EXECUTIVE SUMMARY

The Cornfield Shoals Disposal Site is the only dredged material disposal site managed as a dispersive site by the New England Division (NED) Corps of Engineers. Disposal at this site is conducted using primarily Loran-C coordinates without the aid of a taut-wire buoy. In July 1990, Science Applications International Corporation conducted field operations at Cornfield Shoals to assess both areal distribution of dredged material deposited since the previous July 1987 monitoring survey and the usefulness of REMOTS® sediment-profile photography as a survey tool at this site. Field operations included a 1000 x 1000 m bathymetric survey and a 13 station REMOTS® survey.

According to the tabulation of disposal logs, barges released 104,000 m³ of material at the site since the 1987 survey. Volume calculations showed an estimated 16,600 m³ of dredged material accumulated at the site.

As a result of the high energy regime at Cornfield Shoals, no significant changes in topography (e.g., the development of distinct disposal mounds) were detected. REMOTS® photography detected fresh and/or relic dredged material at several stations, supporting the utility of REMOTS® technology at Cornfield Shoals. Enlargement of the REMOTS® grid to incorporate stations outside of the dredged material dispersion area (where ambient bottom conditions persist) would assist future monitoring efforts at the site.