Dear Friends,

This is my second attempt to write a newsletter from the Coast Guard Loran Station at Gesashi, Okinawa, to the friends and relatives of the crew. The purpose, for those of you that are receiving this for the first time, is to try to acquaint you with the Coast Guard, and especially what we are doing here, 8,000 miles from the United States.

One of the problems that I faced when I first received orders to report to Gesashi was to find the place on a map. Although I have not found it on any world map, the station is approximately the same distance north of the Equator as Miami, Florida, Brownsville, Texas, or a spot in the Pacific Ocean about 450 miles due south of Los Angeles, California. The island of Okinawa itself is bounded on the east by the Pacific Ocean, and on the west by the East China Sea. Our friendly neighbors are the Philippines, approximately 700 miles southwest, Taiwan, about 400 miles west, southwest, and Japan, around 350 miles northeast. The Chinese mainland is about 400 miles due west of us. Okinawa is the largest and most important of the Ryukyu Islands, occupying approximately one half of the 850 square miles that is the total land mass of the 73 islands comprising the chain, which stretches from the southern-most island in the Japanese chain in the north to about 40 miles east of Taiwan in the south.

Presently, Okinawa is being governed by the United State Civil Administration of the Ryukyu Islands (USCAR) and the Government of the Ryukyu Islands (GRI). The High Commissioner, Lt. General James B. LAMPERT, U. S. Army, has been directed to "encourage the development of an effective and responsible Ryukyuan Government, based on democratic principles and supported by a sound financial structure." In 1972, the world will have a chance to view the effectiveness of General LAMPERT and those who went before him, as the government is to be turned back into the hands of the Japanese. The changeover will have little effect on the station. We have turned several LORAN A stations over to host countries in the past, but the LORAN C stations have always been manned by U. S. Coast Guard personnel, and this policy will probably be followed for quite awhile.

Although the science of navigation is very old, dating back to the ancient Phoenicians, electronic navigation is new, and rapidly replacing many of the techniques used by our seafaring forefathers. RADAR (Radio Detection And Ranging) was first used aboard ship in 1937, and is now used extensively by ships operating in coastal waters to obtain ranges (distances) and bearings (directions) to prominent points of land to determine position. This system was good for short ranges of up to about 40 miles maximum, but with the outbreak of World War II, we soon realized a critical need for an accurate long range navigational system, so in 1942, the first three LORAN A rates were installed in the North Atlantic. LORAN (LOng Range Aid to Navigation) has been reviewed, revised, and refined several times since its birth during the early days of the war, but the original type, LORAN A, and one other, LORAN C, are the principle types in use today. Basically, Loran A operates on a medium frequency, has a range of approximately 750 nautical miles, and an accuracy of plus or minus 3 to 10 nautical miles, is relatively inexpensive as electronics go to the user, and is therefore widely used by the boating public of today. LORAN C, on the other hand, operates on a low

frequency, has a range of 1,200 nautical miles, and accuracy of plus or minus one foot per nautical mile (less than a mile, even at the extreme edge of coverage), is quite expensive, and is used mostly by large companies and the military. Plans for another system, called OMEGA, are presently under development, using a very low frequency to cover a range of 5,000 nautical miles with an accuracy of plus or minus one nautical mile. It is obvious that we are still making progress in electronic navigation, but aside from minor perfections and projects, this station will probably not be outdated in the near future.

Personnel turnover for the month of May was probably the largest that the station has seen in quite a while, with 8 departures and 5 arrivals. Kenny RIGHARDSON started the landslide by going to Cape Hatteras Loran Station in North Carolina. Five days later, CS2 Rusty CARMICHAEL left for USCGC GLACIER, an icebreaker out of Long Beach, California. ET3 "Andy" BUSHARD went home to California to be stationed at Point Arguello Loran Station. SN Bob CHAPMAN left just in time to get in some leave before reporting to Governors Island, New York City, for Marine Science Technician School, and SA Bruce "Smokey" PURNELL is now on his way to the Coast Guard Yard in Baltimore, Maryland. On the last day of the month we lost the last three; ET2 Leo HURLEY to Group Gloucester, Mass; ET2 Karl NEE to Coast Guard Radio New York; and ET3 Bob HEMPECK to Base Sault St. Marie, Michigan. had finally started to see replacements towards the end of the month. FNEN Mike HART arrived from Engineman School at Yorktown, and SNET's Glen THOME and Dana GRAY arrived from ET School at Governors Island. Gesashi will be the first real duty station for these three as they have just recently enlisted. ET3 Mike CORNISH also arrived from ET School, but had served aboard USCGC WACHUSETT out of Seattle, Washington. Our latest newcomer is CS2 James WALLACE, recently stationed aboard USCGC POINT YOUNG, Division 12 of Coast Guard Squadron One, out of DaNang, South Vietnam.

Probably the most excitement on the station for the month was a big electrical rain storm over the next to the last weekend of the month. Very early Sunday morning, we lost commercial power due to the storm which was pouring about 5 inches of water down on us, and lighting up the area as brightly as the sun at random intervals. Several times we were able to pick up the station electrical load with our own generators, but each time the loran gear would trip off the air again due to power surges, possibly caused by lightning striking our 625 foot Loran C tower. By the time the worst of the storm had passed, we had picked up over 100 minutes of unusable time.

Well, so much for the month of May, 1970. I will endeavor to write again at the end of this month. Until then, I am

Sincerely,

David H. Lyon, LTJG, USCG Commanding Officer