ADVANCED SUMMARY

The change in sand volume of the nourished beach was computed based on the first (July 88) and third (Jan 89) post-nourishment surveys. The change is a loss of 26,796 cubic yards between profiles R-96 and R-111G, which is a loss of about 5.1 percent of 529,150 cubic yards, the total amount of sand actually placed in the nourishment project. The change within the nourished area (R-99G to R-107) is 51,113 cubic yards, amounting to approximately 9.7 percent.

PURPOSE

The main objective of the project is to develop and interpret survey data. Based upon the surveyed profile data, changes in sediment volumes along the shoreline can be computed. At the end of the two year project the littoral sediment budget in the North Redington Beach and Redington Shores can be evaluated. Therefore, the long-term shoreline changes and sand losses for the project area can be estimated. Also, by using this information and the wave information collected from the Clearwater wave gage, a wave refraction study of the monitored project area will be performed. The wave refraction study will allow comparison between predicted and measured performances of the beach nourishment project. It can be used also to interpret the sediment motion between any two surveyed profiles.

SURVEY AND REPORT SCHEDULE

The monitoring study is for a duration of two years plus pre- and post-nourishment surveys. The offshore profiles were taken immediately prior to the nourishment project and immediately upon completion of the nourishment. Offshore profiles are to be taken at three month intervals for the first twelve months. During the second year after the initial nourishment, profiles will be taken at six month intervals. Individual reports have been completed for the pre-nourishment and first two post-nourishment surveys. A report will be prepared for each additional post-nourishment survey.

FIELD METHODOLOGY

The field survey program includes a total of 26 profiles. The corresponding profile azimuths were established by USF for the pre-nourished beaches representing an approximate shore normal direction at that time (also see Figure 1). The profiles are located at the U.S. Army Corps of Engineers profile points which are D.N.R. reference monuments listed in Table 1. These profile lines include R-96, R-97, R-98A, R-99A, T100, T100A, R101, R101A, R102, R103, R103A, T104,