200) 290 1.80-652



U.S. Geological Survey,

Reports-Open file SeriEs

TM cmc

czin processing

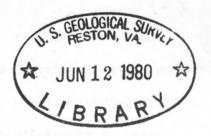
SINGLE-CHANNEL SEISMIC-REFLECTION PROFILES FROM THE BLAKE PLATEAU AND BLAKE OUTER RIDGE, SOUTHEASTERN U. S. CONTINENTAL SHELF

By Norman G. Bailey, 1927 - and

U.S. Department of the Interior Geological Survey

John A. Grow

Open-File Report 80-652



This report is preliminary and has not been edited or reviewed for conformity with U.S. Geological Survey standards or nomenclature.

Approximately 3,300 kilometers each of airgun and minisparker single-channel seismic-reflection data were collected by the U.S. Geological Survey during the R/V FAY 025 cruise in September and October 1976.

The cruise was planned to collect data over a fault at the eastern edge of the Blake Plateau, to trace deep-sea geologic horizons from north of the Blake Outer Ridge across the ridge southwest to the Deep-Sea Drilling Project (DSDP) Site No. 391, to tie Cretaceous horizons at DSDP Site No. 390 into other seismic lines in the central part of the plateau, and to tie in the seaward ends of lines collected on a previous cruise (FAY 017) by running a minisparker profile line (Figure 1).

Seismic instruments included 80- and 160-in³ airguns fired at 10-second intervals and a 600-joule sparker. The data were recorded on two dry-paper recorders and a 7-track analog tape unit. The airgun data were usually filtered between 16 and 60 Hertz, and the sparker data were filtered between 280 and 1060 Hertz.

Navigation systems consisted of a Loran-C receiver for both Range-Range and hyperbolic positions, a satellite receiver, a gyro compass, and a speed log, all integrated into a data-acquisition computer set up for dual 9-track magtape recording. Range-Range Loran was the primary system used, and the hyperbolic Loran and gyro systems served as secondary systems.

The original records can be seen at the U.S. Geological Survey Data Library at Woods Hole, MA 02543. Microfilm copies can be purchased from the National Geophysical and Solar-Terrestrial Data Center, National Oceanic and Atmospheric Administration, Boulder, CO 80302.

.

