

IDA GREEN - 16-3

The staff for Leg 3 will be:

J. L. Worzel, Chief Scientist

C. Burk

R. Buffler

S. Ali

G. Putman

R. Kerr

Kanykowski

We plan to leave at 2000 CST or 0400Z 30-I-76.

30-I-76

Departed Pt. St. Joe 0400Z and started putting out streamers. Streamers out 1200Z. 4 guns deployed 1230Z. DFS won't function getting a time break only every other pop. George looked on it till 1900. Then I insisted he change the relay in the \_\_\_\_\_ timer circuit. Then I traced the blust circuit and we found if we let the shot timer trip the DFS and the DFS shoot the guns all O.K. Started shooting our line at 1930Z.

31-I-76

One gun started leaking about 1600 Z. Outboard gun on Stbd side #4. It was the short hose between the gun and the towing fixture. It was one of the armored ones. Replaced it with an armored hose and a wire rope topped to it. Four guns back in operation about 2000 Z

About 0900Z #1 profile quit operating. The trouble was the reed switch. The replacement reed switches were normally open switches and the machine requires normally closed switches. George made a jury rig repairs by breaking the glass cover and

binding one of the reeds. Back in operation about 1200Z. Recorded the first 4 \_\_\_\_\_ bottom with # 2 profiler while it was out.

About 2000Z tripping on #1 profiler showed some erratic behavior so switched to #2 profiler for upper part of the nitron and #1 profiler for the lower part. After about 2 hours George made an adjustment and we returned to the upper nitron on #1 profiler and the lower nitron or #2 Profiler.

Filled the dead section with oil. This is the one we removed at the start of leg 2. I welded the shark bites closed and topped over them for mechanize protection during leg 2. Wound it on a spool.

Dick painted some more on the single channel streamer. The radio gave trouble the last two days so have had trouble reporting in. George found a loose ball (from a bearing) in the works which was mechanically striking some of the switches causing erratic contacts. Made a good contact with Bob about 2300Z

Tape cleaning is proceeding slowly. We are doing about 30 tapes a day and using 30 a day. We have to clean them twice and find quite a lot of dirt in the containers. Some we have cleaned 4 or 5 times! Obviously much more care has to be maintained for cleanliness.

1-II-76

A storm started building about 0000Z. Otis estimated it blew about 50 knots about 1000 Z and we had waves about 20 ft high. The ship was bouncing pretty badly. Had to make 900 turns to keep up our speed as the swell was coming in off our port bow. Streamer was towing quite shallow and was very noisy. About 2000Z it sur-

faced and we had to slow down to let it go back down. About 2200Z it started to moderate and we started to get good records again. During the storm the maggie record was very noisy too. I guess that is from our jerking on the cable.

2-II-76

Storm was pretty well over by 1000Z and moderating well. 1400Z still a fair swell but very little wind and no waves. By 2300Z it was very quiet and calm. We have been able to follow layers down to the bottom multiple all the way across except for the storm period. Our spare reels broke the chain and lay flat on the deck through most of the storm. Replaced them by the rail but with the flat side down. Refastened chain moderately tight as I didn't want to damage the plastic. Our new towing signals blew out in the storm. Otis and I repaired the old one enough to work. We should get to our turning point for the Freeport line about 0700Z tomorrow. Crossed a knoll about 2000Z in the region where "only domes" are supposed to exist.

3-II-76

#3 gun failed about 0430Z. Pulled it and found the wire from the deck to the gun was broken. Didn't have a wire long enough to replace it so had to splice 2 remnants together. Back in operation about 0730. Failed again about 1000. Dave had left slack at the towing bridle in the tow cable so the strain came on the splice. Pulled the gun again about 1400. Replaced it and re-fastened to towing cable. Made sure there was slack.

About 1000Z Creighton decided to determine the shape of Challenger knoll. Unfortunately he got off onto two others and his try was abortive. We \_\_\_\_\_ the multi-channel for \_\_\_\_\_

operations about 1530. Very fine weather today.

4-II-76

Weather fine. All went well today. #3 gun has a small air leak but it is not serious and fires well, so will see how long it hangs in there.

Creighton made extensive tests on the 3.5 Khy.

We finished cleaning all the magnetically wiped tapes today. We're starting in on the Nasa tapes under the bridge. At least they'll be clean.

5-II-76

Weather overcast but clear. A few minor showers during the day. Finished cleaning the NASA tapes today. #3 gun keeps hanging in there. It looks like we'll be able to finish our work with it. Completed the Freeport line about 2300Z. Got into 20 fms of water just after the turn. It scared us because the after \_\_\_\_\_ depth sections are indicating more than 100 feet. Ali has been a great help. He has been perfection at keeping all the data straight and well marked. Dick Buffler has seen to keeping the laboratory clean.

6-II-76

Finished multi-channel work about 0630Z. Turned to run down rear. Started picking up gear 0715Z. All gear on board (except maggie) and under way for Galveston about 0900Z.

There seemed to be a leak in the dead section just ahead of # 7 live. I believe that would be #15 dead.

Streamer is still heavy aft. At 6 knots it was running at 40 ft at #24 and was a little over 100 ft. by 15-16. 1-2, 5-6, 10-11 all running over 100 ft. but did not touch bottom in 20 fms.

Balloon was gone from the <sup>top</sup>mid of the streamer where we got it back. Gun #3 has a small leak somewhere.

6-II-76

Tied up at Galveston 1713Z.