

Single-channel seismic-reflection profiles from Massachusetts coastal waters
and the western part of Georges Bank

By Diane M. Eskenasy

The U.S. Geological Survey collected approximately 1,200 km each of airgun and minisparker single-channel seismic-reflection profiles during the R/V *FAY* cruise 023 in September 1976. The purpose of the 6-day cruise was to study the shallow sedimentary structure south and east of southern Massachusetts and to obtain magnetic and gravity data in these areas and in the vicinity of Great South Channel and Cape Ann (fig. 1). The survey was conducted by the U.S. Geological Survey as part of the Massachusetts Cooperative Marine Geologic Program.

Seismic instruments used include a ¹Teledyne 600-joule minisparker system and a 20-in³ airgun system. Navigational data during the cruise were obtained by the use of an Integrated Navigation System, which included the following sub-systems:

1. Teledyne Loran-C for both range-range and hyperbolic positions;
2. Magnovox satellite receiver;
3. Sperry Mark-29 gyrocompass; and
4. Hewlett-Packard 21 MX computer system with dual 9-track magnetic tape recording.

The original records may be studied at the U.S. Geological Survey offices in Woods Hole, Mass. Copies of the records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center, NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder CO 80303. (303-497-6338).

1. Use of tradenames in this report is for purposes of identification only and does not constitute endorsement by the U.S. Geological Survey. This report is preliminary and has not been edited for conformity with USGS editorial standards.

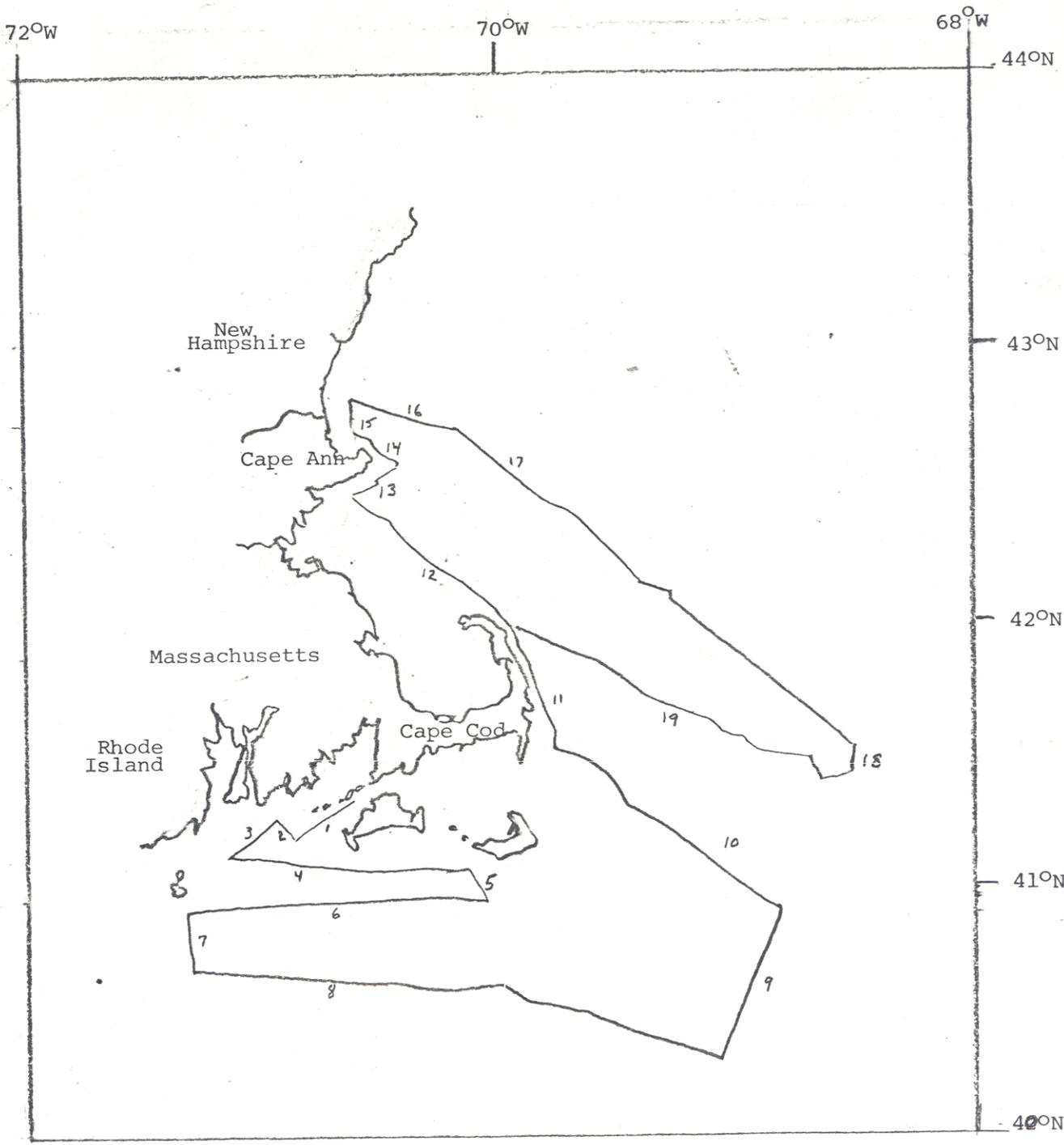


Figure 1. Tracklines, R/V FAY Cruise 023, September 1976.