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Staff Study - Proposed Management Procedures  
for WS 117L

SEP 12 1956

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WDGV(In Turn)

WDTR

Lt. Col. Oder/dh/1344

1. Statement of the Problem: To develop a Western Development Division with regard to the overall management of the development program of WS 117L. This action was directed in your memorandum (Inclosure 1) of 20 July 1956 to Commander Truax, Subject: "117L Management".

2. Recommendations: It is recommended that Western Development Division adopt and take steps to have implemented the following management structure for ARS:

a. Since the utility of the ARS transcends the interests of the Air Force, and because of the necessity of having high level interdepartmental cognizance of the ARS program, the Operations Coordinating Board of the Executive Office of the President augmented by the Intelligence Chiefs of the three services, should be kept informed on at least an annual basis of the program and its progress, and should submit such advice and recommendations to the program managers as the OCB may deem necessary.

b. Because of the sensitive security nature of the ARS program and the consequent necessity to limit Air Staff and OSAF review to the essential program funding, together with review and approval of those items requiring consideration by the Secretary of the Air Force, should be undertaken by the Air Force Ballistic Missiles Committee in executive session. Because of the ARS mission, one representative each from AFOOP and AFOIV should be invited to augment the AF-EMC during these sessions. Similar considerations should apply to the OSD-EMC should they be involved.

c. The contact point within the Air Staff and channel to the AF-EMC should be in the office of the DCS/D. Consideration should be given to assigning this function to the Assistant for Special Projects to the DCS/D.

d. Funding for the ARS will be identified in normal Air Force fashion by a single line item in the appropriate Budget Programs. Funding channels will be those currently used by Western Development Division in connection with the ICM and IRM programs with the exception that DCS/D rather than AFOSM would be the Air Staff focal point.

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e. As in the case of the ICEN and IRBM programs, the Commander, Western Development Division as a Deputy Commander of ARDC is authorized direct correspondence with Hq, USAF but will insure that an essential minimum number of members of the Staff of Hq, ARDC Baltimore are kept fully informed on the program. Initially speaking, this should be limited to the Commander, the Deputy Commander/ Resources, Assistant for Guided Missiles to the Deputy Commander/Weapons Systems, Chief of the Western Development Division office (RDZGW) and a representative of the Intelligence and Reconnaissance Systems Division, Directorate of Systems Plans (RDEPT). Similar limitations on the number of persons in Hq, USAF who are fully informed on the program should be established and maintained.

f. ARDC centers will be involved in the technical development program. This involvement will, in general, be threefold in nature: Accomplishment of technical development, furnishing technical advice and test programs. Each of these activities will be carefully controlled under specific authorization from Western Development Division on the basis of system necessity and economy consistent with the overall program of the prime system contractor. As of the present the following ARDC center efforts are contemplated:

- (1) WADC - development of nuclear APU converter, backup investigations in the ferret and visual reconnaissance areas and in the propulsion and solar APU areas.
- (2) AFCRC - determination of critical environmental data, e.g. the spatial and size distribution and velocity of meteors and micrometeorites.
- (3) RADC - intelligence parameters and processing, acquisition, tracking, ground space communications and command.
- (4) AFMTC - development test flights.
- (5) HADC - launching of upper atmosphere probing rockets to collect environmental data.

The requirements for ARDC center participation in WS 117L will be considered insofar as the individual center can make a timely contribution as determined by Western Development Division based upon unique technical capability in the center not generally extant within the prime contractor's organization.

The requirements for possessing system information will vary from center to center and task to task and will have to be individually released through designated point-of-contact for WS 117L in each center.

g. The role of R-W in support of WS 117L will be that specified in letter dated 10 September 1956 from the Commander, Western Development to the Ramo-Woolridge Corporation, Attn: Dr. Ramo, Subject: "R-W Responsibility in Connection with the WS 117L program".

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h. It is proposed to document the ARS program in accordance with procedures outlined in ARDC Manual 80-4. Dissemination of the documentation will be limited to those persons with specific need-to-know as determined by the Assistant for WS 117L, Technical Operations, Western Development Division. Prelim

i. Western Development Division will establish necessary liaison to accomplish development of WS 117L.

j. Specific action for the implementation of these recommendations is put forward in paragraph 5, below.

3. Facts Bearing on the Problem:

a. The ARS, unlike most other Air Force Weapons Systems, has direct implications and utility transcending the Air Force itself. Information provided by the ARS will be essential to the decision making apparatus and intelligence activities of the other military services, the Defense Department, the State Department, the Central Intelligence Agency, and after evaluation and analysis by these agencies, to the President and the National Security Council.

b. Western Development Division has, by ARDC SDD No. 117L, 17 August 1956, (Inclosure 2) been assigned responsibility for and directed to implement development of the Advanced Reconnaissance System (ARS), WS 117L as presented in the System Development Plan on the same subject, 2 April 1956.

c. While SDD No. 117L provides for only \$3,000,000 in initial funding for FY 1957, there is valid reason to believe that this funding can and will be increased by Hq USAF in the near future to a figure more closely aligned with the approved ARS development plan. Hence, early decision in the subject problem is indicated.

d. Particularly high security sensitivity is associated with the ARS as a national reconnaissance effort since compromise or premature disclosure of this endeavor could result in serious national embarrassment and possible subsequent loss in the operational utility of the system and the resulting intelligence. For this reason, special security procedures are an important factor in the management of ARS and are directed in SDD No. 117L

e. Since the ARS is based upon use of the SM-65 (less nose cone) and possibly the SM-68 (less nose cone) as a booster, there is an interaction between WS 107A and WS 117L. This implies that a certain degree of knowledgibility of the ARS will be required by the AF-PMC and, possibly the OSD-PMC.

f. If ARS funding is subjected to current normal Air Force Procedures and is included as a line item in the Air Force budget (as is the present case), then careful consideration will have to be given to control of the flow of sensitive project information. In the case of the usual R & D program, project information (classified or unclassified) gets widespread dissemination both within and without the Air Force as a result of repeated budget defenses and as a result of ARDC Manual 80-4 document dissemination procedures.

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g. Because of the complex nature of the ARS, several sub-contractors to Lockheed will be involved. This will make for a complex industrial security procedure.

h. The present WS 117L Development Plan allows for only a limited number of flights within each of the eight programs. WDTR is presently initiating a request for studies regarding operational responsibility for the System.

#### 4. Discussion:

a. While the Air Force is uniquely qualified to serve as executive agent for development and operation of the ARS (because of the basic Air Force mission as well as the strong interrelationship between WS 117L and WS 107A) the system is of concern to all three military services, the CIA and the Department of State. Appropriate individuals from these agencies should be kept apprised of system development progress and should be allowed to offer advice and recommendations to the ARS managers so that, to the extent feasible, the needs of these agencies can be reflected in the development program.

b. Several possibilities exist as to the place, organizationally, where such interdepartmental representation (as described in 3a, above) could be dealt with. They are:

(1) The Operations Coordinating Board (OCB) of the Executive Office of the President which is, in essence, the executive arm of the National Security Council.

(2) The Intelligence Advisory Committee (IAC) to the Director of Central Intelligence. The latter, who is also Director of CIA, is statutorily responsible to the President and the NSC. Represented on the IAC are the Intelligence Chiefs of the three services, of OSD, of State, of CIA, of the FBI, and of the AEC.

(3) The NSC, itself.

(4) An ad-hoc group (which could be established on invitation from the Secretary of the Air Force).

c. For the present, at least, it is doubtful that the NSC, itself, need be kept informed on the ARS detail. The NSC must, of course, be kept aware of the endeavor in general terms. Since the ARS has a psychological warfare as well as an intelligence aspect, the IAC is probably not the ideal solution. Neither is the "ad-hoc group" since the membership of the group would have no central purpose or responsibilities, per se, beyond the ARS. There are several reasons for favoring the OCB as the interdepartmental agency which is to be kept informed and which is allowed to offer advice and recommendations on the program. These are:

(1) The basic concept of the ARS involves important questions of national policy. The OCB as executive agent of the NSC must be kept aware of such ramifications.

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(2) The OCB is responsible for psychological warfare operations in the U. S. Government.

(3) The level of representation found in the OCB is such that "project engineering" and "pet ideas" should be minimized.

(4) The OCB is used to dealing with sensitive projects.

(5) Both organizationally and by virtue of its membership, the OCB is in an excellent position to provide top level support to the prosecution of the AFS program. Provision should be made, however, to invite Intelligence Chiefs of the services to presentations to the OCB.

d. Funding a program as large as the ARS by "dummy" line items in the Air Force Budget or concealing the program under other Air Force or other departments, budget items would only result in making more difficult the efficient direction of the effort from the Western Development Division level. This indicates that the ARS should be made a line item in the Air Force budget under the current structure. The place in the financial end of the program where the dilution of security can come is not with the amount of funds but in repeated justifications before organizationally widespread groups in Hq AFDC, the Air Staff and OSD.

e. The best mechanism for avoiding the "budget justification security dilution" problem raised in 3d above, which is presently available, is the AF-DMC, with the proviso that only the actual DMC members are truly informed on the program. In view of the usual relatively large attendance at AF-DMC meetings, however, it is considered essential that ARS presentations be given to the AF-DMC during executive session. Single representatives from AFMCP and AFOIN should be invited for such presentations.

f. Because of the technical complexity of the program, it is suggested that the office of the DCS/D rather than the Assistant Chief of Staff for Guided Missiles be the Air Staff focal point for WS 117L. An office such as the Assistant for Special Projects (to the DCS/D) could be considered for actual program actions.

g. In order that the WS 117L project office be in the best position to do its job, liaison access to two different groups of activities outside of the normal R & D channels and contacts should be established. These are:

(1) Intelligence planners in the three services, OSD and CIA, for the purpose of insuring that the intelligence parameters used in development of ARS are valid and current.

(2) Developers and/or operators of other reconnaissance activities in order that best advantage can be taken of developments and experience in these projects. These activities need not have complete knowledge of the ARS program.

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5. Implementations:

a. As a first step, it is proposed that the Western Development Division position as outlined in paragraphs 2a through 2i, above, serve as an attachment to a personal letter from General Schriever to General Power which covers the need for a special management structure for the AFS. Proposed drafts of such correspondence are Inclosure 3.

b. If General Power approves the proposed Western Development Division position or something along these lines, then the result should be sent to General Putt in a similar fashion. General Putt would then be asked to secure the necessary OSAF approval and implementing instructions.

c. Because of the complicated nature of the problem, it is suggested that the above be handled on a personal basis rather than on a formal basis.

SIGNED

FREDERIC C. E. ODER  
Lt. Colonel, USAF  
Assistant for WS 117L  
Technical Operations

3 Incls:

1. Memo to Cndr Truax  
Subj: 117L Management (Uncl)
2. ARDC SDD No. 117L - 2 page  
(SECRET) WD-56-02519
3. Ltr to Gen. Power (Rough Draft)  
1 page (SECRET) with 1 Incl.  
(Rough Draft) Management  
Structure) (SECRET) WDTR 56-113

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**ROUGH DRAFT**



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Lt. General Thomas S. Power  
Commander  
Air Research and Development Command  
P.O. Box 1395  
Baltimore, Maryland

Dear General:

Since it is quite likely that the Advanced Reconnaissance System (WS 117L) development program will get underway at a reasonable level of effort in the near future, I consider it necessary to propose for your consideration, a management structure for the ARS. The proposed structure is conditioned by three factors:

a. The fact that the utility of and interest in the results from the ARS will transcend the Air Force.

b. The requirement for special security precautions inherent in a national reconnaissance system. This is emphasized in paragraph 4 of the Hq ARDC System Development Directive No. 117L.

c. The advisability of somewhat similar management programs for all of our programs in order that WDD not be subject to an unnecessary variety of procedures.

I have inclosed for your consideration our present thinking on this subject. Your comments and/or approval would be appreciated. If you agree, I would like to present the proposal to General Putt with the request that he secure necessary approval from the Secretary's Office together with implementing instructions.

Sincerely,

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1 Incl:  
Management Structure

D. A. SCHRIEVER  
Major General, USAF  
Commander

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5. As in the case of the ICBM and IRBM programs, the Commander, Western Development Division as a Deputy Commander of ANDC is authorized direct correspondence with Hq USAF but will insure that an essential minimum number of members of the Staff of Hq ANDC Baltimore, are kept fully informed on the program. Initially speaking, this should be limited to the Commander, the Deputy Commander/Resources, Assistant for Guided Missiles to the Deputy Commander/Weapons Systems, Chief of the Western Development Division office (RDZGN) and a representative of the Intelligence and Reconnaissance Systems Division, Directorate of Systems Plans (RDZPI). Similar limitations on the number of persons in Hq USAF who are fully informed on the program should be established and maintained.
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7. The role of R-W in support of WS 117L will be that specified in letter dated 10 September 1956 from the Commander, Western Development to the Ramo-Wooldrige Corporation, Attn: Dr. Ramo, Subject: "R-W Responsibility in Connection with the WS 117L program".

8. It is proposed to document the AES program in accordance with procedures outlined in ARDC Manual 80-4. Dissemination of the documentation will be limited to those persons with specific need-to-know as determined by the Assistant for WS 117L, Technical Operations, Western Development Division.

9. Western Development Division will establish necessary liaison to accomplish development of WS 117L.

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