REPORT BY THE



Comptroller General

OF THE UNITED STATES

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New Alien Identification System--Little Help In Stopping Illegal Aliens

The Immigration and Naturalization Service is developing the Alien Documentation, Identification and Telecommunication system to detect aliens who attempt to enter the country using counterfeit or altered identity cards, but the system is plagued with problems.

More important, even if it operates as designed, the system would not greatly deter illegal entry. A new alien identification card is needed, but GAO questions the need for system automation and suggests the machine-readable features of this system may be too sophisticated.



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COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20548

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The Honorable Elizabeth Holtzman
Chairwoman, Subcommittee on Citizenship,
Refugees, and International Law
Committee on Judiciary
House of Representatives

Dear Madam Chairwoman:

This report, in response to the Subcommittee's request, discusses the limited impact the Alien Documentation, Identification and Telecommunication system will have on illegal entry into the United States, and problems experienced by the Immigration and Naturalization Service in implementing the system.

The report contains recommendations to the Attorney General for reducing the cost of the system. The Justice Department disagreed with our recommendations.

As arranged with your office, we are sending copies of this report to other congressional committees, individual Members of the Congress, and other interested partigs.

Comptroller General of the United States

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COMPTROLLER GENERAL'S REPORT TO THE SUBCOMMITTEE ON IMMIGRATION, REFUGEES, AND INTERNATIONAL LAW COMMITTEE ON THE JUDICIARY HOUSE OF REPRESENTATIVES NEW ALIEN IDENTIFICATION SYSTEM--LITTLE HELP IN STOPPING ILLEGAL ALIENS

DIGEST

The Alien Documentation, Identification and Telecommunication system is primarily meant to prevent aliens from using fraudulent identity cards to enter the United States. By using a machine-verifiable card with features making it hard to tamper with, the Immigration and Naturalization Service hopes to make detecting illegal entry easier. Another feature will be a central data base containing additional data which Federal inspectors can use to question aliens.

However, even if it operates as it should, the system will do little to control the entry of illegal aliens. Estimates of illegal aliens in the country range from 2 to 12 million, but most persons entering illegally do not use admission documents.

Immigration and Naturalization Service statistics for fiscal years 1974 through 1977 show that 89 percent of the deportable aliens apprehended entered without inspection. Only part of the remaining 11 percent entered with fraudulent cards. (See p. 5.) Most illegal aliens simply cross the border between inspection points.

There is little likelihood that this means of illegal entry can be controlled. The border area between land ports of entry extends approximately 8,000 miles. For both political and cost reasons, the United States is unlikely to seal the borders. Hence the new system, for the most part, will simply be an inconvenience for aliens who would illegally enter anyway. (See p. 6.)

Projected development and operating costs for the new system are \$67 million through 1984 (the date the system cards are to replace existing ones). But the system is a long way from completion.

When system development began, the Service planned to replace existing cards within 3 to 4 years. In December 1977, the Service projected a 7-year replacement schedule. However, as of October 1978, planned daily and total card production had not been met and significant production problems existed. It is questionable that the 1984 card replacement target date will be met. (See p. 13.)

Production problems have included:

- --Inability to develop computer software necessary to meet production goals. (See p. 16.)
- --Inability to produce a functional camera for use at ports of entry to photograph data for use on the front of the system card. (See p. 17.)
- --Problems with production processes which forced a move to another facility.) (See p. 19.)

There is a need for an improved alien identification card. Current documents can be easily counterfeited or altered, and some people attempt to do so. Also, simply standardizing the 17 versions of alien registration cards should help Federal inspectors.

The new cards will have machine-readable coded information on the back. They will also have high quality, fine line engraving with a photograph of the alien incorporated in such a manner as to preclude substitution. Special plastic laminates will be fused to the card surface. These and other features will improve the inspectors' manual inspection capability to such an extent that additional machine verification may be of limited value.

The machine verification feature could cause problems at ports of entry, particularly along land borders. Because of the large number of persons entering the country at these points, use of the machines to verify many cards would slow the traffic flow. However, elimination

of the machine verification may require redesign of the card to delete the machine-readable features.

There are other problems with the system. Only limited progress has been made in developing a reader, and the alien central information data base is incomplete because of programming and other problems. The Service maintains that the card should have a 10-year life, but sufficient testing has not been performed to determine card life. (See p. 27.)

GAO concludes that system automation has not been justified and that the card with machine verification features may be too sophisticated. In addition, the fraud-resistent card will not be effective until it replaces existing cards. Whether the 1984 replacement target date will be met is questionable.

RECOMMENDATIONS

The Attorney General should direct the Commissioner of the Immigration and Naturalization Service to

- --cease further development of the automated verification portion of the Alien Documentation, Identification and Telecommunication system and
- --determine the cost effectiveness of retaining the machine verification features of the identification card.

AGENCY COMMENTS

The Department of Justice acknowledges that difficulties have been encountered during development stages of the Alien Documentation, Identification and Telecommunication system. It contends that system development should proceed on its present course of action. GAO does not agree. (See pp. 30 to 34 and app. I.)

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ABBREVIATIONS

ADIT	Alien Documentation, Identification and Telecommunication system
BEP	Bureau of Engraving and Printing
ВУОР	bring your own picture
GAO	General Accounting Office
INS	Immigration and Naturalization Service
OCR	optical character recognition
TECS	Treasury Enforcement Communications System

CHAPTER 1

INTRODUCTION

In response to the April 20, 1978, request of the Chairman, Subcommittee on Immigration, Citizenship, and International Law, House Committee on the Judiciary (see app. I), we reviewed the Immigration and Naturalization Service's (INS') new system for documenting legal aliens. The system, called the Alien Documentation, Identification and Telecommunication (ADIT) system, is intended to solve a part of the Nation's illegal alien problem by attacking the fraudulent use of alien identification documents to obtain U.S. entry.

In recent years there has been increased entry of illegal aliens into the United States—many more than can be apprehended. No reliable estimates are available on the total illegal alien population, although it is thought to be between 2 million and 12 million.

ADMINISTRATION OF IMMIGRATION LAWS

The Immigration and Nationality Act (8 U.S.C. 1101 et seq.) prescribes the conditions for admission and stay of immigrant and nonimmigrant aliens. The act authorizes the Attorney General and the Secretary of State to administer and enforce the immigration laws. These laws are primarily carried out by INS; the Visa Office of the Bureau of Security and Consular Affairs, Department of State; with assistance from the Customs Service, Department of the Treasury.

INS is required by law to determine the nationality of each person seeking admission and, if the person is an alien, to determine his or her eligibility for admission; prevent illegal entry into the United States; and apprehend and remove those who entered the country surreptitiously or who violate the terms of lawful admission.

A passport and/or visa is sufficient documentation for aliens seeking nonpermanent entry into the United States. However, to facilitate the nonpermanent entry of Canadians and Mexicans, INS issues a nonresident alien border crossing card (I-185 and I-186 respectively). For aliens eligible to reside permanently in the Unites States, INS issues a certificate of registration or an alien registration receipt card (I-151 or I-551).

The Visa Office, through the overseas U.S. consulate offices, screens foreigners' qualifications for entering the United States.

The Customs Service is responsible for preventing the improper entry of goods and assessing duty and taxes on imports. Because of its presence at ports of entry, Customs assists INS in performing its inspection functions. (See ch. 2).

ALIEN DOCUMENTATION SYSTEM OVERVIEW

In October 1973 INS developed a concept for integrating an automated information system with the alien identification card. At about the same time, INS and the Visa Office jointly contracted with the MITRE Corporation to study and define the requirements for equipment and procedures that could (1) prevent the use of altered and counterfeit entry documents and (2) assist inspectors in determining an alien's eligibility for admission to the United States.

In early 1974 INS directed MITRE to further investigate the concept of a secure, machine-readable, entry document—a document which essentially stores all the data that is used to authenticate it and the identity of its holder. In a December 1974 report, MITRE proposed document designs for the nonimmigrant visa and the alien identification card. From the INS concept and MITRE work grew the ADIT system. This system is still under development.

ADIT system concept

The alien documentation system concept includes two related objectives:

- --Redesign the INS-issued identification cards to improve their resistance to fraud, and develop the capability to manufacture and issue the new cards.
- --Design and use an automated information processing and display system to support port of entry inspection functions that would further reduce fraud (see ch. 2).

Estimated cost of ADIT system

The ADIT system was originally estimated to cost about \$13 million. An INS official stated that because of the changing nature of the system it is difficult to project its total cost. However, INS has estimated the cost of the system through 1984 to be about \$67 million. This estimate consists of the following:

	Millions
Amount spent and appropriated through fiscal year 1979	\$ 24.0
Amount requested in fiscal year 1980 budget	7.0
Estimated amount for automated validation and online inquiry equipment	8.7
Estimated amount for card production for 1981 through 1984	27.0
Total	\$ 66.7

CHAPTER 2

SHOULD THE ALIEN DOCUMENTATION SYSTEM

BE COMPLETED?

The ADIT system was designed to support one of INS' primary missions—preventing the illegal entry of aliens into the United States. The proposed system will do little to solve this problem.

The ADIT system would detect those aliens who attempt to enter the country fraudulently by using counterfeit or altered identity cards. However, only a small percentage of fraudulent entries are made in this manner. Most illegal entries into the country are made between check points, thereby avoiding the need for entry documents.

The projected cost of the system through fiscal year 1984 is \$67 million. However, the total cost of the system may exceed this estimate. While we believe that the fraudulent use of identity cards is a problem INS needs to confront in controlling the illegal alien problem, the proposed system may be too sophisticated and costly in relationship to the benefits to be derived.

USE OF FRAUDULENT ALIEN DOCUMENTS INFREQUENT

A variety of methods are used by aliens to illegally enter the United States. Among these are entering without inspection between ports of entry, making false claims to U.S. citizenship, using fraudulent alien identity documents, or using fraudulent documents to obtain visas. Although several of these methods involve the use of fraudulent documents, available information indicates that most aliens attempting to enter the United States use other methods.

There is no reliable data showing the present number of illegal aliens or how they entered the United States. INS believes that most illegal aliens either entered between ports of entry, thus avoiding inspection, or entered using a valid entry document and subsequently violated a condition of entry. The table below shows that between fiscal years 1974 and 1977 illegal aliens apprehended who entered between ports of entry averaged approximately 89 percent of total apprehensions.

Apprehensions by INS

	FY 74	FY 75	<u>FY 76</u>	FY 77	Average percentage (FY 74-77)
Deportable aliens ap- prehended	788,145	766,600	875,915	1,033,427	7 100
Entry without inspection	693,084	667,689	773,460	939,179	89
All other types	95,061	98,911	102,455	-94,248	.11

That most aliens illegally entering the country do not use identity cards is supported by a 1976 INS study which concluded that of the 545,710 projected attempts to enter the United States fraudulently, only 5 percent, or 28,133, were through the use of fraudulent alien registration cards.

The situation with respect to the use of border crossing cards is somewhat similar. INS statistics show that in fiscal year 1975, 72 percent of the 24,377 aliens denied entry at the 12 major land ports of entry had valid border crossing cards and were denied entry for some other reason.

The border area between land ports of entry extends approximately 8,000 miles and is relatively unpatrolled. Border Patrol statistics from fiscal years 1974 to 1977 showed that annually an average of less than 2,300 aliens that it apprehended entered the United States using a fraudulent alien registration card, although the total number of illegal aliens apprehended ranged from 597,000 to 813,000. Although these apprehension figures seem impressive, officials estimate that for each person apprehended while illegally entering the country, at least two others manage to get through. Border officials have said that the number of persons who illegally cross the border without apprehension may be substantially higher.

The contractor that assisted in the design of the ADIT system and some INS officials agree that the successful implementation of the ADIT system may result in an increasing number of aliens attempting to enter the United States without inspection or by falsely claiming U.S. citizenship.

For both political and cost reasons, the United States is unlikely to seal the borders. Hence, the system, for the

most part, will simply be an inconvenience for the aliens who would enter the country illegally.

Other means of illegal entry

Two other means of entering the United States which may involve the use of false documents are (1) the immigrant and nonimmigrant visas and (2) claims to citizenship. Applicants for visas may use fraudulent documents, such as spurious diplomas, employment letters, bank statements, and marriage and birth certificates, to support their applications. The visas in these cases are genuine but fraudulently obtained. Establishing the facts concerning these frauds is difficult. INS had no accurate statistics regarding this type of fraud.

False claims to U.S. citizenship are increasingly being used as a method of entering the United States. Although most claims are made orally, a large number are supported by documents.

INS officials have reported that counterfeit and altered birth certificates are used to support false citizenship claims. They noted that counterfeiting of birth certificates is aided by the fact that forms and authenticating seals vary widely in the United States; over 1,000 different forms may be found of presently issued certified copies. INS officials believe they detect only a small portion of the illegal aliens posing as citizens. The ADIT system will have no impact on these latter two methods of entering the United States illegally.

IMPROVED ALIEN IDENTIFICATION CARD NEEDED

The multiplicity of alien identification cards in use and the lack of quality control in producing and issuing the cards has contributed to the ease of altering or counterfeiting such documents thereby adding to the difficulty of INS' inspection process.

The identification card being developed for the ADIT system should be difficult to counterfeit, and ADIT card issuance may be helpful in reducing the number of aliens who entered the country legally and then violated a condition of entry.

Since 1941 INS has been issuing alien registration cards to all aliens provided permanent residence status in the United States. This identification card, also known as the I-151 or "green" card, has hidden features to increase its

level of security. Each time the card was compromised a new security feature was added; however, old versions of the card were not replaced. Consequently, 17 versions of the identification card, which serve to validate an alien's legal status, are currently in use.

These 17 versions were produced at over 250 different ports of entry and district offices with little or no quality control. These various versions, and differences in the quality of production, have made it difficult for inspectors, investigators, and border patrolmen to identify fraudulent alien cards and have made counterfeiting and altering easy. In our August 30, 1976, report, "Smugglers, Illicit Documents, and Schemes Are Undermining U.S. Controls Over Immigration" (GGD-76-83), we said

"The alien registration receipt card is easily counterfeited by means of an offset printing press. Although counterfeits have not been detected which overcome all the security devices built into the form, many are of sufficient quality to get by cursory inspections."

Incentives exist for counterfeiting or altering alien registration cards. In addition to signifying that the alien is legally entitled to be in the country, the card identifies the alien as one who has been granted permanent resident status. Permanent resident aliens are eligible to receive most of the benefits accorded a citizen; for example, public assistance payments, free education for children, etc.

Standardizing the 17 versions of the green card, improving the production and issuance of cards through improved quality control, and providing inspectors with additional information to aid in determining the validity of the card and card holder should minimize the problems currently being experienced. Production of new alien identification cards, as part of the ADIT system, was intended to include these features. However, problems in card production may reduce the effectiveness of the card as a secure identity document.

ADIT card issuance may be helpful in reducing the number of aliens who violated entry conditions

One general grouping of the present illegal alien population is composed of persons who entered the country for a temporary period and then violated a condition of

entry, such as overstaying their time of lawful admission, exceeding the mileage limitation, or working. The Mexican and Canadian border crossing cards are documents used to enter the United States legally for a temporary visit.

The Mexican border crossing card is issued to Mexican citizens and authorizes visits to the United States within 25 miles of the border for periods up to 72 hours. The card does not authorize employment and is valid until revoked.

The Canadian border crossing card is issued to Canadian citizens. The card does not impose any mileage or time limits, does not authorize employment, and is valid until revoked.

The new identification cards could reduce the number of aliens who are in violation of their condition of entry. First, the new cards could reduce the possibility of forgery for fraudulent use. Second, in the issuing process, if INS were to develop effective procedures for screening current card holders, it would be able to reclaim cards from aliens who are no longer eligible for the benefit.

SYSTEM AUTOMATION MAY BE OF LIMITED USE

In addition to providing a new fraud resistant alien card, the ADIT system is to include an automated verification capability. The need for this capability has not been adequately justified nor has its addition to the current inspection system been adequately planned. The benefits to be derived from such a system may be limited.

Overview of inspection process

Although many types of entry documents are presented to inspectors at ports of entry, the resident alien card and border crossing card are presented most frequently at land border ports, while at airports most aliens use passports to establish their citizenship and identity.

The current inspection process is divided into primary and secondary. Primary inspection is a relatively brief inspection which must be undergone by everyone who wishes to enter the United States. At land border ports, this inspection is performed by INS or Customs inspectors. It is primarily a manual process in which the inspector utilizes his training, experience, and judgment to determine the authenticity of the entry document and the identity of the individual. Treasury

Enforcement Communication System (TECS) 1/ terminals are located at primary automobile lanes to perform license plate checks.

An individual to be questioned further is referred to the secondary inspection area. Although an inspector can spend more time questioning an individual, he still must depend on his judgment in assessing an individual's right to enter the country. No automated equipment is available to assist INS inspectors at secondary inspection areas. Approximately 3 percent of all individuals seeking entry are referred to secondary inspection.

At airports, INS and Customs occupy separate areas with each service performing its respective inspection functions. Until recently the only device used by INS to determine if an individual should be questioned further was the INS lookout book—a listing of persons for whom a special alert has been posted—which the inspector had to check manually.

In early 1978, INS and Customs began an experiment to facilitate air passenger traffic, eliminate duplication, and combine enforcement tools. The intent was to determine the effectiveness of combining tasks in primary lanes and performing one-stop processing of U.S. citizens by Customs, while all noncitizens would continue to be processed by INS. At selected airports, TECS terminals were installed in INS primary and secondary areas. The INS lookout book was incorporated into TECS. INS inspectors can now automatically check the lookout listing at these airports.

Inadequate planning and questionable justification of automated verification capabilities

Plans for the ADIT system provide for automatic verification capability for both primary and secondary inspections. These plans appear to have been formulated without adequate consideration of all pertinent factors. INS has committed substantial resources to the production of a machine-readable identification card, but has made only limited progress in resolving questions regarding the hardware needed to take advantage of machine-readable features of the card.

^{1/}A Customs automated telecommunications network.

Although ADIT's automated inspection system is intended to aid inspectors in identifying fraudulent documents, INS has made improvements to the card which provide additional information needed for manual inspection. INS contends that the manual aspect of the ADIT system is the most important component, and the automated inspection system cannot be substituted for a thorough inspection or interrogation of a card holder by an inspector.

Primary inspection automation study should have been performed earlier

INS wanted its alien documentation system to include an identification card which was machine-readable so that its authenticity could be verified automatically at ports of entry. After a study of different machine reading techniques, MITRE tentatively concluded that the optical character recognition (OCR) technique would serve INS' purpose.

As envisioned at that time, the back of the ADIT card would have a magnetic stripe bearing the alien's identification number which could be used to verify the accuracy of the number printed on the front of the card. In addition, the card was to contain specially coded numbers which could be used with automated readers to determine the authenticity of the card.

A test of several automated card readers was held at the El Paso port of entry. This test was limited to verifying whether the OCR and the magnetic stripe reader could successfully read the alien registration number. No attempt was made to read the coded information printed on the card during the inspection process. Therefore, this feature of the cards has never been tested in an operational environment. A subsequent decision to eliminate the magnetic stripe from the ADIT card has rendered the results of these tests somewhat meaningless.

In 1976, despite the fact that no studies were performed to determine the cost and impact of automatic inspections on border traffic, the configuration of the primary inspection area, and current inspection procedures and methods, INS proceeded with the development of a machine-readable identification card.

Since its commitment to OCR reading equipment, INS has made little progress in obtaining answers to these questions and in developing or selecting a reader suitable for its needs.

Large numbers of persons enter the United States through ports of entry, particularly those on the land borders. INS personnel agreed that the addition of any function to the inspection process, such as reading 100 percent of the ADIT cards, would tend to cause greater backups and have an impact on traffic flow. This would contradict present policy to facilitate traffic flow and reduce the delay being experienced by people seeking iU.S. entry.

In December 1978 INS and Customs undertook a joint study of six southern land border ports to determine how ADIT and TECS could best complement each other in a port of entry environment and what type of automated tools would aid inspectors in performing their job. The study was to consider

- --what physical changes to the port of entry would be needed for introduction of automated equipment,
- --how primary inspection procedures would need to be modified, and
- --what effect additional automated equipment would have on the existing requirements for the use of TECS land border terminals.

According to INS, the prime objective of this study is to develop a single card reader which would automatically check lookout lists from all enforcement agencies. Another objective is to determine what type of automated equipment would be best suited for each port on the basis of its unique characteristics.

A study of this type should have been performed before the ADIT card design was established and production undertaken. Conceivably, the study could show that the automated card reader is not beneficial, that limitation on the time for making inspections would affect its use, or that the use of existing Customs equipment would be feasible.

Widespread automation of secondary inspection not adequately justified

INS planned to install, nationwide, on-line terminals at ports of entry. This equipment would enable inspectors to access INS' master index and ADIT data base files to obtain information for interrogating persons referred to secondary inspection. The total cost of this automated equipment was estimated to be \$2 million.

Information furnished by INS showed that:

- --80 percent of the terminals were to be installed at ports handling only one-third of the documented alien traffic. Many of these were at ports with estimated usage of fewer than 10 transactions a day.
- -- The majority of terminals was to be located at northern border ports.
- --Only 20 percent of the terminals were to be located at southern border locations.
- --Approximately 24 percent of the terminals were to be located at airports.
- --Sites were planned outside the United States which would not have communication lines to the master file.

The following information cast considerable doubt on the wisdom of installing terminals nationwide on the basis of the above plan.

- --Only about 3 percent of primary traffic is referred to secondary inspections. In addition, the majority of alien traffic occurs at a limited number of ports.
- --Canadian citizens are not required to show documentation to enter the United States; therefore, the need for automated inspection tools would be limited at northern land border ports.
- --Most alien land border crossings occur at the southern border crossings which have the highest incidence of alien entry document abuse.
- --Most aliens arriving by air possess a nonimmigrant visa. If an individual possessing such a document is referred to secondary inspection, the inspector must interrogate the individual only on the basis of the documents as no additional information would be available in the master index or ADIT data base.

In addition, INS did not (1) perform adequate tests to determine how effective this system would be in preventing illegal entry or (2) consider joint use of communication networks and equipment already operational.

After bringing these matters to INS' attention, we were informed that it is considering installing fewer secondary terminals. Experience gained with these terminals will be used to determine if terminals are needed.

Also, INS and Customs began conducting a joint network study to determine whether coordination of communication needs is feasible. The results of this study will help determine the amount and type of ADIT equipment needed.

PRODUCTION OF ALIEN IDENTIFICATION CARDS--ACHIEVEMENT OF GOALS QUESTIONABLE

Benefits contemplated from the use of the new fraudresistant identification card cannot be realized until it replaces all existing cards. Until then the existing easy to counterfeit cards will provide an easy means of entering the country illegally. When system development began, INS planned to replace 4.5 million outstanding alien registration cards within 3 to 4 years. By December 1977 INS determined that a longer, 7-year replacement schedule was more realistic. To meet the replacement schedule, INS card production would have had to average 3,300 a day and 825,000 cards would have had to been issued by October 1978. However, as of that date, the production rate was only 2,000 cards a day and only 160,000 cards had been Problems having a significant impact on card production capabilities still existed. Therefore, the 7-year replacement schedule will not be met unless the production rate increases substantially.

Significant decisions affecting the card production process were made to meet commitments made to the Congress by INS rather than on the basis of a formulated plan for implementing card production. This approach has created problems with production equipment, facilities, and data collection which have increased costs and resulted in program delays.

Overview of ADIT

The principal justification for the ADIT system was the need for a fraud-resistant identification card which would help eliminate the use of fraudulent documents to obtain entry into the United States. The identity measures and security features in the card were to include

- --a very high quality with fine line engraving,
- --a high resolution color photograph of the alien incorporated in such a manner to preclude successful photo substitution,
- --a high quality fingerprint and signature of the holder,
- --special plastic laminants and controlled heat and bonding techniques to be used in fusing the laminant to the card surface, and
- --encrypted data which could be used to determine its validity.

If the system automation is not developed, card features incorporated for machines may not be needed. For example, machine-reading capability was needed to effectively use the encrypted card back data. Without card readers, encrypted and OCR-readable data could be eliminated from the ADIT card design.

The ADIT system was, in part, designed to provide the capability for improved card issuance by establishing a central card production facility equipped with up-to-date automated devices and employing the latest quality control measures to ensure product reliability. ADIT card production, considered a state-of-the-art process, includes the use of minicomputers, photography, and automated card fabrication equipment.

The ADIT card issuance system began in April 1975 when INS contracted with the MITRE Corporation to design specifications for producing and issuing a fraud-resistant, machine-readable, alien identification card. To help fulfill its contractual requirements, MITRE established a prototype card production facility.

In 1976, to produce cards quickly, INS made important decisions to commit to full-scale ADIT card production without a logical implementation plan. In order to proceed with operational card production, MITRE's prototype production facility operations were transferred to the Bureau of Engraving and Printing (BEP), Washington, D.C. Contracts were awarded to Technicolor Graphics Services, Inc. for the

complete operation of the card production facility and to Macro Industries, Inc., for a camera system which would photograph, in one operation, a picture of the alien and card applicant data. Limited card production began in March 1977.

This commitment to full-scale production was made without a trial period for testing equipment and software capabilities. Problems developed and, as a result, excess costs have been incurred and card production goals have not been met.

Important considerations in selection of card production facility

Driven by its desires to begin card manufacture at an early date, INS selected a card production facility, although it had not yet fully tested a camera system or card production equipment and had not completed its demonstration test.

Despite the above-mentioned impediments to a logical and systematic approach to establishing a card production facility, late in fiscal year 1976 INS initiated a search for a facility where secure card production operations could be quickly established. While working with BEP on ADIT card artwork and design, INS became aware of space available there. BEP agreed to provide space, security, and some additional services on a reimbursable basis.

INS issued to BEP a purchase order in the amount of \$800,000 for the set-up costs and other services to be provided for the period September 1, 1976, through September 30, 1977. Reimbursement to BEP for facility set-up costs was eventually authorized up to a maximum of \$650,000.

As discussed on page 18, by May 1977 INS was dissatisfied with the performance of its camera system contractor and was considering alternatives to data collection at ports of entry. With the camera contract termination, INS adopted a new data collection procedure. This procedure created the need for additional centralized personnel and equipment which INS felt could not be accommodated in the space it had at BEP. In February 1978, with less than 1 year of card production activity and expenditures of over \$500,000 in sunk costs, INS notified BEP of plans to phase out the card manufacturing process at BEP and concentrate all card manufacturing operations in another facility (see pp. 19 to 20).

Use of unproven and inappropriate equipment and software has delayed card production and increased cost

INS' hasty decision to contract for an unproven camera system and to use equipment and software intended for demonstration operations has necessitated a number of changes in card production procedures and operations. These changes have delayed production and increased the cost of the ADIT system.

Limited card production began at BEP during March 1977, with production reaching only about 400 cards a day by August. Because of the hardware limitations, it has been necessary to install additional production hardware.

MITRE, at the request of INS, developed prototype (experimental) software as an interim measure to get ADIT card production underway. MITRE believed its extended use would be detrimental to achieving card production goals because the software was not designed to handle the desired volumes. Long delays in developing production software have forced continued prototype software use, resulting in inefficient data processing support. Costs have been incurred to maintain prototype software which will no longer be useful when production software is operating.

Equipment and software not suited for volume card production

To start producing cards quickly, INS used demonstration computers as well as prototype software not intended for volume card production. From the outset, INS had been told the computers were not suitable to support volume card production, nevertheless, it chose to use them. Because of the continued use of demonstration hardware and prototype software, increased costs have been incurred, data processing support to card production is inefficient, and achievement of volume production goals has been hampered.

In order to produce cards to demonstrate the ADIT concept, MITRE established an experimental card production facility. Minicomputers to demonstrate inspections were installed at El Paso, Texas, the site for the demonstration tests.

By November 1976, MITRE had prepared specifications for a proposed computer system to support volume card production of 8,000 cards a day. These specifications called for a minicomputer having greater capacity than those used for the El Paso demonstration. INS wanted to begin card production quickly, and officials thought that the quickest way to get started was to use the minicomputers from the El Paso demonstration rather than soliciting proposals for a new computer system. Although MITRE informed INS that these minicomputers were not suitable for volume card production, INS officials thought that the computers could be modified to achieve the desired capacity and therefore moved the computers from El Paso to BEP.

Failure of camera system resulted in significant production and procedural changes

The ADIT card front is a single photographic print of the rightful holder's portrait photograph, fingerprint, signature, and other data. INS hoped to use a camera at ports of entry which would, in one operation, produce such a print. Although this procedure was thought to be advantageous, INS terminated its contract with the camera supplier because acceptable cameras were not delivered in a timely manner. This action produced a need for new data collection procedures and adversely affected the adequacy of production facilities and equipment.

During ADIT system development, emphasis was placed on the card front photograph. INS tried to develop a photo capture technique which would provide it with an anticounterfeit feature. Photo substitution was a major concern and INS believed that selecting a photo technique not available to potential counterfeiters would overcome this problem.

In April 1976 numerous camera manufacturers participated in INS' presolicitation conference which was intended to give industry an opportunity to learn about the card production process and to offer their suggestions. The general performance requirements for the photo capture system were to provide the capability for nontechnically skilled personnel to acquire the required photograph rapidly and repeatedly in an open public environment.

INS wanted to quickly award a camera contract and, in August 1976, INS issued a request for proposal for an ADIT camera system and card production facility equipment. Despite the fact that the photo capture technique provided by the Macro camera system was never thoroughly tested and INS had not reached firm decisions regarding the camera design, on September 23, 1976, 7 days before the end of the fiscal year, a contract was awarded to Macro Industries, Inc.

Macro was selected because it submitted the lowest offer. Because of the haste with which the contract was awarded, there was no time to negotiate with vendors, perform the required preaward survey of financial and operational capabilities, or evaluate contractor cost and pricing data. After the contract was awarded, INS and Macro agreed to modifications in camera design and delivery dates. Some changes were requested verbally by ADIT technical personnel and later formalized in contract modifications.

The contractor repeatedly missed the revised delivery dates, and the six cameras which were delivered continually malfunctioned. Faced with this situation, ADIT program officials began considering alternative methods for collecting port of entry data.

On June 6, 1977, INS terminated its contract with Macro for default. Macro appealed this decision and on November 1, 1977, it was converted to termination for convenience of the Government. On October 16, 1978, INS negotiated a settlement with Macro amounting to approximately \$290,000.

Problems with alternative photo capture techniques being corrected

The termination of the camera system contract resulted in the need to establish an alternative photo capture capability. INS chose the bring-your-own-picture (BYOP) procedure. Other alternatives were rejected as too costly or time-consuming. Because this procedure had not been adequately tested, problems have arisen in its implementation; however, actions are being taken to correct these problems.

In May 1977, just 1 month before the termination of the Macro camera contract, the ADIT program manager reported to INS management that no alternatives to the Macro camera had been totally tested. With the termination of the camera contract, INS wanted an alternative photo capture technique implemented in the least possible time. It was felt that the simplest technique to implement would be the BYOP procedure. Other alternative procedures, such as modifying the Macro-supplied cameras or obtaining cameras from another supplier, were discounted as being too costly and/or time-consuming. INS believed that its commitment would not allow further delay of card production.

In presenting arguments for adopting the BYOP concept, the ADIT program manager pointed out that volume data typing,

photographing, and support of sophisticated camera systems would be eliminated in the field. This concept was adopted on July 1, 1977.

The BYOP procedures require the alien, when applying to a consulate for an immigrant visa, to furnish a current color photograph. This photograph, together with the alien's fingerprint, signature, and other pertinent data, obtained at the port of entry, is forwarded to a data assembly facility where the card front components are photographically combined to form the front of the ADIT card.

Although the collection of color photographs by consulates is an important part of the BYOP procedures, the U.S. Consulates were not notified of this requirement until May 1978—almost 1 year after the procedure went into effect. Consequently, INS has had to supply cameras and related support to about half of the U.S. ports of entry. INS and the State Department have taken action recently which should, according to an ADIT official, hasten compliance by the consulates in collecting the required color photographs.

Estimated savings resulting from move to Texas questionable

The adoption of the BYOP procedures resulted in a need for additional space at the card production facility. INS decided to obtain the additional space needed in Arlington, Texas. Later, INS decided to move all production operations to Texas. This move was justified, in part, by estimated savings that would result when compared to other options considered. These savings are of questionable validity.

Initial plans for expanding card production capacity not adopted

Additional space needed for card front data assembly, which became necessary with the adoption of the BYOP procedures, was not readily available from BEP. INS decided to establish a facility separate from BEP for (1) card applicant data assembly and (2) future border crossing card production. INS reasoned that a second facility would preclude mixing border crossing card and alien registration card production processes, provide backup capabilities, and provide for expansion.

INS considered locations in the Washington, D.C., and the Dallas, Texas, areas for the second facility. In August 1977, INS selected Arlington, Texas, for the data assembly

and border crossing card production facility. This location was selected because most border crossing card requirements are in the Southwest, and the Dallas area is centrally located.

Before INS had an opportunity to establish a second production facility, events caused it to rethink this decision. The factors influencing INS' decision were:

- --Delays experienced in obtaining approval from the General Services Administration to procure computer equipment for the second production site. Approval delays were based not on the duplication of facilities, however, but on INS' request that equipment be acquired on a sole source basis.
- --BEP's revelation that Treasury had expressed concern about continued INS use of BEP space.
- --The consideration that one production facility would be more efficient than two. Either BEP or the Texas facility could produce 5,000 cards per day, and operating two facilities would have provided extensive excess capacity.

INS prepared a cost analysis comparing annual costs of operating two facilities as originally planned, one facility in the BEP, or one facility in Texas. INS' analysis showed that operating one facility in Texas would be less costly than the other alternatives, although our analysis showed that cost savings do not exist. Of the options INS considered, operating one facility in BEP was not likely feasible because (1) space was limited and (2) sustained, long-term support from BEP was questionable. The most reasonable alternative for INS to consider was to operate one facility, although not necessarily in Texas. Other options INS could have considered, but did not, were to locate all production operations outside BEP, but in the metropolitan Washington area, or to locate card manufacturing in Washington and data assembly in Texas.

Cost savings do not exist

The INS cost analysis of consolidating production operations at the Texas facility estimated annual recurring production costs of \$1.7 million. INS estimated annual cost savings of approximately \$500,000 compared to the cost of operating two facilities—one in Texas and one at BEP—or

operating one facility in BEP. We believe the INS cost analysis was inaccurate in estimating cost to the Government, and, therefore, estimated cost savings do not exist.

As shown in the following table, we estimated the recurring costs in Texas to be \$370,000 higher than INS had estimated. The major difference in the estimates was that we estimated personnel costs to be higher. We used a rate base calculated by labor category whereas INS used an average rate base. Also, we added contractor labor overhead, general and administrative expenses, and fee.

Recurring Costs			roduction
	In Texa	<u>s</u>	
	(1NS (000)	(000)	Comments
Facility lease costs: Texas facility	\$ 32	\$ 46	(a)
Personnel costs	1,586	1,963	(b)
Other costs	47	27	(c)
Total	\$1,665	\$2,036	

a/Annual lease cost plus facility maintenance; contractor
general and administrative expenses, and fee.

We also adjusted the costs INS had estimated to operate one facility in BEP or to operate two facilities—one in Texas and one at BEP. The following table shows the adjustments we made to the costs of operating two facilities, since this was the most reasonable alternative. The major differences were in personnel costs, as explained above, and in BEP overhead. Since we wanted to determine whether there was a cost savings to the Government associated with the consolidation of ADIT card manufacturing activities in

<u>b</u>/Includes costs for contractor employees, labor overhead, general and administrative expenses, and fee. We used a rate base calculated by labor category, whereas INS used an average rate base.

c/Transmission line cost. Other costs INS included are constant for all options.

Texas, we included indirect costs in our analysis only to the extent they represented increased costs to the Government. Certain costs INS incurred at BEP for overhead and space rental were deducted from our cost estimates for producing cards at BEP because in the absence of ADIT card production these costs would be absorbed either by the Bureau or another Government activity. Although they represented increased costs to INS, they did not represent increased costs to the Government.

Recurring Costs To Operate Two Facilities--One At BEP And One In Texas

	<u>INS</u> (000)	(<u>GAO</u> (000)	Comments	
Facility lease costs: BEP space Texas facility	\$ 47 30	\$ - 46	(a) (b)	
Personnel costs	2,062	2,258	(c)	
Other costs	60	27	(d)	
	2,199	2,331		
Less BEP overhead included above		(339)	(e)	
Major recurring costs to the Government	\$ <u>2,199</u>	\$ <u>1,992</u>		

- a/No lease cost for this option because BEP space would be occupied by BEP employees.
- b/Annual lease cost plus facility maintenance, and contractor general and administrative expenses, and fee.
- c/Includes costs for BEP and contractor employees plus contractor labor overhead, general and administrative expenses, and fee. We used a rate base calculated by labor category, whereas INS used an average rate base.
- d/Transmission line cost. Other costs INS included are constant for all options.
- e/Pro rata overhead was deducted from our cost estimate because in the absence of ADIT card production this overhead would be absorbed either by BEP or another Government activity. Although it would represent increased cost to INS, it would not represent increased cost to the Government.

Comparing the costs we estimated to locate all card production in Texas with those we estimated to operate two facilities shows little difference in cost. Since our analysis included only major recurring costs, it did not consider INS and contractor personnel travel costs, costs to lease offsite office and warehouse space, and costs to

renovate card facility space. Most of these costs would apply to operating one facility in Texas. Consideration of these costs would further increase the financial benefits of operating two facilities.

Contractor personnel costs represent most of the cost to produce cards. In October 1978 INS and the card production contractor signed a renewal contract in which estimated personnel costs were \$3.3 million, substantially more than earlier estimates. The primary reason given for the increased costs was the need for labor-intensive card production, since production software was not yet operating.

Automated card production yet to be achieved

Although card production has been underway since March 1977 and the move to new card production facilities has been completed, planned card production automation has not yet been achieved.

Reaching ADIT card issuance goals is dependent on achieving sufficient automation support from the new card production system. Card production software (programs to operate card production computers) development has been delayed, and additional work is needed before the software will support high-volume production.

The production software system will replace the prototype software in use since March 1977. In May 1978 Computer Sciences Corporation, the contractor responsible for production software development, encountered a problem in the performance of its contract which delayed software development. Although the problem was apparently overcome, INS will not be assured of the system's operation until testing is complete.

Another condition exists which will prevent the production software from supporting high-volume production. An analysis done in September 1978 revealed that unless modifications were made, production software would support output of fewer cards a day than does the prototype software currently in use. ADIT officials believe that restructuring a computer program, along with additional computer equipment, should increase the software's capabilities from under 2,000 to between 2,700 and 3,600 cards a day. INS also plans another change to the system which ADIT officials estimate could take 4 or 5 months. The card production software will support production of significantly fewer than 5,000 cards a day until this change is completed.

Because production software support has been delayed and its performance is uncertain, the card issuance contractor was awarded a costly, labor-intensive contract to support card production. INS and the contractor have agreed to review the status of card production software and negotiate, if necessary, revised staffing levels and costs to produce ADIT cards.

Testing the new production system could negatively affect card production and increase backlogs at the card facility. In September 1978 there was a backlog of over 80,000 card applications, and average turnaround time to issue cards was over 70 days. Although production reports indicate turnaround time may have improved, the card issuance contractor estimated that during software testing, the card backlog would build to about 100,000 cards over whatever is in the system at the start of the tests. The contractor's plans were to gradually reduce the backlog by arriving quickly at 5,000-card-a-day capacity. Now, however, card production estimates for early 1979 are substantially below 5,000 cards a day, and the contractor's card issuance goal does not reach 5,000 until September 1979.

Implementation problems have affected data reliability and card security and durability

Inadequate policies and procedures have caused data base problems ranging from missing and duplicate records to problems in merging ADIT data with the Master Index file. Poor quality fingerprints and photographs are lowering card quality, standardization and, therefore, security. In addition, tests to determine card durability have not been performed, and changes in production may have limited the usefulness of an anticounterfeit feature.

Efforts to assure data base integrity will be costly and time-consuming

The ADIT data base is a collection of automated records, each of which contains personal information and card issuance history information on each alien applicant for an ADIT card. This information is stored on the INS Master Index file—a computerized information system designed to be a centralized index on resident aliens.

Data base integrity is crucial to the ADIT program's credibility because the data will be used in response to online requests from INS secondary inspection terminals planned for installation at ports of entry. A potentially embarrassing

situation could occur if an inspector, checking a legal alien with a valid ADIT card, were unable to validate the card because a data base record did not exist or was in error.

ADIT officials believe there are between 5,000 and 10,000 data record discrepancies relating to missing and/or lost ADIT records. Included in these discrepancies are approxiately 3,000 data records which were lost at the startup of the Texas facility. An ADIT official stated that resolution of data discrepancies would begin in November 1978. However, because of the magnitude of the problem, he estimated that no less than 4 months will be needed for resolution. In the future, the card issuance contractor will be responsible for maintaining the data base.

In addition to ADIT record discrepancies, the computer program designed to merge ADIT records with the Master Index file will not accept the ADIT records. As of October 1, 1978, only 52,000 ADIT records had been merged with the Master Index file, although approximately 160,000 ADIT cards had been issued. An ADIT official was unable to determine when this problem could be resolved.

In its final report to INS for fiscal year 1978, MITRE recommended that ADIT cards be released to the alien only after the alien's data associated with the card had been entered into the automated files. According to MITRE, only in this way can INS be sure that its data bases are accurate and that each ADIT card has a corresponding data base record.

Data collection problems lessen card quality and standardization

Adherence to prescribed data collection procedures is considered essential to the reliability of the entire ADIT system. In the absence of adequate tests to identify what data capture techniques are most effective and the number and kinds of errors made, INS instituted procedures to collect alien data. These procedures have not been effective.

Data collection forms are being submitted with poor quality photographs and fingerprints, data discrepancies, and other deficiencies which make the forms unusable or difficult to use without correction. When field data collection is unacceptable, the data collection form may be returned and the ADIT card applicant reprocessed.

To lessen the number of forms being returned to the field, INS relaxed its data quality standards for the card issuance

contractor. Nevertheless, as of October 1, 1978, almost 11,000 applications had been returned to ports of entry for correction. The current card facility practice is to relax the standards even further in order to make ADIT cards.

Instead of continued testing in one geographic area, as MITRE had proposed, INS has made successive and fragmented attempts to refine its nationwide procedures for collecting data. The effect of the changes has been to shift responsibility for most data items from INS port of entry to card issuance contractor personnel. For example, visa processing (contractor extracts ADIT data directly from visas) was to be fully effected nationwide by December 1978. It is too early to tell whether these interim changes will correct the problems.

Durability and life of ADIT card unknown

INS maintains the ADIT card should have a 10-year life. Life cycle (durability) testing of the current ADIT card, however, has been limited and is not being done on a regular basis. Therefore, the durability of the card is not known.

MITRE obtained suggestions from the Massachusetts Institute of Technology for various tests. The criteria for durability required the card to remain intact and to be humanand machine-readable. These tests became a general specification of the card system.

The card manufacturer conducts quality assurance tests which involve testing identification cards for their machine readability and positioning of internal features.

Some durability tests have been performed. However, according to MITRE, in June 1977 durability testing was abandoned because a relationship between the tests and card life had never been firmly established.

Changes have been made to the card design which, according to MITRE, have resulted in a shortening of the card life. In the absence of regular durability and life cycle tests, as well as standards to measure the test results, INS does not know the durability of the current card. As part of the current contract, INS required that the card production contractor develop a comprehensive study of ADIT card life expectancy on the basis of previously conducted tests, results of any additional tests developed, projected card life expectancy, and recommendations of additional tests deemed necessary and feasible.

Anticounterfeit features should be evaluated

Fingerprint Coding

One ADIT card feature intended to be an anticounterfeit device is the numerical coding on the card back of selected fingerprint patterns in the cardholder's fingerprint. MITRE studies of the data base representing the cardholder fingerprint patterns indicate that the original design for selecting patterns has been altered to the extent that it may make counterfeiting fingerprint patterns simpler. MITRE also recommended that INS investigate the operational use of the fingerprint coding scheme in the inspection process. It was MITRE's view that any limited use of fingerprint patterns would be offset by the labor-intensive and, therefore, expensive coding process.

Procedure changes approved in October 1978 allow the card production contractor to code more valid fingerprint patterns, and the contractor has reported improvements in the quality of fingerprint pattern coding. Under its current contract, the card production contractor is to research and specify modifications for upgrading the existing fingerprint coding systems.

Even if fingerprint coding quality can be restored, however, still unanswered is whether the cost of coding finger-print patterns is worth the benefits to be derived.

Encryption

To determine the authenticity of alien identification cards at ports of entry, INS decided to decode data on card backs which had been secretly coded or encrypted in the manufacturing process. Decoding the data would be done in conjunction with automatic port-of-entry reading—a planned inspection technique we have already questioned. Although INS has given the impression that secretly coding the card back data would help counteract card fraud, in our opinion this feature would do little.

Encryption is traditionally used to safeguard the transmission of sensitive information over communication lines. Messages being transmitted are scrambled through the use of a computerized mathematical formula (algorithm). The message recipient has the formula key which unscrambles the message to its original form.

INS encrypts data on the ADIT card backs. Nevertheless, this data can be seen in its encrypted form rather than

being completely hidden. The data contained on each line is scrambled using a computerized formula which derives a check digit or parity number which is the last number of each line. To inspect the card, the data is to be reprocessed through the computerized mathematical formula to determine what the parity number should be. If any data item were changed or altered, the card would not pass the parity check.

INS believes that counterfeiting would be prevented because data could not be successfully encrypted on a bogus card without access to the secret formula. In our opinion, encryption is of marginal value in deterring document fraud because:

- --Alteration of lines other than the first is possible and may go undetected if only the first line of data is machine-read. In essence, therefore, encryption protects only a limited number of items from tampering.
- --A counterfeited or altered card front could be combined with a legitimate card back or a bogus card back.
- -- The card front design should be sufficient to protect against card alteration if, as INS believes, it is counterfeit-proof and unalterable.

CONCLUSIONS

Aliens illegally enter the United States using various methods. Counterfeiting, altering, or use by an impostor of the alien registration card and the border crossing card is only a small portion of the illegal entry problem. Furthermore, intelligence reports indicate that many of these fraudulent documents are not used to enter the United States. Instead, aliens enter surreptitiously between ports of entry with these documents hidden on them and later use the documents to obtain social security cards or as evidence of lawful residence in the United States to obtain employment.

In the absence of a cost effectiveness study and an analysis of the illegal alien problem, INS management has had no assurance that the system under development will be cost beneficial and consistent with agency needs. The limited statistics that are available show that millions of dollars are being spent to address only a small part of the illegal alien problem.

System automation has not been justified nor has its addition to the current inspection system been adequately planned. INS has committed substantial resources to the production of a machine-readable identification card, but has made only limited progress in resolving questions regarding the hardware needed to use the machine-readable features. Widespread automation of secondary inspection was not adequately justified, and INS has decided to install fewer terminals.

The lack of a logical and systematic plan for implementing card production has resulted in operational changes which have adversely affected INS' ability to achieve card issuance goals and increased program costs.

Although INS recognized that its original goals were unrealistic and in December 1977 established a 7-year replacement schedule, the numerous problems that remain to be resolved make it questionable that these revised goals will be met.

RECOMMENDATIONS TO THE ATTORNEY GENERAL

Under these circumstances, there is little justification for continuing to develop the automated portion of the system. We believe, however, that an improved identification card would be beneficial, but elimination of machine verification may require the card to be redesigned.

Therefore, we recommend that the Attorney General direct the Commissioner of INS to

- --cease further development of the automated verification portion of the ADIT system and
- --determine the cost effectiveness of retaining the machine verification features of the identification card.

AGENCY COMMENTS AND OUR EVALUATION

In a March 29, 1979, letter the Justice Department furnished us comments on our report. (See app. I.) These comments are summarized and evaluated below.

In its comments the Department objected to our measuring the effectiveness of ADIT in terms of its impact on the combined total of all illegal entries. It stated that ADIT should be judged by its impact on alien identification card fraud, not on the other aspects of illegal entry. The

Department further stated that "* * * when the purpose of ADIT is placed in proper perspective, the INS decision to implement ADIT can be seen as a sound management action to address that portion of the alien identification problem which is amenable to solution."

The Department's comments reflect a difference in philosophy on measuring the effectiveness of the ADIT system. Like the Department, we agree that there is a need to address the fraudulent document problem. What we question is whether the benefits to be achieved warrant such a sophisticated and costly system.

The Department apparently feels that if the system is successful in curtailing the use of fraudulent documents, it would be an effective system.

The primary enforcement mission of INS is the prevention of illegal entry into the United States. Therefore, we believe that the system's effectiveness must be measured in terms of how it affects this mission.

Although the ADIT system should be effective in reducing the use of fraudulent documents to gain entry to the United States, we believe many of those denied entry in this manner will merely use alternative methods. This view was shared by enforcement officials in INS and by the contractor who designed the system. This, together with the fact that only a small percentage of illegal entries are made with counterfeit or altered documents, led us to conclude that the system's effectiveness in reducing illegal entry would be minimal.

In commenting on the cost of the system the Department stated:

"ADIT is one of the few Federal programs which has the potential for eventually paying for itself. Through the fees charged to card applicants, it is likely that the major cost of the program will be paid."

We do not believe that the fact that the cost of the system can be substantially recovered from aliens applying for an identity card justifies the cost of the system. We believe that the benefits to be derived from the system should be the criteria used to judge the reasonableness of its cost. Applicants should not be expected to pay for a system that is not cost-beneficial.

In commenting on our recommendation that the INS cease further development of the automated verification portion of the ADIT system, the Department of Justice commented, with respect to primary inspection, that:

- --ADIT was designed with the necessary sophistication to stay ahead of document fraud for many years in the future, and the automation aspects of the design are part of this strategy.
- --The ADIT system development effort has been coordinated with the Visa Office of the Department of State, which subsequently developed a machine-readable visa counterfoil for inclusion in foreign passports. The counterfoils would be read by the ADIT automated reading equipment.
- --It does not accept the contention that traffic flow would be slowed down, since inspectors will not have to spend as much time manually examining the ADIT card and questioning the holder.

In our opinion, machine-reading of ADIT cards at primary inspection areas would have only limited additional impact on the fraudulent document problem. The Fraudulent Entrants Study showed that the fraudulent use of alien identification documents involved misuse, impostors, alterations, and counterfeits. The misuse of a valid document and the use of a valid document by an impostor represented, by far, the most frequently occurring fraudulent use of an alien identification card. Machine-reading of ADIT cards at primary inspection would have no impact on these types of fraudulent entry since the machine will only indicate whether the card is valid or not. With respect to the latter two categories of fraudulent entry--alterations and counterfeits -- we believe the improved quality of the ADIT card should enable inspectors to visually detect most abusers falling into these categories.

A recent joint study by INS and Customs personnel, which simulated machine-reading of ADIT cards at primary inspection, concluded that machine-reading would substantially increase inspection time. If inspectors decreased the time spent on visual inspections, the potential would increase for imposters using valid ADIT cards to enter the country.

An official of the Visa Office informed us that the visa design is still in draft form. He stated that the major concern of the Visa Office is the use of an algorithm to provide coded data for the visa. The official said that many questions concerning need, cost, and status of INS' development in this area has left the Visa Office in a tentative position. If the visa is not machine-read, ANVIS--Automated Nonimmigrant Visa Issuing System--would still be valuable because it is an automated information system and has produced a more useful and secure visa.

With respect to secondary inspection terminals, the Department stated that the report cites items of questionable validity to support our position. On page 12 of the report we include the reasons why we believe that secondary automation had not been adequately planned or justified. INS officials agreed that only a limited number of secondary terminals should be installed and that experience gained with these terminals should be used to determine if terminals are needed.

With respect to card production, the Department commented that (1) the manual system capacity surpassed 3,500 cards per day in February 1979, (2) the new baseline system which has a production capacity of 5,000 cards per day, and will increase to 7,000 cards per day by early summer, has recently passed the acceptance test and is being phased into operations, and (3) the backlog of card applications anticipated by the audit team did not occur.

Although we do not question the fact that card production could eventually reach 5 to 7 thousand cards a day, we believe the Department's comments portray the current situation optimistically. Production statistics show that during February 1979, daily card production exceeded 3,500 cards on only one day. During the period February 1 to March 16, 1979, average daily card production was about 2,500 cards a day.

With respect to the baseline system, we were informed that operation of the system will start on April 1, 1979, and will be phased in over several months. In this regard, a recent report prepared by the card production contractor pointed out that some of the equipment to be used in the baseline system will be one-of-a-kind prototype devices that may require frequent maintenance during initial operating periods.

In commenting on our recommendation that it determine the cost effectiveness of retaining the machine verification

features of the card, the Department stated that ADIT encryption equipment and card production process are in place. Therefore, it would be unwise to redesign the ADIT card at this time without substantial supporting evidence.

Although we have not determined the disadvantages or benefits of eliminating the machine-readable features of the card, INS program staff estimated that elimination of the printed data on the back of the card would save about \$2 a card. When one considers that about 3.5 to 4 million cards will be reissued, and 700,000 cards for new applicants will be issued annually, savings could be substantial. In our opinion, the potential savings would warrant a reassessment of these features to determine if their retention would be cost effective.

The Department acknowledged that missing and duplicate records in the data base is a serious condition, but believes it can be resolved. It stated that the test results on card durability have been received and point out that the life expectancy of the ADIT card is well in excess of 10 years.

In summary the Department contends that the system development should proceed on its present course of action. We do not agree for the reasons enumerated previously.

CHAPTER 3

SCOPE OF REVIEW

Our review included an assessment of (1) the validity of the ADIT system concept, (2) the progress of program implementation, and (3) the impact of system implementation on enforcement provisions of the Immigration and Nationality Act.

We reviewed the INS coordination with the Department of State and the Customs Service. We also reviewed studies and analyzed statistics on illegal entry of aliens and border control problems.

Our review was conducted at:

- -- INS Central Office, Washington, D.C.
- --INS regional and district offices, border patrol sectors, and land and air ports of entry in the Southwest area of the United States, as well as a regional office, a district office, and two air ports of entry in the Eastern area of the United States.
- --ADIT card production facilities in Arlington, Texas, and the Bureau of Engraving and Printing, Washington, D.C.
- --Departments of Justice and State, and the Customs Service in Washington, D.C.
- -- The MITRE Corporation headquarters in Bedford, Massachusetts.
- -- The Computer Sciences Corporation offices in Huntsville, Alabama.
- --Technicolor Graphic Services offices in Alexandria, Virginia, and Arlington, Texas.

APPENDIX I APPENDIX I



UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D.C. 20530

MAR 29 1979

Mr. Allen R. Voss Director General Government Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Voss:

This letter is in response to your request for comments on the draft report entitled "The Alien Documentation, Identification and Telecommunication System--Little Help In Stopping Influx Of Illegal Aliens."

The General Accounting Office (GAO) report acknowledges the need for an improved alien identification card as well as the need to replace the 17 versions of alien identification cards with a single fraud-resistant version, so as to enable the Immigration and Naturalization Service (INS) to declare the earlier versions invalid. The fact that the Alien Documentation, Identification and Telecommunication (ADIT) system has experienced technical difficulties and a precise date cannot be set as to when the system will replace all other cards does not provide substantive reasons why fulfillment of the basic ADIT concepts should not continue.

The report raises three broad issues which we would like to address. The first pertains to the apparent GAO belief that ADIT's effectiveness should be measured only against its impact on the total illegal entry problem. The second relates to INS's capability to produce alien identification cards in sufficient quantity, and the third concerns the validity of the automated card validation aspects of the system.

In terms of system effectiveness, it is important to recognize that ADIT was neither conceived nor designed to solve the entire complex problem of illegal entry to the United States—it is but another tool for combatting the problem of illegal entry into the United States. Secure



-2-

alien identification cards cannot substitute for Border Patrol agents; the cards obviously cannot stop entry without inspection, false claims to U.S. citizenship or alien smuggling. The report acknowledges this point on page ii, where it states that "There is little likelihood that these other means of illegal entry can be controlled." Despite this acknowledgement, the report uses ADIT's impact on the total illegal entry problem as a measure of the program's effectiveness.

The purpose of ADIT is to eliminate one facet of the illegal entry problem -- the counterfeiting, altering and impostor use of Governent-issued alien identification documents. It is not realistic, therefore, to attempt to measure ADIT's effectiveness in terms of its impact on the combined total of all illegal entries. ADIT should be judged by its impact on alien identification card fraud, not the other aspects of illegal entry which are beyond the program's, or even, as the report seems to indicate, the Government's control. Thus, when the purpose of ADIT is placed in proper perspective, the INS decision to implement ADIT can be seen as a sound management action to address that portion of the alien identification problem which is amenable to solution. Similarly, the report's estimate that ADIT will cost \$62 million dollars must likewise be placed in proper perspective. ADIT is one of the few Federal programs which has the potential for eventually paying for itself. Through the fees charged to card applicants, it is likely that the major cost of the program will be paid. A fee increase to \$10 per card will provide revenues of \$7 million when considering a long-term projected card issuance of 700,000 cards per year.

In terms of card production, it is almost one year since the GAO audit team observed operations at the card production facility. Significant progress has been made since that time. The baseline system has recently passed the acceptance test and is being phased into operational use. The excessive buildup of card application backlogs at the facility anticipated by the audit team did not occur. The present prefabrication queue is at 39,000 cards. The optimum queue size to insure continued card production in an environment of fluctuating application receipts is considered to be 50,000 cards.

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The production capacity of the card facility has also exceeded the expectations of the GAO audit team. The manual system capacity surpassed 3,500 cards per day in February 1979. The new baseline system has a production capacity of 5,000 cards per day and will increase to 7,000 cards per day by early summer following planned system enhancements. It should also be noted that the turnaround time—receipt of application to mailing of card—is averaging 21 days for uncomplicated cases.

The problem of missing and duplicate records in the data base is acknowledged as a serious condition but it can be resolved and is being addressed by the technical staff.

With respect to the question of card durability, the report mentioned that the test results were due in February 1979. The test results have since been received and point out that, "The life expectancy of the ADIT card is well in excess of the desired ten (10) years." The accelerated life test subjected the card to a variety of chemical, abrasion, flexing and extreme ambient condition variances.

In terms of border crossing card production, the report states that a policy for replacing outstanding alien border crossing cards has not been established. As of this date, the policy to issue secure border crossing cards has been established, only the methodology remains to be finalized.

The report recommends that INS "cease further development of the automated verification portion of the ADIT system" and "reassess the need for the machine verification features of the identification card." This recommendation fails to consider the essence of the total system concept. It must be recognized that document fraud is similar in nature to the electronic measures/counter-measures situation—it never ends, just increases in sophistication. ADIT was designed with the necessary sophistication to stay ahead of document fraud for many years in the future. The automation aspects of the design are part of this strategy.

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In support of its recommendations, the report cites several items of questionable validity. For example, the statement that 80 percent of the terminals handle only 33 percent of secondary inspection traffic is by implication, a negative statement. In fact, terminal distribution must also consider geographic distribution of the inspection traffic as well as the degree of sophistication of the remote terminals. A less expensive terminal may be installed for lower volume ports of entry. This decision, however, is one of economics and is best deferred until industry proposals are available.

In terms of using automated card reading capabilities as a tool to assist in primary inspection, we do not accept the contention that traffic flow would be slowed down. The time it takes to machine-read a card during the inspection process is minimal and requires but a few seconds. It simply involves taking the card from the alien, machine-reading it, and returning it. On average, even with the few additional seconds it takes to read an ADIT card, total inspection time will probably remain the same, and in some instances reduce primary inspection time, because the inspector will not have to spend as much time manually examining the ADIT card and questioning the holder. The establishment of a prototype configuration at a port of entry has been authorized to validate this determination.

In considering the automated card reader aspects of the system, the fact cannot be overlooked that the ADIT system development effort has been coordinated with the Visa Office of the Department of State, which subsequently developed a machine readable visa counterfoil for inclusion in foreign passports. The counterfoils will be read by the ADIT automated reading equipment at ports-of-entry. The report acknowledges this fact but there is no evidence that it was factored into the analysis leading to GAO's recommendation to cease further development of the automated system. In addition, future operational enhancements involving non-immigrant aliens are dependent on increasing the interface between the systems of the two agencies.

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Finally, in terms of card content, the report seems to inappropriately refer to encryption and coded data in the same context. For one thing, the encryption code does not only apply to the first line of data on the back of the card—there is a cypher at the end of each of the three lines of data. In terms of coded data, most of the data on the back of the card is also manually readable through manual inspection and has been determined by the operational staffs to be beneficial for inspection and identification purposes.

The report comments on the use of optical character recognition (OCR) are similarly ambiguous. Some form of high quality printing is required for quality control purposes. The use of OCR font is simply an option which makes automated machine reading feasible.

In conclusion, we acknowledge that difficulties have been encountered during the initial development stages of the ADIT system. Currently, ADIT encryption equipment and card production processes are in place. It would be unwise, without substantial supporting evidence, to redesign the ADIT card at this time. In view of the demonstrated accomplishments and progress which has been made in recent months, it is our contention that system development should proceed on its present course of action.

We appreciate the opportunity to comment on the draft report. Should you desire any additional information, please feel free to contact us.

Sincerely,

Assistant Attorney General

for Administration

(18350)

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