

bidders but only the one bid cited above has been received period. I have requested the Hawaiian Constructors to furnish me with additional proposals from other manufacturers period. It is requested that the division engineer go into this matter and by inquiry determine whether or not other bidders are interested and what price should be paid for the cable way and towers desired period. Daily radio advice is requested.

WYMAN

Certified to be US Govt. official business:

THEODORE WYMAN, JR.,  
Lt. Col., Corps of Engineers,  
District Engineer.

ARMY PEARL HARBOR BOARD EXHIBIT No. 42

G-3:

WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS,  
Washington, August 5, 1940.

C. of E. 676.3 (Aircraft Warning Service)

Subject: Requirements for A. W. S. Building Construction.  
To: The Chief Signal Officer.

1. The Chief of Engineers is apprehensive as to his ability to accomplish the design and construction of the necessary buildings for Aircraft Warning Service with fiscal year funds unless definite information can be obtained of Signal Corps requirements. Preliminary designs of structures have been prepared but it is felt that preparation of type plans for transmission to the field can not be completed until a definite statement of the equipment to go in each structure, and the space requirements for operation can be obtained. This information was requested by letter this office, dated May 21, 1940, subject: Requirements for A. W. S. Building Construction, C. of E. Sic 676.3 (A. W. S.), and has been requested informally at intervals since that time.

2. The Chief of Engineers is ready and anxious to cooperate in working out any details in connection with this important program. It is considered essential that basic information with type plans be transmitted to the constructing agencies, in the near future, with authority for local determination of details. Unless such information and necessary funds for accomplishment of the work are made available and authority decentralized the program will be seriously delayed.

For the Chief of Engineers:

C. I. ARCOCK,  
Major, Corps of Engineers,  
Kamiliha Office.

Copy of C. of E. 676.3 (Aircraft Warning Service) 21.

ARMY PEARL HARBOR BOARD EXHIBIT No. 42A

OCSigO 676.3—AWS Gen.  
(8-5-40)

1st Ind. 6

WAR DEPARTMENT, OCSigO,  
Washington, August 16, 1940.

To the Chief of Engineers.

1. Reference is made to your drawing "21 Man Barracks for AWS Station" dated April 3, 1940. This general plan and layout is suitable for fixed stations if due consideration be given to the local climate conditions and to the provision of space for heating plant as may be required. Space for personnel should be as follows:

## a. Panama.

1 Officer, 22 enlisted men.

## b. Hawaii.

Stations at Kokee and Haleakala.

2 detachments at each, consisting of

(1) 1 Officer, 19 enlisted men.

(2) 1 Officer, 26 enlisted men.

c. All other fixed stations requiring this type of construction—1 Officer, 19 enlisted men (Puerto Rico: Alaska; Kaala, T. H.).

d. Requirements at Burrwood, La., are not known at this time. If existing barracks space is now available there will be required only space necessary to house the communications and shop equipment, office, etc. This may also be available.

In connection with the stations in Hawaii, requirement for heating cannot be definitely stated other than that, from personal experience, provision for heating the communications building at Haleakala is essential. The requirements at the other two stations (Kokee and Kaala) should be investigated before completing the final plans.

Detailed projects have not yet been received enumerating the specific items of equipment to be installed at each station; however, there will be installed in the radio room a minimum of

a. 1 radio transmitter, 24' x 24' x 72' high, weight—1000 lbs.

2 radio receivers mounted in a rack 19' x 16' x approximately 76' high.

2 operating tables or desks, chairs, etc.

A power building located adjacent to the communications building is required for each fixed station. Except at Burrwood, La., where commercial power is available, the power building will house three power units and necessary switchboards. The minimum clear floor space required is 16' x 21' and ceiling height should be at least 9'. The building at Burrwood will house one power unit and should be 12' x 16' with 9' ceiling.

The communications building and power building at each station should be sufficiently removed from the detector station (minimum 300 yd.) to avoid interference with the operation of the detector. If practicable, these buildings should be located at somewhat less elevation than the detector.

2. Reference is made to your drawing "Preliminary AWS Information Centers" dated April 25, 1940. Requirements for the plotting room are stated by the Signal Corps Board as a room at least 30' x 30' x 20' high with a balcony 9' from the floor on at least two sides of the room, the major item of equipment being a plotting board 18' x 18'. The power room is required to provide space for an emergency power unit and switchboard. This room should be approximately 12' x 15' minimum.

The telephone room and radio room should each be approximately 12' x 25' minimum, the dimensions indicated providing for the most economical use of space. It is desirable, although not essential, that the radio room be readily accessible to the outside for installation of antenna lead-ins. The office should provide approximately the amount of floor space indicated in your drawing. The repair shop and storeroom may be reduced in area by about one-third.

3. In connection with the mobile detector stations no protection will be required for the equipment. No provision should be made at this time for quarters for personnel at these stations.

4. The information centers in the continental United States and Alaska are contemplated as separate buildings; in the overseas departments, the information centers will be combined with the command post. The information centers in the United States will be designed as splinter-proof with provision for later bomb-proofing as required. Provision will not be made at this time for housing for information center personnel.

5. All equipment should be suitably housed to give it the normal protection from excess moisture as is required for radio and telephone equipment in fire control installations.

6. It is requested that prior to their completion, plans be referred to this office, or that a representative of this office be given an opportunity to inspect such

plans, in order that provision may be made for necessary ducts for carrying communication and power circuits.

7. For all building one duct from the exterior will be required for communication cable and one for power cable. The detailed requirements within the buildings are not available at this time. It is hoped that this information will be available in the near future. There will be required for information centers and communications buildings provision for antenna lead-in.

For the Chief Signal Officer:

PAUL C. GRIFFIN,  
Major, Signal Corps.

---

ARMY PEARL HARBOR BOARD EXHIBIT No. 43

[1]

[SECRET]

By order of the Chief of Engineers 10/23/41

/s/ JLP

WAR DEPARTMENT,

OFFICE OF THE CHIEF OF ENGINEERS,

3-N

Washington, October 23, 1941.

Refer to File No. 676.3 (AWS-Continental US)

*Air Mail*

Subject: Aircraft Warning Service—Foundation Drawings.

To: The Division Engineer, South Pacific Division, 1200 Balfour Building, 351 California Street, San Francisco, California.

1. Reproducible prints of drawings listed below are forwarded for use in the design and construction of foundations for antenna towers and transmitter buildings, where authorized, at approved fixed and semifixed Aircraft Warning Service Stations.

a. ES-D-6681-C, Floor Plan for Combined 36-foot Tower and Building used with Radio Set SCR-271.

b. ES-D-7418-A., ES-D-7419-A, ES-D-7420-A., Foundation Plan for 36-foot Tower and Building used with Radio Set SCR-271, for Three General Soil Conditions.

c. ES-D-7421-A., ES-D-7422-A., ES-D-7423-A., Foundation Plan for Tower TR-8 (100') used with Radio Sets SCR-271-A and SCR-270-C, for Three General Soil Conditions.

d. ES-D-7424-A., ES-D-7425-D., Foundation Plan and Floor Plan for Separate Transmitter Building used with SCR-271-A.

e. ES-D-7366-B., (Secret) Relative Position of 100-foot Tower TR-8 and Separate Transmitter Building used with SCR-271-A.

f. ES-D-6859-B., (Secret) ES-D-6860-A, (Secret) Sketches of 100-foot Tower and Separate Buildings used with SCR-271-A.

2. Drawing No. ES-D-6862, copies of which have been previously furnished to certain field offices has been superseded by the drawings listed in paragraph 1 a above, and is no longer applicable.

3. Action is being taken by the Office, Chief Signal Officer to change the classification of certain of the drawings listed above. [2] This office will furnish Division Engineers with a new set of the drawings as soon as notification of the change in classification is received.

By direction of the Chief of Engineers:

/s/ J. L. Person,

J. L. PERSON,

Major, Corps of Engineers,

Assistant Chief, Construction Section.

Inclosures: 12 Vandyke prints of drawings listed in par. 1.

Received Nov 24, 1941 at 8:00 a. m. in U. S. Engineer Office, Honolulu, T. H. as shown by receipt stamp.

---