U. S. FLEET AIR BASE
PEARL HARBOR, HAWAII, U. S. A.

6 APR 1937 25/VEC

From : Lieutenant Arnold E. True, U.S. Navy
To : The Chief of Naval Operations
Via : Commanding Officer
The Chief of the Bureau of Aeronautics

Subject : Weather forecasts for flight of Amelia Earhart; report on.

References: (a) SecNav 1315-1544 of 15 February 1937.
(b) BuNav 6419-1200 of 19 February 1937.

Enclosures: (A) Copies of forecasts issued to Miss. Earhart.
(B) Sample weather map for 18 March 1937.

1. In accordance with references (a) and (b) I joined the USCG Shoshone on 10 March 1937 and proceeded to Howland Island for Aerological duty in connection with the Earhart flight between Oakland, California, and Lae, British New Guinea. The Shoshone arrived at Howland on 15 March, landed fuel and supplies, and on 16 March proceeded to Baker Island to land supplies for the colony there, returning to Howland on 17 March where she remained until 20 March at which time the Earhart plane crashed at Luke Field, Oahu. The Shoshone then returned to Honolulu via Jarvis, Fanning, and Palmyra islands, arriving at Honolulu on 29 March.

2. During the above trip two weather maps were drawn daily as of noon and midnight G.C.T. Arrangements were made for Honolulu to add U.S., Canadian, and Alaskan Pacific Coast stations and the Pan American, Palau Observatory, and Asiatic reports to their regular broadcasts of North Pacific reports. The Governor of American Samoa collected the South Pacific Island reports principally from the broadcasting station at Suva and transmitted them direct to the Shoshone. Radio Tutuila was apparently unable to pick up the broadcasts from New Zealand and Australia and no reports from these sources were obtained. The U.S.S. Ontario which was stationed half way between Howland and Lae had been instructed to pick up and relay weather broadcasts from Port Moresby, British New Guinea, and the Solomon Islands. The Ontario was unable to hear these stations at any time during the trip. Just prior to scheduled take off from Honolulu arrangements were

made by Mr. Black, of the Department of Interior, for reports from Port Moresby and Lae to be forwarded by Commercial Wireless, via Sydney, Australia and Radio Tutila. Communication with the Ontario was very unsatisfactory and during the ten days between 10 March and 20 March, only five weather reports from the Ontario were received. Several efforts by the Shoshone to make direct contact with the Ontario were unsuccessful though the distance between them was only 1300 miles. In addition to the above, reports were broadcast by Fanning Island but due to the low power of the radio station there they were received only three times. Reports from the amateur station at Jarvis Island could not be heard.

3. At present there are no weather maps printed covering the Mid-Pacific Area both North and South of the Equator on one chart. For this flight a special map was made up at the Aerological Office at Pearl Harbor, using a mercator projection covering the area between Longitudes 110° W and 110° E and between Latitudes 60° N and 30° S. A sample copy of this map as drawn for 0000 G.C.T., 19 March is forwarded as enclosure (B).

4. During the period 10-29 March, weather conditions between Honolulu and Howland Island were excellent except for periods of cloudiness and fresh winds near and for a short distance south of Hawaii. Winds were generally between ENE and ESE with velocities averaging 14 knots at surface and 19 knots at 5000 feet. At 10000 feet both direction and velocity are more variable but the prevailing direction is easterly. There were occasionaly heavy rain squalls between Latitude 20° N and Latitude 10° N, Generally local in character and of fairly short duration. These squalls were less frequent between Latitude 10° N and the equator. There was no precipitation at Howland Island between 15 March and 20 March, though several showers passed within sight. In general the worst weather in this area seems to lie along and to the south of the equatorial front and during March this front lies normally some distance south of Howland Island. During the period observed, one tropical disturbance formed near Suva and after two days moved off to the Southeast. Weather over the Fiji and Samoan Islands was generally bad with frequent heavy rain squalls. Practically no data was obtainable for the route from Howland to Lae but as this route is near the normal location of the equatorial front it is believed that a number of heavy tropical rain squalls would have been encountered on this route. Squalls of