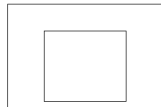




~~(S)~~ NATIONAL RECONNAISSANCE OFFICE
WASHINGTON, D.C.

OFFICE OF THE DIRECTOR

March 13, 1972



MEMORANDUM FOR MR. RUSH
MR. HELMS
DR. DAVID

SUBJECT: Proposed Changes for the KENNEN Relay Satellite Program

The KENNEN Data Relay Satellite (DRS) Program is nearing the start of the acquisition phase and requires some changes in the security provisions and management structure to ensure the necessary security protection for the NRP. Attached herewith are several options which have been formulated to achieve this objective.

Your guidance in this matter is requested.

John L. McLucas
John L. McLucas

Attachment
DRS Issue Paper

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[REDACTED] MANAGEMENT

(KENNEN DATA RELAY SATELLITE)

ISSUE

What is the best management and security arrangement for the Data Relay Satellite (DRS) segment of the KENNEN program

BACKGROUND

1. Rationale for Current Management Plan. The KENNEN Data Relay Satellite (DRS) is currently under the management of the Air Force Space and Missile Systems Organization (SAMS) and designated as [REDACTED] was originally assigned to Air Force management vice the NRO for several reasons:

a. Financial Impact on NRP Budget - The addition of DRS funding ([REDACTED] FYDP total) could drive the total NRP budget level above [REDACTED]

b. Air Force Role - The Air Force (SAMS) was already involved in support of other DOD communication missions and the resources to develop and operate this type of system.

c. Mission Orientation - The DRS evolved as an integral and necessary part of the KENNEN reconnaissance system and is

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principal design requirements for high data rate transmission were determined by the KENNEN mission. However, when we originally assigned the DRS design studies to the AF we believed that there might be other programs with mission requirements which could also use the DRS and that a management appropriate to a multimission system was therefore desirable. (Under this situation, KENNEN would be only one of many users and keeping its participation secure would not be difficult.) Hence, the DRS was planned as a multipurpose communication relay satellite under Air Force management with the intent of meeting the NRO needs and also insuring that communication technology and mission support would be available for other users. This approach is consistent with the NRO practice of limiting its internal programs to those reconnaissance missions which cannot, for security reasons, be performed by other organizations.

2. Change in Security Criteria. During the technology phase (1969-1972), that portion of the DRS dedicated to KENN support was conducted under Air Force SECRET/Special Access Required (SAR) security to insure that the priority KENNEN segment was not compromised. However, we have recently decided that the KENNEN segment of the DRS must be provided BYEMAN

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security control to insure optimum covert protection for the NRP. This decision necessitates a re-examination of the entire management plan for the DRS program.

DISCUSSION

The change in security philosophy inherently necessitates changes in the planning, programming, and budgeting of the D program as now structured. A number of options addressing various management schemes are summarized below for your review. All options provide for the covert development of the KENNEN segment of the DRS but at varying levels of confidence in being able to maintain the overall security of the KENNEN system.

OPTION 1 (Black₁)

<u>Management/SPD</u>	<u>Contract Authority</u>	<u>Security</u>	<u>Technical Requirements</u>	<u>Funding</u>
OSP	OSP	OSP	OSP	NRP

Under this option the present overt DRS program would be terminated, and the acquisition phase would be initiated as an NRP entity. Complete management and System Program Director (SPD) responsibility, including security and contracting activities, would be assigned to OSP/NRO. All technical requirements would be integrated by the OSP KENNEN Project Office. SAFSP would support the KENNEN SPD in areas of labor

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vehicle procurement and integration and SCF support for launch operations. The Air Force planned mission capabilities [redacted] would be reassigned to some other DOD space program leaving the DRS fully dedicated to NRP programs. Funding would be totally under the NRP (adding ab [redacted] to the FYDP).

OPTION 2 (Black₂)

<u>Management/SPD</u>	<u>Contract Authority</u>	<u>Security</u>	<u>Technical Requirements</u>	<u>Funding</u>
OSP	OSP	OSP	OSP/AF	NRP (AF p partial f

This option is the same as Option 1, with the exception that the Air Force payload requirement would remain a part of the DRS payload. The Air Force (SAMSO) would manage their "White" segment of the payload under the Deputy for Space Communications and interface with the KENNEN SPD. This management approach is similar to that provided by [redacted]

[redacted] Security and contracting activities would be similar to Option 1, except that the KENNEN SPD would provide the additional security and contracting for the Air Force payload segment. The Air Force would provide their technical requirements to the KENNEN SPD, and the door would be left open for DRS support of future DOD/NRP mission

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The Air Force would provide about over a three-year period to the NRO for development and acquisition of the "White" payloads.

OPTION 3 (Black₃)

<u>Management/SPD</u>	<u>Contract Authority</u>	<u>Security</u>	<u>Technical Requirements</u>	<u>Funding</u>
SAFSP	SAFSP	SAFSP	OSP/Air Force	NRP (AF p partial f

This option is similar to Option 2, except that the Director, SAFSP, would develop the Relay Satellite on behalf of OSP (the KENNEN SPD) and would have Management/SPD, Contract Authority, and Security responsibilities. SAFSP would be under the general direction of the KENNEN SPD and would be the focal point for the OSP and Air Force technical requirements. SAFSP would arrange for launch vehicle procurement, launch vehicle integration, and SCF support. Funding arrangements would be the same as with Option 2.

OPTION 4 (Hybrid₁)

<u>Management/SPD</u>	<u>Contract Authority</u>	<u>Security</u>	<u>Technical Requirements</u>	<u>Funding</u>
Air Force	OSP/AF	OSP/AF	OSP/AF	AF (with of partial ing by NI

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Under this option, the DRS program would remain under Air Force (SAMSO) management except that the KENNEN segment contract authority and security would be assigned to OSP. The Air Force Relay Satellite SPO would be responsible to the KENNEN SPD for insuring that the KENNEN requirements are satisfied. To the uninitiated, the DRS program would be dedicated solely to the Air Force

The Air Force (SAMSO) would have separate contract authority and security provisions for their "White" payloads and launch vehicles. This arrangement would probably necessitate some overall integrated security package which could prove difficult because of the different security operating procedures employed by OSP and the Air Force. The Air Force (SAMSO) SPD would receive and integrate the KENNEN payload technical requirements (contract authority remaining with the CIA). The Air Force would continue to budget and justify the total DRS funding

KENNEN payload segment. The DRS program would be funneled through Air Force and DOD for Congressional review. The two Air Force missions may not by themselves adequately justify the expense of the DRS program. However, a variation of funding

support could be achieved by carving out about from the Air Force budget for the KENNEN payload segment and adding it to the NRP budget. Whichever way one perceives this option arrangement, "split funding" will create some management problems.

OPTION 5 (Hybrid₂)

<u>Management/SPD</u>	<u>Contract Authority</u>	<u>Security</u>	<u>Technical Requirements</u>	<u>Funding</u>
Air Force	SAFSP/AF	SAFSP/AF	OSP/AF	AF (with of partialing by NR

This option is similar to Option 4 except that the Director, SAFSP, would have the responsibility for the KENNE payload BYEMAN security and contract authority. SAFSP would appear to the Air Force (SAMSO) as a payload customer seeking a service. The SAMSO SPD would have overall responsibility for conduct of the total DRS program. SAFSP would obtain technical requirements from and interface with OSP and provide the KENNEN payload segment to the SAMSO SPD for integration. The SAMSO SPD would also integrate "White" Air Force technical requirements and interface with SAFSP (rather than OSP). The SAMSO SPD would have direct access to the DNRO for resolution of any conflicts. Funding arrangements would be similar to

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OPTION 6 (Hybrid₃)

<u>Management/SPD</u>	<u>Contract Authority</u>	<u>Security</u>	<u>Technical Requirements</u>	<u>Funding</u>
Air Force	SAFSP/AF	SAFSP/AF	OSP/AF	Air Force

Under this option the DRS program would remain as presently constituted under the management of the Air Force (SAMSO) except that the Director of SAFSP would be charged with support responsibility for BYEMAN contracting and security administration of the KENNEN segment. The KENNEN technical requirements and security policy would continue to be issued directly to the [redacted] Systems Program Office (SPO) by the KENNEN SPD.

[redacted] SPO would be responsible for all contracting, budgeting, funding, security (including KENNEN must know authority), integration of requirements and management of all segments of the DRS program. Total DRS program funding would be provided through Air Force/DOD channels; however, about



SPO for the BYEMAN contracts. To insure streamlined management

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and optimum security protection, minimum reporting and review would prevail and only key individuals in Air Force/DOD channels would be designated as having access to the DRS program. The SPO would have direct access to me for all funding requirements and resolution of DRS conflicts

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Option	Relay Program Management Direction	Relay Program Implementation (RPO Location)	Contract Authority			Kennen Security	Tech Req'ts	Funding
			Spacecraft	Kennen Payload	AirForce Payload			
1	OSP	OSP	OSP	OSP	X	OSP	OSP	NRP
2	OSP	OSP	OSP	OSP	OSP	OSP	OSP/AF	NRP (Partia AF Fundin
3	SAFSP	SAFSP	SAFSP	SAFSP	SAFSP	SAFSP	OSP/AF	NRP (Partia AF Fundin
4	AF	AF	AF	OSP	AF	OSP	OSP/AF	AF (NRP Part Funding Optio
5	AF	AF	AF	SAFSP	AF	SAFSP	OSP/AF	AF (NRP Part Funding Option)
6	AF	AF	AF	SAFSP	AF	SAFSP	OSP/AF	AF