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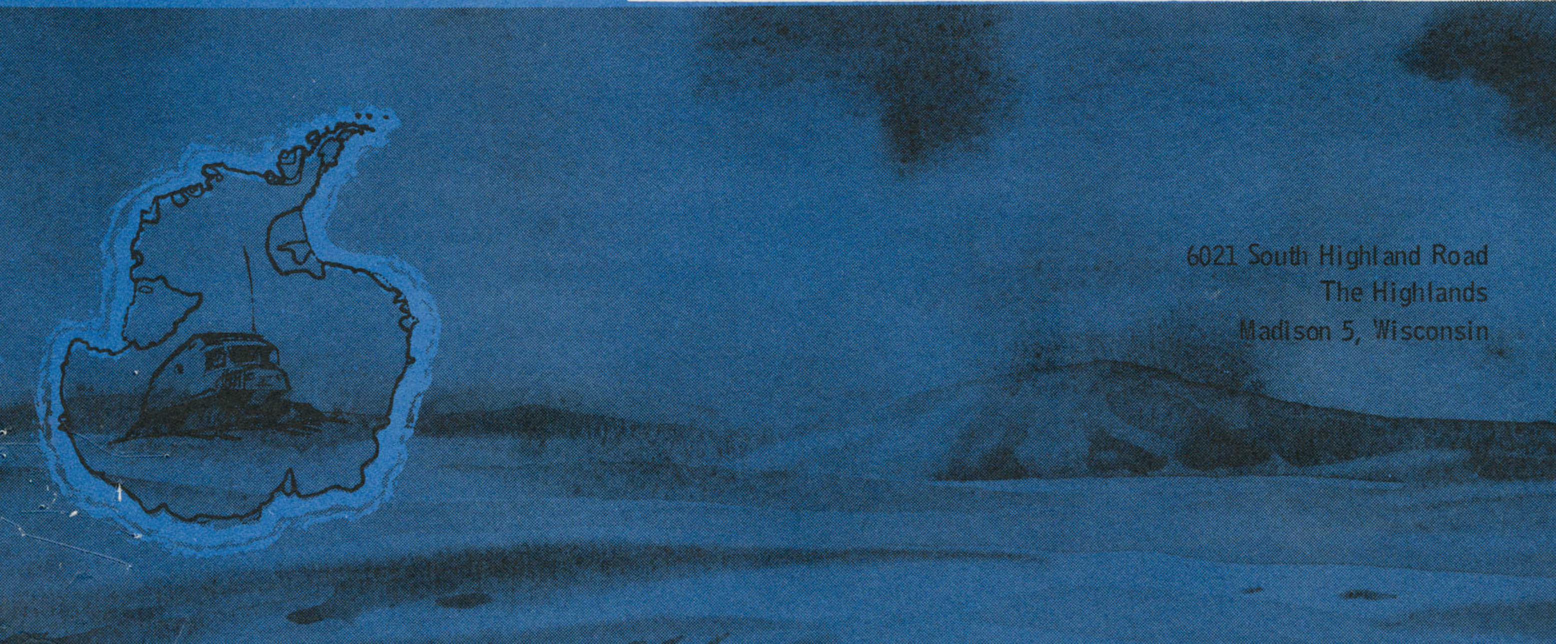
GRAVITY OBSERVATIONS FROM ICE ISLAND ARLIS-II, 6 OCTOBER, 1961 TO 8 APRIL, 1962

by

D. Jan Black and Ned A. Ostenso

Work completed under
Office of Naval Research Contract NONR 1202(16)
and
Arctic Institute of North America Project ONR-313

RESEARCH REPORT NO. 62-8 November, 1962



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Contribution No. 91

INTRODUCTION

During the period from 6 October 1961 to 8 April 1962 the senior author made gravimeter observations from ice island ARLIS-II as it drifted in the Arctic Ocean. These observations are part of a broad program of geophysical investigations of the Arctic Ocean Basin being conducted by the Geophysical and Polar Research Center, University of Wisconsin. This report is part of a series designed to facilitate prompt dissemination of data which may be of interest to other investigators. A description of the ice island was given in the preceding report, No. 62-7, (Den Hartog and Ostenso, 1962).

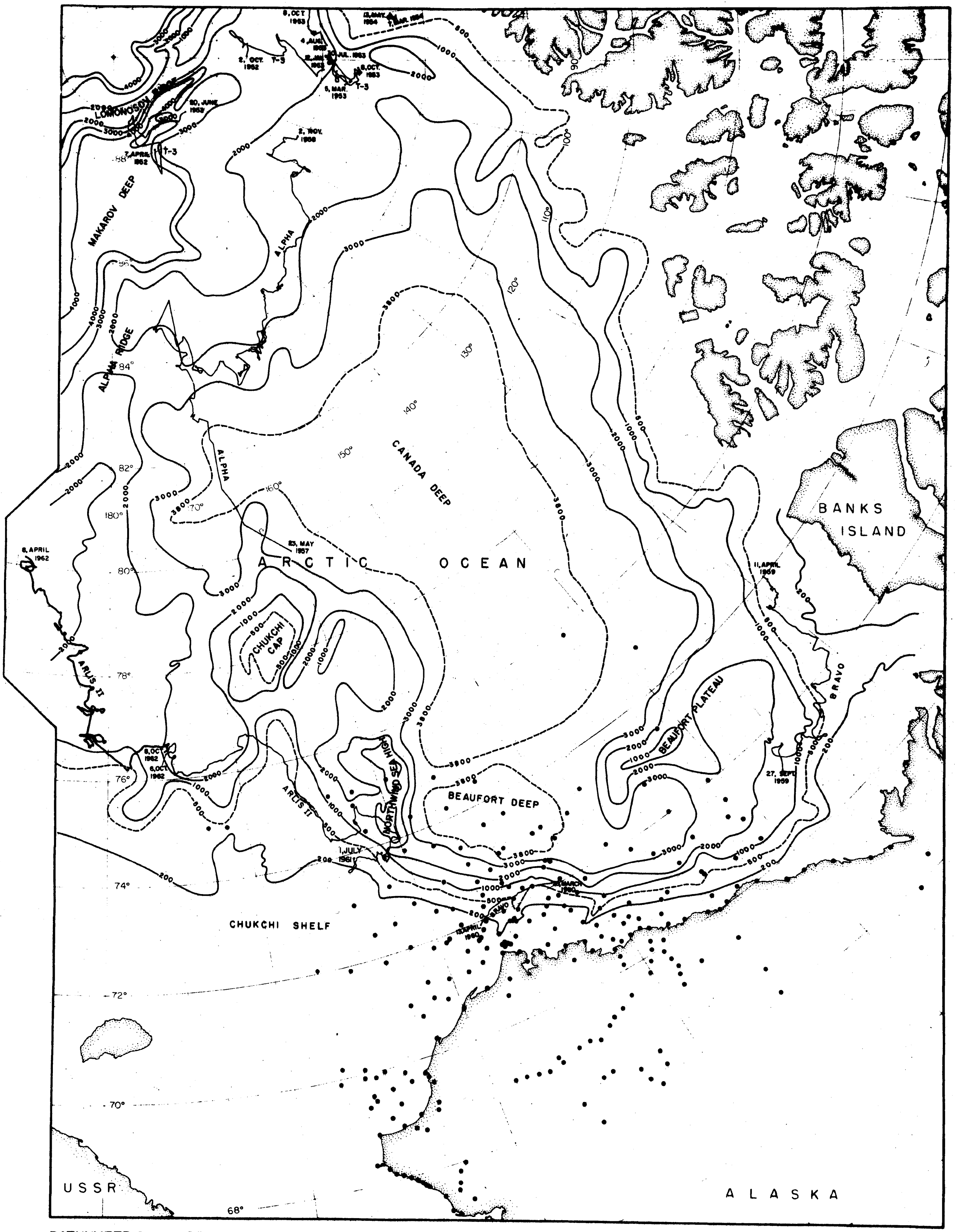
DRIFT TRACK

The drift path of ARLIS-II for the six-month period covered in this report is shown in Figures 1, 2a, and 3. Positions of the island were obtained by celestial fixes with a theodolite whenever weather permitted. These are shown as points in Figure 3 and are considered to be accurate to approximately $\pm$ 1 nautical mile (1.6 km). In Figure 2a the drift track is shown as straight line connections between fixes. In practice the actual drift was interpolated between fixes on the basis of available meteorological information. Details of the interpolated track are shown in Figure 3 and these were used in applying latitude corrections to the observed gravity. In the 181 days between 1 November 1961 and 30 April 1962, the true drift of the ice island was 750 nautical miles (1200 km) or an average of 4.2 miles (6.8 km) per day. The general drift was 270 miles (435 km) in a northwesterly direction for an average velocity of 1.5 nautical miles (2.4 km) per day.

All of the navigation and interpolation of drift tracks was done by Charles H. Cook, Richard Sommerfield and Arnold Hanson of the Department of Meteorology and Climatology, University of Washington, Seattle. We are sincerely grateful for their contribution to this report.

DEPTH SOUNDING

A recording Edo depth sounder (0-6000 fathoms range) was used to obtain a continuous profile of the ocean bottom topography along the drift path. The conversion of the echo travel-time to water depth was done by using Crary and Goldstein's (1959) formulas, based upon the Kauwahara (1938) charts. These soundings are estimated to be accurate to $\pm$ 10 m. Unfortunately the fathometer was subject to rather frequent breakdowns, which resulted in two prolonged periods of inoperation. No echo soundings were obtained during the first 2 weeks of this drift with the exception of seismic soundings made on the 6, 7, and 8 October 1961. A second prolonged breakdown occurred on the 17 to 23 December 1961 during which time two wire-soundings were completed. The water depths in meters are tabulated in the APPENDIX and presented as a bathymetric chart in Figure 2a.



BATHYMETRIC CHART OF THE ARCTIC OCEAN SHOWING THE LOCATION OF AIRLIFTED AND DRIFTING GRAVITY STATIONS

FIGURE I

ICE ISLAND ARLIS II, 6 OCTOBER 1961 TO 8 APRIL 1962

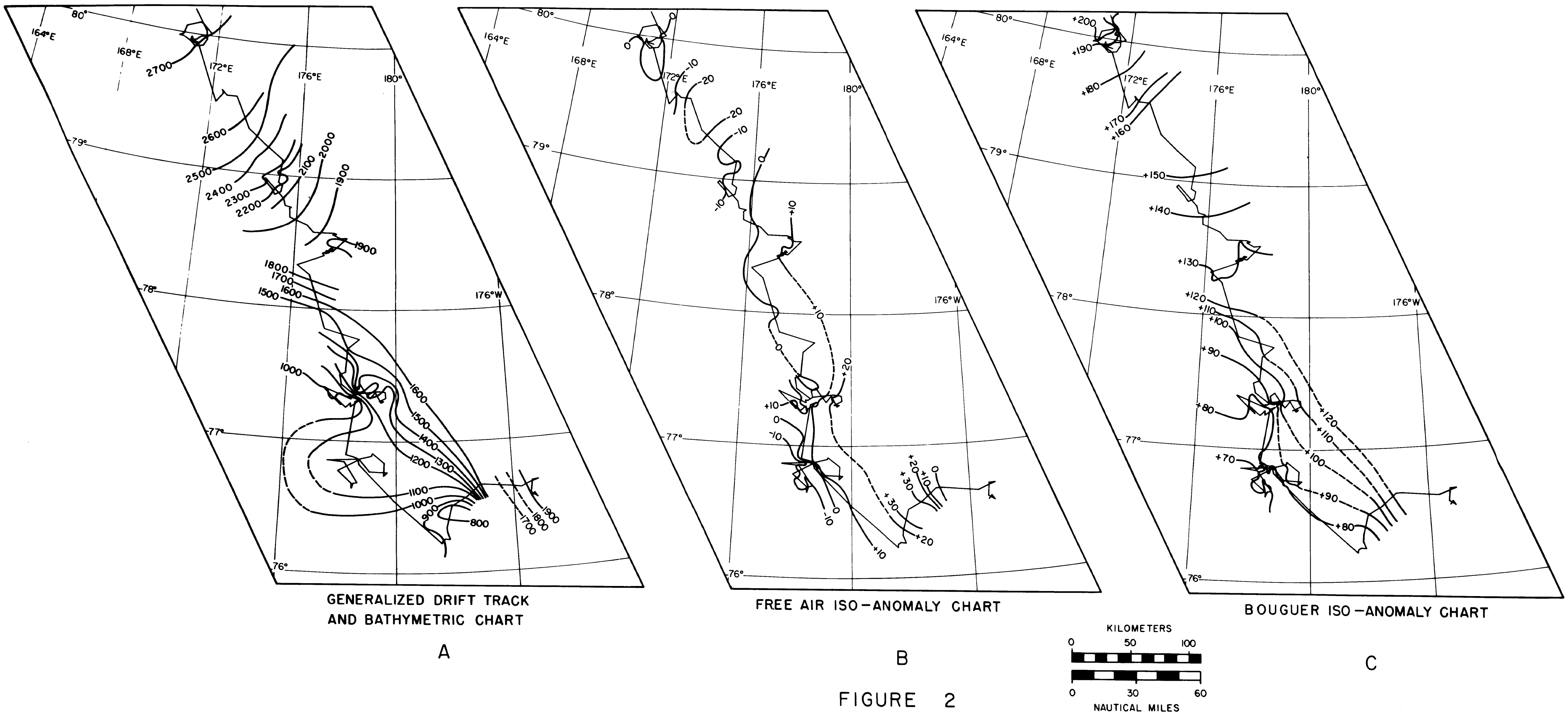


FIGURE 2

DETAILED DRIFT PATH OF ARLIS—II

FROM CELESTIAL FIXES AND METEOROLOGICAL DATA

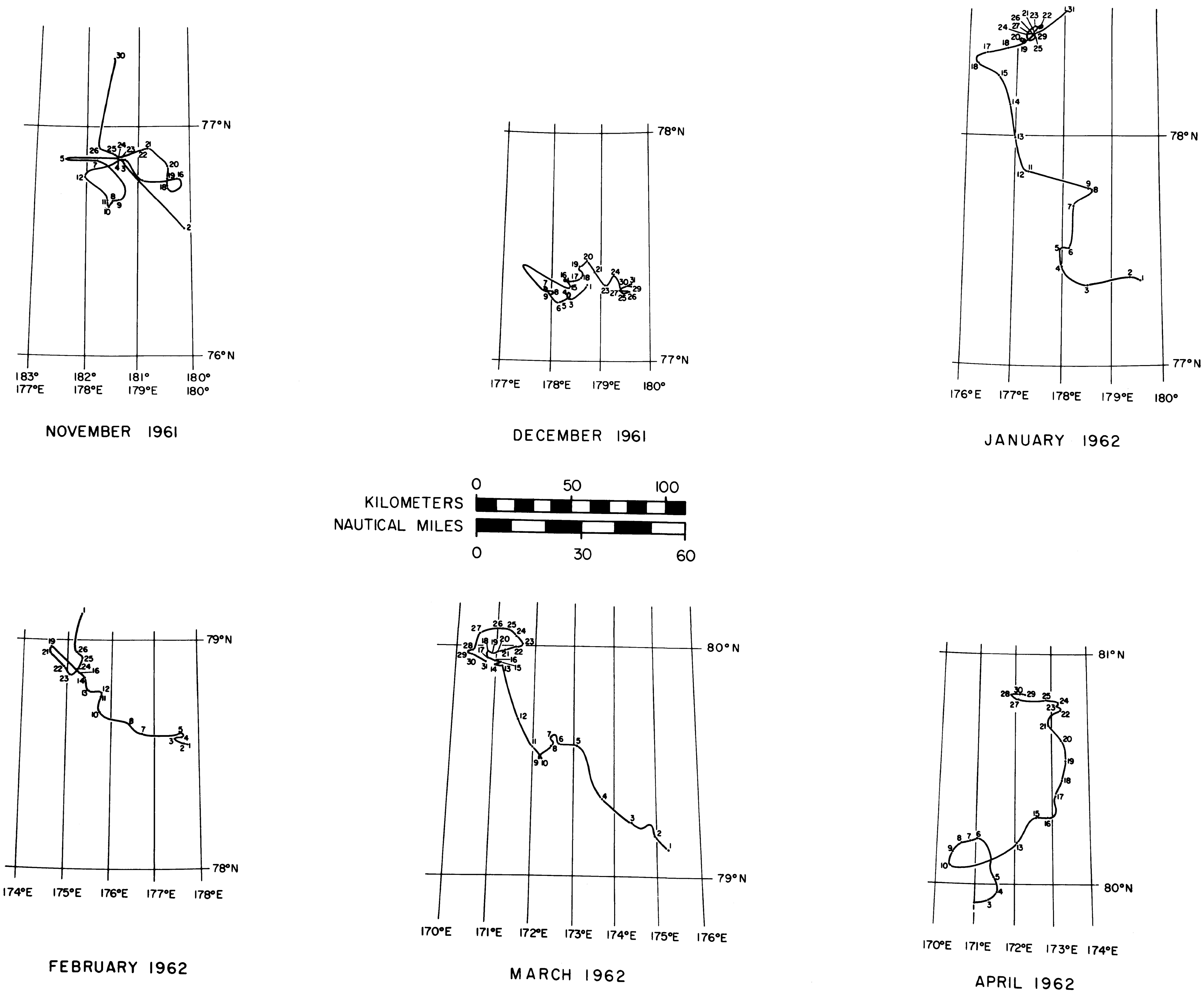


FIGURE 3

The drift track of the island originated southwest of the Chukchi Cap and continued in a generally northwesterly direction onto the base of the Alpha Ridge. Water depth increased northwestward from 800 to 2700 m at a fairly uniform rate and bottom topography was subdued.

GRAVIMETRY

Two gravimeters were used in this survey: World Wide meter #5 and North American #AG-1-113. The former was used throughout the entire drift whereas the latter, on loan from the Air Force Cambridge Research Laboratory, did not arrive until 31 December 1961. From this date both meters were read concomitantly except for the period when The North American meter was returned to the Arctic Research Laboratory at Barrow, Alaska for a gravity tie and drift check. Observations were normally made four or five times daily. Beginning 12 February 1962, the World Wide meter was read only once a day. The calibration constant of the World Wide meter was 0.11244 mgls/dial division and the North American instrument constant was 0.2136 mgls/dial division.

Because the ice island was not a perfectly stable platform it was frequently difficult to read the gravimeters and usually the hairline could not be brought to a complete standstill for null readings, rather, it oscillated, generally with a period of 10 to 15 sec. on either side of the null position. Under these conditions, the dial was set so that the hairline oscillated at equal amplitudes on either side of the null position and a reading accuracy of better than 1 mgl was obtained. Occasionally, during severe storms, oscillations became so violent that the beam bounced off the stops and it was impossible to obtain a reading. Hopefully, this problem will be overcome by an overdamped instrument, especially designed for ice island use by LaCoste and Romberg, which is now on ARLIS-II.

The most serious problem encountered in the survey was uncertainty concerning the drift characteristics of the meters. Two gravity ties and drift checks were made with the North American meter between ARLIS-II and Barrow, Alaska. The first was from the 2 to 9 February 1962 and the second from the 8 to 11 April 1962. An additional gravity tie was made on 24 March 1962 with a Worden meter flown out from Barrow on a resupply flight. The results of these ties and drift checks are graphically illustrated in Figure 4.

The World Wide gravimeter could not be used for ties to Barrow as its maximum range was only 300 mgls without re-setting. A 7-day drift curve for this meter, made at Barrow upon termination of the survey, is shown in Figure 5. Observed gravity and free air and Bouguer anomalies are tabulated in the APPENDIX. The estimated accuracy of observed gravity is $\pm$ 10 mgls and the values are tied to an absolute datum at the University of Wisconsin pendulum station at the Arctic Research Laboratory (982.6997 gal). In computing Bouguer anomalies the water column under the gravimeter was corrected to a density equivalent of 2.67 gm/cm^3.

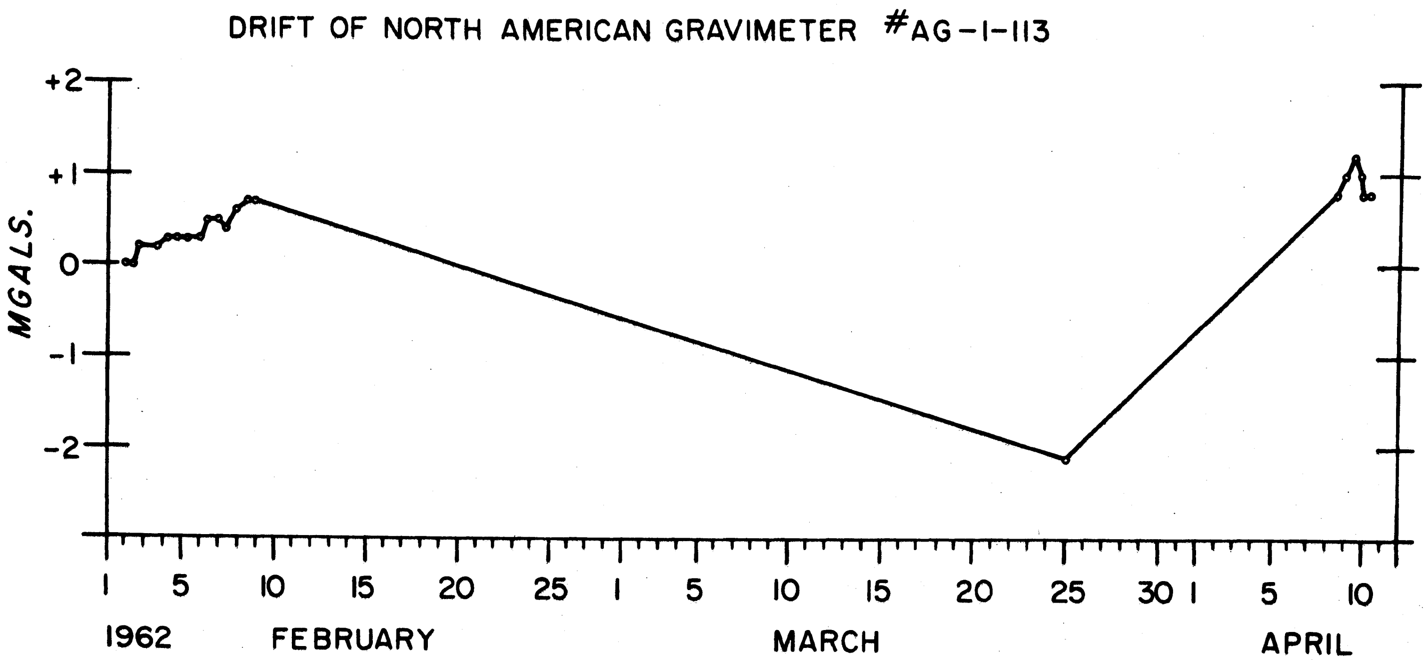


FIGURE 4

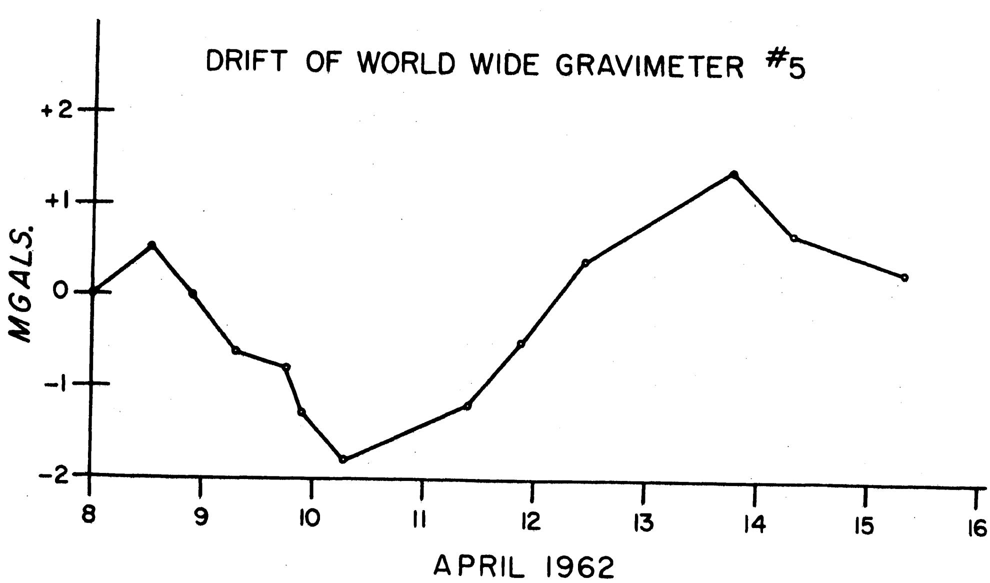


FIGURE 5

1961 FREE AIR AND BOUGUER ANOMALY AND OCEAN BOTTOM PROFILES ALONG DRIFT TRACK OF ARLIS II

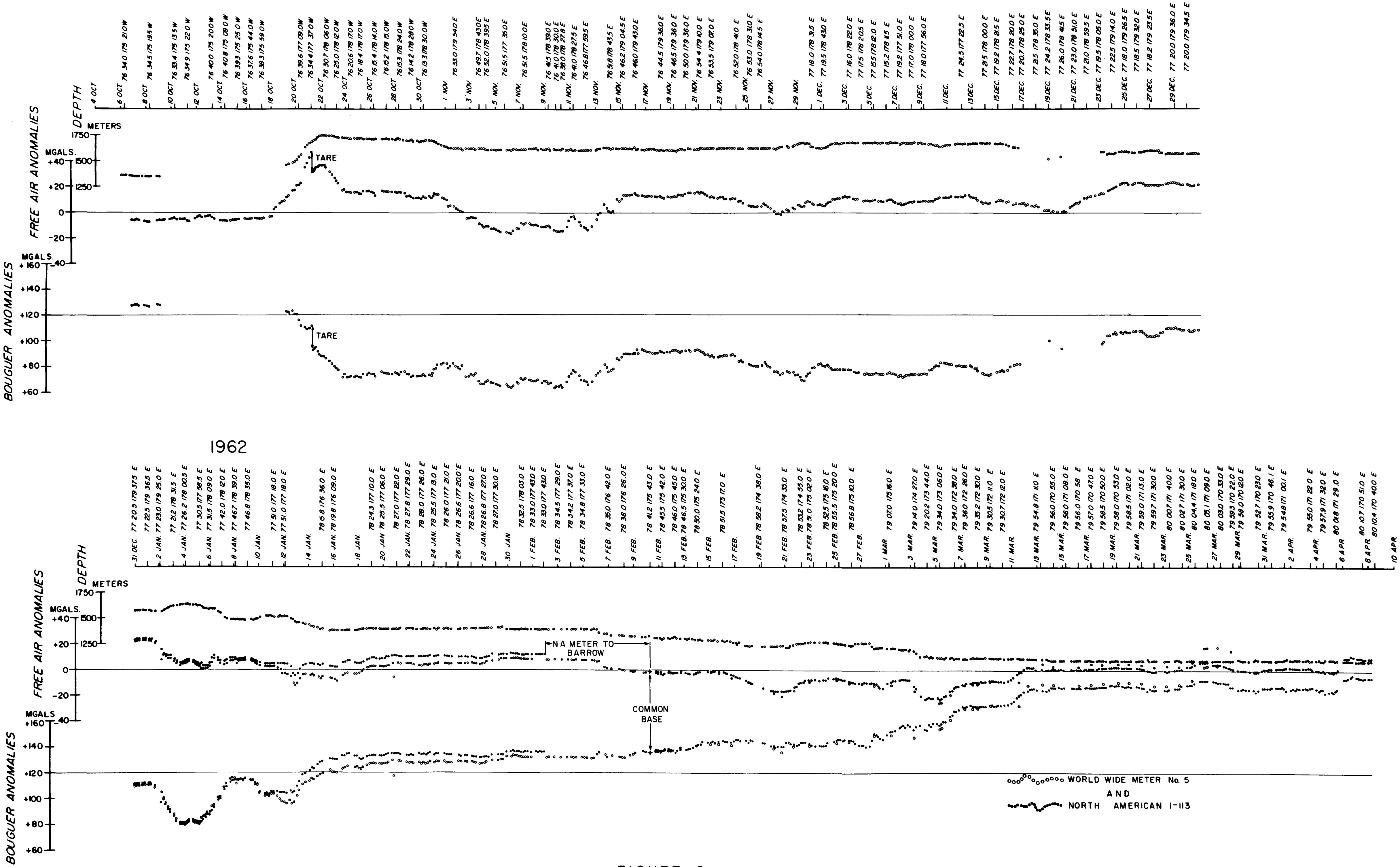


FIGURE 6

A $\pm$ 10 m error in bathymetry would introduce a $\pm$ 0.7 mgl error in the Bouguer anomalies.

Free air and Bouguer anomalies for both gravimeters and water depths are plotted in profile form in Figure 6. Prior to 31 December 1961 only the World Wide meter was on ARLIS-II. No soundings were obtained between the 9 and 19 October 1961. On 20 October 1961 there was an unexplained tare in the meter reading that appears to affect four readings. The fathometer was inoperative between 17 to 23 December 1961 and only two ocean depths were obtained from wire-sounding during this interval. On 31 December 1961, the North American gravimeter was flown out to the ice island and the two meters were read together. Beginning 11 January 1962, the two meters began to diverge to about 8 mgls and then very slowly converged. On 2 February 1962 the North American gravimeter was flown to Barrow for a gravity tie to the pendulum station at the Arctic Research Laboratory and for a drift check. The North American meter returned to ARLIS-II on 10 February 1962 and this tie served as a new datum for the World Wide meter. Beginning on 12 February 1962 the World Wide meter again jumped about 8 mgls relative to the North American meter. On 6 April 1962 the North American observations made an 8 mgl jump which was unexplained by ocean bottom topography.

The variations in gravity profiles which cannot be related to ocean bottom topography are generally within the accuracy of the observations; $\pm$ 10 mgl. However, many of the anomalies may indicate lithologic changes or, more probably, sub-bottom topography. The gravity profiles are possibly a better reflection of the surface topography of underlying consolidated material than the surface of the ocean bottom unconsolidated sediments. The gravity profiles for the southern portion of the drift track showed considerably more deviation from bottom topography than for the northern portion which is farther from the edge of the continental shelf. This suggests that the consolidated ocean floor may have been covered by low-density turbidity flows from off the continental slope. The turbidite veneer thins away from the continental shelf.

The free air and Bouguer anomalies are presented in contour form in Figures 2b and 2c. The near zero free air anomaly indicates that the portion of the Arctic Basin traversed by the drift station appeared to be in good isostatic adjustment, with the free air anomalies rarely exceeding $\pm$ 20 mgls. A +30 mgl free air anomaly was associated with the topographic high extending from the continental shelf north of Wrangel Island (see Fig. 1). Interpolated contours suggest that the relative high approximately paralleled the strike of the isobaths along the southern half of the drift track. This free air high, which was associated with topography, may reflect isostatic undercompensation. Contrastingly, the -20 mgl free air low centered on 79°30'N., 174°E. was not associated with marked topographic relief and thus would appear to reflect lithologic change or an abnormal thickness of low-density sediments.

The Bouguer iso-anomaly map and profile show the normal inverse relationship with ocean bottom elevation. Local anomalies which could not be correlated with topography, such as those centered on 6 January 1962 and 13 January 1962 (Fig. 6), suggested possible lithologic heterogeneity.

ACKNOWLEDGMENTS

In addition to our aforementioned indebtedness to C. Cook, R. Sommerfield, A. Hanson and the Air Force Cambridge Research Laboratory, it is a pleasure to acknowledge the invaluable support and assistance so cheerfully given by the director and staff of the Arctic Research Laboratory and the personnel of ARLIS-II.

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APPENDIX

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)
D61-541	6	Oct	2200	76°34.1'N	175°20.3'W	1945	982.9351	-6.0	+127.5
542	7	Oct	0200	76°34.1'	175°20.2'	1949	982.9350	-6.1	127.7
543	7	Oct	0600	76°34.2'	175°20.1'	1951	982.9355	-5.6	128.3
544	7	Oct	1000	76°34.3'	175°20.0'	1953	982.9349	-6.3	127.7
545	7	Oct	2200	76°34.4'	175°19.7'	1958	982.9343	-7.0	127.4
D61-546	8	Oct	0230	76°34.4'	175°19.6'	1959	982.9341	-7.2	127.2
547	8	Oct	0610	76°34.5'	175°19.5'	1958	982.9337	-7.6	126.8
548	8	Oct	2200	76°34.1'	175°17.5'	1957	982.9349	-6.2	128.1
549	9	Oct	0215	76°34.0'	175°17.0'	1957	982.9348	-6.2	128.1
550	9	Oct	0610	76°33.9'	175°16.5'	?	982.9349	-6.0	?
D61-551	9	Oct	1000	76°33.8'	175°16.0'	?	982.9352	-5.7	?
552	9	Oct	2200	76°33.6'	175°14.5'	?	982.9350	-5.7	?
553	10	Oct	0200	76°33.5'	175°14.0'	?	982.9357	-5.0	?
554	10	Oct	0600	76°33.4'	175°13.5'	?	982.9360	-4.6	?
555	10	Oct	1000	76°33.5'	175°14.9'	?	982.9350	-5.7	?
D61-556	10	Oct	1800	76°33.6'	175°17.7'	?	982.9356	-5.1	?
557	10	Oct	2200	76°33.7'	175°19.1'	?	982.9356	-5.2	?
558	11	Oct	0200	76°33.8'	175°20.5'	?	982.9355	-5.4	?
559	11	Oct	0600	76°34.9'	175°22.0'	?	982.9353	-6.3	?
560	11	Oct	1000	76°35.3'	175°21.8'	?	982.9354	-6.5	?
D61-561	11	Oct	2200	76°36.6'	175°21.2'	?	982.9382	-4.6	?
562	12	Oct	0200	76°37.0'	175°21.0'	?	982.9395	-3.5	?
563	12	Oct	0600	76°37.4'	175°20.8'	?	982.9409	-2.4	?
564	12	Oct	1000	76°37.8'	175°20.7'	?	982.9400	-3.6	?
565	12	Oct	1800	76°38.7'	175°20.5'	?	982.9411	-3.1	?
D61-566	12	Oct	2200	76°39.1'	175°20.3'	?	982.9418	-2.7	?
567	13	Oct	0200	76°39.5'	175°20.2'	?	982.9420	-2.7	?
568	13	Oct	0600	76°40.0'	175°20.0'	?	982.9413	-3.8	?
569	13	Oct	1015	76°40.1'	175°18.2'	?	982.9401	-5.0	?
570	13	Oct	2200	76°40.6'	175°12.8'	0	982.9393	-6.2	?
D61-571	14	Oct	0200	76°40.7'	175°10.9'	0	982.9390	-6.6	?
572	14	Oct	0600	76°40.8'	175°09.0'	0	982.9393	-6.3	?
573	14	Oct	1000	76°40.6'	175°11.7'	0	982.9390	-6.5	?
574	14	Oct	1800	76°39.9'	175°17.1'	0	982.9386	-6.4	?
575	14	Oct	2200	76°39.7'	175°19.8'	0	982.9390	-5.9	?
D61-576	15	Oct	0215	76°39.5'	175°22.4'	0	982.9392	-5.5	?
577	15	Oct	0600	76°39.3'	175°25.0'	0	982.9392	-5.4	?
578	15	Oct	1000	76°39.0'	175°28.2'	0	982.9396	-4.8	?
579	15	Oct	2200	76°38.2'	175°37.8'	0	982.9392	-4.7	?
580	16	Oct	0200	76°37.9'	175°41.0'	0	982.9388	-4.9	?
D61-581	16	Oct	0600	76°37.6'	175°44.0'	0	982.9389	-4.5	?
582	16	Oct	1000	76°37.7'	175°46.5'	0	982.9389	-4.6	?
583	16	Oct	1800	76°38.0'	175°51.5'	0	982.9391	-4.6	?
584	16	Oct	2200	76°38.1'	175°54.0'	0	982.9390	-4.8	?
585	17	Oct	0200	76°38.2'	175°56.5'	0	982.9394	-4.5	?
D61-586	17	Oct	0600	76°38.3'	175°59.0'	0	982.9396	-4.3	?
587	17	Oct	1000	76°38.4'	176°02.9'	0	982.9399	-4.1	?
588	17	Oct	2200	76°38.6'	176°14.6'	0	982.9448	.7	?
589	18	Oct	0200	76°38.7'	176°18.5'	0	982.9451	.9	?
590	18	Oct	0600	76°38.7'	176°22.4'	0	982.9468	2.6	?

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly $\rho = 2.67$ (mgal)
D61-591	18	Oct	1000	76°38.8'N	176°26.3'W	0	982.9484	4.1	?
592	18	Oct	1800	76°39.0'	176°34.1'	0	982.9516	-7.8	?
593	18	Oct	2200	76°39.1'	176°38.0'	0	982.9529	-6.6	?
594	19	Oct	0230	76°39.2'	176°41.9'	0	982.9539	-5.4	?
595	19	Oct	0600	76°39.2'	176°44.8'	1625	982.9565	-3.0	123.5
D61-596	19	Oct	1000	76°39.3'	176°48.7'	1600	982.9578	-1.8	123.0
597	19	Oct	1800	76°39.4'	176°56.5'	1550	982.9621	2.4	123.8
598	19	Oct	2200	76°39.5'	177°00.4'	1510	982.9621	2.4	121.0
599	20	Oct	0200	76°39.5'	177°04.2'	1460	982.9656	5.9	121.1
600	20	Oct	0600	76°39.6'	177°09.0'	1390	982.9660	6.2	116.6
D61-601	20	Oct	1000	76°38.7'	177°13.7'	1310	982.9666	7.4	112.3
602	20	Oct	1800	76°37.0'	177°23.0'	1105	982.9785	20.5	111.3
603	20	Oct	2200	76°36.1'	177°27.7'	1040	982.9805	23.1	109.5
604	21	Oct	0200	76°35.2'	177°32.4'	990	982.9839	27.1	110.0
605	21	Oct	0600	76°34.4'	177°37.0'	955	982.9876	31.3	111.9
D61-606	21	Oct	1000	76°33.8'	177°41.8'	910	982.9722	31.3	93.8
607	21	Oct	1115	76°33.7'	177°43.0'	890	982.9733	32.5	93.6
608	21	Oct	1200	76°33.5'	177°44.2'	890	982.9736	32.9	94.0
609	21	Oct	1400	76°33.2'	177°46.6'	880	982.9752	34.8	95.1
610	21	Oct	1800	76°32.6'	177°51.4'	820	982.9758	35.8	92.0
D61-611	21	Oct	2200	76°32.0'	177°56.2'	775	982.9760	36.4	89.6
612	22	Oct	0200	76°31.4'	178°01.0'	760	982.9756	36.4	88.5
613	22	Oct	0600	76°30.7'	178°06.0'	755	982.9752	36.5	88.3
614	22	Oct	1000	76°29.7'	178°07.0'	760	982.9730	34.9	87.1
615	22	Oct	1800	76°27.8'	178°09.0'	770	982.9686	31.9	84.7
D61-616	22	Oct	2200	76°26.8'	178°10.0'	775	982.9657	29.6	82.8
617	23	Oct	0215	76°25.9'	178°11.0'	780	982.9621	26.7	80.2
618	23	Oct	0630	76°25.0'	178°12.0'	790	982.9596	24.8	79.0
619	23	Oct	1000	76°24.2'	178°12.8'	805	982.9570	22.7	78.0
620	23	Oct	1900	76°22.5'	178°14.4'	810	982.9498	16.7	72.3
D61-621	23	Oct	2200	76°21.8'	178°15.2'	820	982.9506	18.0	74.3
622	24	Oct	0200	76°21.2'	178°16.1'	830	982.9477	15.5	72.5
623	24	Oct	0600	76°20.6'	178°17.0'	835	982.9476	15.8	73.1
624	24	Oct	1000	76°20.2'	178°17.0'	840	982.9474	15.9	73.6
625	24	Oct	1800	76°19.5'	178°17.0'	840	982.9468	15.8	73.4
D61-626	24	Oct	2200	76°19.1'	178°17.0'	840	982.9468	16.1	73.7
627	25	Oct	0200	76°18.7'	178°17.0'	835	982.9454	14.9	72.3
628	25	Oct	0600	76°18.4'	178°17.0'	840	982.9448	14.5	72.2
629	25	Oct	1000	76°17.9'	178°16.5'	850	982.9461	16.2	74.5
630	25	Oct	1800	76°16.9'	178°15.5'	850	982.9457	16.5	74.8
D61-631	25	Oct	2200	76°16.4'	178°15.0'	850	982.9460	17.1	75.5
632	26	Oct	0200	76°15.9'	178°14.5'	855	982.9445	16.0	74.7
633	26	Oct	0600	76°15.4'	178°14.0'	860	982.9438	15.6	74.7
634	26	Oct	1000	76°15.4'	178°14.0'	860	982.9417	13.5	72.6
635	26	Oct	2200	76°15.3'	178°14.0'	870	982.9448	16.7	76.4
D61-636	27	Oct	0200	76°15.2'	178°15.0'	870	982.9442	16.2	75.9
637	27	Oct	0600	76°15.2'	178°15.0'	860	982.9443	16.3	75.3
638	27	Oct	1000	76°15.2'	178°16.5'	860	982.9442	16.2	75.2
639	27	Oct	1800	76°15.2'	178°19.0'	860	982.9441	16.1	75.1
640	27	Oct	2400	76°15.2'	178°21.2'	880	982.9439	15.9	76.3

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ = 2.67 (mgal)
D61-641	28	Oct	0200	76°15.3'N	178°22.5'W	870	982.9439	15.8	75.5
642	28	Oct	0600	76°15.3'	178°24.0'	860	982.9439	15.8	74.8
643	28	Oct	1000	76°15.1'	178°24.7'	880	982.9438	15.8	76.2
644	28	Oct	1800	76°14.8'	178°26.0'	890	982.9434	15.7	76.7
645	28	Oct	2200	76°14.6'	178°26.7'	900	982.9406	13.0	74.8
D61-646	29	Oct	0200	76°14.4'	178°27.4'	900	982.9406	13.1	74.9
647	29	Oct	0600	76°14.2'	178°28.0'	890	982.9398	12.5	73.6
648	29	Oct	1000	76°14.1'	178°28.3'	910	982.9386	11.3	73.8
649	29	Oct	1830	76°13.8'	178°29.0'	910	982.9383	11.3	73.7
650	29	Oct	2200	76°13.6'	178°29.3'	910	982.9383	11.4	73.9
D61-651	30	Oct	0200	76°13.4'	178°29.6'	910	982.9383	11.5	74.0
652	30	Oct	0600	76°13.3'	178°30.0'	910	982.9388	12.1	74.6
653	30	Oct	1000	76°14.5'	178°36.0'	910	982.9389	11.4	73.8
654	30	Oct	1800	76°17.0'	178°48.0'	900	982.9418	12.5	74.3
655	30	Oct	2200	76°18.2'	178°54.0'	900	982.9419	11.8	73.6
D61-656	31	Oct	0000	76°18.8'	178°57.0'	915	982.9432	12.7	75.5
657	31	Oct	0200	76°19.4'	179°00.0'	930	982.9455	14.6	78.4
658	31	Oct	0600	76°20.6'	179°06.0'	950	982.9456	13.8	79.0
659	31	Oct	1000	76°21.9'	179°12.0'	990	982.9467	14.0	82.0
660	31	Oct	1800	76°24.3'	179°24.0'	1035	982.9459	11.6	82.6
D61-661	31	Oct	2200	76°25.5'	179°30.0'	1055	982.9459	10.7	83.1
662	1	Nov	0200	76°26.7'	179°36.0'	1070	982.9459	9.9	83.3
663	1	Nov	0600	76°27.9'	179°42.0'	1100	982.9411	4.3	79.8
664	1	Nov	1000	76°29.1'	179°48.0'	1115	982.9429	5.3	81.8
665	1	Nov	1800	76°31.5'	180°00.0'	1140	982.9442	4.9	83.2
D61-666	1	Nov	2200	76°33.0'	179°54.0'E	1140	982.9431	2.8	81.0
667	2	Nov	0200	76°34.5'	179°47.0'	1140	982.9431	1.8	80.0
668	2	Nov	0600	76°36.0'	179°40.6'	1140	982.9431	.7	79.0
669	2	Nov	1000	76°37.5'	179°34.2'	1185	982.9436	.2	81.6
670	2	Nov	1800	76°40.5'	179°21.4'	1135	982.9412	-4.2	73.7
D61-671	2	Nov	2230	76°42.0'	179°15.0'	1135	982.9421	-4.3	73.6
672	3	Nov	0200	76°43.5'	179°08.6'	1135	982.9438	-3.6	74.3
673	3	Nov	0700	76°44.0'	179°00.6'	1135	982.9440	-3.8	74.1
674	3	Nov	1000	76°45.5'	178°55.8'	1155	982.9447	-4.1	75.2
675	3	Nov	1800	76°49.7'	178°43.0'	1130	982.9434	-8.2	69.3
D61-676	3	Nov	2200	76°50.5'	178°41.8'	1130	982.9425	-9.7	67.9
677	4	Nov	0200	76°51.3'	178°40.6'	1140	982.9416	-11.1	67.2
678	4	Nov	0600	76°52.0'	178°39.5'	1155	982.9431	-10.1	69.2
679	4	Nov	1000	76°52.0'	178°32.7'	1170	982.9425	-10.7	69.6
680	4	Nov	1800	76°51.9'	178°19.1'	1170	982.9410	-12.1	68.2
D61-681	4	Nov	2200	76°51.8'	178°12.3'	1170	982.9408	-12.2	68.1
682	5	Nov	0200	76°51.8'	178°05.5'	1170	982.9399	-13.1	67.2
683	5	Nov	0600	76°51.7'	177°58.7'	1170	982.9392	-13.8	66.5
684	5	Nov	1000	76°51.7'	177°51.9'	1170	982.9386	-14.4	65.9
685	5	Nov	2200	76°51.5'	177°35.0'	1185	982.9378	-15.0	66.3
D61-686	6	Nov	0200	76°51.5'	177°39.0'	1185	982.9371	-15.7	65.6
687	6	Nov	0600	76°51.5'	177°43.0'	1185	982.9365	-16.3	65.0
688	6	Nov	1000	76°51.5'	177°47.0'	1170	982.9386	-14.2	66.1
689	6	Nov	1800	76°51.5'	177°56.0'	1170	982.9407	-12.1	68.2
690	6	Nov	2200	76°51.5'	178°00.0'	1170	982.9405	-12.3	68.0

APPENDIX (con't)

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ = 2.67 (mgal)
D61-691	7	Nov	0200	76°51.5'N	178°05.0'E	1170	982.9440	-8.8	71.5
692	7	Nov	0600	76°51.5'	178°10.0'	1170	982.9435	-9.3	71.0
693	7	Nov	1000	76°50.6'	178°15.0'	1170	982.9435	-8.7	71.6
694	7	Nov	1800	76°48.9'	178°23.0'	1155	982.9427	-8.4	70.9
695	7	Nov	2200	76°48.1'	178°29.0'	1155	982.9414	-9.1	70.1
D61-696	8	Nov	0200	76°47.3'	178°33.0'	1155	982.9404	-9.6	69.7
697	8	Nov	0600	76°46.4'	178°37.0'	1155	982.9397	-9.7	69.6
698	8	Nov	1000	76°45.5'	178°40.0'	1170	982.9387	-10.1	70.2
699	8	Nov	1800	76°43.7'	178°45.0'	1155	982.9366	-11.0	68.3
700	8	Nov	2300	76°42.4'	178°44.0'	1170	982.9357	-11.0	69.3
D61-701	9	Nov	0200	76°41.7'	178°42.0'	1170	982.9354	-10.8	69.5
702	9	Nov	0600	76°41.5'	178°39.0'	1135	982.9362	-9.9	68.0
703	9	Nov	1000	76°41.3'	178°34.5'	1155	982.9350	-11.0	68.3
704	9	Nov	1800	76°41.0'	178°30.0'	1135	982.9322	-13.6	64.3
705	9	Nov	2200	76°40.3'	178°29.3'	1170	982.9306	-14.7	65.6
D61-706	10	Nov	0200	76°39.6'	178°28.7'	1170	982.9302	-14.6	65.7
707	10	Nov	0600	76°38.9'	178°28.0'	1170	982.9302	-14.1	66.2
708	10	Nov	1000	76°39.2'	178°27.9'	1155	982.9302	-14.3	64.9
709	10	Nov	1800	76°39.9'	178°27.7'	1170	982.9343	-10.7	69.6
710	10	Nov	2200	76°40.3'	178°27.6'	1170	982.9387	-6.6	73.7
D61-711	11	Nov	0200	76°40.6'	178°27.6'	1155	982.9419	-3.6	75.7
712	11	Nov	0600	76°41.0'	178°27.5'	1180	982.9428	-3.0	78.0
713	11	Nov	1000	76°42.0'	178°22.8'	1185	982.9417	-4.7	76.6
714	11	Nov	1800	76°43.9'	178°13.2'	1185	982.9404	-7.3	74.0
715	11	Nov	2200	76°44.9'	178°08.5'	1185	982.9384	-10.0	71.3
D61-716	12	Nov	0200	76°45.9'	178°03.8'	1185	982.9378	-11.3	70.1
717	12	Nov	0600	76°46.8'	177°59.5'	1185	982.9376	-12.1	69.3
718	12	Nov	1000	76°47.2'	178°03.2'	1185	982.9363	-13.6	67.7
719	12	Nov	1800	76°48.0'	178°10.6'	1170	982.9400	-10.5	69.8
720	13	Nov	0200	76°48.8'	178°18.0'	1155	982.9464	-4.6	74.7
D61-721	13	Nov	0600	76°49.3'	178°22.7'	1140	982.9496	-1.7	76.5
722	13	Nov	1000	76°49.8'	178°27.1'	1135	982.9512	-.5	77.4
723	13	Nov	1800	76°50.3'	178°31.8'	1115	982.9582	6.2	82.7
724	13	Nov	2200	76°50.8'	178°36.5'	1115	982.9561	3.7	80.3
725	14	Nov	0200	76°51.3'	178°40.2'	1115	982.9536	.9	77.4
D61-726	14	Nov	0600	76°51.8'	178°43.5'	1135	982.9532	.2	78.1
727	14	Nov	1000	76°50.9'	178°47.0'	1135	982.9540	1.6	79.5
728	14	Nov	1800	76°49.0'	178°54.0'	1130	982.9613	10.2	87.7
729	14	Nov	2200	76°48.1'	178°57.5'	1130	982.9597	9.2	86.7
730	15	Nov	0200	76°47.2'	179°01.0'	1130	982.9607	10.8	88.3
D61-731	15	Nov	0600	76°46.2'	179°04.5'	1130	982.9628	13.5	91.1
732	15	Nov	1000	76°46.2'	179°10.9'	1130	982.9629	13.6	91.2
733	15	Nov	1400	76°46.2'	179°17.3'	1130	982.9629	13.6	91.2
734	15	Nov	1800	76°46.1'	179°23.7'	1130	982.9629	13.7	91.3
735	15	Nov	2200	76°46.1'	179°30.1'	1130	982.9629	13.7	91.3
D61-736	16	Nov	0200	76°46.0'	179°36.5'	1115	982.9634	14.3	90.8
737	16	Nov	0600	76°46.0'	179°43.0'	1170	982.9629	13.8	94.1
738	16	Nov	1000	76°45.8'	179°46.5'	1135	982.9622	13.2	91.1
739	16	Nov	1800	76°45.2'	179°46.5'	1170	982.9622	13.6	93.9
740	16	Nov	2200	76°45.1'	179°46.3'	1170	982.9618	13.3	93.6

APPENDIX (con't)

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

							World Wide #5		
Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ= 2.67 (mgal)
D61-741	17	Nov	0200	76°45.0'N	179°45.8'E	1155	982.9618	13.3	92.6
742	17	Nov	0600	76°44.9'	179°44.3'	1155	982.9615	13.1	92.4
743	17	Nov	1200	76°44.8'	179°42.2'	1140	982.9613	13.0	91.2
744	17	Nov	1800	76°44.7'	179°40.0'	1140	982.9610	12.7	91.0
745	17	Nov	2200	76°44.6'	179°38.5'	1155	982.9605	12.3	91.6
D61-746	18	Nov	0200	76°44.5'	179°37.0'	1170	982.9607	12.6	92.9
747	18	Nov	0600	76°44.5'	179°36.0'	1170	982.9603	12.2	92.5
748	18	Nov	1000	76°44.8'	179°36.0'	1170	982.9596	11.3	91.6
749	18	Nov	1800	76°45.4'	179°36.0'	1170	982.9609	12.2	92.5
750	18	Nov	2300	76°45.7'	179°36.0'	1170	982.9609	12.0	92.3
D61-751	19	Nov	0230	76°46.1'	179°36.0'	1185	982.9613	12.1	93.4
752	19	Nov	0725	76°46.5'	179°36.0'	1180	982.9621	12.6	93.6
753	19	Nov	1000	76°47.1'	179°36.0'	1180	982.9626	12.7	93.7
754	19	Nov	1400	76°47.7'	179°36.0'	1155	982.9639	13.6	92.9
755	19	Nov	1800	76°48.3'	179°36.0'	1140	982.9641	13.4	91.7
D61-756	19	Nov	2200	76°48.9'	179°36.0'	1155	982.9648	13.7	93.0
757	20	Nov	0210	76°49.5'	179°36.0'	1155	982.9662	14.7	94.0
758	20	Nov	1020	76°50.7'	179°31.7'	1135	982.9681	15.8	93.7
759	20	Nov	1400	76°51.4'	179°27.4'	1135	982.9681	15.3	93.2
760	20	Nov	2200	76°52.8'	179°18.8'	1135	982.9693	15.6	93.5
D61-761	21	Nov	0200	76°53.6'	179°14.4'	1135	982.9703	16.1	94.0
762	21	Nov	0600	76°54.4'	179°10.0'	1130	982.9707	15.9	93.5
763	21	Nov	1000	76°54.3'	179°09.5'	1115	982.9706	15.9	92.4
764	21	Nov	1400	76°54.1'	179°09.0'	1115	982.9700	15.4	92.0
765	21	Nov	1800	76°54.0'	179°08.5'	1115	982.9688	14.3	90.8
D61-766	21	Nov	2200	76°53.8'	179°08.0'	1115	982.9679	13.5	90.1
767	22	Nov	0200	76°53.7'	179°07.5'	1115	982.9670	12.7	89.2
768	22	Nov	0600	76°53.5'	179°07.0'	1115	982.9669	12.7	89.3
769	22	Nov	1000	76°53.3'	179°03.5'	1115	982.9661	12.1	88.6
770	22	Nov	1800	76°52.8'	178°56.5'	1115	982.9656	11.9	88.4
D61-771	22	Nov	2200	76°52.5'	178°53.0'	1115	982.9656	12.1	88.6
772	23	Nov	0200	76°52.3'	178°49.5'	1110	982.9658	12.4	88.6
773	23	Nov	0600	76°52.0'	178°46.0'	1110	982.9649	11.7	87.9
774	23	Nov	1000	76°52.0'	178°45.0'	1110	982.9648	11.6	87.8
775	23	Nov	1800	76°52.0'	178°43.0'	1115	982.9648	11.6	88.2
D61-776	23	Nov	2200	76°52.0'	178°42.0'	1115	982.9648	11.6	88.2
777	24	Nov	0200	76°52.0'	178°41.0'	1115	982.9643	11.1	87.7
778	24	Nov	1000	76°52.3'	178°39.3'	1115	982.9627	9.3	85.9
779	24	Nov	1400	76°52.4'	178°37.6'	1115	982.9625	9.1	85.6
780	24	Nov	1800	76°52.6'	178°35.9'	1115	982.9617	8.1	84.7
D61-781	25	Nov	0600	76°53.0'	178°31.0'	1115	982.9597	5.9	82.4
782	25	Nov	1000	76°53.2'	178°28.2'	1115	982.9594	5.4	82.0
783	25	Nov	1400	76°53.3'	178°25.5'	1115	982.9590	5.0	81.5
784	25	Nov	1800	76°53.5'	178°22.7'	1115	982.9592	5.0	81.6
785	25	Nov	2200	76°53.7'	178°19.9'	1115	982.9593	5.0	81.5
D61-786	26	Nov	0600	76°54.0'	178°14.5'	1115	982.9597	5.2	81.7
787	26	Nov	1000	76°55.0'	178°15.2'	1115	982.9627	7.5	84.1
788	26	Nov	1400	76°56.0'	178°15.9'	1115	982.9619	6.1	82.6
789	26	Nov	1830	76°57.0'	178°16.5'	1115	982.9614	4.9	81.4
790	26	Nov	2200	76°58.0'	178°17.2'	1115	982.9611	3.9	80.5

APPENDIX (con't)

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ= 2.67 (mgal)
D61-791	27	Nov	0600	77°00.0'N	178°18.6'E	1115	982.9597	1.2	77.7
792	27	Nov	1000	77°01.0'	178°19.3'	1130	982.9587	-.4	77.1
793	27	Nov	1400	77°02.0'	178°20.0'	1115	982.9596	-.2	76.3
794	27	Nov	1800	77°03.0'	178°20.7'	1100	982.9596	-.9	74.6
795	27	Nov	2300	77°04.0'	178°21.4'	1095	982.9620	.9	76.0
D61-796	28	Nov	0600	77°06.0'	178°22.1'	1080	982.9653	2.9	77.0
797	28	Nov	1000	77°07.0'	178°22.8'	1090	982.9650	1.9	76.7
798	28	Nov	1800	77°09.0'	178°24.3'	1055	982.9685	4.1	76.5
799	28	Nov	2215	77°10.0'	178°25.1'	1040	982.9685	3.4	74.8
800	29	Nov	0300	77°11.0'	178°25.9'	995	982.9721	6.4	74.7
D61-801	29	Nov	0600	77°12.0'	178°26.7'	980	982.9721	5.7	73.0
802	29	Nov	1000	77°13.0'	178°27.5'	965	982.9714	4.4	70.6
803	29	Nov	1400	77°14.0'	178°28.3'	950	982.9727	5.0	70.2
804	29	Nov	1800	77°15.0'	178°29.1'	965	982.9762	7.9	74.1
805	29	Nov	2200	77°16.0'	178°29.9'	970	982.9778	8.8	75.4
D61-806	30	Nov	0200	77°17.0'	178°30.7'	995	982.9780	8.4	76.7
807	30	Nov	0515	77°18.0'	178°31.5'	1055	982.9779	7.6	80.0
808	30	Nov	1000	77°18.3'	178°33.4'	1080	982.9770	6.5	80.7
809	30	Nov	1800	77°18.8'	178°37.2'	1110	982.9770	6.2	82.4
810	30	Nov	2200	77°19.0'	178°39.1'	1110	982.9776	6.7	82.9
D61-811	1	Dec	0200	77°19.2'	178°41.0'	1110	982.9769	5.9	82.0
812	1	Dec	0600	77°19.5'	178°43.0'	1110	982.9769	5.7	81.8
813	1	Dec	1000	77°19.2'	178°41.2'	1100	982.9778	6.8	82.3
814	1	Dec	1430	77°18.9'	178°39.5'	1070	982.9787	7.8	81.3
815	1	Dec	1800	77°18.6'	178°37.7'	1040	982.9791	8.4	79.8
D61-816	1	Dec	2200	77°18.3'	178°36.0'	1000	982.9806	10.1	78.8
817	2	Dec	0300	77°18.0'	178°34.2'	995	982.9806	10.3	78.6
818	2	Dec	0600	77°17.7'	178°32.5'	990	982.9810	10.9	78.9
819	2	Dec	1000	77°17.4'	178°30.7'	980	982.9810	11.1	78.4
820	2	Dec	1800	77°16.8'	178°26.2'	965	982.9817	12.2	78.4
D61-821	2	Dec	2200	77°16.5'	178°24.4'	965	982.9817	12.4	78.6
822	3	Dec	0230	77°16.2'	178°23.2'	965	982.9813	12.2	78.4
823	3	Dec	0600	77°16.0'	178°22.0'	965	982.9813	12.3	78.6
824	3	Dec	1400	77°16.5'	178°21.0'	965	982.9801	10.8	77.0
825	3	Dec	1800	77°16.7'	178°20.0'	960	982.9797	10.3	76.2
D61-826	3	Dec	2200	77°17.0'	178°20.3'	960	982.9798	10.2	76.1
827	4	Dec	1030	77°17.2'	178°20.5'	960	982.9794	9.6	75.5
828	4	Dec	1400	77°16.9'	178°20.5'	960	982.9794	9.8	75.7
829	4	Dec	1800	77°16.6'	178°20.5'	960	982.9792	9.8	75.7
830	4	Dec	2200	77°16.3'	178°17.7'	960	982.9786	9.4	75.3
D61-831	5	Dec	0200	77°16.0'	178°14.9'	960	982.9786	9.6	75.5
832	5	Dec	0600	77°15.5'	178°12.0'	965	982.9785	9.9	76.1
833	5	Dec	1400	77°15.4'	178°11.8'	965	982.9778	9.2	75.4
834	5	Dec	1800	77°15.3'	178°11.8'	965	982.9776	9.1	75.3
835	5	Dec	2200	77°15.3'	178°11.7'	965	982.9775	9.0	75.2
D61-836	6	Dec	0600	77°15.2'	178°11.5'	965	982.9781	9.6	75.9
837	6	Dec	1000	77°15.0'	178°08.1'	965	982.9785	10.2	76.4
838	6	Dec	1400	77°15.8'	178°04.7'	965	982.9788	10.0	76.2
839	6	Dec	1830	77°16.7'	178°01.3'	970	982.9785	9.1	75.6
840	6	Dec	2200	77°17.5'	177°57.9'	970	982.9785	8.6	75.1

APPENDIX (con't)

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ= 2.67 (mgal)
D61-841	7	Dec	0230	77°18.3'N	177°54.5'E	970	982.9774	6.9	73.5
842	7	Dec	0600	77°19.2'	177°51.0'	980	982.9786	7.6	74.8
843	7	Dec	1000	77°18.8'	177°51.0'	970	982.9773	6.5	73.1
844	7	Dec	1430	77°18.2'	177°53.2'	970	982.9773	6.9	73.5
845	7	Dec	1800	77°17.5'	177°55.4'	980	982.9771	7.2	74.4
D61-846	7	Dec	2200	77°17.0'	177°57.7'	980	982.9774	7.8	75.0
847	8	Dec	0200	77°16.5'	178°00.0'	980	982.9777	8.4	75.7
848	8	Dec	0600	77°17.0'	178°00.0'	970	982.9777	8.1	74.7
849	8	Dec	1000	77°17.2'	177°59.3'	970	982.9781	8.3	74.9
850	8	Dec	1800	77°17.5'	177°57.9'	970	982.9785	8.6	75.1
D61-851	8	Dec	2200	77°17.6'	177°57.2'	970	982.9786	8.6	75.2
852	9	Dec	0200	77°17.8'	177°56.6'	980	982.9786	8.5	75.7
853	9	Dec	0600	77°18.0'	177°56.0'	980	982.9788	8.5	75.8
854	9	Dec	1430	77°18.7'	177°54.0'	1010	982.9800	9.3	78.6
855	9	Dec	1800	77°19.1'	177°52.0'	1020	982.9803	9.3	79.3
D61-856	9	Dec	2200	77°19.4'	177°50.0'	1035	982.9804	9.2	80.3
857	10	Dec	0200	77°19.8'	177°48.0'	1040	982.9817	10.3	81.6
858	10	Dec	0600	77°20.1'	177°46.0'	1040	982.9822	10.6	82.0
859	10	Dec	1000	77°20.5'	177°44.0'	1055	982.9830	11.1	83.5
860	10	Dec	1800	77°21.2'	177°40.0'	1050	982.9840	11.7	83.7
D61-861	10	Dec	2200	77°21.6'	177°38.0'	1040	982.9844	11.8	83.2
862	11	Dec	0300	77°22.0'	177°36.0'	1035	982.9848	11.9	83.0
863	11	Dec	0600	77°22.3'	177°34.0'	1020	982.9853	12.3	82.3
864	11	Dec	1800	77°23.4'	177°28.0'	1010	982.9863	12.5	81.9
865	11	Dec	2200	77°23.7'	177°26.0'	1010	982.9863	12.3	81.7
D61-866	12	Dec	0200	77°24.1'	177°24.3'	1010	982.9863	12.1	81.4
867	12	Dec	0600	77°24.5'	177°22.5'	1000	982.9869	12.4	81.1
868	12	Dec	1000	77°24.2'	177°25.9'	995	982.9872	12.9	81.2
869	12	Dec	1800	77°23.7'	177°32.7'	1000	982.9870	13.1	81.7
870	12	Dec	2200	77°23.4'	177°36.1'	995	982.9864	12.6	80.9
D61-871	13	Dec	0200	77°23.1'	177°39.5'	995	982.9852	11.6	79.9
872	13	Dec.	0600	77°22.9'	177°42.9'	990	982.9850	11.6	79.5
873	13	Dec	1045	77°22.6'	177°46.3'	990	982.9830	9.8	77.7
874	13	Dec	1800	77°22.1'	177°53.1'	990	982.9811	8.2	76.1
875	13	Dec	2200	77°21.8'	177°56.5'	980	982.9800	7.3	74.5
D61-876	14	Dec	0200	77°21.5'	178°00.0'	980	982.9800	7.5	74.7
877	14	Dec	0600	77°21.1'	178°03.6'	980	982.9791	6.8	74.1
878	14	Dec	1000	77°20.7'	178°07.2'	990	982.9793	7.3	75.2
879	14	Dec	2200	77°19.6'	178°18.0'	995	982.9800	8.7	77.0
880	15	Dec	0300	77°19.2'	178°21.5'	995	982.9805	9.5	77.7
D61-881	15	Dec	0600	77°19.4'	178°21.3'	995	982.9810	9.8	78.1
882	15	Dec	1000	77°19.8'	178°21.1'	995	982.9809	9.5	77.8
883	15	Dec	1800	77°20.2'	178°20.7'	1020	982.9801	8.4	78.4
884	15	Dec	2200	77°20.4'	178°20.5'	1055	982.9803	8.5	80.9
885	16	Dec	0600	77°20.7'	178°20.0'	1100	982.9785	6.5	82.0
D61-886	16	Dec	1130	77°20.7'	178°21.0'	1100	982.9797	7.7	83.2
887	16	Dec	1800	77°20.7'	178°23.0'	1100	982.9793	7.3	82.8
888	16	Dec	2300	77°20.7'	178°24.0'	1100	982.9793	7.3	82.8
889	17	Dec	0200	77°20.7'	178°25.0'	1100	982.9793	7.3	82.8
890	17	Dec	0600	77°20.8'	178°26.7'	1200	982.9785	6.4	88.8

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	World Wide #5 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ= 2.67 (mgal)
D61-891	17	Dec	1000	77°20.9'N	178°28.4'E	1200	982.9785	6.4	88.7
892	17	Dec	1800	77°21.2'	178°31.8'	1300	982.9772	4.9	94.1
893	17	Dec	2200	77°21.3'	178°33.4'	1300	982.9773	4.9	94.1
894	18	Dec	0200	77°21.5'	178°35.0'	1300	982.9781	5.6	94.8
895	18	Dec	0600	77°22.0'	178°35.5'	1300	982.9774	4.5	93.8
D61-896	18	Dec	1800	77°23.3'	178°33.5'	1400	982.9755	1.8	97.9
897	18	Dec	2200	77°23.8'	178°33.0'	1450	982.9759	1.9	101.4
898	19	Dec	0200	77°24.2'	178°33.5'	1450	982.9759	1.6	101.1
899	19	Dec	0600	77°24.5'	178°34.8'	1400	982.9749	.4	96.5
900	19	Dec	1000	77°24.8'	178°36.1'	1400	982.9759	1.2	97.3
D61-901	19	Dec	1800	77°25.4'	178°38.8'	1400	982.9759	.9	96.9
902	20	Dec	0300	77°26.0'	178°41.5'	1375	982.9759	.5	94.8
903	20	Dec	0530	77°25.5'	178°43.1'	1350	982.9759	.8	93.4
904	20	Dec	1000	77°25.0'	178°44.7'	1300	982.9757	.9	90.1
905	20	Dec	1800	77°24.0'	178°47.9'	1300	982.9787	4.6	93.8
D61-906	20	Dec	2200	77°23.5'	178°49.5'	1300	982.9793	5.5	94.7
907	21	Dec	0200	77°23.0'	178°51.0'	1300	982.9799	6.4	95.6
908	21	Dec	0600	77°22.7'	178°52.4'	1300	982.9808	7.5	96.7
909	21	Dec	1000	77°22.4'	178°53.8'	1300	982.9808	7.7	96.9
910	21	Dec	1400	77°22.0'	178°55.2'	1300	982.9814	8.5	97.8
D61-911	21	Dec	2200	77°21.6'	178°58.0'	1300	982.9837	11.1	100.3
912	22	Dec	0200	77°21.0'	178°59.5'	1300	982.9837	11.5	100.7
913	22	Dec	0630	77°20.7'	179°00.4'	1300	982.9842	12.2	101.4
914	22	Dec	1000	77°20.5'	179°01.3'	1300	982.9842	12.3	101.5
915	22	Dec	1800	77°20.0'	179°03.1'	1300	982.9849	13.3	102.6
D61-916	23	Dec	0200	77°19.5'	179°05.0'	1300	982.9853	14.1	103.3
917	23	Dec	0600	77°20.0'	179°06.5'	1230	982.9861	14.5	99.0
918	23	Dec	1000	77°20.5'	179°08.0'	1240	982.9869	15.0	100.1
919	23	Dec	1800	77°21.5'	179°11.0'	1280	982.9896	17.1	104.9
920	23	Dec	2200	77°22.0'	179°12.5'	1280	982.9903	17.4	105.3
D61-921	24	Dec	0200	77°22.5'	179°14.0'	1280	982.9914	18.2	106.1
922	24	Dec	0600	77°21.8'	179°16.1'	1280	982.9922	19.5	107.3
923	24	Dec	1000	77°21.0'	179°18.2'	1260	982.9922	20.0	106.5
924	24	Dec	1800	77°19.5'	179°22.3'	1250	982.9931	21.9	107.7
925	24	Dec	2200	77°18.8'	179°24.4'	1230	982.9931	22.3	106.7
D61-926	25	Dec	0200	77°18.0'	179°26.5'	1240	982.9931	22.8	107.9
927	25	Dec	0700	77°18.1'	179°27.4'	1240	982.9926	22.3	107.4
928	25	Dec	1000	77°18.2'	179°28.3'	1250	982.9919	21.5	107.3
929	25	Dec	1800	77°18.4'	179°30.1'	1260	982.9924	21.9	108.4
930	25	Dec	2200	77°18.5'	179°31.0'	1260	982.9928	22.2	108.7
D61-931	26	Dec	0600	77°18.5'	179°30.6'	1250	982.9931	22.5	108.3
932	26	Dec	1000	77°18.4'	179°29.2'	1250	982.9930	22.5	108.3
933	26	Dec	1400	77°18.4'	179°27.8'	1240	982.9926	22.1	107.2
934	26	Dec	1800	77°18.3'	179°26.4'	1230	982.9921	21.6	106.1
935	26	Dec	2200	77°18.3'	179°25.0'	1210	982.9918	21.3	104.4
D61-936	27	Dec	0300	77°18.2'	179°23.5'	1210	982.9918	21.4	104.4
937	27	Dec	0530	77°18.3'	179°24.5'	1210	982.9918	21.3	104.4
938	27	Dec	1000	77°18.5'	179°25.6'	1210	982.9922	21.6	104.7
939	27	Dec	1500	77°18.7'	179°26.6'	1230	982.9920	21.3	105.7
940	27	Dec	1800	77°18.8'	179°27.6'	1230	982.9921	21.3	105.7

APPENDIX

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

							North American #113			World Wide #5		
Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly =2.67 (mgal)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)
D61-941	27	Dec	2200	77°18.9'N	179°28.7'E	1250				982.9925	21.6	107.4
942	28	Dec	0200	77°19.1'	179°29.7'	1260				982.9925	21.5	108.0
943	28	Dec	1000	77°19.4'	179°31.8'	1280				982.9939	22.7	110.6
944	28	Dec	1400	77°19.5'	179°32.8'	1280				982.9943	23.1	110.9
945	28	Dec	1800	77°19.7'	179°33.8'	1280				982.9944	23.0	110.9
D61-946	28	Dec	2200	77°19.8'	179°34.9'	1280				982.9944	23.0	110.8
947	29	Dec	0200	77°20.0'	179°36.0'	1280				982.9944	22.8	110.7
948	29	Dec	0600	77°20.0'	179°35.8'	1280				982.9938	22.2	110.1
949	29	Dec	1000	77°20.0'	179°35.5'	1280				982.9938	22.2	110.1
950	29	Dec	1400	77°20.0'	179°35.3'	1280				982.9934	21.8	109.7
D61-951	29	Dec	1800	77°20.0'	179°35.0'	1280				982.9934	21.8	109.7
952	30	Dec	0200	77°20.0'	179°34.5'	1280				982.9932	21.6	109.5
953	30	Dec	0600	77°20.1'	179°35.0'	1280				982.9926	21.0	108.8
954	30	Dec	1000	77°20.2'	179°35.5'	1280				982.9925	20.8	108.7
955	30	Dec	1400	77°20.3'	179°36.0'	1280				982.9931	21.3	109.2
D61-956	30	Dec	2200	77°20.5'	179°37.0'	1280				982.9936	21.7	109.6
957	31	Dec	0200	77°20.5'	179°37.5'	1280				982.9936	21.7	109.6
958	31	Dec	0630	77°20.9'	179°37.2'	1280				982.9943	22.2	110.0
959	31	Dec	1030	77°21.2'	179°36.9'	1280				982.9951	22.8	110.6
960	31	Dec	1800	77°22.0'	179°36.6'	1280				982.9960	23.1	111.0
D61-961	31	Dec	2300	77°22.5'	179°36.5'	1280				982.9962	23.0	110.9
D62- 1	1	Jan	0600	77°22.5'	179°36.5'	1280				982.9965	23.3	111.2
2	1	Jan	1000	77°22.7'	179°34.6'	1290				982.9961	22.8	111.3
3	1	Jan	1800	77°23.0'	179°30.7'	1290				982.9939	20.4	108.9
4	2	Jan	0600	77°22.9'	179°25.0'	1300	982.9814	8.0	97.2	982.9891	15.7	104.9
D62- 5	2	Jan	1000	77°22.5'	179°16.1'	1280	982.9854	12.2	100.1	982.9851	11.9	99.8
6	2	Jan	1400	77°22.0'	179°07.2'	1240	982.9832	10.3	95.5	982.9846	11.7	96.9
7	2	Jan	1800	77°21.7'	178°58.3'	1205	982.9818	9.1	91.8	982.9838	11.1	93.8
8	2	Jan	2200	77°21.2'	178°49.4'	1170	982.9815	9.2	89.5	982.9835	11.2	91.5
9	3	Jan	0600	77°21.7'	178°31.5'	1160	982.9793	6.6	86.3	982.9810	8.3	88.0
D62- 10	3	Jan	1000	77°22.3'	178°25.3'	1130	982.9782	5.2	82.7	982.9796	6.6	84.1
11	3	Jan	1800	77°24.2'	178°12.9'	1120	982.9780	3.7	80.6	982.9793	5.0	81.9
12	3	Jan	2200	77°25.5'	178°06.7'	1110	982.9797	4.6	80.8	982.9808	5.7	81.9
13	4	Jan	0200	77°26.5'	178°00.5'	1100	982.9803	4.6	80.0	982.9819	6.2	81.6
14	4	Jan	0600	77°27.3'	178°00.2'	1100	982.9819	5.6	81.1	982.9763	7.0	82.5
D62- 15	4	Jan	1000	77°27.9'	177°59.9'	1110	982.9829	6.3	82.4	982.9766	7.3	83.4
16	4	Jan	1800	77°29.5'	177°59.4'	1120	982.9830	5.3	82.2	982.9843	6.6	83.5
17	4	Jan	2200	77°30.2'	177°59.1'	1120	982.9824	4.3	81.2	982.9841	6.0	82.9
18	5	Jan	0200	77°31.0'	177°58.8'	1130	982.9819	3.3	80.8	982.9834	4.8	82.3
19	5	Jan	0600	77°31.0'	177°58.5'	1140	982.9810	2.4	80.6	982.9825	3.9	82.1
D62- 20	5	Jan	1000	77°30.9'	178°00.6'	1180	982.9797	1.1	82.1	982.9831	4.5	85.5
21	5	Jan	1400	77°30.9'	178°02.7'	1210	982.9795	.9	84.0	982.9816	3.0	86.1
22	5	Jan	1800	77°30.8'	178°04.8'	1240	982.9789	.4	85.5	982.9809	2.4	87.5
23	5	Jan	2230	77°30.8'	178°06.9'	1260	982.9802	1.7	88.2	982.9816	3.1	89.6
24	6	Jan	0200	77°31.5'	178°09.0'	1240	982.9816	2.7	87.8	982.9838	4.9	90.0
D62- 25	6	Jan	0600	77°33.4'	178°10.0'	1240	982.9859	5.7	90.9	982.9894	9.2	94.4
26	6	Jan	1000	77°35.1'	178°11.0'	1240	982.9894	8.2	93.3	982.9918	10.6	95.7
27	6	Jan	1800	77°38.8'	178°11.8'	1330	982.9910	7.4	98.7	982.9927	9.1	100.4
28	6	Jan	2200	77°40.7'	178°12.0'	1380	982.9900	5.2	99.9	982.9918	7.0	101.7
29	7	Jan	0600	77°43.0'	178°12.0'	1500	982.9900	3.8	106.7	982.9925	6.3	109.2
D62- 30	7	Jan	1000	77°43.8'	178°19.0'	1520	982.9916	4.9	109.2	982.9867	7.5	111.8
31	7	Jan	1800	77°45.1'	178°32.0'	1550	982.9945	7.0	113.3	982.9966	9.1	115.4
32	7	Jan	2200	77°46.0'	178°39.0'	1560	982.9955	7.4	114.5	982.9972	9.1	116.2
33	8	Jan	0300	77°46.7'	178°39.0'	1560	982.9960	7.5	114.5	982.9885	9.1	116.1
34	8	Jan	0600	77°46.7'	178°38.3'	1560	982.9962	7.7	114.7	982.9931	4.6	111.6
D62- 35	8	Jan	1000	77°46.7'	178°37.5'	1560	982.9966	8.1	115.1	982.9963	7.8	114.8
36	8	Jan	1400	77°46.8'	178°36.6'	1560	982.9966	8.0	115.1	982.9965	7.9	115.0
37	8	Jan	1800	77°46.8'	178°35.8'	1560	982.9966	8.0	115.1	982.9965	7.9	115.0
38	8	Jan	2200	77°46.8'	178°35.0'	1570	982.9966	8.0	115.8	982.9967	8.1	115.9
39	9	Jan	1000	77°47.1'	178°22.2'	1550	982.9966	7.8	114.2	982.9888	8.0	114.4

APPENDIX (con't)

ARLIS-II Gravity, 6 October 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	North American #113 Observed Gravity (gals)	North American #113 Free Air Anomaly (mgal)	North American #113 Bouguer Anomaly ρ=2.67 (mgal)	World Wide #5 Observed Gravity (gals)	World Wide #5 Free Air Anomaly (mgal)	World Wide #5 Bouguer Anomaly ρ=2.67 (mgal)
D62- 40	9	Jan	1400	77°47.5'N	178°15.8'E	1560	982.9966	7.6	114.6	982.9968	7.8	114.8
41	9	Jan	1800	77°47.9'	178°09.4'	1540	982.9961	6.8	112.5	982.9950	5.7	111.4
42	9	Jan	2200	77°48.1'	178°03.0'	1540	982.9954	6.0	111.7	982.9939	4.5	110.2
43	10	Jan	0300	77°48.5'	177°55.0'	1480	982.9951	5.4	107.0	982.9934	3.7	105.3
44	10	Jan	1400	77°49.5'	177°37.4'	1450	982.9951	4.8	104.3	982.9934	3.1	102.6
D62- 45	10	Jan	1800	77°49.9'	177°30.8'	1460	982.9951	4.6	104.8	982.9934	2.9	103.1
46	10	Jan	2200	77°50.4'	177°24.4'	1450	982.9951	4.3	103.8	982.9934	2.6	102.1
47	11	Jan	0200	77°51.0'	177°18.0'	1470	982.9960	4.8	105.7	982.9943	3.1	104.0
48	11	Jan	0500	77°51.0'	177°18.0'	1470	982.9960	4.8	105.7	982.9944	3.2	104.1
49	11	Jan	1400	77°51.0'	177°18.0'	1470	982.9960	4.8	105.7	982.9925	1.3	102.2
D62- 50	11	Jan	1800	77°51.0'	177°18.0'	1460	982.9960	4.8	105.0	982.9913	.1	100.3
51	11	Jan	2200	77°51.0'	177°18.0'	1460	982.9960	4.8	105.0	982.9890	-2.2	98.0
52	12	Jan	0200	77°51.0'	177°18.0'	1460	982.9960	4.8	105.0	982.9886	-2.6	97.6
53	12	Jan	0600	77°52.1'	177°15.7'	1460	982.9960	4.1	104.3	982.9886	-3.3	96.9
54	12	Jan	1400	77°54.9'	177°11.0'	1510	982.9960	2.4	106.0	982.9886	-5.0	98.6
D62- 55	12	Jan	1800	77°56.1'	177°08.7'	1550	982.9928	-1.6	104.8	982.9843	-10.1	96.3
56	12	Jan	2200	77°57.9'	177°06.3'	1600	982.9912	-4.3	105.5	982.9834	-12.1	97.7
57	13	Jan	0200	77°59.5'	177°04.0'	1640	982.9937	-2.8	109.8	982.9862	-10.3	102.3
58	13	Jan	0600	78°00.8'	177°01.7'	1650	982.9979	.6	113.9	982.9902	-7.1	106.2
59	13	Jan	1445	78°03.9'	176°57.0'	1680	983.0028	3.6	118.9	982.9955	-3.7	111.6
D62- 60	13	Jan	1800	78°05.0'	176°54.6'	1690	983.0039	4.1	120.0	982.9963	-3.5	112.4
61	14	Jan	0200	78°08.0'	176°49.9'	1710	983.0063	4.6	122.0	982.9976	-4.1	113.3
62	14	Jan	0600	78°09.5'	176°47.6'	1740	983.0072	4.6	124.0	982.9988	-3.8	115.6
63	14	Jan	1000	78°11.0'	176°45.3'	1740	983.0078	4.3	123.7	982.9988	-4.7	114.7
64	14	Jan	1800	78°13.9'	176°40.6'	1790	983.0092	4.0	126.8	982.9998	-5.4	117.4
D62- 65	14	Jan	2200	78°15.7'	176°38.3'	1820	983.0101	3.8	128.7	983.0003	-6.0	118.9
66	15	Jan	0200	78°16.3'	176°36.0'	1820	983.0109	4.2	129.1	983.0017	-5.0	119.9
67	15	Jan	1800	78°18.3'	176°18.0'	1870	983.0109	3.0	131.4	983.0017	-6.2	122.2
68	15	Jan	2200	78°18.9'	176°13.5'	1860	983.0109	2.6	130.3	983.0017	-6.6	121.1
69	16	Jan	0200	78°19.6'	176°09.0'	1870	983.0109	2.2	130.6	983.0010	-7.7	120.7
D62- 70	16	Jan	0630	78°20.3'	176°09.0'	1870	983.0112	2.1	130.5	983.0010	-8.1	120.3
71	16	Jan	1800	78°21.6'	176°16.6'	1865	983.0157	5.8	133.8	983.0055	-4.4	123.6
72	16	Jan	2200	78°21.7'	176°20.4'	1860	983.0159	6.0	133.6	983.0067	-3.2	124.4
73	17	Jan	0300	78°22.0'	176°25.1'	1865	983.0170	6.9	134.9	983.0078	-2.3	125.7
74	17	Jan	0730	78°22.1'	176°29.3'	1865	983.0174	7.2	135.2			
D62- 75	17	Jan	1800	78°22.7'	176°40.2'	1870	983.0159	5.4	133.7	983.0074	-3.1	125.2
76	17	Jan	2200	78°22.8'	176°44.0'	1865	983.0159	5.3	133.3	983.0074	-3.2	124.8
77	18	Jan	0200	78°23.0'	176°47.8'	1840	983.0163	5.6	131.9	983.0081	-2.6	123.7
78	18	Jan	0600	78°23.2'	176°51.6'	1830	983.0163	5.5	131.1	983.0089	-1.9	123.7
79	18	Jan	1000	78°23.4'	176°55.4'	1820	983.0172	6.3	131.2	983.0109	.0	124.9
D62- 80	18	Jan	1800	78°24.0'	177°03.0'	1820	983.0193	8.0	132.9	983.0129	1.6	126.5
81	18	Jan	2200	78°24.1'	177°06.8'	1820	983.0200	8.6	133.6	983.0138	2.4	127.4
82	19	Jan	0200	78°24.2'	177°10.0'	1820	983.0208	9.4	134.3	983.0144	3.0	127.9
83	19	Jan	0600	78°24.4'	177°09.3'	1820	983.0208	9.3	134.2	983.0144	2.9	127.8
84	19	Jan	1000	78°24.6'	177°08.7'	1820	983.0208	9.1	134.1	983.0143	2.6	127.6
D62- 85	19	Jan	1800	78°25.0'	177°07.4'	1820	983.0208	8.9	133.8	983.0143	2.4	127.3
86	19	Jan	2200	78,25.0'	177°06.7'	1820	983.0208	8.9	133.8	983.0143	2.4	127.3
87	20	Jan	0200	78°25.0'	177°06.0'	1820	983.0211	9.2	134.1	983.0143	2.4	127.3
88	20	Jan	0600	78°24.8'	177°06.0'	1820	983.0221	10.3	135.2	983.0148	3.0	127.9
89	20	Jan	1000	78°24.8'	177°09.2'	1820	983.0222	10.4	135.3	983.0157	3.9	128.8
D62- 90	20	Jan	1800	78°26.3'	177°15.6'	1820	983.0236	10.9	135.9	983.0181	5.4	130.4
91	20	Jan	2230	78°26.7'	177°18.8'	1810	983.0243	11.4	135.6	983.0076	-5.3	118.9
92	21	Jan	0200	78°27.2'	177°20.0'	1810	983.0245	11.3	135.5			
93	21	Jan	0600	78°28.1'	177°26.0'	1820	983.0247	11.0	135.9	983.0190	5.3	130.2
94	21	Jan	1000	78°28.5'	177°29.5'	1810	983.0247	10.7	135.0	983.0191	5.1	129.4
D62- 95	21	Jan	2200	78°28.2'	177°33.0'	1800	983.0247	10.9	134.5	983.0190	5.2	128.8
96	22	Jan	0200	78°28.2'	177°29.0'	1790	983.0247	10.9	133.8	983.0191	5.3	128.2
97	22	Jan	0600	78°28.3'	177°28.5'	1800	983.0247	10.9	134.4	983.0190	5.2	128.7
98	22	Jan	1000	78°28.5'	177°28.0'	1800	983.0247	10.7	134.3	983.0186	4.6	128.2
99	22	Jan	2200	78°28.6'	177°26.5'	1820	983.0249	10.9	135.8	983.0179	3.9	128.8

APPENDIX (con't)

ARLIS-II Gravity, 6 October 1961 to 8 April, 1962

							North American #113			World Wide #5		
Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)
D62-100	23	Jan	0200	78°28.8'N	177°26.0'E	1810	983.0249	10.8	135.0	983.0179	3.8	128.0
101	23	Jan	0615	78°28.2'	177°23.8'	1810	983.0249	11.1	135.3	983.0179	4.1	128.3
102	23	Jan	1000	78°28.0'	177°21.6'	1800	983.0249	11.2	134.8	983.0179	4.2	127.8
103	23	Jan	1400	78°27.8'	177°19.4'	1810	983.0249	11.3	135.6	983.0179	4.3	128.6
104	23	Jan	1800	78°27.3'	177°18.2'	1820	983.0249	11.6	136.6	983.0179	4.6	129.6
D62-105	24	Jan	0245	78°26.5'	177°13.0'	1800	983.0238	11.0	134.6	983.0179	5.1	128.7
106	24	Jan	0615	78°25.9'	177°13.0'	1810	983.0238	11.4	135.6	983.0179	5.5	129.7
107	24	Jan	1000	78°25.1'	177°13.0'	1800	983.0238	11.8	135.4	983.0179	5.9	129.5
108	24	Jan	2200	78°25.7'	177°19.0'	1810	983.0238	11.5	135.7	983.0179	5.6	129.8
109	25	Jan	0200	78°26.1'	177°21.0'	1800	983.0238	11.3	134.8	983.0179	5.4	128.9
D62-110	25	Jan	0600	78°26.2'	177°21.0'	1800	983.0238	11.2	134.7	983.0179	5.3	128.8
111	25	Jan	1100	78°26.4'	177°21.0'	1800	983.0238	11.1	134.6	983.0181	5.4	128.9
112	26	Jan	0200	78°26.6'	177°20.0'	1810	983.0234	10.6	134.8	983.0185	5.7	129.9
113	26	Jan	0515	78°26.6'	177°19.4'	1800	983.0234	10.6	134.1	983.0185	5.7	129.2
114	26	Jan	1400	78°26.6'	177°18.0'	1800	983.0234	10.6	134.1	983.0185	5.7	129.2
D62-115	26	Jan	1800	78°26.6'	177°17.4'	1800	983.0234	10.6	134.1	983.0185	5.7	129.2
116	27	Jan	0220	78°26.6'	177°16.0'	1800	983.0233	10.5	134.0	983.0185	5.7	129.2
117	27	Jan	0630	78°26.6'	177°17.8'	1800	983.0231	10.3	133.8	983.0128	5.5	129.0
118	27	Jan	1015	78°26.7'	177°19.6'	1800	983.0228	9.9	133.4	983.0180	5.1	128.6
119	27	Jan	1800	78°26.8'	177°23.2'	1790	983.0228	9.8	132.7	983.0180	5.0	127.9
D62-120	27	Jan	2200	78°26.8'	177°25.0'	1790	983.0228	9.8	132.7	983.0183	5.3	128.2
121	28	Jan	0300	78°26.8'	177°27.0'	1790	983.0233	10.3	133.2	983.0187	5.7	128.6
122	28	Jan	0600	78°26.8'	177°27.5'	1790	983.0237	10.7	133.6	983.0194	6.4	129.3
123	28	Jan	1000	78°26.9'	177°28.0'	1790	983.0237	10.7	133.5			
124	28	Jan	1800	78°27.0'	177°30.0'	1780	983.0261	13.0	135.2	983.0209	7.8	130.0
D62-125	29	Jan	0600	78°27.9'	177°30.0'	1780	983.0261	12.5	134.7	983.0216	8.0	130.2
126	29	Jan	1100	78°28.3'	177°33.7'	1780	983.0270	13.2	135.3	983.0233	9.5	131.6
127	29	Jan	1400	78°28.7'	177°36.0'	1780	983.0272	13.1	135.3	983.0233	9.2	131.4
128	29	Jan	2200	78°29.5'	177°42.0'	1810	983.0275	12.9	137.2	983.0242	9.6	133.9
129	30	Jan	0600	78°29.9'	177°48.0'	1810	983.0283	13.5	137.7	983.0242	9.4	133.6
D62-130	30	Jan	1000	78°30.8'	177°51.0'	1820	983.0285	13.2	138.1	983.0249	9.6	134.5
131	30	Jan	1400	78°31.2'	177°54.0'	1820	983.0285	12.9	137.9	983.0249	9.3	134.3
132	30	Jan	1830	78°31.5'	177°57.0'	1820	983.0286	12.9	137.8	983.0253	9.6	134.5
133	30	Jan	2200	78°31.8'	178°00.0'	1820	983.0286	12.7	137.6	983.0248	8.9	133.8
134	31	Jan	0200	78°32.6'	178°03.0'	1820	983.0286	12.2	137.1	983.0248	8.4	133.3
D62-135	31	Jan	0615	78°32.6'	178°00.5'	1820	983.0286	12.2	137.1	983.0248	8.4	133.3
136	31	Jan	1000	78°32.6'	177°58.0'	1820	983.0288	12.4	137.3	983.0248	8.4	133.3
137	31	Jan	1400	78°32.7'	177°55.5'	1820	983.0288	12.4	137.3	983.0249	8.5	133.4
138	31	Jan	2200	78°32.7'	177°48.0'	1820	983.0288	12.4	137.3	983.0249	8.5	133.4
139	1	Feb	0600	78°32.7'	177°47.0'	1820	983.0288	12.4	137.3			
D62-140	1	Feb	1015	78°32.8'	177°46.0'	1820	983.0288	12.3	137.2			
141	1	Feb	1400	78°32.8'	177°45.0'	1820	983.0289	12.4	137.3			
142	1	Feb	1800	78°32.9'	177°44.0'	1820	983.0291	12.5	137.5			
143	1	Feb	2200	78°33.0'	177°43.0'	1820	983.0292	12.6	137.5			
144	2	Feb	0215	78°33.2'	177°41.0'	1820				983.0248	8.1	133.0
D62-145	2	Feb	0610	78°33.4'	177°39.0'	1820				983.0252	8.3	133.3
146	2	Feb	1822	78°34.0'	177°33.0'	1820				983.0257	8.5	133.4
147	3	Feb	0619	78°34.5'	177°29.0'	1820				983.0258	8.3	133.2
148	3	Feb	1800	78°34.3'	177°34.0'	1820				983.0258	8.4	133.3
149	4	Feb	0203	78°34.2'	177°37.0'	1820				983.0257	8.4	133.3
D62-150	4	Feb	0625	78°34.3'	177°36.3'	1820				983.0256	8.2	133.1
151	4	Feb	1011	78°34.4'	177°35.7'	1820				983.0257	8.3	133.2
152	4	Feb	2213	78°34.7'	177°33.7'	1820				983.0257	8.1	133.0
153	5	Feb	0158	78°34.8'	177°33.0'	1820				983.0258	8.1	133.0
154	5	Feb	0617	78°34.8'	177°28.7'	1820				983.0257	8.0	132.9
D62-155	5	Feb	1808	78°34.8'	177°14.9'	1820				983.0257	8.0	132.9
156	5	Feb	2155	78°34.9'	177°10.6'	1820				983.0258	8.1	133.0
157	6	Feb	0155	78°34.9'	177°06.4'	1860				983.0256	7.9	135.5
158	6	Feb	0608	78°34.9'	177°02.1'	1875				983.0256	7.9	136.6
159	6	Feb	1808	78°35.0'	176°48.3'	1900				983.0211	3.3	133.7

ARLIS-II Gravity, 6 October,1961 to 8 April, 1962

							North American #113			World Wide #5		
Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly =2.67 (mgal)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)
D62-160	6	Feb	2158	78°35.0'N	176°42.0'E	1900				983.0201	2.3	132.7
161	7	Feb	0607	78°35.0'	176°42.0'	1930				983.0199	2.1	134.6
162	7	Feb	2217	78°37.0'	176°31.2'	1930				983.0199	.9	133.4
163	8	Feb	0158	78°37.5'	176°28.6'	1930				983.0199	.6	133.1
164	8	Feb	0558	78°38.0'	176°26.0'	1930				983.0198	.3	132.7
D62-165	8	Feb	1801	78°38.8'	176°15.3'	1970				983.0198	-.2	135.0
166	8	Feb	2158	78°39.1'	176°11.7'	1980				983.0198	-.4	135.5
167	9	Feb	0159	78°39.4'	176°08.1'	1995				983.0198	-.6	136.4
168	9	Feb	1808	78°40.5'	175°53.7'	2020				983.0198	-1.2	137.4
169	9	Feb	2150	78°40.8'	175°49.1'	2020				983.0198	-1.4	137.3
D62-170	10	Feb	0600	78°41.2'	175°43.0'	2000	983.0207	-.7	136.6	983.0207	-.7	136.6
171	10	Feb	1800	78°43.3'	175°42.5'	2035	983.0207	-1.9	137.7	983.0216	-1.0	138.6
172	10	Feb	2200	78°44.0'	175°42.3'	2035	983.0207	-2.3	137.3	983.0218	-1.2	138.4
173	11	Feb	0200	78°44.7'	175°42.1'	2035	983.0208	-2.6	137.0	983.0219	-1.5	138.1
174	11	Feb	0600	78°45.5'	175°42.0'	2050	983.0213	-2.6	138.1			
D62-175	11	Feb	1000	78°45.6'	175°42.5'	2050	983.0216	-2.4	138.3	983.0218	-2.2	138.5
176	11	Feb	1800	78°45.7'	175°43.5'	2050	983.0229	-1.1	139.6	983.0225	-1.5	139.2
177	11	Feb	2200	78°45.8'	175°44.0'	2050	983.0226	-1.5	139.2	983.0224	-1.7	139.0
178	12	Feb	0200	78°45.9'	175°44.5'	2040	983.0226	-1.5	138.5			
179	12	Feb	0600	78°46.0'	175°45.0'	2020	983.0226	-1.6	137.0			
D62-180	12	Feb	1000	78°46.3'	175°41.7'	2040	983.0226	-1.8	138.2			
181	12	Feb	1800	78°46.4'	175°35.3'	2060	983.0226	-1.8	139.6	983.0236	-.8	140.6
182	13	Feb	0200	78°46.5'	175°30.0'	2060	983.0226	-1.9	139.5			
183	13	Feb	0600	78°47.1'	175°29.0'	2070	983.0226	-2.2	139.8			
184	13	Feb	1000	78°47.7'	175°28.0'	2070	983.0226	-2.6	139.5			
D62-185	13	Feb	1800	78°48.9'	175°26.0'	2090	983.0233	-2.6	140.9			
186	13	Feb	2200	78°49.5'	175°25.0'	2110	983.0240	-2.2	142.6	983.0240	-2.2	142.6
187	14	Feb	0200	78°50.0'	175°24.0'	2120	983.0246	-1.9	143.6			
188	14	Feb	0600	78°50.2'	175°23.4'	2110	983.0255	-1.1	143.7			
189	14	Feb	1000	78°50.3'	175°22.8'	2130	983.0255	-1.2	145.0			
D62-190	14	Feb	2200	78°50.8'	175°21.1'	2130	983.0259	-1.1	145.1			
191	15	Feb	0200	78°50.9'	175°20.5'	2115	983.0262	-.8	144.3	983.0259	-1.1	144.0
192	15	Feb	0600	78°51.0'	175°19.9'	2130	983.0264	-.7	145.5			
193	15	Feb	1000	78°51.2'	175°19.3'	2110	983.0267	-.5	144.3			
194	15	Feb	1900	78°51.4'	175°18.1'	2130	983.0266	-.7	145.5	983.0250	-2.3	143.9
D62-195	16	Feb	0200	78°51.5'	175°17.0'	2140	983.0266	-.8	146.1			
196	16	Feb	0600	78°51.9'	175°14.8'	2140	983.0259	-1.7	145.2			
197	16	Feb	1000	78°52.2'	175°12.7'	2140	983.0258	-2.0	144.9			
198	16	Feb	1800	78°53.0'	175°08.4'	2160	983.0249	-3.3	144.9	983.0225	-5.7	142.5
199	16	Feb	2200	78°53.3'	175°06.2'	2180	983.0245	-3.9	145.7			
D62-200	17	Feb	0300	78°53.7'	175°03.0'	2200	983.0243	-4.3	146.7			
201	17	Feb	0600	78°54.1'	175°01.9'	2210	983.0241	-4.7	146.9			
202	17	Feb	1000	78°54.5'	174°59.7'	2200	983.0235	-5.6	145.4			
203	17	Feb	2200	78°55.6'	174°53.2'	2240	983.0220	-7.7	146.0			
204	18	Feb	0200	78°55.9'	174°51.0'	2240	983.0212	-8.7	145.1			
D62-205	18	Feb	0600	78°56.3'	174°48.9'	2260	983.0212	-8.9	146.2			
206	18	Feb	1000	78°56.7'	174°46.7'	2260	983.0212	-9.1	146.0			
207	19	Feb	0600	78°58.2'	174°38.0'	2295	983.0181	-13.1	144.4			
208	19	Feb	1000	78°58.2'	174°37.7'	2295	983.0181	-13.1	144.4			
209	19	Feb	2200	78°58.0'	174°36.9'	2295	983.0157	-15.4	142.2			
D62-210	20	Feb	0200	78°57.9'	174°36.6'	2295	983.0155	-15.5	142.0	983.0136	-17.4	140.1
211	20	Feb	0600	78°57.9'	174°36.3'	2295	983.0153	-15.7	141.8			
212	20	Feb	1000	78°57.8'	174°36.0'	2295	983.0153	-15.6	141.9			
213	20	Feb	1800	78°57.6'	174°35.5'	2295	983.0150	-15.8	141.7	983.0108	-20.0	137.5
214	20	Feb	2200	78°57.5'	174°35.2'	2295	983.0150	-15.8	141.7			
D62-215	21	Feb	0300	78°57.5'	174°35.0'	2335	983.0150	-15.8	144.5			
216	21	Feb	0700	78°56.8'	174°37.9'	2335	983.0150	-15.4	144.9			
217	21	Feb	1000	78°56.2'	174°40.8'	2310	983.0150	-15.0	143.5			
218	21	Feb	1800	78°55.0'	174°46.5'	2275	983.0170	-12.4	143.8	983.0147	-14.7	141.5
219	21	Feb	2300	78°54.3'	174°50.0'	2240	983.0175	-11.5	142.3			

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

							North American #113			World Wide #5		
Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)	Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ=2.67 (mgal)
D62-220	22	Feb	0200	78°53.8'N	174°52.5'E	2235	983.0190	-9.7	143.7			
221	22	Feb	0600	78°53.2'	174°55.0'	2235	983.0194	-8.9	144.5			
222	22	Feb	1100	78°52.9'	174°56.5'	2230	983.0199	-8.3	144.8			
223	22	Feb	1400	78°52.0'	174°57.4'	2220	983.0199	-7.7	144.6			
224	22	Feb	2300	78°51.0'	175°00.2'	2200	983.0200	-7.1	143.9	983.0184	-8.7	142.3
D62-225	23	Feb	0200	78°50.7'	175°01.1'	2180	983.0200	-6.9	142.7			
226	23	Feb	1000	78°51.3'	175°04.3'	2180	983.0200	-7.2	142.4			
227	23	Feb	1800	78°51.9'	175°09.0'	2180	983.0203	-7.3	142.3	983.0202	-7.4	142.2
228	24	Feb	0200	78°52.3'	175°13.7'	2180	983.0211	-6.7	142.9			
229	24	Feb	0600	78°52.5'	175°16.0'	2180	983.0211	-6.8	142.8			
D62-230	24	Feb	1000	78°53.0'	175°16.7'	2190	983.0228	-5.4	144.9			
231	24	Feb	2200	78°54.5'	175°18.7'	2200	983.0236	-5.5	145.5			
232	25	Feb	0200	78°55.0'	175°19.4'	2210	983.0238	-5.6	146.1	983.0294	-7.1	144.6
233	25	Feb	0600	78°55.5'	175°20.0'	2230	983.0237	-5.9	147.1			
234	25	Feb	1000	78°55.7'	175°18.3'	2230	983.0236	-6.2	146.9			
D62-235	25	Feb	1400	78°55.9'	175°16.6'	2235	983.0233	-6.6	146.8			
236	25	Feb	1800	78°56.3'	175°14.9'	2240	983.0233	-6.8	146.9			
237	26	Feb	0200	78°56.6'	175°11.7'	2260	983.0222	-8.1	147.0	983.0204	-9.9	145.2
238	26	Feb	0600	78°56.8'	175°10.0'	2260	983.0222	-8.2	146.9			
239	26	Feb	1000	78°57.4'	175°10.0'	2260	983.0222	-8.5	146.6			
D62-240	26	Feb	1400	78°57.9'	175°10.0'	2230	983.0222	-8.8	144.2			
241	26	Feb	2200	78°59.1'	175°10.0'	2220	983.0227	-9.0	143.4			
242	27	Feb	0200	78°59.6'	175°10.0'	2210	983.0227	-9.3	142.4	983.0227	-9.3	142.4
243	27	Feb	0600	79°00.2'	175°10.0'	2200	983.0234	-8.9	142.1			
244	27	Feb	1000	79°00.8'	175°10.0'	2200	983.0234	-9.2	141.7			
D62-245	27	Feb	1800	79°01.9'	175°10.0'	2210	983.0240	-9.3	142.4			
246	27	Feb	2200	79°02.5'	175°10.6'	2275	983.0240	-9.6	146.5			
247	28	Feb	0200	79°03.1'	175°11.2'	2350	983.0240	-9.9	151.3	983.0229	-11.0	150.2
248	28	Feb	0700	79°03.6'	175°11.8'	2350	983.0240	-10.2	151.1			
249	28	Feb	1000	79°04.2'	175°12.4'	2350	983.0227	-11.9	149.4			
D62-250	28	Feb	1400	79°04.8'	175°13.0'	2345	983.0220	-12.9	148.0			
251	28	Feb	1800	79°05.4'	175°13.6'	2345	983.0220	-13.2	147.7			
252	1	Mar	0300	79°07.0'	175°16.0'	2340	983.0265	-9.6	151.0			
253	1	Mar	1000	79°08.1'	175°13.0'	2350	983.0285	-8.3	153.0	983.0261	-10.7	150.6
254	1	Mar	1400	79°08.7'	175°10.0'	2350	983.0293	-7.8	153.5			
D62-255	1	Mar	1800	79°09.3'	175°07.0'	2360	983.0296	-7.8	154.2			
256	2	Mar	0200	79°10.1'	175°01.0'	2380	983.0308	-7.1	156.3			
257	2	Mar	0600	79°10.7'	174°58.0'	2390	983.0318	-6.4	157.6			
258	2	Mar	1000	79°11.3'	174°51.5'	2390	983.0325	-6.4	157.6			
259	2	Mar	1400	79°12.0'	174°52.0'	2380	983.0327	-6.8	156.6			
D62-260	2	Mar	1800	79°12.5'	174°42.0'	2410	983.0327	-7.1	158.3			
261	2	Mar	2200	79°13.0'	174°37.0'	2390	983.0327	-6.8	157.3			
262	3	Mar	0600	79°14.0'	174°27.0'	2430	983.0282	-11.8	154.9	983.0223	-17.7	149.0
263	3	Mar	1000	79°15.0'	174°19.8'	2490	983.0267	-13.9	157.0			
264	3	Mar	1800	79°17.1'	174°05.5'	2580	983.0224	-19.4	157.7			
D62-265	4	Mar	0200	79°19.3'	173°51.2'	2570	983.0216	-21.4	155.0			
266	4	Mar	0600	79°20.2'	173°44.0'	2560	983.0223	-21.2	154.5			
267	4	Mar	1000	79°22.5'	173°37.7'	2610	983.0240	-20.7	158.4			
268	4	Mar	1400	79°24.8'	173°31.4'	2610	983.0248	-21.2	158.0			
269	4	Mar	1800	79°27.1'	173°25.0'	2630	983.0263	-20.9	159.6			
D62-270	5	Mar	0200	79°29.4'	173°12.4'	2630	983.0277	-20.8	159.7			
271	5	Mar	0700	79°34.0'	173°06.0'	2630	983.0289	-22.1	158.4	983.0261	-24.9	155.6
272	5	Mar	1000	79°34.0'	173°01.3'	2630	983.0294	-21.6	158.9	983.0267	-24.3	156.2
273	5	Mar	1400	79°34.0'	172°56.6'	2630	983.0312	-19.8	160.7			
274	5	Mar	1800	79°34.0'	172°51.9'	2620	983.0319	-19.1	160.8			
D62-275	6	Mar	0300	79°34.0'	172°42.6'	2630	983.0351	-15.9	164.6	983.0326	-18.4	162.1
276	6	Mar	0600	79°34.0'	172°38.0'	2630	983.0360	-15.0	165.5			
277	6	Mar	1030	79°34.0'	172°37.5'	2650	983.0379	-13.5	168.4			
278	6	Mar	1400	79°34.0'	172°37.0'	2645	983.0394	-12.4	169.1			
279	6	Mar	1800	79°36.3'	172°34.2'	2650	983.0405	-11.7	170.2			

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	North American #113 Observed Gravity (gals)	North American #113 Free Air Anomaly (mgal)	North American #113 Bouguer Anomaly =2.67 (mgal)	World Wide #5 Observed Gravity (gals)	World Wide #5 Free Air Anomaly (mgal)	World Wide #5 Bouguer Anomaly ρ =2.67 (mgal)
D62-280	7	Mar	0300	79°36.3'N	172°28.2'E	2660	983.0417	-10.5	172.1			
281	7	Mar	0600	79°36.0'	172°26.0'	2650	983.0417	-10.3	171.5	983.0410	-11.0	170.8
282	7	Mar	1000	79°35.8'	172°28.0'	2660	983.0421	-9.8	172.7			
283	7	Mar	1800	79°35.5'	172°32.0'	2660	983.0421	-9.7	172.9			
284	7	Mar	2200	79°35.4'	172°31.3'	2645	983.0427	-9.0	172.5	983.0410	-10.7	170.8
D62-285	8	Mar	0200	79°35.3'	172°30.6'	2645	983.0427	-9.0	172.6			
286	8	Mar	0600	79°35.2'	172°30.0'	2645	983.0421	-9.5	172.0	983.0410	-10.6	170.9
287	8	Mar	1000	79°34.4'	172°26.8'	2645	983.0421	-9.1	172.5			
288	8	Mar	1400	79°33.6'	172°23.6'	2645	983.0421	-8.7	172.9			
289	8	Mar	1800	79°32.8'	172°20.4'	2645	983.0417	-8.6	172.9			
D62-290	8	Mar	2200	79°32.0'	172°17.2'	2645	983.0412	-8.7	172.8			
291	9	Mar	0600	79°30.5'	172°11.0'	2640	983.0412	-7.9	173.3	983.0410	-8.1	173.1
292	9	Mar	1000	79°30.5'	172°11.2'	2645	983.0412	-7.9	173.7			
293	9	Mar	1400	79°30.6'	172°11.4'	2640	983.0412	-7.9	173.3			
294	9	Mar	1800	79°30.6'	172°11.6'	2640	983.0412	-7.9	173.3			
D62-295	9	Mar	2200	79°30.7'	172°11.8'	2650	983.0412	-8.0	173.9			
296	10	Mar	0200	79°30.7'	172°11.9'	2640	983.0412	-8.0	173.2			
297	10	Mar	1000	79°31.6'	172°08.6'	2640	983.0415	-8.2	173.0			
298	10	Mar	1800	79°32.5'	172°01.6'	2645	983.0426	-7.6	174.0			
299	10	Mar	2200	79°33.0'	171°58.2'	2645	983.0443	-6.1	175.4			
D62-300	11	Mar	0200	79°33.5'	171°54.8'	2645	983.0461	-4.6	176.9			
301	11	Mar	1000	79°34.2'	171°48.0'	2650	983.0490	-2.1	179.8			
302	11	Mar	1400	79°35.6'	171°44.6'	2650	983.0507	-1.1	180.8	983.0432	-8.6	173.3
303	11	Mar	1800	79°37.2'	171°41.2'	2660	983.0520	-.7	181.9			
304	11	Mar	2200	79°38.6'	171°37.8'	2660	983.0551	1.7	184.2			
D62-305	12	Mar	0700	79°41.0'	171°31.0'	2660	983.0569	2.2	184.8	983.0609	6.2	188.8
306	12	Mar	1000	79°43.3'	171°27.6'	2675	983.0584	2.5	186.1			
307	12	Mar	1400	79°45.6'	171°24.2'	2680	983.0595	2.3	186.3			
308	12	Mar	1800	79°47.9'	171°20.8'	2680	983.0609	2.5	186.5			
309	12	Mar	2200	79°50.2'	171°17.4'	2680	983.0609	1.3	185.3			
D62-310	13	Mar	1000	79°55.0'	171°08.3'	2680	983.0635	1.4	185.4	983.0674	5.3	189.3
311	13	Mar	1800	79°55.4'	171°02.9'	2680	983.0635	1.2	185.1			
312	13	Mar	2200	79°55.6'	171°00.2'	2690	983.0635	1.1	185.7			
313	14	Mar	0300	79°55.8'	170°57.6'	2710	983.0635	1.0	187.0			
314	14	Mar	0630	79°56.0'	170°55.0'	2710	983.0635	.9	186.9	983.0658	3.2	189.2
D62-315	14	Mar	1000	79°56.0'	170°57.2'	2710	983.0636	1.0	187.0			
316	14	Mar	1800	79°56.0'	171°01.5'	2710	983.0636	1.0	187.0			
317	14	Mar	2200	79°56.0'	171°03.7'	2710	983.0636	1.0	187.0			
318	15	Mar	0200	79°56.0'	171°05.9'	2710	983.0636	1.0	187.0			
319	15	Mar	1800	79°56.0'	171°02.4'	2710	983.0636	1.0	187.0			
D62-320	15	Mar	2200	79°56.0'	171°01.0'	2710	983.0636	1.0	187.0			
321	16	Mar	0200	79°56.0'	170°59.5'	2710	983.0636	1.0	187.0			
322	16	Mar	0600	79°56.0'	170°58.0'	2710	983.0636	1.0	187.0	983.0655	2.9	188.9
323	16	Mar	1000	79°56.2'	170°56.2'	2710	983.0636	.9	186.9			
324	16	Mar	1800	79°56.5'	170°52.6'	2710	983.0642	1.3	187.3			
D62-325	16	Mar	2200	79°56.7'	170°50.8'	2710	983.0645	1.5	187.5			
326	17	Mar	0200	79°56.9'	170°49.0'	2705	983.0646	1.5	187.2			
327	17	Mar	0600	79°57.0'	170°47.0'	2705	983.0649	1.8	187.4	983.0675	4.4	190.0
328	17	Mar	1000	79°57.2'	170°47.0'	2705	983.0649	1.7	187.3			
329	17	Mar	1800	79°57.8'	170°47.0'	2705	983.0653	1.8	187.4			
D62-330	17	Mar	2200	79°58.0'	170°47.0'	2705	983.0658	2.2	187.8			
331	18	Mar	0300	79°58.3'	170°48.0'	2710	983.0660	2.2	188.2			
332	18	Mar	0600	79°58.5'	170°50.0'	2705	983.0661	2.2	187.9	983.0691	5.2	190.9
333	18	Mar	1000	79°58.4'	170°50.5'	2710	983.0661	2.2	188.2			
334	18	Mar	1800	79°58.2'	170°51.5'	2720	983.0661	2.4	189.0			
D62-335	18	Mar	2200	79°58.1'	170°52.0'	2720	983.0662	2.5	189.2			
336	19	Mar	0200	79°58.0'	170°52.5'	2710	983.0665	2.9	188.9			
337	19	Mar	0530	79°58.0'	170°53.0'	2710	983.0665	2.9	188.9			
338	19	Mar	1000	79°58.0'	170°54.5'	2710	983.0665	2.8	188.8	983.0691	5.4	191.4
339	19	Mar	1830	79°58.3'	170°57.5'	2710	983.0665	2.7	188.7			

APPENDIX (con't)

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	North American #113 Observed Gravity (gals)	North American #113 Free Air Anomaly (mgal)	North American #113 Bouguer Anomaly ρ=2.67 (mgal)	World Wide #5 Observed Gravity (gals)	World Wide #5 Free Air Anomaly (mgal)	World Wide #5 Bouguer Anomaly ρ=2.67 (mgal)
D62-340	19	Mar	2200	79°58.4'N	170°59.0'E	2710	983.0665	2.6	188.6			
341	20	Mar	0200	79°58.5'	171°00.5'	2710	983.0665	2.6	188.6			
342	20	Mar	0600	79°58.5'	171°02.0'	2710	983.0664	2.5	188.5	983.0691	5.2	191.2
343	20	Mar	1000	79°58.6'	171°03.8'	2705	983.0664	2.4	188.1			
344	20	Mar	2200	79°58.8'	171°09.2'	2710	983.0664	2.3	188.3			
D62-345	21	Mar	0200	79°58.9'	171°11.0'	2710	983.0662	2.1	188.1			
346	21	Mar	0600	79°59.0'	171°13.0'	2710	983.0659	1.7	187.7	983.0687	4.5	190.5
347	21	Mar	1000	79°59.1'	171°15.8'	2710	983.0656	1.4	187.4			
348	21	Mar	1800	79°59.4'	171°21.4'	2680	983.0651	.7	184.7			
349	21	Mar	2230	79°59.5'	171°24.2'	2710	983.0647	.3	186.3			
D62-350	22	Mar	0200	79°59.6'	171°27.0'	2710	983.0641	-.4	185.6			
351	22	Mar	0600	79°59.7'	171°30.0'	2710	983.0641	-.4	185.6	983.0671	2.6	188.6
352	22	Mar	1000	79°59.9'	171°31.8'	2705	983.0642	-.4	185.2			
353	23	Mar	0200	80°00.0'	171°38.2'	2705	983.0647	.0	185.7			
354	23	Mar	0600	80°00.5'	171°40.0'	2705	983.0647	-.2	185.4	983.0683	3.4	189.0
D62-355	23	Mar	1000	80°00.7'	171°40.0'	2710	983.0650	.0	186.0			
356	23	Mar	2200	80°01.8'	171°34.6'	2705	983.0665	.9	186.5			
357	24	Mar	0200	80°02.1'	171°32.8'	2690	983.0667	.9	185.6			
358	24	Mar	0600	80°02.4'	171°31.4'	2705	983.0671	1.2	186.8	983.0697	3.8	189.4
359	24	Mar	1000	80°02.7'	171°30.0'	2720	983.0677	1.6	188.3			
D62-360	24	Mar	2200	80°03.4'	171°24.0'	2710	983.0697	3.3	189.3			
361	25	Mar	0230	80°03.7'	171°22.0'	2710	983.0703	3.7	189.7			
362	25	Mar	0600	80°04.0'	171°20.0'	2710	983.0706	3.9	189.9	983.0731	6.4	192.4
363	25	Mar	1100	80°04.4'	171°18.0'	2710	983.0716	4.7	190.7			
364	25	Mar	2200	80°04.8'	171°13.5'	2710	983.0734	6.2	192.2			
D62-365	26	Mar	0200	80°04.9'	171°12.0'	2710	983.0739	6.7	192.7			
366	26	Mar	0600	80°05.0'	171°10.5'	2710	983.0739	6.6	192.6	983.0852	17.9	203.9
367	26	Mar	1000	80°05.1'	171°09.0'	2710	983.0737	6.4	192.4	983.0853	18.0	204.0
368	26	Mar	2200	80°04.3'	170°51.0'	2720	983.0720	5.1	191.8			
369	27	Mar	0200	80°04.0'	170°45.0'	2710	983.0720	5.3	191.3			
D62-370	27	Mar	0600	80°03.3'	170°39.0'	2710	983.0715	5.1	191.1	983.0845	18.1	204.1
371	27	Mar	1000	80°03.0'	170°33.0'	2710	983.0711	4.9	190.9			
372	27	Mar	1800	80°01.8'	170°31.0'	2710	983.0696	4.0	190.0			
373	27	Mar	2200	80°01.2'	170°30.0'	2710	983.0687	3.4	189.4			
374	28	Mar	0300	80°00.4'	170°29.0'	2720	983.0674	2.5	189.2			
D62-375	28	Mar	0600	79°59.8'	170°28.0'	2705	983.0668	2.2	187.9	983.0805	15.9	201.6
376	28	Mar	1000	79°59.3'	170°27.0'	2710	983.0660	1.7	187.7			
377	28	Mar	2200	79°58.6'	170°20.2'	2690	983.0648	.8	185.5			
378	29	Mar	0200	79°58.4'	170°18.0'	2705	983.0641	.2	185.9			
379	29	Mar	0600	79°58.2'	170°18.6'	2705	983.0641	.4	186.0			
D62-380	29	Mar	1000	79°58.0'	170°19.2'	2705	983.0640	.4	186.0			
381	29	Mar	1800	79°57.9'	170°20.4'	2705	983.0634	-.2	185.5			
382	30	Mar	0200	79°57.8'	170°21.6'	2705	983.0629	-.6	185.0			
383	30	Mar	0630	79°57.8'	170°22.3'	2690	983.0629	-.6	184.0			
384	30	Mar	1000	79°57.7'	170°23.0'	2705	983.0631	-.4	185.3			
D62-385	30	Mar	1800	79°57.1'	170°30.7'	2710	983.0636	.4	186.4			
386	30	Mar	2230	79°56.8'	170°34.6'	2710	983.0640	1.0	187.0			
387	31	Mar	0300	79°56.5'	170°38.4'	2710	983.0640	1.1	187.1			
388	31	Mar	0630	79°56.2'	170°42.2'	2705	983.0644	1.7	187.3			
389	31	Mar	1000	79°55.9'	170°46.1'	2705	983.0644	1.8	187.5			
D62-390	31	Mar	2000	79°55.5'	170°51.4'	2705	983.0642	1.9	187.5			
391	31	Mar	2200	79°55.4'	170°52.6'	2705	983.0642	1.9	187.6			
392	1	Apr	0200	79°55.2'	170°55.0'	2705	983.0641	1.9	187.6			
393	1	Apr	0600	79°55.0'	170°57.4'	2710	983.0641	2.0	188.0			
394	1	Apr	1000	79°54.8'	171°00.1'	2690	983.0641	2.1	186.7			
D62-395	1	Apr	1400	79°54.8'	171°01.9'	2675	983.0642	2.2	185.8			
396	1	Apr	2200	79°54.8'	171°05.5'	2680	983.0642	2.2	186.2			
397	2	Apr	0230	79°54.8'	171°07.3'	2690	983.0643	2.3	186.9			
398	2	Apr	0600	79°54.9'	171°09.1'	2680	983.0643	2.3	186.2			
399	2	Apr	1000	79°54.9'	171°10.9'	2690	983.0643	2.3	186.9			

APPENDIX (con't)

ARLIS-II Gravity, 6 October, 1961 to 8 April, 1962

Station	Day	Month	Time (GMT)	Latitude	Longitude	Depth (m)	North American #113 Observed Gravity (gals)	Free Air Anomaly (mgal)	Bouguer Anomaly ρ =2.67 (mgal)
D62-400	2	Apr	1400	79°54.9'N	171°12.7'E	2690	983.0643	2.3	186.9
401	2	Apr	2200	79°54.9'	171°16.6'	2690	983.0643	2.3	186.9
402	3	Apr	0200	79°55.0'	171°18.4'	2690	983.0643	2.2	186.8
403	3	Apr	0600	79°55.0'	171°20.2'	2690	983.0643	2.2	186.8
404	3	Apr	1000	79°55.0'	171°22.0'	2705	983.0643	2.2	187.9
D62-405	3	Apr	1400	79°55.5'	171°23.7'	2710	983.0641	1.8	187.8
406	3	Apr	2300	79°56.5'	171°27.1'	2705	983.0639	1.0	186.7
407	4	Apr	0230	79°57.0'	171°28.8'	2690	983.0639	.8	185.4
408	4	Apr	0630	79°57.5'	171°30.4'	2705	983.0639	.5	186.2
409	4	Apr	1000	79°57.9'	171°32.0'	2705	983.0639	.3	186.0
D62-410	4	Apr	1400	79°58.5'	171°32.0'	2680	983.0639	.0	183.9
411	4	Apr	2200	79°59.7'	171°30.8'	2690	983.0643	-.2	184.4
412	5	Apr	0230	80°00.3'	171°30.2'	2690	983.0643	-.5	184.1
413	5	Apr	0400	80°00.8'	171°29.9'	2690	983.0643	-.8	183.8
414	5	Apr	0800	80°01.2'	171°29.4'	2705	983.0652	-.1	185.6
D62-415	5	Apr	1200	80°01.8'	171°29.0'	2705	983.0668	1.2	186.8
416	5	Apr	2400	80°02.5'	171°29.0'	2710	983.0743	8.3	194.3
417	6	Apr	0400	80°04.8'	171°20.4'	2710	983.0754	8.2	194.2
418	6	Apr	0800	80°05.5'	171°11.7'	2710	983.0764	8.9	194.9
419	6	Apr	1200	80°06.3'	171°03.0'	2710	983.0779	10.0	196.0
D62-420	6	Apr	1600	80°07.0'	171°01.0'	2720	983.0781	9.8	196.5
421	6	Apr	2400	80°08.5'	170°57.0'	2720	983.0781	9.1	195.7
422	7	Apr	0400	80°09.2'	170°55.0'	2720	983.0781	8.7	195.4
423	7	Apr	0800	80°09.9'	170°53.0'	2720	983.0781	8.3	195.0
424	7	Apr	1200	80°10.7'	170°51.0'	2720	983.0781	7.9	194.6
D62-425	7	Apr	1630	80°10.5'	170°49.0'	2720	983.0781	8.0	194.7
426	7	Apr	2400	80°10.0'	170°45.0'	2720	983.0780	8.2	194.9
427	8	Apr	0400	80°09.8'	170°43.0'	2720	983.0780	8.3	195.0

GRAVITY OBSERVATIONS FROM ICE ISLAND ARLIS-II, 6 OCTOBER 1961 TO 8 APRIL, 1962

Research Report No. 62-8

Black, D. Jan and Ned A. Ostenso