

~~TOP SECRET~~HANDLE VIA
BYEMAN
CONTROL SYSTEM~~(S)~~ NATIONAL RECONNAISSANCE OFFICE
WASHINGTON, D.C.

THE NRO STAFF

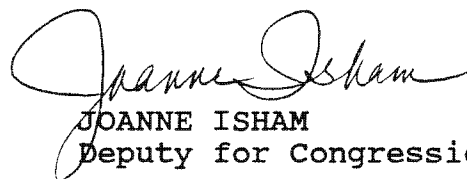
8 June 1989

MEMORANDUM FOR MR. WILLIAM LACKMAN, DEPUTY DIRECTOR, ICS

SUBJECT: GLORIA II

Attached for your information is a copy of the GLORIA II briefing presented by Colonel Gary Geyer at our June 8, 1989 meeting.

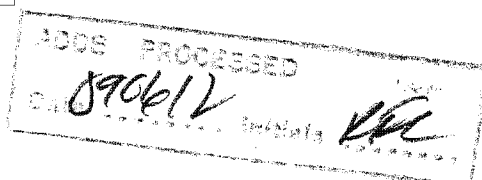
Please let me know if I may be of further assistance.



JOANNE ISHAM
Deputy for Congressional Affairs

Attachment
Briefing Material
Working Papers

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GLORIA-II

QRC Mission for EHF Search

- Motivation
- Launch Opportunity
- Funding

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CONFLUENCE

- Successful Build and Test of GLORIA I
- Successful Integration [REDACTED]
- GLORIA II Ranked High on NSA List
- [REDACTED]
- Last High-Inclination DoD Mission

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GLORIA-II EHF SIGINT Search Satellite

- **MISSION:** Survey 18-26 GHz frequencies for RADAR and COM emitters
- **MOTIVATION**
 - No overhead coverage, past or present
 - DCI SIGINT Guidance, Objective D-3: 'Provide a capability to search for, collect, identify, geoposition, and rapidly report ... signals radiating in the 18-400 GHz range.
 - NSA/DDO hi-priority QRC missions list
- **Signals of Interest**
 - Largely unknown, only 1 'red' intercept, an unknown RADAR
 - Diverse Western applications include RADAR and COMSAT downlinks

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LAUNCH ALTERNATIVES

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- Other candidates

- Pegasus: at least \$6M per launch
- T-IV secondary: approximately \$10M unfunded development and approx \$1M per launch recurring

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FUNDING (\$M)

GLORIA:	I (Current Program)	II (Required)
● SPACECRAFT	9.3	6.6
● GROUND		
○ Development	0.1	-
○ O & M	0.4	0.4
● LAUNCH		
○ 	3.5	-
○ Integration	1.7	0.5
● TOTAL	15.0	7.5

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GLORIA II SYSTEM DEFINITION/LONG-LEAD TASKS

- Mission requirements definition
 - Payload ○
 - Bus ○ Pegasus
 - ○ Ground System
- System Specifications
- Uplink encryption trades
- Design mods associated with incorporating new Command Decoder
- Necessary integration tasks
- Pegasus compatibility assessment
 - Environments
 - Interfaces
 - Security
- Safety Plan
- Production and test planning
- Long-Lead procurements' (approx 75% of piece parts)
- Long-Lead subcontract procurement

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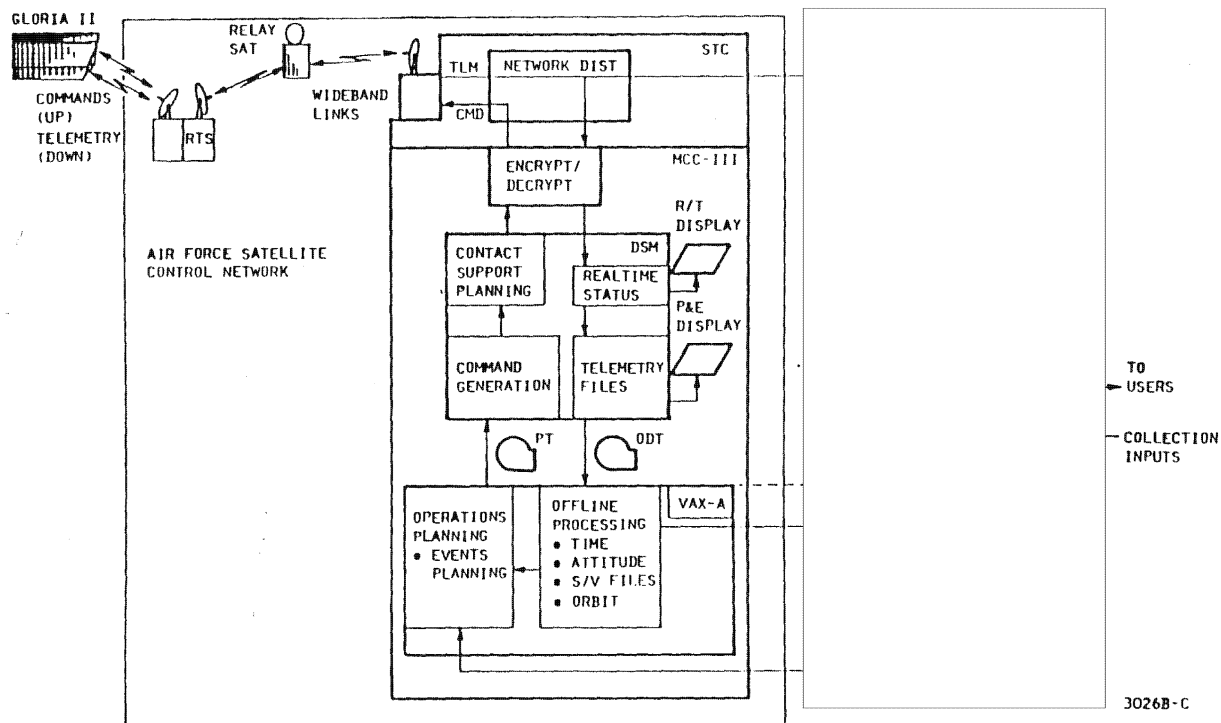
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MISSION CONCEPT

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Master Program Schedule

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DIRECTOR NRO COMMENTS

WORKING PAPERS

RECOMMENDATION

- PROCEED WITH GLORIA II
- FUND FROM WITHIN CURRENT NRP BUDGET
 - USE PROGRAM AS SOURCE THROUGH JAN 90
 - USE NRP AS SOURCE FOR REMAINDER
- BRIEF APPROPRIATE CONGRESSIONAL COMMITTEES

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