INTRODUCTION

Migration, by definition, refers to a two ways journey. For most birds residing in north temperature areas, this migration consists of a southward trip each autumn followed by a northward return the following spring. Distances covered in such round - trip journeys are considerable, frequently exceeding 4000 to 6000 miles (6400 to 9600 km) (Dorst 1962).

Migrating birds have been the subjects of intensive studies by both physiologists and ethologists. Physiologists have studied hormonal and biochemical changes associated with the physiological state of migratory readiness. Whereas ethologists have concentrated upon navigational problems posed by these long - distanse flights.

Many migratory birds undertake long - distance, non - stop flights over vast expanses of water. Such flights have attracted the attention of ornithologists for many years, but only recently have intensive attempts been made to understand migratory flight. The recent literature contains several reports of studies on lipid reserves in migrant passerines, while other papers have dealt with flight - distance estimates and flight - energy requirements. One of the earliest observational studies of long - distance migrants among shore birds was that of Henshaw (1910) on the pacific form the Golden plover, pluvialis dominica fulva. Henshaw (1910) pointed out that these birds perform overwater flights of about 2400 miles between Hawaii and Alaska. In 1967, Johnston and McFarlane, have been studying this species on Wake Island, dealing with the special energy requirements of the plovers migrating to and from this island.

Except for some types of irruptive movements, migration