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M E M O R A N D U M

TO: Dr. J. Lamar Worzel, Director
FROM: Dr. Joel S. Watkins, Chief Scientist *JSW*
SUBJECT: IG-23 Cruise Report

The R/V IDA GREEN departed UTMSI at 1300, 1 Dec 76, and returned at 0930, 21 Dec 76, having completed approximately 1500 miles of CDP (1163 of 12-fold, 329 of 24-fold). Monitor records were of good quality.

The scientific party consisted of F. J. Shaub, R. Kerr, E. Boucher, A. Andrews, J. Tsai, G. Putman, W. Featherston, Phil Roper, and myself.

The Tektronix 4051 worked well. We were able to load on tape, corrected navigation, bathymetry and magnetic data for most of the cruise. Preliminary plot shot point locations program was written and tested, but shot points could not be tabulated because of a limited supply of tape. One to 1-1/2 hours is required to load and check 24 hours of navigation or bathymetry or magnetics. A program was also written to plot daily bathymetry or magnetics. An additional 8K of memory would help, particularly in complex programs such as navigation correcting, where programs are entered in memory sequentially from tape. One tape cassette should hold a month's navigation, or bathymetry, or magnetics, or whatever data in the present (daily) format. A hard copier which is on order will further facilitate the use of the 4051.

The air guns required extensive repair and rebuilding. Three were working at the end of the cruise; the remaining air gun would not fire properly. George Putman, Will Featherston, and Phil Roper are due praise for their hard work and long hours on the guns.

The DFS tape transport upper servo motor switch stuck repeatedly. We observed occasionally periods of 1-2 hrs of high frequency noise with no obvious source, but possibly being generated internally.

The following notes were made during the cruise.

(1) We had less than one full barrel of kerosene. Consequently, some streamer sections are not filled completely.

(2) The water maker may need to be moved prior to the MAT cruise.
Arch: Please see Otis.