# CAPE SARICHEF - SCOTCH CAP TRANSPORTATION PROBLEM

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#### TERRAIN DESCRIPTION

# Cape Sarichef to Sennet Point -

This is a high level route about ten miles long which can be traversed by four wheel drive vehicles. It is a rudementary road cleared through the grassy hummocks in an area of black sand and occasional volcanic rocks. Although minor streams sometime wash through portions of this route, there is only one major fording, about 20 feet wide.

Sennet Point to Scotch Cap -

The ten mile route goes from Sennet Point across a very swampy area "Mattress Flats" which is a difficult crossing by Weasel. This is followed by a lava flow area which is predominately loose volcanic rock. The route then reaches the beach and runs along it to Scotch Cap. This beach run must cross about 14 streams, many of which are extremely hazardous fordings. The Weasel operator cannot judge the stream depth, and since the vehicle is not amphibious, every major crossing is doubtful. The sand is very soft and the streams meander rapidly so that they are in different locations from week to week.

#### WEASEL CONDITIONS

The 6 Weasels now used between Sarichef and Scotch Cap were used Army vehicles which were overhauled in Japan and procured by the Coast Guard in 1957. These vehicles are now in poor condition, and require extensive routine maintenance.

Since this vehicle is no longer manufactured, procurement of parts has been a serious problem. Some parts requisitions now outstanding are over a year old.

The bodies are now beginning to rust out in way of the bogie assembly axles, which are welded directly to the body. There is no adequate economical repair for this deficiency.

#### WEASEL DEFICIENCIES

The Weasel configuration in use is not amphibious. The use of tracked vehicles on volcanic sand is the primary cause of Weasel failure. The sand crodes the track linkage, progressively loosens it, and finally allows stones to work under the sprocket, breaking the track.

# ecv Estimate of Weasel Annual Maintenance and Repair Osts Scotch Cap and Cape Sarichef

Spare Par	ts	• • • • • • • •					\$6,121
Fuel							750
Personnel	EN2	1 ea. @ 1 ea. @ 5 ea. @	5,720 =	5,720 3,536 13,520			
	25% (	of total	personne	l cost .			7,332
Base, Ket	chikar	n overhau	of eng	ines, 2	per year		500
					Tota	11	\$14,703

# ecv HISTORICAL STUDY OF CAPE SARICHEF/SCOTCH CAP

# About 1900 to 1943

Cape Sarichef Light Station and Scotch Cap Light Station existed as typical isolated units individually supplied from the sea.

### 1943

Scotch Cap HF/DF Station constructed as a wartime measure followed by construction of a 1700' fighter landing strip. This strip was not intended for operations or logistics use, but only as an emergency landing field. Its location was determined by the existence of a manned unit in the area.

### 1945

Scotch Cap Light wiped out by tidal wave.

#### 1949

Contractor commenced simultaneous construction of Loran and Light Station Cape Sarichef and Light Station Scotch Cap. He built the road from Sennet Point to Sarichef. The airfield was located midway between the construction sites, and in the vicinity of the best landing beaches. The road was made to be passable by wheeled vehicles in summer and tracked vehicles in the winter months. During this period the Coast Guard started air logistics support to Sennet Point and overland supply in each direction to Cape Sarichef and Scotch Cap.

#### 1952

Emergency building erected at Sennet Point for heat, shelter, radio. Sarichef furnished D-4 Cat, Grader, and roller for airstrip maintenance. Despite this equipment the strip was not usable during spring thaws.

# 1953

A work request was written on 20 February to provide a road from Scotch Cap to Sennet Point. The work was to be done by military personnel using available abandoned contractors equipment. This was estimated at \$225,000 and included a prefabricated bridge at \$20,000. Later correspondence with bridge fabricators indicated that \$127,000 was a better estimate, bringing the total project cost to \$332,000.

#### 1956

AC&I Project Report #24 submitted to the Commandant. This project was for contract construction of the Sennet Point, Scotch Cap road. This was estimated at \$260,000 but still appears to be a low estimate with respect to the bridge work. The Commandant held this project pending C17CGD answers to some minor questions. District reply requested Commandant withhold project from AC&I program until District could reconsider

#### 1958

The Air Force built COB-3 site and associated airstrip at Cape Sarichef. The Sennet Point airstrip was abandoned. AC&I Project #24 cancelled by C17CGD. During this period the following logistics alternatives were considered:

- 1. Repair and lengthen Scotch Cap fighter strip for use by UF2G.
- 2. Minimum repair to Scotch Cap fighter strip for use by light aircraft such as "Beaver" to operate from Cold Bay.
- 3. Provide helicopter and hangar at Cape Sarichef with Loran Station CO to be aviator billet.
- 4. Construct ski lift type aerial tramway Sarichef to Scotch Cap.

# 1960

Attempts have been made to find a more suitable vehicle for use between the two stations. Descriptive information has been received from several manufacturers on varied vehicles, as shown on enclosures hereto.

It appears that all of the proposed vehicles have the common disadvantage of high original cost plus complexity.

Maintenance of any of these vehicles would likely prove more of a problem than the present weasel maintenance problem.

#### OPINIONS

# ROAD PROJECT

The logistics problem could be solved by the construction of a good farm - to market type road with adequate drainage. This solution is expensive. Rough figures from the local office of the BPR indicate a very minimum 20 mile road would cost in the vicinity of \$1,500,000 by commercial contract.

The following comments regarding a road project would also apply:

- 1. It can be open during most of the year to wheeled vehicles.
- It must be cleared of snow during winter months to allow passage of wheeled vehicles. Or -
- 3. Track type vehicles must be provided for use in winter months.
- 4. Wind and water erosion of a 20 mile road would demand a large plant of road maintenance equipment, plus qualified personnel.
- Occasional maintenance projects would be above scope of station crews and would require a major contract award.

Based on a consideration of value received a road cannot be considered a good solution to the problem; however it would permanently solve the problem if we are willing to pay the price.

#### SPECIALIZED VEHICLES

Weasels are far from being the ideal vehicle to make the cross country run, however they are as practical as the larger and more complicated vehicles that have been considered to date. Possibly a better vehicle type exists.

# RECOMMENDATIONS IN ORDER OF PRIORITY

- 1. Commandant to locate and procure a more suitable vehicle type, or -
- 2. Commandant to locate and procure 4 replacement weasels. or -
- 3. (a) Completely separate stations administratively.
  - (b) Discontinue logistics by weasel.
  - (c) Remove 2 weasels from Sarichef and Scotch Cap retaining two for emergency use only, when authorized by C17CGD.
  - (d) Remove D8 tractor and grader from Sarichef, leaving only D6 Tractor.
  - (e) Make routine supply to Scotch Cap by air drop on bi-weekly schedule.
  - (f) Make heavy logistics by semi annual vessel trip with LVT in spring and fall, plus vessel logistic every two months (or monthly if required).
  - (g) Emergencies to be served by helicopter carried to site in C123 or on vessel.