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PDRA 2001-1
15 Pages

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Policy Decision Risk Assessment

Declassifying "Fact Of" National Reconnaissance Office's Use of the Space Shuttle as a Launch Vehicle

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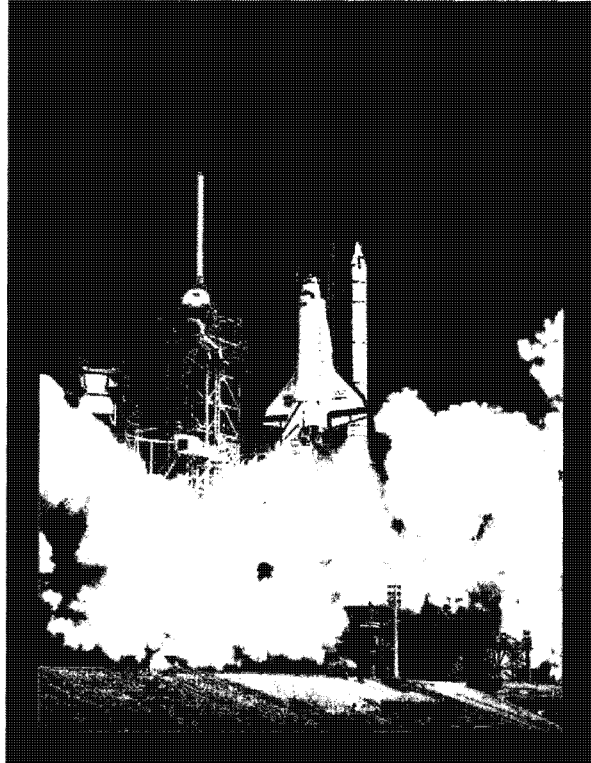
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DECLASSIFYING "FACT OF" NATIONAL RECONNAISSANCE OFFICE'S
USE OF THE SPACE SHUTTLE AS A LAUNCH VEHICLE

A POLICY DECISION RISK ASSESSMENT

PDRA 2001-1



This Figure Is Unclassified.

CENTER FOR THE STUDY OF NATIONAL RECONNAISSANCE
OFFICE OF POLICY
NATIONAL RECONNAISSANCE OFFICE

July 2001

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(U) PROBLEM

~~(S)~~ To assess the risks of declassifying the "fact of" the National Reconnaissance Office's (NRO) use of the Space Shuttle as a launch vehicle.

(U) PREFACE

(U//~~FOUO~~) This policy decision risk assessment (PDRA) was prepared by the NRO Office of Policy's research and policy analysis team, the Center for the Study of National Reconnaissance (CSNR). [redacted], the principle analyst, was responsible for researching and drafting this assessment. The findings in this PDRA will be the basis for the Office of Policy Director's recommendations to the Director, NRO. The CSNR coordinated the contents and findings of this PDRA with the appropriate NRO Staff elements:

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[redacted]

- Information Management Group, Management Services and Operations
- Corporate Operations Office, Office of Space Launch
- Corporate Operations Office, [redacted]
- Corporate Operations Office, Corporate Communications
- [redacted]
- Office of General Counsel
- Office of Security
- The NRO Historian

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(U//~~FOUO~~) In addition, CSNR coordinated this assessment with relevant external offices for factual content and to ensure that the assessment accurately reflects their views:

[redacted]

(b)(3)

Robert A. McDonald
Office of Policy
Chief, Center for the Study of
National Reconnaissance

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(U) Table of Contents

(U) Problem and Preface	iii	
(U) Table of Contents	v	
(U) Executive Summary	1	
1.0 (U) Overall Assessment	1	
2.0 (S) NRO Use of Space Shuttle	2	
3.0 (U) Consideration of Four Risk Areas	4	
3.1 (U) Sources and Methods Considerations	4	
3.1.1 (U) Previously Declassified Information	4	
3.1.2 (U) Impact of "Fact of" [redacted]	5	(b)(3)
3.1.3 (U) Technological and Intelligence Value Factors	5	
3.1.4 (U) [redacted]	5	(b)(3)
3.2 (U) Foreign Policy Implications	6	
3.2.1 (U) Treaties/Foreign Agreements	6	
3.2.2 (U) [redacted]	6	(b)(3)
3.2.3 (S) NRO/Commonwealth Relationships	6	
3.2.4 (S) [redacted]	6	(b)(1)
3.3 (U) Commercial Space Considerations	6	(b)(3)
3.4 (U) Legal Considerations	7	
3.5 (U) Freedom of Information Act Considerations	7	
4.0 (U) Assessment of "Fact of" Sensitivity	7	
4.1 (U) Technical & Engineering Data	7	
4.2 (U) Operational Data	8	
4.3 (U) Management Data	8	
4.3.1 (U) Fiscal Data	8	
4.3.2 (U) [redacted]	8	(b)(3)
4.3.3 (U) Personnel & Organizations	9	
5.0 (U) Conclusion	9	
6.0 (U) Policy Implementation Considerations	9	
(U) Appendix A: Public Affairs Guidelines	A-1	
(U) Appendix B: Acronyms	B-1	

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**POLICY DECISION RISK ASSESSMENT
DECLASSIFYING "FACT OF" NATIONAL RECONNAISSANCE OFFICE
USE OF SPACE SHUTTLE**

~~(S)~~ **EXECUTIVE SUMMARY.** The National Reconnaissance Office (NRO), in compliance with national space policy, used the Space Shuttle [redacted] to launch national security satellites. The NRO use of the Space Shuttle to launch its satellites was declassified *de facto* in the November 2000 Report of the National Commission for the Review of the National Reconnaissance Office. Following analysis of key risk areas, the declassification of the "fact of" NRO's use of the Space Shuttle as a launch vehicle is an appropriate result of evolving classification policy. All related programmatic data, however, should maintain appropriate classification. No other information beyond "fact of" should be declassified.

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1.0 ~~(S//BYE)~~ Overall Assessment. The declassification of the limited "fact of" NRO's use of the Space Shuttle to launch its satellites does not pose significant problems for the NRO. However, all of the affiliated programmatic data continues to meet the standards for continued classification. This conclusion is based on the consideration of four risk areas: (a) sources and methods, (b) foreign policy implications, (c) commercial impact, and (d) legal implications. The following kinds of programmatic data require continued classification*:

- Engineering data related to classified NRO systems launched on the Space Shuttle (system design and configuration, capabilities, survivability, orbital specifics) and the

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- Operational data related to satellite command and control, mission numbers, data link frequencies collection strategy and operations, intelligence products,

[redacted]

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- Management data related to budgetary details and trends

[redacted] and NRO/Shuttle memorabilia when it identifies specific programmatic data (e.g., Air Force Program numbers, payloads, etc.).

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* This is not an exhaustive list. It merely reflects examples of the types of data that require continued classification.

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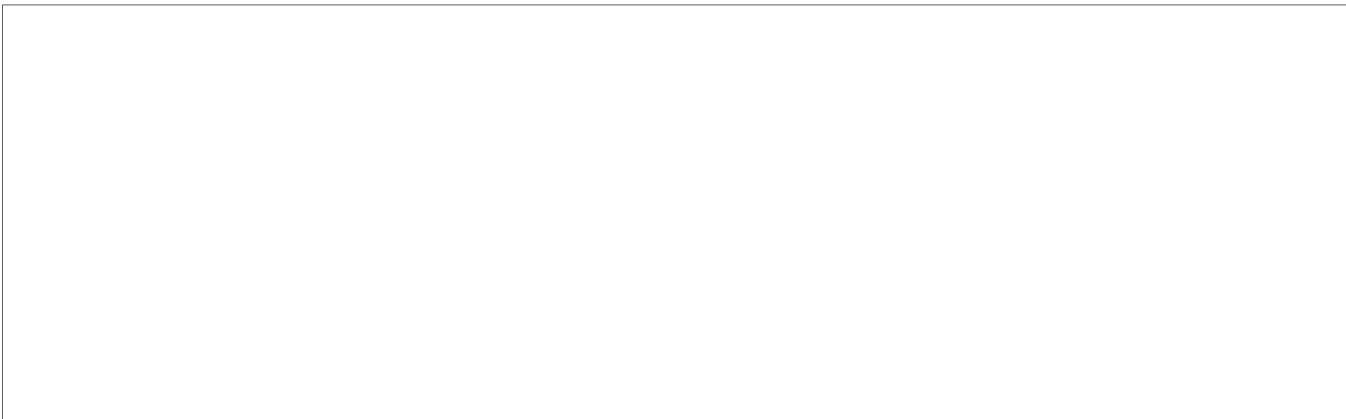
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2.0 ~~(S)~~ **The NRO Use of Space Shuttle.** The NRO's affiliation with the National Aeronautics and Space Administration's (NASA) Space Shuttle program began in 1972. President Nixon approved development of the Space Shuttle predicated on the assumption that it would replace "all present launch vehicles except the very smallest and very largest." Air Force and NRO officials participated in the design of the Shuttle throughout the 1970s, in particular the sizing of its manned orbiter payload bay to accommodate anticipated spacecraft growth. The Air Force also contributed funds to its development during this time. The Space Shuttle was expected to meet the launch requirements of both NASA and the Department of Defense (DoD). In January 1977, President Ford's departing Deputy Secretary of Defense Clements executed a "NASA/DoD Memorandum of Understanding" that pledged the Defense Department to use the Space Shuttle as its "primary vehicle for placing payloads in orbit." President Carter's incoming Air Force Under Secretary, Hans Mark, who favored plans to use the Space Shuttle as the primary launch vehicle for National Reconnaissance Program (NRP) payloads, further reinforced this sentiment.

- ~~(S)~~ The first Space Shuttle launched successfully in April 1981. On 13 November, President Reagan issued National Security Decision Directive 8, which declared the manned Space Shuttle to be America's primary launch vehicle for all space missions. The following year, on 4 July 1982, coincident with the fourth successful Space Shuttle mission, Reagan proclaimed these launch vehicles to be operational and issued his own national space policy, National Security Decision Directive 42 that reinforced the Shuttle as the nation's primary launch vehicle. (b)(1)
(b)(3)
- ~~(S)~~ The first NRO satellite launched on the Space Shuttle was in [redacted] The NRO mission was given an Air Force Program (AFP) number and categorized in the media as a "classified DoD mission." The AFP numbers were first issued to protect the different DoD programs (an umbrella concept). Non-NRO payloads (including the Defense Support Program and the Defense Satellite Communication System [DSCS]) were subsequently declassified early in the 1980s and programmatic relationships to their respective AFP numbers were fully acknowledged.

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~~(S)~~ On 28 January 1986, the Space Shuttle Challenger exploded shortly after liftoff. The Defense Department had already acknowledged that the Shuttle would not meet the U.S. national security launch requirements and had begun a series of actions to reduce DoD reliance on the Shuttle. As a first step, the costly Space Shuttle launch complex (SLC 6) at Vandenberg Air Force Base was mothballed. Expendable launch vehicles (ELVs) like the Titan IV were under development and supported by Congress.¹ To alleviate the large backlog of Shuttle payloads, medium-sized military payloads were removed from Shuttle manifests and moved to Delta-II Global Positioning System and Atlas-II (DSCS) vehicles. When the Shuttle returned to flight status in 1987, the NRO and the Air Force, in compliance with national policy, were still expected to fly [redacted] Shuttle missions through 1990. In fact, the NRO launched [redacted]

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~~(S//TK)~~ The technical fixes required for returning the Shuttle fleet to flight significantly increased its cost and weight. In late 1986, NASA advised the Air Force that the Space shuttle would lift only 55,000 pounds into [redacted] orbits and 16,000 pounds into polar orbit. The [redacted] also disappeared from the Shuttle manifest [redacted] when the [redacted]

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[redacted] Other NRP satellites to be launched into [redacted] from the Kennedy Space Center

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¹ On 25 February 1985, President Reagan released National Security Decision Directive 164 that directed the Defense Department to commit to one-third of Space Shuttle flights over the next 10 years; the remainder of DoD payloads would fly on unmanned ELVs.

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(e.g., [redacted])

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[redacted] remained

temporarily aboard the shuttle. Ultimately, they, too, were scheduled to launch on ELVs. By [redacted], the Air Force and the NRO projected [redacted] shuttle flights per year, while

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[redacted] the military and intelligence space programs. After [redacted], the NRO stopped using the Space Shuttle to launch its satellites. New national space policy directives confirmed that the Shuttle would only be used for launching military spacecraft where the presence of man in space was required.

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3.0 ~~(S)~~ Consideration of Four Risk Areas. Four risk areas are relevant to the risk assessment for declassifying the "fact of" NRO use of the Space Shuttle. These are sources and methods, foreign policy implications, commercial impact, and legal implications.

3.1 ~~(C)~~ Sources and Methods Considerations. Sources and methods considerations include issues related to: (a) the technological value of the program, (b) the intelligence value, and (c) the impact on [redacted] activities.

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3.1.1 ~~(S)~~ Previously Declassified Information. Page 66 of the National Commission for the Review NRO report states:

"The commission notes the painful lesson of the 1980s that grew out of the decision to launch all NRO satellites from the Space Shuttle. Following the Challenger disaster and the suspension of Space Shuttle flights, the NRO was forced to reconfigure its satellites for other launch vehicles. This cost billions of dollars and placed the U.S. national security at risk during the period when replacement satellites could not have been launched if circumstances had so required."

Prior to the 14 November 2000 release of the Commission's report, the NRO's use of the Shuttle had been a topic of speculation (and in some cases assumption) among the media and unbriefed space community. However, the NRO continues to classify as SECRET the "fact of" launching on Shuttle.

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3.1.2 ~~(S)~~ Impact of "Fact of" [redacted]
The NRO has not used the Shuttle to launch satellites [redacted]. Acknowledging the "fact of" its use should not adversely impact [redacted]. The NRO's use of the Shuttle as a launch vehicle was in complete compliance with national space policy of the time. Moreover, the NRO has released the "fact of" other launch vehicles without association to specific program payloads, AFP numbers, or specific launch data. Listing the Space Shuttle along with Atlas Agena, Atlas F, Scout, Thor, Thor Able-Star, Thorad Agena, Thrust Assisted Thor, Titan 3B, Titan 23D, Titan 401 Centaur, and Titan 4 Centaur should have no impact [redacted].

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3.1.3 ~~(S)~~ Technological and Intelligence Value Factors. Because no other information will be released beyond the "fact of" NRO use of the Shuttle as a launch vehicle, there is virtually no technological and/or intelligence risk. Any value would come from knowledge of the NRO satellites and their capabilities.

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3.1.4 ~~(S)~~ [redacted]
While there are [redacted] that must be considered, there are no overwhelming [redacted] to reject the declassification of the "fact of" NRO use of the Space Shuttle as a launch vehicle. There are, however, valid [redacted] reasons to continue to classify programmatic information on the NRO satellites. [redacted]

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[redacted]
use of the Shuttle for [redacted]. Therefore, only the "fact of" NRO's use of the Shuttle as a launch vehicle will be released.

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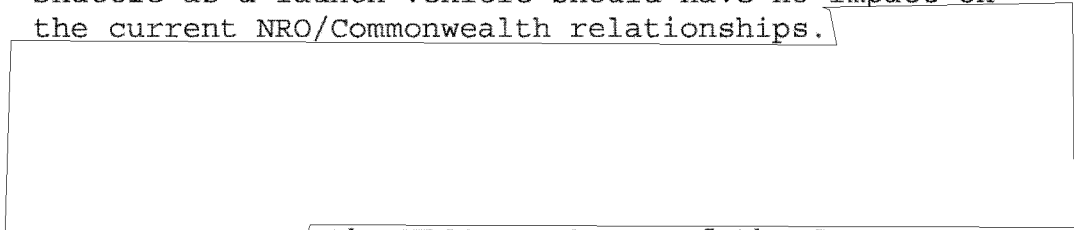
3.2 ~~(S)~~ Foreign Policy Implications.

3.2.1 ~~(S)~~ *Treaties/Foreign Agreements.* The NRO's use of the Space Shuttle as a launch vehicle did not violate any existing treaties or foreign agreements.



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3.2.3 ~~(S)~~ *The NRO/Commonwealth Relationships.* The acknowledgement of the NRO's prior use of the Space Shuttle as a launch vehicle should have no impact on the current NRO/Commonwealth relationships.



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the NRO's past use of the Space Shuttle as a launch vehicle has no bearing on any current NRO/Commonwealth agreements.

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3.3 ~~(S)~~ Commercial Space Considerations. There should be no impact to the commercial space industry with the release of the "fact of " NRO's use of the Space Shuttle as a launch vehicle. The NRO has not used the Shuttle as a launch vehicle [redacted] and was in compliance with national space policy when it did.

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3.4 ~~(S)~~ Legal Considerations. The NRO's use of the Shuttle as a launch vehicle was declassified *de facto* in the NRO Commission report. The unclassified report, including the Shuttle reference, was reviewed and approved by NRO security personnel. There are no legal reasons why the DNRO cannot formally authorize the declassification of the "fact of" NRO use of the Space Shuttle. The President granted declassification authority to the Director, NRO (DNRO) via Executive Order 12958.¹

3.5 ~~(U//FOUO)~~ Freedom of Information Act Considerations. While there are no overwhelming legal risks involved in the declassification of the "fact of" NRO's use of the Space Shuttle, potentially there are Freedom of Information Act (FOIA)-related questions associated with specific flight manifests, orbital data, NRO payloads, and other programmatic data. Consistent with NRO classification policy, all programmatic information related to the NRO's use of the Space Shuttle should remain classified and redacted from any publicly released documentation. The decision to classify or declassify must be dependent on the sensitivity of the specific information and should not be influenced by FOIA concerns.

4.0 ~~(U//FOUO)~~ Assessment of "Fact of" Sensitivity. The term programmatic data refers to three categories of information related to the release of the "fact of" NRO's use of the Space Shuttle as a launch vehicle: (1) technical and engineering data, (2) operational data, and (3) management data (i.e., organizational and personnel, fiscal data, and contracting).

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4.1 ~~(S)~~ Technical and Engineering Data. The release of any technical and engineering data [redacted] This includes system design and configuration, capabilities, survivability, orbital data, and the [redacted] programs. [redacted]

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¹ (U) Executive Order 12958, "Classified National Security Information," April 17 1995, and as amended by Executive Order 12972, "Amendment to Executive Order 12958," September 18, 1995, and by Executive Order 13142, "Amendment to Executive Order 12958, "Classified National Security Information," November 19, 1999.

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4.2 ~~(S)~~ Operational Data. The release of any operational data about NRO Shuttle payloads [redacted]

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[redacted]
all operational data should remain classified. This includes satellite command and control, mission numbers, data link frequencies collection strategy and operations, intelligence products, [redacted]

(b)(3)

4.3 ~~(S)~~ Management Data. Certain management data remain classified and should be redacted from any released documentation. These data include detailed budget information, [redacted]

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and limited terminology related to security.

4.3.1 ~~(S)~~ Fiscal Data. Mr. Tenet, the Director of Central Intelligence (DCI), has determined that all aspects of the intelligence budget must remain classified. The DCI's rationale for the current policy maintains that disclosing either the total figure or details of the intelligence budget "could cause damage to the national security by showing trends over time, or otherwise tend to reveal intelligence sources and methods." For example, the "difference between the appropriation for one year and the Administration's budget request for the next provides a measure of the Administration's unique, critical assessment of its own intelligence programs," which "would permit foreign governments to learn about United States' intelligence collection priorities and redirect their own resources to frustrate the United States' intelligence collection efforts, with the resulting damage to our national security." [redacted]

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[redacted] all related fiscal details and trends should remain classified.

4.3.2 ~~(S//BYE)~~ [redacted]

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[redacted]

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4.3.3 ~~(S)~~ Personnel and Organizations. Because of its ongoing efforts to

[Redacted]

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Although Air Force personnel assigned to the NRO worked at NASA's

[Redacted] they did so under the

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Office of the Secretary of the Air Force/Special Programs (SAF/SP) designation. The DNRO declassified the SAF/SP association with the NRO in December 1997. Therefore, it is possible to acknowledge that, consistent with the NRO's use of the Shuttle as a launch vehicle, certain NRO personnel worked at NASA facilities providing payload integration and launch support. Any NRO/Shuttle launch memorabilia (e.g., patches, photos, etc.) obtained by NRO personnel that identify specific flight information (AFP numbers, payloads, etc.) should remain classified.

5.0 ~~(S)~~ Conclusion. This assessment could find no compelling reason to deny the declassification of the "fact of" NRO use of the Space Shuttle as a launch vehicle. Declassification is limited to the "fact of" NRO's use of the Space Shuttle as a launch vehicle and, therefore, the "fact of" an operational relationship between the NRO and NASA during the time of those launches. All programmatic details, however, should remain classified [Redacted] The Space Shuttle (without association to specific program payloads, AFP numbers, or specific launch data) should be listed among the other NRO launch vehicles indicating nothing more than the "fact of" the Space Shuttle being one among many launch vehicles available to the NRO. [Redacted]

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[Redacted]

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6.0 ~~(S)~~ Policy Implementation Considerations. The decision to acknowledge the NRO's use of the Space Shuttle as a launch vehicle is a result of evolving classification policy, and there

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should be no publicity surrounding the policy implementation (i.e., no press releases or public announcements). When the declassification is approved, the Office of Policy will coordinate with appropriate offices (NRO Office of Security, Information Declassification Review Center (IRDC), etc.) to ensure that the necessary personnel are notified and updates are made to the NRO Classification and Redaction Guides. An appendix is included that offers additional guidance for "public affairs" inquiries.

6.1 (U) Office of Security. The NRO Office of Security will be responsible for notifying the appropriate component security personnel and updating the NRO Classification Guide.

6.2 (U) Information Declassification Review Center. The NRO IDRC will be responsible for updating the NRO Review and Redaction Guide for 25-Year Old Information. The CSNR recommends including the Space Shuttle along with the other 12 launch vehicles (Section 1.10.2, Launch Vehicle Utilization). This will allow the release of the "fact of" NRO use of the Space Shuttle as a launch vehicle without association to specific program payloads, AFP numbers, or specific launches.

6.3 (U) Office of Corporate Communications. While CSNR recommends that this "fact of" declassification occur without publicity, the NRO Office of Corporate Communications still will be responsible for responding to public inquiries about the NRO's use of the Space Shuttle as a launch vehicle. Appendix A offers further guidance on the "fact of" disclosure limitations.

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APPENDIX A
Public Affairs Guidelines

The decision to acknowledge the National Reconnaissance Office's (NRO) use of the Space Shuttle as a launch vehicle is a result of evolving classification policy. The NRO will not issue a press release or formal announcement. In the event that the NRO personnel are questioned on the subject, they must remember that only the "fact of" the NRO's use of the Shuttle as a launch vehicle is declassified. All programmatic details remain classified. The following are sample questions and answers that the Office of Corporate Communications may encounter:

Q: To what extent has the NRO used the National Aeronautics and Space Administration's (NASA) Space Shuttle to launch reconnaissance satellites?

A: The NRO has used the Space Shuttle as a launch vehicle. This was in accordance with national space policy of the time.

Q: Which Space Shuttle Missions carried NRO payloads?

A: That information is classified.

Q: Why can't you explain details of NRO's use of the Space Shuttle? The NRO announces today's launches?

A: The NRO, with certain exceptions (Corona, Argon, and Lanyard) has not acknowledged any of its launches prior to December 1996.

Q: How extensive is the NRO relationship with NASA?

A: In addition to the NRO's past use of the Shuttle as a launch vehicle, the NRO, NASA, and USSPACECOM representatives convene regularly for Partnership Council meetings to discuss issues of mutual interest.

Q: Does use of the Space Shuttle mean NASA plays an active role in intelligence operations?

A: No.

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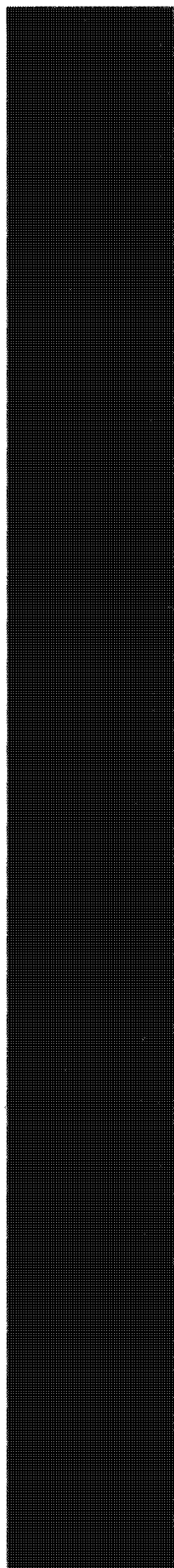
Acronyms

AF	Air Force
AFB	Air Force Base
AFP	Air Force Program
CIA/CRES	Central Intelligence Agency/Recollections Requirements & Evaluation Staff
CSNR	Center for the Study of National Reconnaissance
D&D	Denial & Deception
DCI	Director of Central Intelligence
DNRO	Director, National Reconnaissance Office
DoD	Department of Defense
DSCS	Defense Satellite Communication System
DSP	Defense Support Program
ELV	Expendable Launch Vehicle
FOIA	Freedom of Information Act
FOUO	For Official Use Only
GPS	Global Positioning System
IDRC	Information Declassification Review Center
INR	Department of State/Bureau of Intelligence Research
NASA	National Aeronautics and Space Administration
NIMA	National Imagery and Mapping Agency
NRO	National Reconnaissance Office
NRP	National Reconnaissance Program
NSA	National Security Agency
NSSD	National Security Decision Directive
OCC	Office of Corporate Communications
OP	Office of Policy
PDRA	Policy Decision Risk Assessment
SAF/SP	Office of the Secretary of the Air Force/ Special Programs
SDS	Satellite Data System
SIGINT	Signals Intelligence
STS	Space Transportation System
USSPACECOM	United States Space Command

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