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BYEMAN CONTROL SYSTEM
14 april 80
Leven to Herman

POINT PAPER

ON

DAMON

	DAMON	
o	DAMON is an early Shuttle experiment to develop and test management, technical and operational Shuttle interfaces for NRO payloads	
0	Objectives	
	- Establish precedent for reconnaissance from Shuttle - Develop transition to Shuttle experience	
	 Payload planning/integration/flight development Security procedures Integrated Shuttle payload operational procedures Shuttle support capability (mechanical, electrical) Shuttle enviroment (contamination, thermal acoustics, stable platform) Payload/facilities interfaces development 	
	- Data bank - "lessons learned"	
	Acquires knowledge which will benefit NRO (as well as DoD) programs Knowledge gathered early with inexpensive experiment rather than later with multi-million dollar critical and sensitive operational satellites. Without DAMON, critical and sensitive DAMON leads adequately to preclude serious problems or compromise	
	- Acquire useful intelligence to supplement HEXAGON between now and 1984	(b)(1) (b)(3)
	 Orbit could be optimized for crisis with up to three accesses per day for six days Synoptic coverage in seven days - up to 80,000 feet of black and white, color NIIRS 3-5 stereo Sixty day launch capability after first flight and refurbishment 	(b)(1) (b)(3)
	- Evaluate utility of man in mission enhancement - Evaluate benefits/impacts of orbiter services	



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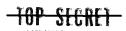
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- o Shuttle schedule issue
 - Shuttle will become the sole avenue to space
 - Possible Shuttle schedule slips of up to one year will not impact DAMON
 - -- DAMON can fly on any available Shuttle schedule
 - -- Could fly on first operational flight or even an operational test flight
 - DAMON program includes no-cost storage contingency if Shuttle is delayed
 - Whenever DAMON flies--it still precedes--and benefits--NRO programs (and DoD programs)
- o Costs
 - DAMON termination
 - -- Only saves \$21.7M in FY 81
 -- Potential value of Shuttle knowledge exceeds cost; could save
 from costly technical, procedural, or security
 impact
 (b)(1)
 - DAMON delay of one year
 - -- Program stretch costs more than payload completion and no-cost storage
 - -- May miss Shuttle availability with minimum Shuttle schedule slip
 - -- Pre-launch planning/integration "lessons learned" may not accrue to near term NRO launches
- o DAMON Shuttle experiment is built around a film-based imagery payload
 - HEXAGON spares: known system, inexpensive
 - Demonstrate ability to integrate, operate a complex, sensitive payload (non-trivial experiment)
- o Conclusions
 - DAMON is a cost-effective NRO experiment to:
 - -- Enhance NRO programs' Shuttle use (security, planning, integration)
 - -- Maximize NRO's ability to exploit Shuttle
 - DAMON is not completely sensitive to Shuttle schedule adjustments
 - DAMON will provide useful imagery; may serve as a temporary backup





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- o Recommend continuation of DAMON
 - Most cost effective to continue DAMON regardless of Shuttle schedule adjustments
 - Benefits to NRO programs are:
 - -- Timely, vital, and necessary
 - -- Inexpensive

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