

U. S. COAST GUARD

MAY 9 1956

OPERATIONS-SHORE UNITS

Serial 1541 BCV

9-MAY 1956

From: Commandant  
To: Commander, Fourteenth CG District (e)  
Subj: CG LORSTA French Frigate Shoals, AC&I project for Shore Protection

Ref: (a) C14CGD AC&I Project Report No. 24-36 of 25 Jan 1956

1. Endeavor has been made to conclude logically the best corrective action for shore protection at French Frigate Shoal LorSta by studying reference (a). However, the description and justification contained therein are too limited to permit an evaluation commensurate with the magnitude of the project in both funds and technical features. Particularly in view of the nature and scope of the project, it is considered that all pertinent terrain, geological and submarine features must be obtained and all practicable alternates of accomplishment be considered in order to arrive at the most satisfactory, long-lived and economical solution.
2. Headquarters' files contain very limited specific data covering site conditions at this Shoal. Recollection is that its above-water land was primarily man-made during World War II wherein bottom material was dredged and structurally contained on and above the low exposed shoal to increase the area and altitude of the site. A review of the background of this site development may prove very beneficial in solving the current Coast Guard problem.
3. Since no funds approaching three quarters of a million dollars for protecting a single unit (having approximately the same inventory value) are indicated as probably forthcoming in the near future, the additional time required to develop a more comprehensive report should not affect adversely the date of accomplishing the project.
4. Furthermore, only well founded and recorded project reports will receive highest consideration by review boards of Headquarters, Budget and others which are concerned with such planning and funds appropriations.
5. Therefore, it is requested that subject project be reinvestigated, redeveloped and resubmitted. Action on the reference (a) will be held in abeyance pending receipt of same.

Commandant  
to Commander, Fourteenth CG District (e)

Serial 1541 BCV  
9-MAY 1956

Subj: CG LORSTA French Frigate Shoals, AC&I project for Shore Protection

6. In redeveloping the report, the following features should be considered:

a. Original site conditions prior to World War II development, inclusive of soundings, topography, and soil conditions ashore and below abutting waters.

b. World War II developments retained and made available to the Coast Guard, including type of soil confinement installed, its design, area, cross section, nature of fill, and present condition, particularly in the areas of greatest concern to CG, such as about LorSta, and in the vicinity of the airstrip.

c. Plot plan of present LorSta site, equipment and airstrip including eroded areas, and complete with description and photos of eroded areas and failures of present soil retaining barriers.

d. Various types of shore protection considered such as natural rock riprap, "on-site-made" concrete riprap, sheet piling, groins, concrete bulkheads, concrete, steel or wood cribbing, with quantities and estimated costs of those which are applicable. Also state the availability and nearest source of materials involved. Where practicable, substantiate cost estimates by inquiries of qualified contractors and suppliers.

e. Restoration of shore eroded areas by periodic and perpetual rebuilding by station personnel (presently assigned or augmented as required) by assigning to the unit a suitable dragline or clamshell on a mobile crane which might refill washouts by material dredged from adjacent ocean bottom. Such an arrangement would indicate study data including sectional soundings, bottom sampling and probing, estimates of quantities of materials required and available annually, and the frequency of need of such restoration action.

f. Breakdown of recommended restoration methods between LorSta site and the airstrip, to permit adequate apportionment of funds in case the total available at any time is insufficient to cover both areas, complete with realistic portrayal of progressively worsening results that may be expected if corrective action is not taken on either or both areas, and the effect on operational commitments that may be anticipated if corrective action is not taken.

K. E. COWART  
By direction