5. Since there is no railroad rurning from Honofulu to Kancobe Buy, it will be accountry to move this rallway battery to Kancobe Bay by truck trailer, and it is proposed to marall this battery on fixed mounts similar to these of Battery Granger Adams on Black Point.

6. Each of the 155-runs battery positions should include the following:

(1) 4 Panama nominta.

(2) 4 eplinterproof ammunition shelters for 25 rounds at each gun position.

(3) 4 csm bunkers.

(4) 4 splinterproof personnel shelters,

(5) 2 splinterpacof propeller t shelters for 150 charges each, (6) 2 splinterproof projectile shatters for 150 projectiles each.

1 splinterproof plotting room.

8) The reads and ramps necessary for the occupation of the position,

(6) Curnourlance tevalances of all the above listed installations.

Considering the urgent need for combat training and the large amount of labor rescaled to complete ficial works now being operativeted by the troops of this com-

mand, is is believed advisable to construct these positions by contract.

[3] 7. The cost of installation of the three bastories of 155-nam gunn including the acquisition of land has been estimated at \$93,630.00. The cost of the transportation and installation of the 8-inch railway battery in an emplacement. similar to that of Hattery Granger Adams has been estimated at \$121,655. Those estimated costs include both direct costs and indirect rosts. Inchosure No. 2 is a tabular breakdown of these cost figures.

A. It is recommended that the installation of these three batteries of 155-case game with the agreement field fortifications and the construction of one S-inch gun battery position be approved, and that funds in the amount of \$215,255.60 be alletted to the U. S. District Ragineer, Homolulu, for emogracian,

WALTER C. SHORT, Lientenaut troneral, U. S. Array. Consumpting.

2 Incls: (1) Map

(2) Bucakdown

A True copy.

Edward von Geldern, REWARD YOU GELBERN. 2rd Lt., F. A.

[Exhibit 1D]

[SECRET]

27 August 1941.

Deslege Brown 1st Lieutenant, Corps of Engrs. Assistant Department Engineer.

To: The Adjutant General, Washington, D. C.

Beurad anno fifteen July district engineer estimates cost of forty five hundred foot runway at three hundred thirty thousand dollars due to railroad relocation and heavy fill Stop Thirty five hundred foot runway is longest that can be provided without railway relocation Stop Reduction from thirty seven hundred feet due to bunker construction and new housing Stop Strongly recommend construction of thirty five hundred foot runway as auxiliary landing strip comma forty five hundred feet economically unfeasible Stop Main runway can be used by planes requiring longer run Stop Auxiliary also needed for use while main runway is being leveled recommend immediate allotment of twenty five thousand dollars for levelling of main runway and thirty thousand seven hundred for thirty five hun dred foot auxiliary runway. SHORT.

A true copy. Edward von Geldern, EDWARD VON GELDERN,

2nd Lieutenant, F. A.

Subject: Improvement of Landing Facilities at Wheeler Field, T. H.

2nd Ind.

(12-E10)

WAR DEPARTMENT. OFFICE, CHIEF OF THE AIR CORPS, Washington, D. C., August 25, 1941.

To The Adjutant General THRU Chief of Engineers.

1. Attached hereto is a copy of the radiogram transmitted to the Commanding

General, Hawaiian Department, Fort Shafter, T. H. on July 15, 1941.

2. In explanation thereof, you are advised that this office concurs with the opinion that the uneven areas in the runways, referred to in the basic communica-

tion, should be eliminated in the interests of safe operation.

3. This office considers runways of 4,500 feet in length to be an absolute minimum for military airports at sea level, with an additional 500 feet of length for each 1,000 feet of elevation or fraction thereof. This minimum likewise meets the requirements for the future installation of an instrument landing facility, if there is provided that the same time forty to one clear angles of approach at

if there is provided that the same time forty to one clear angles of approach at both ends of the runway in question.

4. If such clearances are not available at the north end of the present N-8 runway, or of the proposed new N-8 runway, because of quarters built at that end of the field, then the runway lengths should be extended on the southerly ends sufficiently to insure that a 4,500 foot length of runway will exist south of a point where a forty to one clearance angle may be realized.

5. There is no objection to the runway crossing the railroad spur, if necessary, providing the runway pavement is kept flush with the top of the rails and there is; no break in the runway grade, and providing, of course, rail traffic is controlled. If a difference in grade exists, the rail grade should be brought to that of the If a difference in grade exists, the rail grade should be brought to that of the runway, or the spur relocated.

6. It is requested that the District Engineer be advised of these considerations,

and that his new estimates be made accordingly.

7. No funds are available at this time for the construction and improvements recommended in the basic communications. The recommendation, however, will be placed in our "Suspense File" for further consideration upon receipt of a revised estimate, and when funds therefore become available.

For the Chief of the Air Corps:

Walter J. Reed, Colonel, Air Corps, Asst. Chief, Bldgs. & Grounds Div.

SHORT.

Incl. Cy, Radio 8/21/41 cc: Commanding General, Hawaiian Department. For information only This is not an authorization

A true copy. Edward von Geldern, EDWARD VON GELDERN, 2nd Lt. F. A.

SIGNAL CORPS, UNITED STATES ARMY

WAR DEPARTMENT MESSAGE CENTER ROOM 3441, MUNITIONS BUILDING, Washington, D. C.

56 WTJ 125 WD Ft Shafter TH 1057 A Aug 27 THE AG Washington DC.

Reurad agmo fifteen July district engineer estimates cost of forty five hundred foot runway as three hundred thirty thousand dollars due to railroad relocation and heavy fill stop thirty five hundred foot runway is longest that can be provided without railway relocation stop reduction from thirty seven hundred feet due to bunker construction and new housing stop strongly recommend construction of thirty five hundred feet runway as auxiliary landing strip comma forty five hundred feet economically unfeasible stop main runway can be used by planes requiring longer run stop auxiliary also needed for use while main runway is being levelled . . Recommend immediate allotment of twenty five thousand dollars for levelling of main runway and thirty thousand seven hundred for thirty five hundred foot auxiliary runway.

305 AM

A True Copy:
Edward von Geldern,
Edward Von Geldern,
2nd Lt., F. A.

IMMEDIATE ACTION

WAR DEPARTMENT,
THE ADJUTANT GENERAL'S OFFICE,
Washington.

1st Ind.

AG 580.82-Wheeler Field (8-27-41) NO

JJF 1r

War Department, AGO, August 28, 1941—To the Chief of the Air Corps. In connection with letter your office dated July 11, 1941, file 611.

By order of the Secretary of War:

[S] JOHN B. COOLEY,
Adjutant General.

A True Copy:

EDWARD VON GELDERN; 2nd Lt., F. A.

Subject: Improvement of Landing facilities at Wheeler Field, T. H.

2nd Ind.

(12-E10)

WAR DEPARTMENT, OFFICE, CHIEF OF THE AIR CORPS, Washington, D. C., September 2, 1941.

To: Commanding General, Hawaiian Department, Fort Shafter, T. H.

1. With reference to your radiogram dated August 27, 1941, attention is invited to 2nd Indorsement of basic letter dated June 21st, subject as noted above, a copy of which is attached hereto.

2. A request has been made this date that \$25,000.00 be included in the funds estimated to be required for use in future airfield development. This sum is to be

used for the leveling of the main runway at Wheeler Field.

3. No request will be made for the inclusion of funds for the construction of the auxiliary runway, pending receipt of the revised estimate as requested in the 2nd Indorsement referred to above.

By order of the Chief of the Air Corps.

FRANK M. KENNEDY, Colonel, Air Corps, Chief, Building & Grounds Division.

Incl. Cy 2nd Ind. 8/25/41
A True Copy:
Edward Von Geldern,
Edward Von Geldern,
2nd Lt., F. A.

## [Friblish 173]

Headquartess Hawahan Department, Fort Shafter, T. H., 19 June 1921.

## MEMORANDUM FOR DEPARTMENT ADJUTANT GENERALS

Request that the following Secret official radiogram be sent. This message does KOT cover subject matter previously sent in a message, either in the clear or having a different security elastification.

This message is routine.

Roment J. Francou, Ju., Major, Corps of Engineers, Assistant Department Engineers.

A true copy: Enwage voy Gelegely, 2nd Lin P. A.