MEMORANDUM FOR SECRETARY OF THE AIR FORCE 8 October 1980

SUBJECT: DAMON Flight Charges

As you are aware, the DAMON program flight is scheduled for April/May 1982 on Orbital Flight Test number four. The recent HPSCI and SSCI authorization conference for the FY 81 budget has supported the DAMON program: "The conferees believe that the DAMON program will provide valuable Shuttle experience at a modest cost, but that only one flight should be planned." In addition to providing one flight, the conferees deleted the Shuttle flight charges from the DAMON budget request: "Orbital Flight Test (OFT) missions are funded within the NASA program, hence there should be no requirement for Shuttle flight charges in the fiscal year 1981 DAMON budget." The entire conference wording on DAMON is attached.

The DAMON program office has worked the objectives for the DAMON OFT-4 flight with NASA JSC, as we have with NASA Headquarters, and have identified the flight as a seven day, 150 nm, 37-38 degree inclination joint Shuttle thermal/DAMON mission. Shuttle lift capability for the mission is marginal and sufficient lift has been provided by decreasing the inclination of the orbit. Final agreement has not been reached with NASA as both sides were hesitant to proceed until the Congress took action on the FY 81 budget.

The appropriation action has not gone to conference. At this point, the House Appropriations Committee has recommended termination of DAMON. We plan to reclaims to the SAC and are confident of maintaining the DAMON OFT-4 flight. The HAC markup is attached.

Based on the authorization wording, request you discuss the flight of DAMON on OFT-4 with the NASA management at your next meeting with the objective of obtaining NASA agreement to fly DAMON on OFT at no cost to the NRO or DOD.

We feel it is important to pursue the flight charges now as it could have an impact on the Appropriations Conference concerning DAMON.

Donald L. Haas

2 Attachments
1. Authorization Conference
2. HAC Markup
DAMON and Supplementary Imaging System Study

The conferees agreed to an authorization of $13.3 million for DAMON and the Supplementary Imaging System Study which would delete $11.4 million from the DAMON Program's fiscal year 1981 budget request, identified as Shuttle flight charges and $1.0 million from the Supplementary Imaging System Study.

At the time the fiscal year 1981 DAMON program budget was submitted to Congress, the Shuttle was scheduled to become operational sometime between December 1981 and March 1982. The first DAMON flight was scheduled in the April/June 1982 time period and was, therefore, budgeted on the basis of an operational Shuttle mission with flight charges included in the fiscal year.
1981 budget request. Since that time, the projected date for Shuttle operational capability has slipped to September 1982; therefore, the first DAMON mission will be on one of the NASA test flight missions (or slip into fiscal year 1983). Orbital Flight Test (OFT) missions are funded within the NASA program, hence there should be no requirement for Shuttle flight charges in the fiscal year 1981 DAMON budget. If the DAMON mission is ultimately slipped to an operational mission (vice OFT), then flight charges can be considered in the fiscal year 1982 DAMON budget request.

The conferees believe that the DAMON program will provide valuable Shuttle experience at a modest cost, but that only one flight should be planned.

This agreement to complete the experiment does not imply any commitment to continuation of the DAMON concept or a follow-on pallet system.
The DAMON Experiment involves a HEXAGON camera system integrated into a support structure to be mounted in the orbiter bay of the Space Shuttle. The DAMON pallet will collect photographic imagery when the orbiter cargo doors are open and the cargo bay is oriented toward the earth. Two experimental DAMON flights are planned, one in June 1982 and one in June 1983. The fiscal year 1981 budget has $21,670,000 for the DAMON Experiment and $4,000,000 for a Supplementary Imaging System Study. If successful, DAMON would be

The House Permanent Select Committee on Intelligence recommended that DAMON be terminated and related funding of $22,700,000 not be authorized because DAMON is inadequate to establish the feasibility of supporting Mapping, Charting, and Geodesy requirements and it is a

TOP-SECRET/DAMON
HANDLE VIA BYEYEMAN CHANNELS ONLY

HEXAGON

DAMON

HANDLE VIA BYEYEMAN-TALENT-KEYHOLE-COMMIT
CONTROL SYSTEMS JOINTLY

BYE-28455/80
Atch 2
The Committee shares the same concerns held by the House Select Committee. To be a meaningful follow-on, a DAMON follow-on should not use the Space Shuttle pallet concept. Much of the $21,670,000 budgeted was to be used to reimburse NASA to permit DAMON to fly on operational space shuttle numbers 6 or 7. With the current slip in the Space Shuttle program, if DAMON is flown in June 1982, it will fly in orbital test vehicle number 4. It is highly questionable and unlikely that DOD needs to pay NASA to fly DAMON on a NASA test vehicle that is part of the NASA developmental test of the Space Shuttle system. The way the Space Shuttle program has been slipping its schedule, NASA may not even be able to fly DAMON in June 1982.

Of the $4,000,000 budgeted for a Supplementary Imaging System Study, $1,000,000 will be used to conduct a system concept definition study for a Space Shuttle film-return imaging system which would be a follow-on to DAMON. It is difficult to understand how such a study can be performed before the DAMON experiments scheduled for June 1982 and 1983 are first completed and later thoroughly analyzed. As a minimum, this study effort is a fiscal year 1982 endeavor even if DAMON were a program approved by the Congress. On the other hand, the Committee has no objection to the remaining system concept studies involving free-flying spacecraft launched by the Space Shuttle or by expendable launch vehicles.

Therefore, the Committee recommends that the $21,670,000 budgeted for the DAMON experiment be denied and DAMON terminated. Furthermore, the $1,000,000 for a concept definition study of a DAMON follow-on system is not funded for the reasons stated above.