment systems intended primarily for their use, such as the Citizen Alarm and the Low Cost Burglary Alarm.

It is proposed that Aerospace support of most of the dissemination mechanisms be provided in response to Technical Instructions and that funds be provided under the Special Technical Support charge. The only exception is the funding of the specialized mechanisms which it is recommended be decided on an individual basis when the time comes.

INTRODUCTION

The National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration (LEAA) was established to encourage research and development in order to improve and strengthen the nation's law enforcement and criminal justice systems. As part of its plan for fulfilling its charter, the Institute initiated the Equipment Systems Improvement Program, under the direction of the Institute's Advanced Technology Division, to provide an integrated approach to equipment-related research and development. Through this program, the Advanced Technology Division manages a considerable portion of the total national research and development effort allocated to law enforcement technology. The Aerospace Corporation is under contract to support this program and to translate equipment needs into practical systems for law enforcement and criminal justice applications.

The Institute and Aerospace realize the importance of timely dissemination of the results of the research and development efforts under the Equipment Systems Improvement Program. Dissemination of information in a timely fashion is important both from the standpoint of promoting coordination and stimulating interchange among those segments of private industry, government, universities, and the law enforcement community which have interests in the results of the program and from the standpoint of assuring the acceptance and the availability of systems developed under the program by providing potential users, manufacturers, and distributors with information on equipment systems and their applications. Accordingly, a plan is herein presented which is intended to ensure the orderly and timely dissemination of the results of the Equipment Systems Improvement Program research and development projects to a rather large and diverse audience.

The plan addresses the types of information and materials to be prepared by Aerospace; existing and proposed mechanisms for dissemination; and

funding and scheduling considerations for Aerospace support of the dissemination function. Sections of the plan are devoted to the following topics:

- (1) Publication and distribution of Aerospace technical reports;
- (2) Preparation of papers suitable for presentation at professional society meetings or for publication in the journals of professional societies;
- (3) Preparation of an Information Brief for each project under the Equipment Systems Improvement Program;
- (4) Support to the Equipment and Technology Center of the International Association of Chiefs of Police;
- (5) Specialized mechanisms for disseminating information.

TECHNICAL REPORTS

The principal mechanism for the dissemination of detailed findings of the research and development efforts under the Equipment Systems Improvement Program is the distribution of the various contractually defined technical reports delivered to LEAA by Aerospace. These reports, whose subject matter ranges from the results of a market survey to a highly detailed description of a new piece of equipment or an analytical technique, comprise a major portion of the Aerospace deliverables. The LEAA has a number of ways to distribute technical reports prepared for the Institute. A review of these systems indicates that although they are readily available, they have been used to publish and distribute only a small number of Aerospace technical reports. In this section, ways will be suggested to improve the dissemination of these reports to interested law enforcement and criminal justice professionals.

The National Criminal Justice Reference Service (NCJRS) acts as a clearinghouse for criminal justice information as well as the distributor of LEAA publications. All of the documents classified in the Reference Service

system are abstracted and indexed by subject, title, and author in the <u>Document</u> <u>Retrieval Index</u>. The <u>Index</u> includes LEAA and Institute publications, books and published journal articles as well as unpublished documents available through the National Technical Information Service (NTIS). The Reference Service also distributes the !'Research Information Letter'' (to be discussed in the section on Information Briefs) and the Monographs and Research Reports sponsored by the Institute's Office of Research Programs. Many of these are distributed free to criminal justice agencies and individuals who request information. In addition to distributing some publications, the Reference Service operates an interlibrary loan system for documents in its data base.

When a document is entered into the Reference Service data base, all persons on the NCJRS mailing list are sent an abstract of the document if its subject matter falls within categories they have pre-selected. If, for example, an individual indicated that he wanted to be notified of all new forensic documents entered into the data base, he would receive abstracts pertaining to blood analysis, gunshot residue detection, etc. The notice would include the author and title of the publication, an abstract of the article and the source from which the material could be obtained.

Monographs and Research Reports are published for the Office of Research Programs (ORP) by the Government Printing Office and then distributed through the National Criminal Justice Reference Service. Reports suitable for publication are recommended by the Grant Program manager, and the printing costs are borne by the ORP. These publications are referenced in the NCJRS <u>Document Retrieval Index</u> and are usually distributed free by the Reference Service.

The Institute, through the Office of Technology Transfer, is also able to submit publications to the NTIS for duplication and distribution at no cost to

LEAA. The requester of the document pays for the duplication costs. The NTIS duplication and dissemination network is used primarily for final research reports. When a publication is sent to NTIS it is also included in the NCJRS Library and the <u>Document Retrieval Index</u>. The NTIS duplication process, coupled with the NCJRS indexing, abstracting and notification service makes the NTIS a powerful information dissemination technique.

Currently, the Emergency Energy Committee reports and the reports listed in Appendix I are in the NCJRS data base and are available through the interlibrary loan system. With the exception of the Emergency Energy Committee Reports, none of the Aerospace technical reports have been published as Monographs or Research Reports and none have been included in the NTIS system. It is strongly recommended that the reports listed in Appendix II be included in the NCJRS data base and that all the reports included in Appendices I and II either be published as Monographs or Research Reports or included in the NTIS system.

If the available LEAA publication techniques discussed above should require more time or cost to make the reports available than is desirable, it would be possible for Aerospace to print additional copies for distribution. Many of the initial publication costs -- editorial services, preparation of printing plates, etc. -- are incurred by the sponsor when the small number of deliverables are prepared, so that the only additional costs for providing several copies for distribution would be the direct printing costs.

It is recommended that this alternative be used only if, for some reason, a decision is made not to distribute the Aerospace reports as Monographs or Research Reports or via the NTIS and NCJRS mechanisms. Article XI of the Aerospace-LEAA contract specifically prohibits the Corporation from printing more than 5,000 units of copies of any one page and more than 25,000 units in the aggregates of a multiple page document unless authorized by the Contracting

Officer. However, we do not anticipate that the demand for these reports will require a number of units in excess of this restriction.

In order to assure the availability of the Aerospace technical reports to a wide audience, it is recommended that they be announced in as many publications as possible. The LEAA <u>Newsletter</u> and the "Research Information Letter" would be excellent vehicles for such announcements, and it is recommended that they be considered for such a purpose. It is planned to include a list of all major documents prepared for each project under the Equipment Systems Improvement Program and information on how to obtain them in the Information Briefs to be prepared by Aerospace.

Since the technical reports are contractually defined deliverables, all funding, manpower and scheduling considerations for the preparation of the reports are covered in the task plans for the individual projects. However, should the Institute decide to have Aerospace print additional copies for distribution, additional funds would be required. Should this approach be taken, it is proposed that additional copies be printed in response to Technical Instructions, and that funds be provided under the Special Technical Support charge.

PAPERS

Another excellent mechanism for the dissemination of information is the preparation of papers for presentation at professional society meetings or for publication in the journals of professional societies. This dissemination mechanism offers a high degree of flexibility, in that the paper can be tailored to suit the needs and interests of the audiences. For example, the members of the American Chemical Society might be interested in a highly technical discussion of the characterization of explosives vapors, whereas law enforcement personnel would be more receptive to a non-technical discussion of how such research might impact their ability to deter the criminal use of explosives.

Several papers being proposed for development during FY 76T and FY 77 are described in Appendix III. For each proposed paper, the following information is provided:

- (1) Title or topic
- (2) Expected completion date
- (3) Appropriate audiences

All papers will utilize the results of funded studies and will require no significant analyses which are outside the scope of the funded studies. It is proposed that these papers be prepared in response to Technical Instructions and that funds to cover the preparation and presentation/publication of these papers be provided under the Special Technical Support charge.

INFORMATION BRIEFS

It is proposed that Aerospace develop and maintain an Information Brief for each project under the Equipment Systems Improvement Program. These briefs will be complete, up-to-date, summary information packages which will provide the following information on the projects:

- (1) Project title
- (2) Objective(s)
- (3) Background
- (4) Development concept(s)
- (5) Development status
- (6) Major accomplishments
- (7) Major reports prepared in the project and information on how to obtain them
- (8) Person(s) to contact for additional information.

It is anticipated that each brief will be from four to eight pages in length and that the briefs will be updated when major events occur in the projects or at six-month intervals.

These Information Briefs will have many uses, the most important of which is to provide an effective medium for responding to requests for general information on the development projects. It is recommended that these Briefs be distributed to the LEAA Regional Offices in order to keep them apprised of the results of the equipment research and development projects and to provide them with information which can be distributed to the agencies with whom they interact. They will also be useful for providing background information for LEAA press releases announcing significant development project results. In addition, the briefs will provide information useful to LEAA personnel in preparing articles for the LEAA Newsletter, particularly the "Research Overview" section, and they will supply the Office of Technology Transfer with information which can be used to prepare articles for dissemination by the "Research Information Letter" mechanism.

The <u>Newsletter</u> has the widest distribution of all LEAA publications and tends to print articles that have wide audience appeal. Several times each year the <u>Newsletter</u> runs a "Research Overview" section, prepared by the Office of Technology Transfer, which describes ongoing research projects funded by the Institute. The "Research Information Letter," which usually contains a twoto three-page summary of work undertaken by the Institute is published on an irregular basis by the Office of Technology Transfer. This "Letter" is sent to publishers of the State Planning Agency Newsletters, professional journals, and trade and association magazines. It is modelled after a press release, and the information in it can be reprinted directly as written or edited to fit the space and content needs of the publication receiving the letter. Both the <u>Newsletter</u> and the "Research Information Letter" appear to be ideally suited for the distribution of information about research and development projects, and efforts should be made to provide coverage to all projects under the Equipment Systems Improvement Program. The Information Briefs will facilitate the preparation

of articles for those publications. It is proposed that these briefs be prepared in response to Technical Instructions and that the funding be provided under the Special Technical Support charge.

EQUIPMENT AND TECHNOLOGY CENTER SUPPORT

The International Association of Chiefs of Police, with funding from the LEAA, has established the Equipment and Technology Center (ETC) to assist the police administrator and his purchasing agent by providing reliable and objective information on law enforcement equipment. The ETC functions as a national repository and clearinghouse for law enforcement equipment information and disseminates to law enforcement agencies throughout the United States timely and objective information and research guidelines concerning product and equipment standards, specifications, safety, cost and related consumer data.

The primary objective of the ETC publications is to provide law enforcement agency administrators and purchasing officials with consumer information written in succinct, nontechnical language. Two ETC publications, the <u>ETC</u> <u>Bulletin</u> and "Special Reports," appear to be well suited to the task of disseminating information about the Equipment Systems Improvement Program projects. The <u>ETC Bulletin</u> is a monthly publication which contains consumer information describing available products and prototype performance specifications, along with discussions on their adaptability for law enforcement use. The <u>Bulletin</u> also contains feature articles highlighting selected equipment-related projects currently funded by LEAA (i.e., synopses of research and development projects). ETC "Special Reports" will provide a periodic review of the testing and evaluation research performed by various agencies. These "Special Reports" present test results in concise, nontechnical language and describe the products tested in terms of their usefulness to the law enforcement community.

Aerospace support to the ETC is expected to be on a continuing basis and to consist of maintaining liaison with the ETC and preparing articles and reports suitable for publication in the <u>Bulletin</u> or the "Special Reports." The types of articles or reports which Aerospace might provide to those publications include: short, informative summaries of the projects under the Equipment Systems Improvement Program; in-depth articles on equipment or techniques being developed in those projects; state-of-the-art reviews; survey reports; and field test results. It is proposed that this support be provided in response to Technical Instructions and that funds be provided under the Special Technical Support charge.

SPECIALIZED DISSEMINATION MECHANISMS

In the past Aerospace has, in its continuing efforts to present appropriate information in the most effective manner to the right audience, utilized specialized dissemination mechanisms which differ from those already discussed. Such diverse techniques have been used as: sponsoring a symposium for medical doctors at which blunt trauma wounds expected with the use of soft body armor were discussed; establishing a working group arrangement in which Aerospace and several forensics labs work hand in hand to evaluate a promising new technique for gunshot residue detection; presenting demonstrations of improved equipment systems such as the prototype police patrol car; preparing films on equipment developments such as the cargo security system; and preparing training materials such as was done in the Speaker Identification project.

Specialized dissemination techniques, including those used in the past as well as some new ones, will be utilized in the future. In particular, information channels to private citizens, such as public service television, must be investigated in anticipation of disseminating information about the Citizen Alarm and the Low Cost Burglary Alarm.

In the past these specialized dissemination mechanisms have been funded through the appropriate projects. In the future, particularly as new techniques are developed, it may be more appropriate to provide funds through the Special Technical Support charge. It is proposed that the question of funding for the specialized mechanisms be left open at this time to be decided on an individual basis when the time comes.

APPENDIX I AEROSPACE TECHNICAL REPORTS IN THE NCJRS DATA BASE

		Deliver	y Date
1.	• Assessment of Technology Applicable to Body-Mounted Antennas, Aerospace Report No. TOR-0073(3653-01)-1	Mar.	1973
2.	Feasibility Study - Remote Vehicle Disabling Systems, Aerospace Report No. TOR-0073(3658-01)-1	Apr.	1973
3.	Voiceprint Applications Manual, Aerospace Report No. TOR -0073(3654-04)-1	Jun.	1973
4.	System Analysis - Recording System for Illegal Telephone Calls, Aerospace Report No. TOR-0073(3654-04)-1	Jun.	1973
5.	Feasibility Demonstration of a Truck Antihijacking System, Aerospace Report No. TOR-0073(3658-02)-1	Jun.	1973
6.	Evaluation of an Automatic Direction Finder for Hijacked Truck Location, Aerospace Report No. TOR-0073(3658-02	Jun. .)-2	1973
7.	Evaluation of Aerial Vehicles for Law Enforcement Application, Executive Summary, Aerospace Report No. TOR-0073(3657-01)-2	Jun.	1973
8.	Evaluation of Aerial Vehicles for Law Enforcement Application, Aerospace Report No. TOR-0073(3657-01)-1	Jun.	1973
9.	Investigation of Body-Mounted Antennas for Law Enforce- ment Application, Aerospace Report. No. TOR-0073(3653 01)-2	Jun.	1973
10.	Powerline Alarm Transmission System: Phase I Report - Power System Characterization, GTE Sylvania, Inc.	Aug.	1973
11.	Powerline Alarm Transmission System: Final Report, GTE Sylvania, Inc.	Jan.	1974
12.	"Feasibility Demonstration of Citizen Alarm System: Phase I Final Report, " Compu-guard Security Systems, Inc.	Oct.	1973
13.	"A Review of Methods for the Detection and Identification of Explosives, "Aerospace Report No. ATR-0074(7902)-1	Nov.	1973

		Delivery Date
14.	Final Report, "Methods for Reducing Police Car Fuel Consumption," Aerospace Report No. ATR-74(7914)-1	Jan. 1974
15.	"Concept Definition for the Truck Anti-Hijack and Trailer Security System," Aerospace Report No. ATR-74(7908)-1	Jan. 1974
16.	"Feasibility Demonstration of Citizen Alarm System: Phase II Development Report, " Compu-guard Security Systems, Inc.	Mar. 1974
17.	Survey and Assessment - "Blood and Bloodstain Analysis Program, Volume 2: Appendices," Aerospace Report No. ATR-74(7910)-1	Apr. 1974
18.	Survey and Assessment - "Blood and Bloodstain Analysis Program, Volume 1: Technical Discussion," Aerospace Report No. ATR-74(7910)-1	Apr. 1974
19.	"Survey and System Concepts for a Low-Cost Burglary Alarm System for Residences and Small Business," Aerospace Report No. ATR-74(7904)-1	Jun. 1974
20.	"A Photoluminescence Technique for the Detection of Gunshot Residue, " Aerospace Report No. ATR-74(7915)-	Jun. 1974 l
21.	"Survey and Concept Definition for an Improved Citizen Alarm System: Volume I, Technical Summary," Aerospace Report No. ATR-74(7905)-2	Jun. 1974
22.	"Survey and Concept Definition for an Improved Citizen Alarm System: Volume II, Technical Appendices," Aerospace Report No. ATR-74(7905)-2, Vol. II, Rough Draft	Jun. 1974
23.	"Preliminary Investigation of Applications of the Computer-Aided Speaker Identification System," Aero- space Report No. ATR-74(7907)-1, Rough Draft	Jun. 1974
24.	Final Report: "Equipment Options and Cost in 911 Emer- gency Phone Systems," Aerospace Report No. ATR 74(7912)-2	Jul. 1974

		Deliver	y Date
25,	Final Report – "External Alarm Transmission Media Study," Stanford Research Institute	Jun.	1975
26.	Final Report - "Survey and System Concepts for a Low Cost Burglary Alarm System for Residences and Small Businesses, "Aerospace Report No. ATR-74(7904)-1, (3330-JOE-75-019)	Sep.	1974
27.	Phase I Report - "Analysis of System Requirements and Component Design Specifications," Compu-guard Security Systems, Inc.	Dec.	1974
28.	Final Report - "Feasibility Demonstration of the Citizen Alarm System," Volume I. Compu-guard Security Systems, Inc.	Feb.	1975
29.	Final Report - "Protective Armor Development Program: Volume I - Executive Summary; Volume II - Technical Discussion; Volume III - Appendices, " Aerospace Report No. ATR-75(7906)-1	Dec.	1974
30.	"Preliminary Investigation of Applications of the Compute Aided Speaker Identification System," Aerospace Report No. ATR-74(7907)-1	r- Aug.	1974
31.	"Semi-Automatic Speaker Identification System Final Report, "Rockwell International Report No. 74-1185/501 (Hardware Development Report)	Dec.	1974
32.	"Analytical Studies Final Report," Rockwell International Report No. C74-1184/501	Dec.	1974
33.	"Applications of Semi-Automatic Speaker Identification Techniques, "Aerospace Report No. ATR-75(7907)-1	Mar.	1975
34.	"Survey and Technical Assessment - Cargo Security Sys- tem," Aerospace Report No. ATR-75(7908)-1	Jul.	1974
35.	"Cargo Security System Feasibility Analysis Report - Hybrid Dead Reckoning and Hyperbolic Grid Location," Aerospace Report No. ATR-75(7908)-2	Apr.	1975

	<u>1</u>	Deliver	y Date
36.	"Operational Design of a Cargo Security System," Aerospace Report No. ATR-75(7908)-3	Jun.	1975
37.	"Persistance of Selected Genetic Markers in Dried Blood, Aerospace Report No. ATR-75(7910)-1	' Apr.	1975
38.	Final Report - "Feasibility and Test of Coded Taggant Materials for the Identification of Explosives," Lawrence Livermore Laboratory	Apr.	1975
39.	Final Report - "An Investigation of the Feasibility of Use of Laser Optoacoustic Detection for the Detection of Explosives, " Case Western University	Apr.	1975
40.	"Gunshot Residue Detection - Survey and Assessment and Identification of Alternate Concepts," Aerospace Report No. ATR-75(7915)-1	Sep.	1974
41.	"Conclusive Detection of Gunshot Residue by the Use of Particle Analysis," Aerospace Report No. ATR-75(7915)-2	Dec. 2	1974
42.	"Analysis of Advanced Forensic Science Capabilities," Aerospace Report No. ATR-75(7918-01)-1, (Analysis)	Feb.	1975
43.	Semi-Automatic Speaker Identification System (SASIS) Laboratory Test Report, Rockwell International Report C75-701/501	Aug.	1975
44.	Operational Analysis Support for the Citizen's Alarm System, J. H. Wiggins Report No. 75-1227-22	Sep.	1975
45.	"Compliance and Enforcement Aspects of Various Retail Gasoline Distribution Schemes," Aerospace Report No. ATR-74(7919)-2	Jul.	1974
46.	"Effects of Gasoline Shortages on Selected Law Enforce- ment Agencies," Aerospace Report. No. ATR-74(7919)-3	Jul.	1974
47.	"Gunshot Residue Detection Using Inorganic Luminescence Aerospace Report No. ATR-76(7915)-1	," Feb.	1976

		Delivery	y Date
48.	"Doppler-Free Two-Photon Concept for the Detection of Explosives Vapors," Aerospace Report No. ATR-76(7911)-1	Dec.	1975
49.	"Design Requirements Report: Cargo Security System Program," Hoffman Nav Com	Apr.	1975
50.	"The Market Potential for Lightweight Routine Duty Body Armor," Tyler Research Associates, Inc.	Nov.	1975
51.	"The Market Potential for a Low Cost Burglary Alarm System," Tyler Research Associates, Inc.	Nov.	1975
52.	"The Market Potential for a Citizen's Alarm System," Tyler Research Associates, Inc.	Nov.	1975

APPENDIX II AEROSPACE TECHNICAL REPORTS TO BE ADDED TO THE NCJRS DATA BASE

Burgla	Delivery Date			
1.	Sensor False Alarm Performance Evaluation Report	Apr. 1976		
2.	Final Test Report of Integrated System	Jul. 1976*		
3.	SYNCTRAN System - Final Design Report	Sep. 1977*		
<u>Citizer</u>	n Alarm System			
4.	"Improved Citizens Alarm System - Final Report," Compu-guard Corporation	Jun. 1976		
5.	Integrated Citizen Alarm System - Operations Development Report	Jul. 1976*		
Speake	r Identification System			
6.	"Semi-Automatic Speaker Identification System (SASIS) Final Report," Rockwell International Report No. C76-96/501	Apr. 1976		
Cargo	Security System			
7.	Final Report - Brassboard Cargo Security System	Jun. 1976*		
Blood	Blood and Bloodstain Analysis			
8.	Electrophoresis Interim Methodology Development Report	Jan. 1977*		
9.	Blood Data File Report	Jul. 1977*		
<u>Contro</u>	l of Illegal Use of Explosives			
10.	Explosives Vapor Characterizations Study Final Report	Jun. 1976*		
11.	Reassessment Study Report	Apr. 1977*		
12.	Two-Photon Explosives Detector Feasibility Report	Dec. 1976*		
13.	Laser Optoacoustic Explosives Detector Final Report	Sep. 1977*		

Police	Patrol Car System Improvements	Delivery Date
14.	''Summary Report - Police Patrol Vehicle Systems Improvement Program Prototype Vehicle''	Jul. 1976*
15.	Vehicle Locator Final Report	Jul. 1976*
16.	Dual Mode Performance Final Report	Jul. 1976*
17,	Alternate Body Concepts Final Report	Jul. 1976*
18.	Field Test Report	Sep. 1977*
Detect	ion of Gunshot Residue	
19.	"Detection of Gunshot Residue - Development Plan," Aerospace Report No. ATR-76(7913)-3	Jun. 1976*
20,	Analysis Report - Particle Analysis Method	Feb. 1976
21.	Final Report on Characterization of Gunshot Residue	Sep. 1977*
22.	Report for Detection of Organic Constituents	Apr. 1977*
23.	Report on Characterization of Handblank Particles	Sep. 1977*
Analys	is	
24.	Survey and Assessment of Arson	Jul. 1976*
25.	A Study of Integrated Location Systems	Jun. 1976*
Citizer	n Alarm System Field Test	
26.	Pre-test Evaluation Report	Feb. 1977*
Body A	Armor Field Test	
27.	Interim Evaluation Report	Jun. 1976*
28.	Field Test Final Report	May 1977*

* Expected Delivery Date

APPENDIX III PROPOSED PAPERS

Paper #1

Title: Performance of the Semi-Automatic Speaker Identification System With Channel and Noise Filters

Expected Completion Date: November 1976

- Audience: (1) Speech scientists and analysts
 - (2) Voiceprint examiners (International Association of Voice Identification)
 - (3) Acoustical Society of America
 - (4) Institute of Electrical and Electronics Engineers (IEEE) group on Acoustics, Speech and Signal Processing

Paper #2

Title: Computer-Aided Speaker Identification Using Dynamic Features of Speech

Expected Completion Date: January 1977

Audience: (Same as for Paper #1)

Paper #3

Title: Operational Analysis of a Local Criminal Justice System

Expected Completion Date: August 1976

Audience: (1) Operations Research Society of America (2) IEEE group on Systems, Man and Cybernetics

Paper #4

Title: Policy Alternatives to Criminal Justice Administration

Expected Completion Date: September 1976

- Audience: (1) American Society of Criminology
 - (2) International Criminal Justice Association
 - (3) National Council on Crime and Delinquency

Paper #5

Title: Cost-Effectiveness Considerations for an Integrated Citizen Alarm/Vehicle Location System

Expected Completion Date: August 1976

Audience: Carnahan Conference on Electronic Crime Countermeasures

Paper #6

Title: The Potential of Forensic Science in Crime Control

Expected Completion Date: October 1976

- Audience: (1) American Society of Criminology
 - (2) International Association for Identification
 - (3) American Chemical Society group on Forensic Science

Paper #7

Title: The Effects of Daylight Savings Time on Crime

Expected Completion Date: August 1976

Audience: (Same as for Paper #4)

Paper #8

Title: A Statistical Relation Between the Incidence of Arson and the Prosecution of Arsonists

Expected Completion Date: September 1976

Audience: (1) American Society of Criminology

- (2) International Association of Arson Investigators
- (3) National Association of Fire Investigators

Paper #9

Title: Methods of Arson Reduction

Expected Completion Date: September 1976

- Audience: (1) International Association of Arson Investigators
 - (2) National Association of Fire Investigators
 - (3) Fire Marshals Association of North America
 - (4) National Fire Protection Association

Paper #10

Title: Scientific and Technical Aids for Arson Investigation

Expected Completion Date: September 1976

Audience: (1) International Association of Arson Investigators

- (2) American Academy of Forensic Sciences
- (3) American Chemical Society group on Forensic Science

Paper #11

Title: Explosives Vapor Characterization Studies

Expected Completion Date: September 1976

Audience: American Chemical Society group on Trace Vapor Detection



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