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Authority: EO 13526
Chief, Records & Declass Div, WHS
Date: JUN 09 2015

11 FEB 1977

Honorable A. M. Lovelace
Deputy Administrator
National Aeronautics and Space
Administration
Washington, D. C. 20546

Dear Dr. Lovelace:

(U) This letter is in response to the NASA letter of 10 January 1977 from Director, Special Programs, relative to degrading the altimeter instrumentation in the SEASAT-A experiments. From DoD's viewpoint, this concept is unacceptable. NASA made a commitment to DoD, as a user of the system, to provide an altimeter to satisfy our requirements.

(S) The remaining sensors do not provide data for resolution of the geoid. The gravity data needed for weapon system support would not be available from SEASAT-A if the altimeter is modified. The Fleet Numerical Weather Central can continue with the real-time data demonstration without major impact. However, the assessment of the dynamic topography variations for knowledge of ocean currents needed for meteorological and oceanographic analysis also depends on the altimeter to provide the basic reference to the geoid. Without the precise altimeter data, these studies could not be completed. Thus, the need for DoD to participate in the SEASAT-A experiment would be significantly diminished.

(U) An alternative open to DoD is to launch an altimeter, with the planned SEASAT-A precision, in the proper orbit to collect data against our requirements. We feel that a two or three channel microwave radiometer would potentially be needed to provide the atmospheric water vapor correction for the altimeter measurements. Such a system would cost an estimated \$30-40 million, exclusive of launch expenditures.

(S) A second alternative open to DoD is the collection of the required gravity data by surface ships. Based on recent analysis, the SEASAT-A altimeter data can satisfy 18-31 ship years of the total TRIDENT requirement. Operational cost of a surveying ship is approximately \$4.1 million annually. This is not considered to be a reasonable solution to the survey requirement due to the increased cost and time necessary for completion.

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 DEPARTMENT OF THE NAVY
 OFFICE OF THE OCEANOGRAPHER OF THE NAVY
 HOFFMAN II
 200 STOVALL STREET
 ALEXANDRIA, VA. 22332

IN REPLY REFER TO
 OCEANAV:kr
 Ser C115/N31

8 FEB 77

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 Authority: EO 13526
 Chief, Records & Declass Div, WHS
 Date: JUN 09 2015

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MEMORANDUM FOR THE DIRECTOR, DEFENSE MAPPING AGENCY

Subj: Impact of SEASAT-A Altimetry Data on Ocean Survey Program (OSP) Surveys (U)

Ref: (a) DMA ~~(c)~~ 011830Z FEB 77
 (b) Phoncon between Mr. Tselepis (OCEANAV-Code N31) and Mr. Schwimmer (DMA-Code PPS) of 3 Feb 77

1. ~~(c)~~ In consideration of the inferred urgency of responding to reference (a), this memorandum constitutes an interim reply and confirms reference (b). The rationale developed in support of the figures in the following rewrite of paragraph 2 of reference (a) will be submitted within ten days under separate cover: (U)

"The OSP effort in support of TRIDENT was initially planned for a total of 44 ship years of effort including the contribution of SEASAT-A. (This is based on initial estimates that SEASAT-A would satisfy safety of navigation and gravity information requirements in 70 percent of the TRIDENT operating area.) Based on additional studies and the analysis of GEOS-3 data, it is now estimated that SEASAT-A will satisfy these requirements only in depths of greater than 1570 fathoms. These areas, i.e. those greater than 1570 fathoms, represent approximately 70 percent of the overall TRIDENT survey requirement and would require 40 to 70 percent more OSP ship years for survey if SEASAT-A were not available."

R. F. FALKENSTEIN
 Captain U. S. Navy
 Assistant Chief of Staff
 for Plans, Operations & Readiness
 By direction of the Oceanographer
 of the Navy

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 DATE 11/15/83
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 BY 1983~~

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 TAB B



National Aeronautics and
Space Administration
Washington, D.C.
20546

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Reply to Attn of: ES

January 10, 1977

RADM Ross N. Williams
Office of Director, Defense
Research and Engineering
The Pentagon
Room 3E130
Washington, DC 20301

DECLASSIFIED IN FULL
Authority: EO 13526
Chief, Records & Declass Div, WHS
Date: JUN 09 2015

Dear Ross:

This letter is to follow-up my verbal request of mid-December for a DoD assessment of the impact and implications to the Seasat-A Program if the altimetric portion of the altimeter data currently planned for acquisition during the mission was not accomplished.

Your immediate response would be appreciated and hopefully not later than January 25.

Sincerely,

Francis L. Williams
Francis L. Williams
Director, Special Programs
Office of Applications

Office of the Secretary of Defense **SUSC 1552**
Chief, RDD, ESD, WHS +
Date: ~~BY~~ JUN 2015 Authority: EO 13526
Declassify: Deny in Full: _____
Declassify in Part: _____
Reason: _____
MDR: 13 -M- 4704

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R. F. Falkenstein

R. F. FALKENSTEIN
 Captain U. S. Navy
 Assistant Chief of Staff
 for Plans, Operations & Readiness
 By direction of the Oceanographer
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 TAB B



National Aeronautics and
Space Administration

Washington, D.C.
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RADM Ross N. Williams
Office of Director, Defense
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