

UNCLASSIFIED

AD 267 489

*Reproduced
by the*

**ARMED SERVICES TECHNICAL INFORMATION AGENCY
ARLINGTON HALL STATION
ARLINGTON 12, VIRGINIA**



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

VOLUME 2A

XEROX

267 489

Altitude Sampling Program

RESULTS OF FILTER

ANALYSE
SECTION

ISOTOPE INC.

Defense Atomic Support Agency

WASHINGTON 25, D.C.

245 150
DASA 1300

THE HIGH ALTITUDE SAMPLING PROGRAM

by

James P. Friend, Editor
Herbert W. Feely, Project Director
Philip W. Krey
Jerome Spar
Alan Walton

VOLUME 2A

RESULTS OF FILTER ANALYSES
(Less Table 4.3 and Flight Cross-Sections)

The Final Report on Contract DA-29-044-XZ-609

Prepared for

Defense Atomic Support Agency
Washington 25, D. C.
August 31, 1961

ISOTOPES, INCORPORATED
123 Woodland Avenue
Westwood, New Jersey

GENERAL TABLE OF CONTENTS

Volume 1. HASP Purpose and Methods

Abstract
Preface

Part I. Stratospheric Radioactivity

Chapter 1. Introduction
Chapter 2. The Problem
Chapter 3. Procedures
Appendix A.

Volume 2. Results of Filter Analyses

Part I. (Continued)

Chapter 4. Analytical Results

Volume 3. Discussion of HASP Results

Part I. (Continued)

Chapter 5. The Distribution of Nuclear Debris in the Stratosphere
Chapter 6. Meteorological Processes and Radioactivity

Volume 4. The Application of HASP Data

Part I. (Continued)

Chapter 7. The Surface Burden of World-Wide Fallout
Chapter 8. Remaining Problems in World-Wide Fallout
Chapter 9. The Hazards from Radioactive Fallout
Chapter 10. Summary and Conclusions

Volume 5. Supplementary HASP Studies

Part II. Studies of Stratospheric Particles

Chapter 1. Introduction
Chapter 2. Physical Methods of Particle Studies
Chapter 3. Neutron Activation of Filter Samples
Chapter 4. Analytical Results
Chapter 5. Discussion and Conclusions

Part III. Measurements of Fallout in Man's Environment

Chapter 1. Measurements of Carbon-14 in Tropospheric Air
Chapter 2. Measurement of Tritium in Precipitation
Chapter 3. The Distribution of Radioactivity in Soils
Chapter 4. Plutonium in Man and Environment

VOLUME 2

TABLE OF CONTENTS

Part I. Stratospheric Radioactivity (continued)

Chapter 4. Analytical Results	1
Nuclides Which Have Been Measured	1
Routine Analyses	5
Special Analyses	7
Presentation of the Data.	8
The Organization of the Tables.	8
The Construction of the Flight Cross Sections	10
Flight Data For HASP Missions	14
Radiochemical Data From Routine Analyses	97
Activities of Short Lived Fission Products	628
Activities of Tracer and Cosmic Ray Nuclides	694
Activities of Cesium-137 and Plutonium	710
Activities of Activation Products	722
The Analysis of Composite Samples	724
Duplicate Analyses of HASP Samples.	729

VOLUME 2

LIST OF TABLES

4.1	Radiosonde Stations Used for the Construction of HASP Flight Cross Sections	13
4.2	Flight Data for HASP Missions	19
	(Missions Flown During 1957 19 - 22)	
	(Missions Flown During 1958 22 - 39)	
	(Missions Flown During 1959 40 - 78)	
	(Missions Flown During 1960 78 - 96)	
4.3	Radiochemical Data From Routine Analyses (Reproduced in Volume 2B)	100
	(Missions Flown During 1957 100 - 126)	
	(Missions Flown During 1958 128 - 270)	
	(Missions Flown During 1959 272 - 518)	
	(Missions Flown During 1960 520 - 626)	
4.4	Strontium-89 and Zirconium-95 Analyses	630
4.5	Barium-140 Analyses	674
4.6	Yttrium-91 Analyses	678
4.7	Cerium-144 Analyses	680
4.8	Tungsten-181 Analyses	696
4.9	Rhodium-102 and Beryllium-7 Analyses	701
4.10	Phosphorus-32 Analyses	709
4.11	Cesium-137 Analyses	711
4.12	Plutonium Analyses	716
4.13	Sodium-22 and Calcium-45 Analyses	723
4.14	Samples Analyzed as Composites	726
4.15	Duplicate Analyses of Individual Sample Solutions	730
4.16	Samples Which Were Reanalyzed For Strontium-90	733
4.17	Samples Which Were Reanalyzed For Strontium-89	736
4.18	Samples Which Were Reanalyzed For Cesium-137, Tungsten-185, Zirconium-95 or Barium-140	736

VOLUME 2

LIST OF FIGURES

(Reproduced in Volume 2B)

4.1 - 4.14	Flight Cross Sections and Flight Profiles for HASP Missions Flown During 1957	101-127
4.15 - 4.86	Flight Cross Sections and Flight Profiles for HASP Missions Flown During 1958	129-271
4.87 - 4.210	Flight Cross Sections and Flight Profiles for HASP Missions Flown During 1959	273-519
4.211-4.264	Flight Cross Sections and Flight Profiles for HASP Missions Flown During 1960	521-627

(blank page)

THE HIGH ALTITUDE SAMPLING PROGRAM

PART 1

STRATOSPHERIC RADIOACTIVITY

(continued)

(blank page)

CHAPTER 4

ANALYTICAL RESULTS

During the High Altitude Sampling Program more than 3600 filter samples of stratospheric dust were collected and analyzed radiochemically for various constituents of radioactive debris from nuclear weapon tests. The data from these analyses are presented here in tables together with some of the important flight data from the sampling missions. Flight cross sections, on which are plotted the observed strontium-90 concentrations, are included to facilitate the visualization of the stratospheric distribution of the debris. First, however, a few introductory remarks must be made on the selection of nuclides for analysis and on the arrangement of the data in tables.

NUCLIDES WHICH HAVE BEEN MEASURED

The objectives of HASP, stated briefly, were the determination of the stratospheric burden and stratospheric residence time of strontium-90 and any other hazardous radionuclides, the description of the mechanisms and rates of mixing and transfer within the stratosphere, and the prediction of future changes in the rate of world-wide fallout and in the relative hazard resulting from it. Thus two groups of nuclides were measured: those which are potentially hazardous and those which yield information on mixing and transfer processes within the atmosphere. The nuclides which were deemed potentially hazardous were strontium-90, cesium-137 and plutonium. Though the gamma dose received by the human population from shorter lived nuclides, such as cerium-144 and zirconium-95, during periods of weapon testing is not negligible, these nuclides were measured primarily for the information they yield on the origin of debris.

Several types of nuclides were useful for the elucidation of mixing and transfer mechanisms. Besides the normal fission products, these included tracer nuclides which characterized debris from one shot or one series of shots, activation products produced in the environment of the shot by the neutrons escaping from the weapon, and cosmic ray nuclides indigenous to the stratosphere.

The total beta activity of a sample indicates its general content of nuclear debris, and the apparent half life of this activity is a measure of the approximate age of the youngest component of the debris. The activity of mixed fission products decreases approximately according to the relationship:

$$A = A_1 t^{-1.2}, \quad (1)$$

where A_1 is the activity at unit time after fission and A is the activity at some time, t , later. The apparent half life of the total beta activity increases with time as the shorter lived nuclides decay away. Integration of equation (1) reveals that the half life, $t_{1/2}$, is related to the age of the debris, T , as follows:

$$T = 1.73 t_{1/2} \quad (2)$$

Several fission products with half lives between a week and a year were measured to permit more precise determination of apparent age. The activity ratios of shorter-lived to longer-lived fission products in debris decrease with time, and the value of a ratio such as Ba^{140}/Sr^{89} , Sr^{89}/Sr^{90} or Ce^{144}/Sr^{90} may be used to determine the age of debris in a sample. For example, in newly formed debris, the ratio Ba^{140}/Sr^{89} is about 7.8. This ratio has dropped to 5.1 by the

time the debris is 10 days old and to 2.3 by the time it is thirty days old. Mixing of this debris with older debris containing no measurable barium-140 but some strontium-89 would also lower the ratio, so normally only a maximum possible age could be obtained from stratospheric samples collected at sites remote from testing areas, as in HASP. With increasing age of debris the concentrations of short-lived nuclides become too low to measure, and a series of different ratios must be used between shot date and an age of about two months, $\text{Sr}^{89}/\text{Sr}^{90}$ might be used up to an age of about a year or a year and a half, and $\text{Ce}^{144}/\text{Sr}^{90}$ up to an age of several years.

Particles condensing in the cooling fireball of a nuclear weapon are unable to incorporate volatile nuclides, such as iodine-131, xenon-140 or krypton-89, within themselves as effectively as they incorporate nonvolatile nuclides, such as zirconium-95 or cerium-144. Thus, world-wide fallout from surface bursts is normally depleted in nuclides which are nonvolatile and lack volatile precursors, for much of the activity from such shots is deposited in local fallout. As a result, the ratios $\text{Ce}^{144}/\text{Sr}^{90}$, $\text{Zr}^{95}/\text{Cs}^{137}$, etc. are lower in stratospheric fallout from surface bursts than from air shots (which produce negligible local fallout). This may make "dating" of such debris more difficult, but it does permit the extraction of information on shot type from measured nuclide ratios.

Two tracers were injected into the stratosphere during Hardtack. A number of surface bursts produced radiotungsten which subsequently spread within the lower stratosphere with the debris from these shots. A rocket shot, Orange, exploded at about 100,000 feet on 12 August 1958, produced rhodium-102, which subsequently spread within the mesosphere and eventually into the lower atmosphere.

The neutrons emitted from the fireball produce a number of activation products by bombarding the materials around a nuclear weapon. Calcium-45 may be produced in soil, sodium-22 in sea salt, carbon-14 in the air, etc. Sodium-22 and calcium-45 were measured in a few HASP samples, carbon-14 in samples of tropospheric air, and tritium, which may be a constituent of thermonuclear weapons or may be formed during the course of the thermonuclear reactions, was measured in precipitation.

Some measurements, such as analyses of total beta activity and strontium-90 activity, were made routinely on all samples. Other measurements, such as analyses of cesium-137 or rhodium-102, were made only on a few selected samples. However, the determinations included within the routine analyses changed from time to time during the course of the program, and nuclides such as zirconium-95, which were analyzed routinely in all samples at one time, were sought only in special samples at other times.

Routine Analyses

The analyses which were performed routinely on all HASP samples were those which sought the information basic to the solution of the primary objectives of the program. They included the measurement of the total beta and strontium-90 activities to indicate the concentration of nuclear debris in the sample, and the measurement of short-lived fission products and tracer nuclides to indicate its time and place of origin. As experience indicated which data were proving to be the most valuable, and as periods of weapon testing alternated with periods of no testing and finally gave way to a moratorium on testing, it was necessary continually to modify the analytical schedules. The early HASP samples, collected during late 1957 and early 1958, were analyzed for total beta activity, strontium-90 and zirconium-95. The apparent half-life of the total beta activity and the Zr^{95}/Sr^{90} ratio were used to determine the age of the debris. Samples collected during and after March 1958 were also analyzed for strontium-89, and by mid-April 1958 the zirconium-95 analysis of all samples was temporarily discontinued. By mid-May 1958, tungsten-185 measurements were added to the list of routine analyses, for Hardtack injections of this isotope into the stratosphere had begun. By mid-June 1958, in an effort to gain as much information as possible about the origin of fresh debris which was expected to be collected by HASP filters during Hardtack, the routine analysis was expanded to include zirconium-95 and barium-140. At this time, then, all samples were analyzed for total beta activity and strontium-90, for tungsten-185, and for barium-140, strontium-89 and zirconium-95.

Some modifications were made in the analytical procedures during the summer of 1958, while all U-2 aircraft were grounded. Beginning in September 1958, with the commencement of Phase 3 of Crowflight, though total beta activity, strontium-90, strontium-89 and tungsten-185 were still measured in all samples,

zirconium-95 and barium-140 were analyzed only in one quarter of the samples, and these two analyses were performed by gamma spectrometry of disks cut from the untreated filter. This schedule was maintained, generally, throughout Phase 3, though by May 1959 analyses of strontium-89 and tungsten-185 began to be omitted for many samples with low activities, wherein they could not be detected by the routine procedures. This was especially true of samples collected during lower altitude flights from Ezeiza. Toward the end of Phase 3 some tungsten-181 analyses were substituted for tungsten-185 analyses because they could be performed by means of gamma spectrometry on disks cut from the untreated filters. Since barium-140 had by then decayed to undetectable levels, the routine analysis of this nuclide was decreased in frequency and only the samples with especially high beta activities were measured for it.

With the commencement of Phase 4, with virtually all sampling being performed in the Northern Hemisphere, few samples with low activities were obtained and the schedule of routine analyses was again modified. Strontium-90 and tungsten-185 or tungsten-181 analyses were again performed on all samples. By December 1959 it became evident that gamma spectrometry of untreated filters was no longer giving usable data for tungsten-181 and that tungsten separations would be required before measurements. Because of the low activities involved, composites of several samples were used for each analysis and beta counting for tungsten-185 was employed. Composites of several samples were also used for strontium-89 analyses beginning about December 1959 although, for the most part, cerium-144, with its longer half-life, replaced strontium-89 in the scheme of routine analyses. By this time zirconium-95 levels were also too low to be detected any longer by gamma spectrometry of untreated filters and, like barium-140, it was sought only in samples with unusually high beta activities.

Special Analyses

Several nuclides were never included in the schedule of routine analyses or were included in it for only a limited time during the program. This was true of cesium-137 and plutonium, for the relative constancy of the Cs^{137}/Sr^{90} and Pu/Sr^{90} ratios in stratospheric debris eliminated the need for the measurement of these in all samples, though more than 300 filters were analyzed for each.

During most of the program cerium-144 was also measured in only a limited number of samples because its half-life was too long for it to be a sensitive indicator of age of debris during times of weapon testing. As the activities of nuclides such as strontium-89 and zirconium-95 decreased during the moratorium on weapon testing, however, the cerium-144 data became more useful, and by December 1959 it was added to the list of nuclides which were being analyzed routinely.

As the strontium-89 activities decreased during 1959 some analyses were made of yttrium-91 activities to determine whether this fission product could be used instead as an indicator of the age of debris. Over 100 samples were measured and the data obtained were fairly good, but it was decided that cerium-144 rather than yttrium-91 would be the most practical substitute for strontium-89 in the analytical scheme.

By early 1959 analytical procedures had been developed for molybdenum-99 and iodine-131 for the more precise determination of age of fresh debris, but the suspension of weapon tests resulted in their never being used on HASP samples. Similarly by early 1960 procedures had been worked out for the analysis of sodium-22 and calcium-45 in filters, but the activities in individual samples were too low by then to permit precise measurements and the program ended before any composites could be analyzed.

During 1959 procedures were designed for the separation and analysis, by beta counting, of rhodium-102. By late 1959 it had become evident that the concentration of this tracer nuclide in HASP samples was quite low and it was decided to use composites of several samples for its analysis. It was also determined that more sensitive measurements could be made using gamma spectrometry to detect the characteristic X-ray from this nuclide. Thus, beginning in December 1959, a series of composites were analyzed for rhodium-102.

Since it was deemed desirable to obtain all possible sources of information on mixing processes in the stratosphere, it was decided to attempt to measure the cosmic ray product, beryllium-7, in HASP samples. The composites which were analyzed for rhodium-102 were used also for the beryllium-7 measurements. When these determinations proved to be feasible, the analysis of these composites for phosphorus-32 was also begun, just before the end of the program.

PRESENTATION OF THE DATA

During HASP many analyses have been made of several nuclides and it is not feasible, nor necessarily desirable, to combine all of the resulting flight data and radiochemical data in a single table. The results have been organized in a manner which represents a compromise between brevity and completeness.

The Organization of the Tables

In order to simplify the tables of data, only a single nuclide or a small number of nuclides have been included in each. All of the pertinent flight data have been presented first, in Table 4.2. Next the data from the routine

analyses have been given in Table 4.3. These include the total beta, strontium-90 and tungsten-185 activities in the samples, some nuclide ratios which are useful for estimating the age and origin of the debris, and the half-life of the total beta activity, which has a similar use. A meridional cross section of the sampling corridor, a profile of the vertical concentration gradient, or a similar diagram is given for each mission to aid in the visualization of the stratospheric distribution of the debris. .

Some grouping has been possible in the presentation of the data from the special analyses, for often the same set of samples was chosen for analysis for several nuclides. Thus many of the analyses for strontium-89 and zirconium-95 or for rhodium-102 and beryllium-7 were performed on the same samples. The results of the strontium-89 and zirconium-95 analyses are given in Table 4.4. These fission products, which have similar half-lives, give information on the age and fractionation of debris. Of similar use are the data for barium-140, yttrium-91, and cerium-144 which are given in Tables 4.5, 4.6 and 4.7 respectively. The measured activities of tungsten-181, reported in Table 4.8 and of rhodium-102, reported in Table 4.9, are useful for deducing mechanisms of stratospheric mixing. The data for beryllium-7, which are also contained in Table 4.9 and those for phosphorus-32, in Table 4.10, have a similar use. Analyses for the potentially hazardous cesium-137 and plutonium are given in Tables 4.11 and 4.12 respectively. In Table 4.13 are given the results of a few analyses of sodium-22 and calcium-45, activation products from surface bursts on Pacific atolls.

Most analyses were made on individual samples, but some nuclides, either throughout the program or during its latter months, had activities too low to be detectable in individual samples. To measure these nuclides, composites were made of several samples collected within a limited range of

latitude, altitude and time and these were analyzed. The samples which were analyzed as composites are listed in Table 4.14.

As a check on the precision of the analyses, two or more aliquots were taken from a number of samples and were analyzed separately. The results of these analyses have been discussed in Chapter 3, Table 3.22. The samples which were analyzed in duplicate are listed in Table 4.15.

Inspection of the analytical data or attempts to interpret them in the light of the meteorological situation which existed at the time of their collection often revealed anomalies which were most easily attributable to analytical errors. Where such apparent errors were found, especially if they were in strontium-90 data, the samples were often reanalyzed. Samples which were reanalyzed for strontium-90 are listed in Table 4.16. Those which were reanalyzed for other nuclides are listed in Tables 4.17 and 4.18.

The Construction of the Flight Cross Sections

A meteorological analysis was prepared for each sampling mission as an aid in the interpretation of the radioactivity data. This analysis was based almost entirely on the radiosonde observations (RAOBS) from weather stations located in the vicinity of the sampling corridor. The RAOB stations which were used are listed in Table 4.1. Supplementary data from the meteorological panel (Little and Big Hickory) installed in some of the U-2 aircraft were also used.

Each RAOB employed in the analysis was plotted on a meteorological sounding diagram (tephigram), which shows the temperature as a function of altitude (pressure). For most of the stations upper wind data, obtained by electronic tracking of the balloons, were also available. (The combined radiosonde and upper wind measuring system is known as "rawinsonde", and

the wind observation is referred to as a RAWIN report.) The RAOB and RAWIN data corresponding to each sampling mission were coordinated by plotting them on a vertical cross section representing the sampling corridor. The meteorological analyses shown in the flight cross sections were based on these data and on the lapse rate (temperature - altitude) curves on the tephigrams. The analysis was restricted to the representation of the jet stream (where sufficient upper wind data were available), delineation of the tropopause, and a general indication of stability in the stratosphere.

The jet stream, a narrow core of high wind speed found near the polar tropopause and generally at the bottom of the gap between the polar and tropical tropopauses, is shown by means of isotachs (lines of equal wind speed). These are drawn, as dotted lines, at an interval of 25 knots for wind speeds of 100 knots or greater. The letter J on the cross sections denotes the velocity maximum, or core, of the jet.

The tropopause is the boundary layer separating the troposphere below, with its large lapse rate of temperature, from the stratosphere above, in which the lapse rate is small or even negative. A negative lapse rate signifies temperature increasing with altitude, and is also known as an inversion. In many cases the tropopause can be identified unambiguously by the discontinuity of lapse rate. But often the transition from troposphere to stratosphere is diffuse. Since there is no universally accepted strict definition of the tropopause, there is some element of subjectivity in the tropopause analysis. The tropopause is shown on the cross sections as a thick black line, the width of which indicates the fact that the tropopause is a layer rather than a mathematical surface. Almost invariably two (or more) distinct tropopauses, the low polar and high tropical tropopauses, can be found, with the two overlapping in the gap region.

The lapse rate is a useful measure of the intensity of convection (overturning, vertical mixing) that can develop in a layer of air. This tendency to convection is referred to as instability, while the inhibition of convection is called stability. The greater the lapse rate, the smaller the stability. An inversion layer is one of great stability. The stratosphere is generally stable, but not uniformly so. Some regions of the stratosphere, e.g., the tropical stratosphere, are almost invariably characterized by inversions. But others, e.g., the arctic stratosphere in winter, exhibit positive lapse rates and are less stable. To indicate the spatial variation of stratospheric stability in the vertical cross sections, the inversion layers are hatched. The hatched areas thus represent the definitely stable regions of the stratosphere.

The tracks and sampling segments of the aircraft are shown by the arrows on the cross sections. The sample number and, in parentheses, the strontium-90 activity, expressed in disintegrations per minute per one thousand standard cubic feet of air, are plotted on the diagrams, generally above and below, respectively, the appropriate arrow. Also shown on the cross sections are the reports of atmospheric turbulence provided by the pilots of the U-2 aircraft. Turbulence is denoted by L, M, and S for light, moderate, and severe respectively. While these reports are necessarily subjective estimates, they are of considerable interest.

Table 4.1 Radiosonde Stations Used for the Construction of HSP
Flight Cross Sections

A. Stations Used During Phase 2 of Crowflight

Station	Number	Latitude	Longitude
Clyde, Northwest Terr.	090	73° 27' N	68° 33' W
Frobisher, Northwest Terr.	409	61° 45' N	68° 34' W
Port Harrison, Quebec	907	58° 27' N	78° 08' W
Fort Chimo, Quebec	906	58° 05' N	68° 25' W
Atlantic Station	"B"	56° 30' N	51° 00' W
Nitchequon, Quebec	826	53° 12' N	70° 35' W
Moosonee, Ontario	836	51° 16' N	80° 39' W
Seven Islands, Quebec	811	50° 13' N	66° 16' W
Caribou, Maine	712	46° 52' N	68° 01' W
Maniwaki, Quebec	722	46° 22' N	75° 59' W
Portland, Maine	606	43° 39' N	70° 19' W
Albany, New York	518	42° 45' N	73° 48' W
Nantucket Island	506	41° 15' N	70° 04' W
Ideswild, New York	486	40° 46' N	73° 52' W
Washington, D. C.	405	38° 51' N	77° 02' W
Norfolk, Virginia	308	36° 53' N	76° 12' W
Hatteras, North Carolina	304	35° 15' N	75° 40' W
Charleston, South Carolina	208	32° 54' N	80° 02' W
Jacksonville, Florida	206	30° 25' N	81° 39' W
High Rock, Great Bahama I.	063	26° 37' N	78° 20' W
Miami, Florida	204	25° 49' N	80° 17' W
Coffin Hills, Eleuthera	076	25° 16' N	76° 18' W
Bonefish, Watling I.	089	24° 04' N	74° 32' W
Grand Turk Island	118	21° 30' N	71° 08' W
Guantanamo, Cuba	361	19° 54' N	75° 09' W
Sabana de la Mar, Dominican Republic	467	19° 03' N	69° 23' W
San Juan, Puerto Rico	526	18° 27' N	66° 06' W
St. Maarten	866	18° 02' N	63° 07' W
Rainet, Guadeloupe	894	16° 16' N	61° 31' W
Curacao	988	12° 11' N	68° 59' W
Trinidad	967	10° 41' N	61° 37' W
Balboa, Panama Canal Zone	806	8° 58' N	79° 33' W
Guayaquil, Ecuador	129	2° 10' S	79° 53' W
Lima, Peru	631	12° 02' S	77° 04' W

B. Stations Added for Phase 3 and Phase 5

Station	Latitude	Longitude
Antofagasta, Chile	23° 28' S	70° 26' W
Resistencia, Argentina	27° 28' S	58° 59' W
Cordoba, Argentina	31° 19' S	64° 13' W
Quintero, Chile	32° 47' S	78° 32' W
Esclas, Argentina	34° 50' S	58° 32' W
Neuquen, Argentina	38° 57' S	68° 09' W
Puerto Montt, Chile	41° 27' S	72° 50' W
Comodoro, Rivadavia, Argentina	45° 47' S	67° 30' W
Stanley Island	51° 42' S	57° 52' W
Argentine Island	65° 15' S	64° 16' W

C. Stations Used During Phase 4

Station	Number	Latitude	Longitude
Aklavik, Mackenzie	968	68° 14' N	135° 00' W
Coppermine, Mackenzie	933	67° 47' N	135° 15' W
Norman Wells, Mackenzie	043	65° 18' N	126° 51' W
Fort Smith, Mackenzie	934	60° 01' N	111° 58' W
Nelson, British Columbia	945	58° 50' N	122° 35' W
The Pas, Manitoba	857	53° 58' N	101° 06' W
Edmonton, Alberta	879	53° 34' N	113° 31' W
Glasgow, Montana	768(775)	48° 11' N	106° 38' W
Bismarck, North Dakota	764	46° 46' N	100° 43' W
Rapid City, South Dakota	668	44° 09' N	103° 36' W
North Platte, Nebraska	562(553)	41° 08' N	100° 42' W
Topeka, Kansas	456	39° 04' N	95° 37' W
Dodge City, Kansas	451(450)	37° 46' N	99° 58' W
Amarillo, Texas	363(353)	35° 18' N	101° 42' W
Midland, Texas	265	32° 55' N	102° 12' W
Fort Worth, Texas	239	32° 50' N	97° 03' W
Del Rio, Texas	261(253)	29° 20' N	100° 53' W
Corpus Christi, Texas	251	27° 46' N	97° 26' W
Brownsville, Texas	250	25° 55' N	97° 28' W
Monterrey, Nuevo Leon, Mexico	393	25° 40' N	100° 18' W
Ciudad Victoria, Tamaulipas, Mexico	492	23° 43' N	98° 55' W
Tampico, Tamaulipas, Mexico	549	22° 18' N	97° 51' W
Merida, Yucatan, Mexico	644	20° 53' N	89° 38' W
Vera Cruz, Vera Cruz, Mexico	692	19° 12' N	96° 08' W
Chetumal, Quintana Roo, Mexico	751	18° 29' N	88° 20' W
Swan Island	501	17° 24' N	83° 56' W
Catacamas, Honduras	714	14° 51' N	85° 55' W
Puerto Cabezas, Nicaragua	730	14° 00' N	83° 24' W
San Andres Island, Colombia	001	12° 30' N	81° 48' W

D. Stations Used for Sea Fish Special Flights

Station	Number	Latitude	Longitude
Alert, Ellesmere Island	082	82° 33' N	62° 35' W
Eureka, Ellesmere Island	917	80° 13' N	86° 11' W
Mould Bay, Northwest Territories	072	76° 17' N	119° 28' W
Resolute, Cornwallis Island	924	74° 43' N	94° 59' W
Barter Island, Alaska	086	70° 07' N	143° 40' W
Aklavik, Mackenzie	968	68° 14' N	135° 00' W
Coppermine, Mackenzie	938	67° 47' N	135° 15' W
Norman Wells, Mackenzie	043	65° 18' N	126° 51' W
Baker Lake, Dist. of Keewatin	926	64° 18' N	96° 05' W
Coral Harbour, Dist. of Keewatin	915	64° 11' N	83° 17' W
Anchorage, (International Airport) Alaska	273	61° 10' N	149° 52' W
Whitehorse, Yukon	964	60° 43' N	135° 05' W
Fort Smith, Mackenzie	934	60° 01' N	111° 58' W
Cape St. Elias, Alaska	360	59° 48' N	144° 36' W
Yakutat, (Intermediate Field) Alaska	361	59° 31' N	139° 40' W
Nelson, British Columbia	945	58° 50' N	122° 35' W

FLIGHT DATA FOR HASP MISSIONS

The flight data which are presented here are those necessary for the identification of the sampling missions and the samples collected during them and for their location in time and space. The data which are included in Table 4.2 are the date and number of each mission, the identification number of each aircraft which took part in each mission, an indication of the region sampled during the mission, the sample number assigned to each filter at Isotopes, Inc., the filter number given each by the Air Force, the position of the filter within the sampler, the time, latitude, longitude and altitude at the commencement and termination of each filter exposure, the indicated air speed of the aircraft, and the air temperature during sample collection. In addition the total beta and strontium-90 activities of each sample are listed.

The main source of the flight data in Table 4.2 was the flight data cards supplied with the exposed filters by the detachments of the 4080th Strategic Reconnaissance Wing. These contained the forecast winds and temperatures for each sampling leg of each mission, together with the pilot's observations of time, latitude, longitude and altitude of commencement and termination of exposure of each filter. The indicated air speeds during the mission and any turbulence encountered were also noted. Additional information was obtained from film strips of the auxiliary observer panel of the aircraft. These were used to verify or modify exposure times and flight altitudes reported on the flight data cards.

The missions are arranged chronologically according to sampling date. The mission numbers which are given are generally those assigned by the Air Force, though they have frequently been modified to prevent two different mission numbers from being assigned to flights made on a single day

or a single number from being assigned to flights made on different days. The most common modification has been the addition of A and B designations to missions flown a day apart from the two sampling bases. The sampling dates rather than the mission numbers have most commonly been used in working with the HASP data, both because of their greater intrinsic significance and because of the repetition of mission numbers, especially from Phases 1 and 2 to Phase 3 to Phase 4 and 5.

Data are given for several missions which were not regular HASP sampling missions. Test Hop 717 (14 Jan 1958) and Mission of Opportunity (10 June 1959) were flown to test equipment, while Special No. 1 (19 Mar 1958) and Special No. 2 (20 Nov 1958) were additional missions which supplied some samples for HASP. Minney 1 and 2 (6 Mar 1958) were flown in conjunction with a Project Ashcan balloon flight at Minneapolis to provide intercalibration samples. Sea Fish Special missions (14 Apr 1959, 21 Aug 1959, and 14 Oct 1959) were flown to the North Pole by B-52 aircraft to provide sampling of the polar region which was beyond the range of the Crowflight U-2 aircraft. Samples were also collected for HASP during North Flight (12 Sep 1958, 2 Oct 1958 and 22-29 Apr 1959) and the May-June 1960 missions from Eielson (ANW Flights), Laughlin (LO Flights) and Ramey (RS Flights), which were flown in conjunction with Crowflight Phase 5 (ES Flights), though most of the sampling during these missions was performed for other government agencies.

The samples collected during each mission which is included in Table 4.2 are arranged in groups according to the aircraft that collected them. The aircraft number is given in the first column of the table (except for some early missions from Laughlin and Ramey for which the aircraft number was

not supplied) together with two or more letters which indicate the base from which the aircraft operated and the region it sampled. Six U-2 aircraft were equipped with nose samplers. Three of these, No. 705, 714 and 715 were based at Ramey during Phases 2 and 3. The other three, No. 716, 717 and 718 were based at Plattsburg during Phase 2 and at Ezeiza during Phase 3. During Phase 4 aircraft No. 715, 716 and 717 were based at Minot and No. 705, 714 and 718 at Laughlin. During March 1960 when several of these aircraft were grounded for repairs, an additional U-2, No. 707, flew Crowflight missions, first from Minot and then from Laughlin. It was not equipped with a nose sampler so it collected only hatch samples. During Phase 5, aircraft No. 714, 715 and 716 were deployed to Ezeiza. Other U-2 aircraft were used by the Air Force to collect samples near Alaska during North Flight and during May-June 1960. The bases used by the U-2 aircraft included Laughlin (L), Ramey (R), Plattsburg (P), Ezeiza, (E), Minot (M), Eielson (A) and Minneapolis (M'P'L'S). Flights north from a base are designated N, those south, S, and orbit flights, O. One flight east from Laughlin (29 Aug 57) was designated E, and flights northwest from Eielson in May-June 1960 were designated NW. Thus flights north from Plattsburg are labeled PN, south from Ramey, RS, from Ramey to Ezeiza, RE, from Plattsburg to Ramey, PR, and orbit missions at Minot, MO.

The HASP sample numbers, which are listed in the second column of Table 4.2, were assigned in sequence as the samples were received. Thus they are only approximately chronological with reference to sampling date. The samples within each mission are grouped according to which aircraft collected them, as was mentioned above, and are listed in order of exposure. When a nose and hatch sample were collected simultaneously the nose sample is listed first. All filters which were received were assigned a sample number.

Since some of these were forwarded to other laboratories and many others were malfunctions which were not analyzed, a number of samples are missing from the tables of data. The Air Force numbers which are given in the third column were stamped on the filters before exposure and were used by the Air Force detachments to designate the samples. They were not used at Isotopes, Inc. because of their complexity and because of the somewhat random order of use of the filters by the detachments.

The fourth column in the table contains a designation of the filter type, nose (N) or hatch (H), and the position of the filter within the sampler. The nose sampler carried four filters and the hatch sampler carried six. The hatch filters could only be exposed in sequence, number 1 through number 6, but the nose filters could be exposed out of sequence or could be exposed twice during a mission, and this happened occasionally.

The time, latitude, longitude and altitude at which the exposure of each filter was begun and ended are given in the fifth, sixth, seven and eighth columns, respectively. The times are Greenwich Mean Time, the latitudes in degrees and minutes north or south, the longitudes in degrees west and the altitudes in units of one thousand feet. When the path followed during an orbit mission was a circle or a square, only the midpoint or center of the figure described is given. Since most flights were along a meridian, except during Phase 4, only a single longitude is usually given. Similarly, since most flights were horizontal, only one altitude is usually given. When the aircraft turned during the collection of a sample and followed a new course, the time, latitude, longitude and altitude of the turning point, as well as those of the ends of the sampling segment, are given. The exposure times are given to the nearest minute and the altitudes to the nearest one hundred feet interval, but there is frequently more uncertainty than this in these measurements. The pilot's observations of time often differed by a minute or

two and sometimes by several minutes from the times indicated on the automatic observer ("AO") panel. Only late in the program was periodic recalibration of the aircraft altimeters called for, and then discrepancies of several hundred feet between the pilot's altimeter and that on the AO panel were found to be common. Nevertheless the time measurements may generally be considered to be accurate to within a minute and the pressure altitude data to within 500 feet.

The indicated air speed, in knots, during the collection of each sample is given in the ninth column. These are almost always those recorded by the pilot. In a few instances, where the values on the flight data card were obviously in error, the air speed which was normally scheduled for the altitude flown was substituted for that on the flight data card.

The air temperature, in degrees Kelvin, during the collection of each filter is given in the tenth column. These temperatures, taken from the flight data cards, were the forecast temperatures for the day of the mission and were not actually measured during the flight. The indicated air speed and temperature are given only because they must be used in the calculation of sample volumes.

The volume of air sampled by each filter is given, in units of one thousand standard cubic feet, in the eleventh column. The calculation of these data are described in detail in Chapter 3. Generally an attempt was made to collect 10,000 standard cubic feet or more to insure that there would be adequate activity on the filter for it to be readily measured. Because the air decreases in density toward higher altitudes longer exposure times were required at the higher altitudes than at the lower. As is discussed in Chapter 3, a hatch filter sampled about 2.5 times as much air as a nose filter for equal exposure times.

The total beta activity and strontium-90 activity, in disintegrations per minute per one thousand standard cubic feet of air, are given in the twelfth and thirteenth columns. These are included here only for the convenience of the reader since they are also given in Table 4.3.

Isotopes, Inc.

Table 4.2 Flight Data for HASP Missions

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
22 August 1957 Mission 1													
---	3	WD625	N1	1456/1530	31:28N	100:27	46	164	203	12.3	2,700	9	
LO	4	WD626	N2	1542/1648	31:28N	100:27	56	150	208	15.1	22,000	53	
	5	WD627	N3	1657/1845	31:28N	100:27	62.5	129	213	15.9	26,000	126	
	6	WD628	N4	1920/2209	31:28N	100:27	67.2	110	216	16.2	33,000	172	
29 August 1957 Mission 2													
---	7	WD645	N1	1602/1657	31:28N	104:05/97:06	56	150	205	12.8	19,100	65	
LE	8	WD646	N2	1659/1754	31:28N	96:51/89:40	56	150	206	12.7	17,100	62	
	9	WD647	N3	1755/1850	31:28N	89:32/82:27	56	150	207	12.7	16,100	43	
	10	WD648	N4	1851/1946	31:28N	82:19/75:50	56	150	207	12.7	18,500	62	
17 September 1957 Mission 3													
---	11	WD649	N1	1530/1621	28:22N/34:46N	100:27	56	150	202	12.1	51,000	87	
LN	12	WD650	N2	1628/1723	34:53N/41:14N	100:27	56	150	207	12.7	21,000	95	
	13	WD651	N3	1724/1819	41:21N/47:40N	100:27	56	150	213	12.2	25,000	108	
	14	WD652	N4	1820/1913	47:47N/54:30N	100:27	56	150	216	11.7	90,000	181	
4 October 1957 Mission 5													
---	15	WD657	N1	1440/1503	31:28N	100:27	46	164	203	8.2	840	7	
LO	16	WD658	N2	1512/1603	31:28N	100:27	56	150	206	11.8	67,000	103	
	17	WD659	N3	1618/1750	31:28N	100:27	62	129	211	14.0	28,000	165	
	18	WD660	N4	1805/2040	31:28N	100:27	66.5	115	215	16.5	56,000	192	
16 October 1957 Mission 4													
---	19	WD673	N1	1414/1504	34:47N/28:43N	100:27	56/56.4	150	203	11.7	33,000	80	
LS	20	WD674	N2	1513/1616	28:15N/21:58N	100:27/100:35	56	150	205	14.6	45,000	98	
	21	WD675	N3	1616/1713	21:09N/15:13N	100:35/100:25	56	150	208	13.1	22,000	53	
	22	WD676	N4	1714/1805	*14:53N/ 14:00N/19:05N	*100:25/ 100:25/100:00	56	150	208	11.7	12,400	45	
5 November 1957 Mission 13-A													
717	23	WPL501	N1	1240/1328	44:00N/49:26N	71:00	62/63	130	214	7.1	2,500,000	824	
PN	24	WPL502	N2	1329/1417	49:33N/55:02N	71:00	63/63.5	124	218	6.3	240,000	211	
	25	WPL503	N3	1430/1506	56:31N/60:36N	71:00	63.5/64.5	120	220	4.3	13,300	123	
	26	WPL504	N4	1507/1555	60:43N/66:10N	71:00	64.5/65	121	222	5.6	11,200	89	
718	27	WPL505	N1	1325/1414	44:00N/38:28N	71:00	64.2/65	121	215	6.0	200,000	234	
PS	28	WPL506	N2	1414/1500	38:21N/32:48N	71:00	65	120	212	5.6	147,000	235	
	29	WPL507	N3	1503/1552	32:41N/27:16N	71:00	65	120	212	6.0	640,000	215	
	30	WPL508	N4	1553/1627	27:12N/21:50N	71:00	64.5/65	122	207	4.4	193,000	163	
-/RN	31	WP661	N1	1443/1531	16:00N/23:47N	69:00	64.2/65	121	211	6.0	38,000	144	
---	31	WP657	N1	1413/1500	16:00N/10:28N	69:00	64.4	122	209	6.1	38,000	205	
RS	32	WP658	N2	1503/1551	10:14N/04:42N	69:00	64.4/64.6	122	207	6.3	43,000	227	

* Aircraft turned at 14:00N 100:25W to course of 360° continuing exposure of filter.

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
8 November 1957 Mission 13-B												
717 PN	36	WPL513	N1	1240/1329	44:00N/49:24N	71:00	56	150	215	10.8	55,000	127
	37	WPL514	N2	1330/1417	49:33N/54:59N	71:00	56	150	217	10.3	104,000	173
	38	WPL515	N3	1418/1506	55:06N/60:33N	71:00	56	150	218	10.4	53,000	166
	39	WPL516	N4	1511/1544	61:08N/65:10N	71:00	56	150	225	6.9	44,000	169
--- RN	40	WP501	N1	1327/1414	16:00N/21:34N	69:00	65	120	210	5.8	47,000	290
	41	WP502	N2	1418/1506	21:48N/27:23N	69:00	65.3	118	213	5.6	64,000	160
	42	WP503	N3	1508/1557	27:37N/33:17N	69:00	65.4	120	212	5.9	66,000	157
	43	WP504	N4	1558/1645	33:31N/39:07N	69:00	65.5	120	213	5.6	390,000	293
--- RS	44	WP665	N1	1244/1330	16:00N/10:33N	69:00	65	120	209	5.8	34,000	156
	45	WP666	N2	1334/1421	10:19N/04:52N	69:00	65	121	207	5.9	38,000	246
	46	WP667	N3	1424/1512	04:38N/00:49S	69:00	65	121	210	6.0	47,000	257
	47	WP668	N4	1514/1602	01:03S/06:30S	69:00	65	121	211	5.9	43,000	90
12 November 1957 Mission 14												
716 PN	48	WPL517	N1	1243/1323	44:24N/49:04N	71:00	53	156	219	10.1	45,000	111
	49	WPL518	N2	1329/1408	49:55N/54:35N	71:00	53	158	209	10.5	35,000	169
	50	WPL519	N3	1415/1454	55:26N/60:06N	71:00	53	158	219	10.0	220,000	155
	51	WPL520	N4	1506/1545	61:32N/66:12N	71:00	53	158	219	10.0	230,000	208
718 PS	52	WPL521	N1	1325/1413	44:00N/38:30N	71:00	63.5/65.5	120	216	5.8	13,500	100
	53	WPL522	N2	1414/1501	38:23N/32:53N	71:00	65.5	119	215	5.5	18,000	115
	54	WPL523	N3	1503/1551	32:46N/27:11N	71:00	65.5/67	119	213	5.5	26,000	208
	55	WPL524	N4	1552/1640	27:04N/21:29N	71:00	67/67.5	115	211	5.0	590,000	341
--- RN	56	WP673	N1	1331/1424	16:00N/22:01N	69:00	63.3	128	200	8.1	410,000	327
	57	WP674	N2	1425/1513	22:08N/27:34N	69:00	63.7/64.7	125	206	6.6	260,000	298
	58	WP675	N3	1514/1604	27:41N/33:30N	69:00	65	121	208	6.3	105,000	207
	59	WP676	N4	1605/1653	33:51N/39:35N	69:00	65	120	215	5.7	11,200	121
--- RS	60	WP677	N1	1247/1333	16:00N/10:20N	69:00	66.1/66.5	119	209	5.4	101,000	204
	61	WP678	N2	1334/1426	10:06N/04:24N	69:00	66.5/66.8	118	209	5.9	36,000	225
	62	WP679	N3	1428/1516	04:10N/01:30S	69:00	66.8/67.5	118	209	5.4	86,000	221
20 November 1957 Mission 15												
718 PS	68	WPL529	N1	1606/1654	21:48N/27:10N	71:00	66.5/68	118	205	5.5	32,000	138
	69	WPL530	N2	1655/1744	27:17N/32:42N	71:00	68.2/68.7	114	209	5.0	14,900	115
	70	WPL531	N3	1744/1832	32:48N/38:18N	71:00	68.8/69.4	110	210	4.4	16,300	127
	71	WPL532	N4	1833/1920	38:26N/44:59N	71:00	69.3/70	109	211	4.2	10,900	129
--- RN	72	WP669	N1	1602/1650	39:22N/33:46N	69:00	67/67.5	114	210	5.0	12,500	141
	73	WP670	N2	1652/1740	33:32N/27:56N	69:00	67.5/68.2	112	209	4.8	13,100	106
	74	WP671	N3	1741/1830	27:42N/21:47N	69:00	68.2/68.5	110	210	4.7	24,000	141
	75	WP672	N4	1831/1920	21:33N/16:00N	69:00	68.2/69	110	209	4.6	18,100	176
--- RS	76	WP685	N1	1539/1627	06:40S/01:18S	69:00	65/66.5	116	213	5.2	49,000	317
	77	WP686	N2	1628/1716	01:04S/04:28N	69:00	66.5/67.7	114	213	4.9	51,000	406
	78	WP687	N3	1716/1804	04:42N/10:14N	69:00	67.6/67.7	112	212	4.7	25,000	374
	79	WP688	N4	1808/1856	10:28N/15:00N	69:00	67.7/68.5	110	213	4.4	22,000	292

Table 1.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	90 Sr
22 November 1957 Mission 16												
717 PN	84	WPL537	N1	1212/1239	45:23N/48:04N	71:00	47	162	223	8.4	90,000	137
	85	WPL538	N2	1304/1325	50:57N/53:39N	71:00	47	162	222	6.5	230,000	258
	86	WPL539	N3	1357/1424	56:37N/59:21N	71:00	47	162	223	8.4	31,000	89
	87	WPL540	N4	1449/1515	62:13N/64:51N	71:00	47	162	223	8.0	40,000	64
716 PS	83	WPL536	N1	1246/1332	43:57N/38:35N	71:00	62/61.6	129	201	7.4	230,000	231
	82	WPL535	N2	1335/1421	38:15N/33:00N	71:00	61.7/62.2	128	204	7.2	210,000	252
	81	WPL534	N3	1424/1510	32:40N/27:20N	71:00	62.3/61.8	130	209	7.2	270,000	256
	80	WPL533	N4	1513/1600	27:00N/21:57N	71:00	62	130	218	7.0	200,000	258
--- RN	92	WP693	N1	1259/1345	16:11N/21:23N	69:00	62.6/62.9	130	208	7.0	162,000	264
	93	WP694	N2	1349/1435	21:51N/27:12N	69:00	62.8	130	206	7.0	159,000	225
	94	WP695	N3	1439/1526	27:40N/33:01N	69:00	62.9/62.8	130	205	7.2	230,000	284
	95	WP696	N4	1529/1614	33:30N/39:00N	69:00	62.6/62.8	130	218	6.6	126,000	238
--- RS	88	WP689	N1	1210/1301	15:56N/10:35N	69:00	62	128	209	7.8	280,000	307
	89	WP690	N2	1302/1346	10:07N/04:46N	69:00	63.5	128	208	6.4	4,600,000	982
	90	WP691	N3	1351/1441	04:18N/01:03S	69:00	64	128	207	7.2	11,700,000	2333
	91	WP692	N4	1441/1526	01:31S/06:52S	69:00	62	128	207	6.9	5,000,000	977
26 November 1957 Mission 17												
718 PN	96	WPL541	N1	1230/1250	45:48N/47:40N	71:00	44	158	222	6.5	73,000	79
	97	WPL542	N2	1328/1348	51:19N/53:21N	71:00	44	158	223	6.5	198,000	198
	98	WPL543	N3	1424/1444	56:57N/59:04N	71:00	44	158	223	6.5	153,000	207
	99	WPL544	N4	1518/1538	61:44N/63:50N	71:00	44	158	221	6.5	172,000	215
716 PS	100	WPL545	N1	1250/1338	44:00N/38:35N	71:00	59	138	211	8.7	147,000	172
	101	WPL546	N2	1339/1427	38:28N/32:35N	71:00	59	138	211	8.7	180,000	260
	102	WPL547	N3	1428/1516	32:28N/26:59N	71:00	59	138	198	9.5	156,000	132
	103	WPL548	N4	1517/1605	26:53N/21:23N	71:00	59	138	195	9.7	136,000	46
--- RN	104	WP681	N1	1257/1614	16:00N/37:32N	69:00	59.1	140	199	39.2	105,000	80
	105	WP682	N2	1717/1812	32:03N/21:13N	69:00	59.3/59.1	140	198	11.0	168,000	81
--- RS	106	WP697	N1	1210/1259	16:00N/10:20N	69:00	59.2/58.8	136	190	9.9	113,000	60
	107	WP698	N2	1300/1349	10:06N/04:26N	69:00	58.9/58.8	138	188	10.3	73,000	86
	108	WP699	N3	1350/1438	04:12N/01:28S	69:00	59/58.5	136	195	9.5	101,000	81
3 December 1957 Mission 18-A												
717 PN	110	WPL549	N1	1155/1243	44:00N/49:40N	71:00	59	138	221	8.3	115,000	211
	111	WPL550	N2	1244/1332	49:47N/55:27N	71:00	59	138	221	8.3	89,000	167
	112	WPL551	N3	1333/1421	55:34N/61:24N	71:00	59	138	221	8.3	142,000	164
	113	WPL552	N4	1422/1510	61:30N/67:15N	71:00	59	138	220	8.4	240,000	241
--- RN	117	WP733	N1	1259/1345	16:08N/21:26N	69:00	56.3	147	198	10.7	12,400	20
	118	WP734	N2	1349/1435	21:54N/27:12N	69:00	55.5	147	198	11.0	23,000	28
	119	WP735	N3	1439/1525	27:40N/32:58N	69:00	55.5	147	202	10.8	17,800	31
	120	WP736	N4	1529/1615	33:26N/38:44N	69:00	55	147	209	10.5	19,100	36
-/RS	114	WP701	N1	1211/1257	15:55N/10:37N	69:00/69:99	57	150	199	10.8	13,300	18
14 December 1957 Mission 18-B												
716 PN	125	WPL557	N1	1151/1239	44:00N/49:20N	71:00	59	138	215	8.6	117,000	168
	126	WPL558	N2	1240/1328	49:27N/54:55N	71:00	59	138	215	8.6	155,000	258
	127	WPL559	N3	1329/1417	55:02N/60:34N	71:00	59	138	216	8.6	152,000	184
	128	WPL560	N4	1418/1505	60:41N/66:15N	71:00	59	138	217	8.4	79,000	191
718 PS	121	WPL553	N1	1245/1331	44:00N/38:38N	71:00	56	150	215	10.2	169,000	200
	122	WPL554	N2	1335/1421	38:11N/32:57N	71:00	56	152	205	11.0	116,000	160
	123	WPL555	N3	1424/1510	32:17N/27:41N	71:00	56	154	204	11.3	45,000	64
	124	WPL556	N4	1516/1602	27:00N/21:56N	71:00	56	157	201	11.8	16,600	30
--- RN	137	WP737	N1	1259/1346	16:06N/21:15N	69:00	55.7/55.9	150	198	11.5	20,000	36
	138	WP738	N2	1347/1432	21:29N/26:51N	69:00	56.1/55.4	150	201	10.8	28,000	50
	139	WP739	N3	1435/1522	27:05N/32:35N	69:00	55.9	150	204	11.2	48,000	87
	140	WP740	N4	1523/1608	32:49N/38:31N	69:00	55.7/56.1	150	205	10.6	97,000	165
--- RS	142	WP757	N1	1211/1257	15:52N/10:40N	69:00	55.7/55.2	150	197	11.4	8,800	16
	143	WP758	N2	1300/1348	10:16N/04:44N	69:00	55.2/56	150	197	11.9	5,200	10
	144	WP759	N3	1349/1521	04:36N/07:30S	69:00	56	150	197	22.5	870	2

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
17 December 1957 Mission 19-A													
717/FN	129	WPL561	N1	1201/1248	44:13N/49:20N	71:00	56	150	216	10.3	167,000	265	
718 PS	133	WPL565	N1	1239/1348	43:38N/39:00N	71:00	53	157	213	10.2	95,000	137	
	134	WPL566	N2	1331/1410	37:50N/33:17N	71:00	53	157	209	10.4	78,000	102	
	135	WPL567	N3	1422/1501	32:40N/27:23N	71:00	53	157	207	10.7	120,000	155	
	136	WPL568	N4	1515/1554	26:50N/22:12N	71:00	53	157	206	10.6	66,000	103	
--- RN	145	WP761	N1	1305/1345	16:34N/21:00N	69:00	53/52.7	157	196	11.5	6,800	4	
	146	WP762	N2	1357/1436	22:22N/26:48N	69:00	52.8/52.7	158	206	10.8	37,000	68	
	147	WP763	N3	1447/1526	28:14N/32:40N	69:00	52.9/53.4	157	207	10.5	83,000	122	
	148	WP764	N4	1617/1704	28:00N/22:28N	69:00	67/67.5	115	211	5.0	52,000	202	
10 January 1958 Mission 19-B													
717 FN	149	WPL581	N1	1202/1246	44:14N/49:17N	71:00	56	150	215	9.7	85,000	182	
	150	WPL582	N2	1251/1337	49:47N/54:52N	71:00	56	150	215	10.2	98,000	230	
716 PS	151	WPL589	N1	1241/1328	44:00N/38:36N	71:00	53	157	206	12.8	73,000	141	
	152	WPL590	N2	1335/1420	37:50N/33:20N	71:00	53	156	213	11.6	70,000	165	
	153	WPL591	N3	1424/1504	32:16N/27:47N	71:00	53	158	213	10.5	58,000	114	
	154	WPL592	N4	1504/1522	27:40N/26:00N	71:00	53	157	203	5.0	35,000	64	
--- RN	155	WP781	N1	1318/1357	16:31N/21:04N	69:00	50	157	200	11.9	4,600	≤ 8	
	156	WP782	N2	1407/1447	22:17N/26:53N	69:00	50	157	203	12.0	8,900	37	
--- RS	157	WP785	N1	1216/1304	15:29N/11:03N	69:00	53	157	197	13.7	1,670	4	
	158	WP786	N2	1306/1345	09:48N/05:22N	69:00	53	157	196	11.2	210	1	
	159	WP787	N3	1356/1435	04:08N/00:18S	69:00	53	157	196	11.2	≤ 210	1	
	160	WP788	N4	1446/1523	01:33S/05:59S	69:00	52.5	157	196	10.8	10,800	11	
14 January 1958 Test Hop 717													
717 PO	161	WPL597	N1	1430/1456	44:40N/41:33N	71:00	50	160	212	7.6	68,000	81	
	162	WPL598	N2	1506/1531	41:33N/44:40N	71:00	55	160	212	5.8	64,000	149	
	163	WPL599	N3	1541/1606	44:40N/41:33N	71:00	60	135	212	4.2	105,000	253	
	164	WPL600	N4	1618/1643	41:33N/44:40N	71:00	65	121	212	3.1	210,000	315	
21 January 1958 Mission 20													
716 PN	169	WPL593	N1	1204/1241	44:30N/48:57N	71:00	53	157	208	10.0	73,000	187	
	170	WPL594	N2	1253/1332	50:05N/54:34N	71:00	53	157	208	10.5	70,000	170	
	171	WPL595	N3	1344/1420	55:44N/60:16N	71:00	53	157	207	9.7	86,000	224	
	172	WPL596	N4	1430/1509	61:13N/65:42N	71:00	53	157	201	10.9	71,000	162	
718 PS	165	WPL585	N1	1254/1324	42:57N/39:40N	71:00	49.6	160	212	8.9	49,000	96	
	166	WPL586	N2	1346/1416	37:12N/33:53N	71:00	49.6	160	209	9.1	4,200	≤ 7	
	167	WPL587	N3	1436/1506	31:41N/28:12N	71:00	50	160	210	8.9	3,100	6	
	168	WPL588	N4	1523/1554	26:08N/22:53N	71:00	50	160	207	9.3	990	≤ 2	
--- RS	173	WP789	N1	2122/2152	14:56N/11:36N	69:00	51.1/50.1	160	194	9.4	1,220	1	
	174	WP790	N2	2215/2245	09:13N/05:57N	69:00	50.5/50.5	162	197	9.7	480	1	
	175	WP791	N3	2307/2338	03:32N/00:18N	69:00	50.2/50.3	162	197	10.0	≤ 350	1	
	176	WP792	N4	2359/2429	02:08S/05:24S	69:00	50/50.3	162	196	9.8	≤ 240	1	
24 January 1958 Mission 21													
717 PN	177	WPL833	N1	1305/1335	45:01N/48:22N	71:00	50	161	209	9.1	80,000	166	
	178	WPL834	N2	1355/1425	50:39N/53:57N	71:00	50	160	212	8.8	67,000	144	
	179	WPL835	N3	1447/1516	56:18N/59:40N	71:00	50	160	213	8.5	115,000	251	
	180	WPL836	N4	1535/1605	61:45N/65:08N	71:00	50	160	204	9.2	200,000	371	
718 PS	181	WPL837	N1	1350/1414	42:34N/40:08N	71:00	47	160	208	7.9	98,000	204	
	182	WPL838	N2	1447/1511	36:39N/34:25N	71:00	47	160	208	7.9	4,800	14	
	183	WPL839	N3	1543/1609	30:09N/28:32N	71:00	47	160	203	8.7	660	10	
	184	WPL840	N4	1610/1634	28:12N/25:44N	71:00	47	160	203	8.1	430	5	
--- RS	185	WP797	N1	1328/1352	14:32N/12:00N	69:00	48.4/48.1	163	204	7.9	1,880	≤ 3	
	186	WP798	N2	1421/1444	08:51N/06:19N	69:00	48.1/47.1	173	203	8.5	≤ 270	2	
	187	WP799	N3	1514/1537	03:11N/00:39N	69:00	46.8/47.1	173	202	9.5	490	1	
	188	WP800	N4	1607/1631	02:31S/05:01S	69:00	47.2/47.1	173	202	9.0	128	1	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (KT)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Str ⁹⁰
31 January 1958 Mission 22												
716 PN	189	WPL841	N1	1314/1339	45:30N/47:57N	71:00	47	162	224	7.7	54,000	132
	190	WPL842	N2	1410/1434	51:08N/53:30N	71:00	47	161	223	7.4	50,000	137
	191	WPL843	N3	1507/1532	56:51N/59:41N	71:00	47	160	223	7.6	61,000	170
	192	WPL844	N4	1603/1626	62:13N/64:38N	71:00	47	163	223	7.2	90,000	190
717 PS	193	WPL849	N1	1422/1443	42:13N/40:27N	71:00	44.3	167	226	7.3	74,000	196
	194	WPL850	N2	1527/1547	36:27N/34:40N	71:00	44.3	166	223	6.9	17,000	41
	195	WPL851	N3	1630/1656	30:54N/29:06N	71:00	44	166	217	9.3	1,480	≤ 5
	196	WPL852	N4	1733/1753	25:24N/23:26N	71:00	44	164	208	7.3	≤ 470	< 1
--- RN	213	WP813	N1	1121/1141	17:44N/19:38N	69:00	44	166	207	7.6	760	≤ 2
	214	WP814	N2	1215/1235	23:06N/25:00N	69:00	43.7	166	208	7.5	≤ 310	≤ 1
	215	WP815	N3	1308/1328	28:57N/31:15N	69:00	44	166	217	7.2	1,600	≤ 8
	216	WP816	N4	1359/1419	34:51N/37:04N	69:00	45	166	223	6.8	5,600	27
--- RS	209	WP809	N1	1334/1354	14:23N/12:33N	69:00	44	166	205	7.6	1,660	≤ 3
	210	WP810	N2	1436/1456	08:54N/07:04N	69:00	44	166	205	7.6	≤ 600	≤ 6
	211	WP811	N3	1537/1557	03:29N/01:33N	69:00	44	166	205	7.8	≤ 290	< 1
	212	WP812	N4	1637/1657	01:58 S/03:58 S	69:00	44	166	205	7.6	≤ 300	< 1
4 February 1958 Mission 23												
716 PN	197	WPL865	N1	1259/1348	43:54N/49:30N	71:00	55	155	225	11.2	42,000	161
	198	WPL866	N2	1349/1436	49:37N/55:07N	71:00	55	155	226	10.7	53,000	182
	199	WPL867	N3	1437/1525	55:14N/60:43N	71:00	55	155	225	10.9	23,000	129
	200	WPL868	N4	1526/1614	60:50N/66:33N	71:00	55	155	225	10.9	72,000	214
--- RN	221	WP897	N1	0959/1128	16:00N/26:22N	69:00	56/65.2	121	205	11.7	48,000	217
	222	WP898	N2	1131/1301	26:34N/36:56N	69:00	64.8/65.3	118	216	10.2	70,000	239
	223	WP899	N3	1309/1439	36:56N/26:34N	69:00	64.3/68	121	216	10.4	110,000	319
	224	WP900	N4	1441/1611	26:22N/16:00N	69:00	67.7/69.4	112	213	8.7	112,000	424
--- RS	217	WP893	N1	0940/0958	16:00N/10:30N	69:00	55	155	198	12.7	4,000	23
	218	WP894	N2	0959/1047	10:21N/04:49N	69:00	55	155	197	12.7	≤ 180	< 1
	219	WP895	N3	1048/1136	04:41N/01:09 S	69:00	55	155	197	12.7	≤ 180	< 1
	220	WP896	N4	1138/1226	01:00 S/06:32 S	69:00	55	155	197	12.7	≤ 180	< 1
7 February 1958 Mission 24												
717 PN	205	WPL877	N1	1256/1344	44:00N/49:52N	71:00	54.7	155	224	11.0	35,000	223
	206	WPL878	N2	1345/1434	49:59N/54:59N	71:00	55	155	227	11.0	36,000	230
	207	WPL879	N3	1435/1523	55:06N/60:58N	71:00	54.9	155	226	11.0	34,000	154
	208	WPL880	N4	1524/1611	61:05N/66:50N	71:00	54.9	155	225	10.7	24,000	143
716 PS	201	WPL873	N1	1345/1432	44:00N/38:40N	71:00	55	155	221	10.9	29,000	175
	202	WPL874	N2	1433/1536	38:33N/31:38N	71:00	55	155	216	15.0	9,600	61
	203	WPL875	N3	1537/1611	31:31N/27:41N	71:00	55	155	217	8.2	3,400	24
	204	WPL876	N4	1612/1626	27:34N/26:10N	71:00	55.5	155	209	3.4	2,000	≤ 17
--- RS	229	WP905	N1	1311/1359	16:02N/10:42N	69:00	55.1	155	205	12.0	3,200	18
	230	WP906	N2	1400/1448	10:33N/05:13N	69:00	55	155	205	12.1	≤ 290	< 1
	231	WP907	N3	1449/1537	05:04N/00:33 S	69:00	55	155	204	12.2	≤ 280	< 1
	232	WP908	N4	1539/1627	00:42 S/05:44 S	69:00	55.2	155	204	12.2	≤ 280	< 1
--- RS	225	WP901	N1	1355/1531	16:00N/04:58N	69:00	57.2/67	120	195	13.0	47,000	227
	226	WP902	N2	1533/1709	04:44N/06:20 S	69:00	67/68	115	203	10.7	250,000	702
	227	WP903	N3	1717/1853	06:20 S/04:44N	69:00	67.7/70.2	110	204	9.4	380,000	1123
	228	WP904	N4	1855/2030	04:58N/16:00N	69:00	70.2/71	106	202	8.3	330,000	1059

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dgm/1000 SCF		
											Total Beta	Sr ⁹⁰	
21 February 1958 Mission 25													
718 PO	237	WPL897	N1	1416/1437	44:40N	73:30	55	155	217	5.0	27,000	194	
	238	WPL898	N2	1440/1500	44:40N	73:30	55	155	217	4.7	27,000	224	
	239	WPL899	N3	1505/1527	44:40N	73:30	50	160	218	6.3	7,100	48	
	240	WPL900	N4	1529/1549	44:40N	73:30	50	160	218	5.7	7,200	45	
716 PS	233	WPL889	N1	1339/1427	44:00N/38:16N	71:00	55.5	155	217	11.3	33,000	194	
	234	WPL890	N2	1428/1516	38:09N/32:36N	71:00	55	155	213	11.6	26,000	176	
	235	WPL891	N3	1517/1605	32:29N/26:54N	71:00	55/55.5	155	208	11.8	11,400	81	
	236	WPL892	N4	1606/1652	26:47N/21:31N	71:00	55.5/55	155	203	11.8	1,270	5	
--- RN	263	WP917	N1	1402/1538	16:00N/27:02N	69:00	58/67.2	118	206	11.3	18,700	15	
	264	WP918	N2	1540/1716	27:16N/38:18N	69:00	67/67.4	114	212	10.0	3,200	64	
	266	WP920	N4	1902/2036	27:02N/16:00N	69:00	70/71	106	208	8.0	50,000	238	
26 February 1958 Mission 26													
718 PO	249	WPL953	N1	1417/1438	44:40N	73:30	45	160	210	7.2	22,000	135	
	250	WPL954	N2	1438/1458	44:40N	73:30	45	160	210	6.9	31,000	172	
	251	WPL955	N3	1502/1522	44:40N	73:30	40	160	211	7.8	11,600	54	
	252	WPL956	N4	1523/1543	44:40N	73:30	40	160	211	7.8	8,100	50	
716 PS	245	WPL949	N1	1303/1351	43:40N/38:46N	71:00	45	165	211	17.1	23,000	132	
	246	WPL950	N2	1358/1446	37:55N/33:13N	71:00	45.5	165	203	17.6	13,200	88	
	247	WPL951	N3	1453/1541	32:25N/27:46N	71:00	45	165	205	17.6	4,600	26	
	248	WPL952	N4	1547/1635	26:57N/21:58N	71:00	45	165	208	17.4	< 330	1	
717 PS	241	WPL945	N1	1345/1434	44:00N/38:24N	71:00	55	155	209	12.2	18,700	146	
	242	WPL946	N2	1435/1523	38:17N/32:47N	71:00	55	155	205	12.1	11,900	85	
	243	WPL947	N3	1526/1613	32:40N/27:03N	71:00	55	158	201	12.5	7,400	52	
	244	WPL948	N4	1615/1703	26:56N/21:15N	71:00	55	158	198	13.0	1,770	30	
-/RN	274	WP512	N4	1626/1714	32:43N/38:00N	69:00	59	135	203	8.9	14,800	91	
--- RN	267	WP505	N1	1314/1402	16:05N/21:30N	69:00	64.5	121	206	6.2	23,000	128	
	268	WP506	N2	1402/1452	21:37N/27:03N	69:00	65	121	206	6.4	19,000	146	
	269	WP507	N3	1453/1539	27:10N/32:36N	69:00	65	121	210	5.8	16,400	77	
	270	WP508	N4	1541/1629	32:43N/38:00N	69:00	65	121	212	5.9	13,300	101	
1 March 1958 Mission 27													
718 PN	258	WPL906	N1	1300/1348	44:00N/49:30N	71:00	55/54.8	155	218	11.3	11,200	72	
	259	WPL907	N2	1350/1437	49:37N/55:07N	71:00	54.8/54.7	155	220	11.1	14,400	107	
	260	WPL908	N3	1438/1530	55:14N/61:19N	71:00	54.7/54.9	155	225	11.9	25,000	222	
	257	WPL905	N4	1530/1621	61:26N/66:56N	71:00	55	155	228	11.4	25,000	217	
717 PS	253	WPL901	N1	1345/1433	44:00N/38:35N	71:00	55	155	214	11.6	11,200	78	
	254	WPL902	N2	1435/1523	38:21N/32:56N	71:00	55	155	208	12.0	3,300	26	
	255	WPL903	N3	1525/1615	32:42N/27:17N	71:00	55	155	201	13.0	< 620	≤ 5	
	256	WPL904	N4	1617/1705	27:03N/21:33N	71:00	55	155	198	12.7	< 450	< 1	
--- RN	335	WP921	N1	1359/1535	16:00N/26:41N	69:00	57.5/67.1	118	209	11.1	16,900	162	
	336	WP922	N2	1537/1713	26:55N/37:36N	69:00	67.2/68	113	207	10.0	6,900	100	
	337	WP923	N3	1721/1857	37:36N/26:24N	69:00	67/69.4	111	207	9.5	2,700	58	
	338	WP924	N4	1859/2034	26:40N/15:18N	69:00	69.4/70.2	107	208	8.3	9,300	101	
--- RS	331	WP517	N1	1310/1359	16:02N/10:30N	69:00	55/54.2	155	197	13.1	1,410	6	
	332	WP518	N3	1448/1536	04:41N/00:51S	69:00	54.5	155	196	13.0	620	6	
	333	WP519	N4	1633/1728	06:32S/04:00S	69:00	54.5	155	196	14.9	210	3	
	334	WP520	N2	1812/1900	04:49N/10:21N	69:00	55/54.7	155	196	12.8	620	3	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
5 March 1958 Mission 28													
718 PN	279	WPL609	N1	1300/1348	44:00N/49:45N	71:00	55	155	221	11.2	17,500	149	
	280	WPL610	N2	1349/1445	49:52N/55:22N	71:00	55	158	222	13.3	17,100	149	
	281	WPL611	N3	1445/1531	55:29N/60:53N	71:00	55	155	223	10.6	21,000	182	
	282	WPL612	N4	1531/1615	61:00N/66:31N	71:00	55	155	225	10.0	28,000	210	
717 PS	275	WPL605	N1	1345/1433	44:00N/38:42N	71:00	55	150	217	10.8	18,700	164	
	276	WPL606	N2	1434/1522	38:35N/33:17N	71:00	55	155	208	12.0	15,100	145	
	277	WPL607	N3	1523/1611	33:10N/27:52N	71:00	54.5	155	201	12.6	3,400	23	
	278	WPL608	N4	1612/1700	27:45N/ 25:15N/27:45N	71:00	54.5/54.7	155	197	12.9	< 900	6	
--- RS	343	WP521	N1	1353/1532	16:00N/04:58N	69:00	54.9/67.3	118	196	12.5	37,000	221	
	344	WP522	N2	1532/1706	04:44N/06:18S	69:00	67.2/68	113	207	9.7	44,000	252	
	345	WP523	N3	1717/1853	06:18S/04:44N	69:00	67.7/69.3	112	208	9.4	59,000	282	
	346	WP524	N4	1855/2032	04:58N/16:00N	69:00	69.2/70.1	108	209	8.6	81,000	406	
6 March 1958 Mission Minney 1 and 2													
717 M'P'L'S O	283	WPL613	N1	1438/1508	45:00N	93:00	49.8/47.2	160	217	8.6	19,900	138	
	284	WPL614	N2	1510/1542	45:00N	93:00	47.7/47.6	160	217	9.6	22,000	123	
	285	WPL615	N3	1544/1617	45:00N	93:00	47.6/48.4	160	217	9.9	21,000	127	
	286	WPL616	N4	1619/1649	45:00N	93:00	48.6/49	160	217	9.2	19,200	115	
718 M'P'L'S O	287	WPL617	N1	1458/1535	45:00N	93:00	55/55.2	150	218	8.4	18,500	164	
	288	WPL618	N2	1538/1612	45:00N	93:00	55.2/55.8	150	218	7.6	15,800	155	
	289	WPL619	N3	1612/1642	45:00N	93:00	55.8/55.2	150	218	6.7	17,000	139	
	290	WPL620	N4	1643/1712	45:00N	93:00	55.1/54.5	150	218	6.5	18,800	151	
11 March 1958 Mission 29													
716 PN	295	WPL625	N1	1259/1347	44:00N/49:40N	71:00	55	155	221	11.2	16,800	125	
	296	WPL626	N2	1348/1436	49:47N/55:27N	71:00	55	155	220	11.3	16,300	114	
	297	WPL627	N3	1437/1525	55:34N/61:10N	71:00	55	156	220	11.3	16,900	138	
	298	WPL628	N4	1526/1613	61:17N/66:53N	71:00	54.8/55	155	218	11.1	16,400	119	
717 PS	291	WPL621	N1	1420/1509	44:30N/38:48N	71:00	55	155	220	11.5	15,400	134	
	292	WPL622	N2	1510/1550	38:33N/32:47N	71:00	55	155	209	9.9	16,800	117	
	293	WPL623	N3	1553/1647	32:40N/26:54N	71:00	55	155	208	13.5	5,400	37	
	294	WPL624	N4	1648/1735	26:47N/21:01N	71:00	55	155	201	12.2	1,790	20	
--- RN	311	WP525	N1	1359/1534	16:00N/27:02N	69:00	55/67.5	118	203	11.5	---	118	
	312	WP526	N2	1537/1717	27:16N/38:18N	69:00	67.5/68	113	210	10.2	---	183	
	313	WP527	N3	1725/1859	38:18N/27:16N	69:00	68/69.5	111	210	9.0	28,000	270	
	314	WP528	N4	1901/2042	27:02N/16:00N	69:00	69.5/70.5	108	210	9.8	29,000	233	
18 March 1958 Mission 30													
716 PS	299	WPL629	N1	1305/1353	43:29N/38:41N	71:00	45/45.5	165	218	16.6	560,000	374	
	300	WPL630	N2	1401/1449	37:53N/33:05N	71:00	45.5/45	163	213	16.7	13,700	89	
	301	WPL631	N3	1457/1546	32:17N/27:29N	71:00	45/45.5	165	206	17.7	8,600	40	
	302	WPL632	N4	1553/1640	26:47N/21:59N	71:00	46/45	162	213	16.0	720	2	
718 PS	303	WPL633	N1	1346/1434	43:46N/38:22N	71:00	55/55.5	155	219	11.2	15,800	126	
	304	WPL634	N2	1440/1528	37:55N/32:31N	71:00	55.5/55	155	212	11.6	10,600	89	
	305	WPL635	N3	1531/1618	32:04N/26:52N	71:00	55	155	204	12.0	8,200	66	
	306	WPL636	N4	1622/1710	26:26N/21:24N	71:00	54.9/55	155	201	12.4	3,100	17	
--- RN	319	WP613	N1	1358/1446	16:00N/21:27N	69:00	60	135	203	8.7	7,100	81	
	320	WP614	N2	1447/1535	21:34N/27:01N	69:00	60	135	203	8.7	11,300	120	
	321	WP615	N3	1536/1624	27:08N/32:35N	69:00	60	135	211	8.2	15,100	133	
	322	WP616	N4	1625/1713	32:42N/38:08N	69:00	60	135	211	8.2	15,000	164	
--- RN	315	WP609	N1	1313/1401	16:00N/21:27N	69:00	64.5	121	210	6.1	26,000	217	
	316	WP610	N2	1402/1450	21:34N/27:01N	69:00	65	121	211	5.9	23,000	182	
	317	WP611	N3	1451/1538	27:08N/32:35N	69:00	65	121	213	5.7	22,000	175	
	318	WP612	N4	1540/1627	32:42N/38:08N	69:00	65	121	219	5.6	18,200	208	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude ("W)	Altitude (1000 ft.)	IAS (Kt)	Temp. ("K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	30 Sr	
19 March 1958 Special No. 1													
716 PO	323	WPL637	N1	1405/1425	42:30N	71:00	40	170	223	8.1	26,000	136	
	324	WPL638	N2	1441/1502	42:30N	71:00	45	165	218	7.2	11,400	95	
	325	WPL639	N3	1514/1534	42:30N	71:00	50	160	218	5.7	16,900	112	
	326	WPL640	N4	1555/1615	42:30N	71:00	45.5	165	216	6.9	11,000	88	
25 March 1958 Mission 31													
716 PS	327	WPL645	N1	1346/1434	43:53N/38:11N	71:00	60	135	220	7.8	230,000	211	
	328	WPL646	N2	1436/1524	38:04N/32:33N	71:00	60	135	216	8.0	610,000	405	
	329	WPL647	N3	1526/1612	32:20N/26:49N	71:00	60	135	213	7.8	1,110,000	865	
	330	WPL648	N4	1616/1704	26:35N/21:04N	71:00	60	135	205	8.5	260,000	285	
718 PS	355	WPL641	N1	1346/1434	43:53N/38:11N	71:00	60	135	220	7.8	192,000	229	
	356	WPL642	N2	1436/1524	38:04N/32:33N	71:00	60	135	216	8.0	630,000	398	
	357	WPL643	N3	1526/1613	32:20N/26:49N	71:00	60	135	213	8.0	1,070,000	699	
	358	WPL644	N4	1616/1704	26:35N/21:04N	71:00	60	135	205	8.5	240,000	321	
--- RN	347	WP605	N1	1358/1446	16:00N/21:32N	69:00	65	121	211	5.9	18,800	193	
	348	WP606	N2	1447/1535	21:39N/27:11N	69:00	65	121	213	5.9	21,000	178	
	349	WP607	N3	1536/1624	27:18N/32:50N	69:00	65	121	216	5.8	28,000	191	
	350	WP608	N4	1625/1713	32:57N/38:29N	69:00	65	121	216	5.8	28,000	216	
--- RN	351	WP617	N1	1358/1446	16:00N/21:32N	69:00	65	121	211	5.9	15,100	143	
	352	WP618	N2	1447/1535	21:39N/27:11N	69:00	65	121	213	5.9	22,000	203	
	353	WP619	N3	1536/1624	27:18N/32:50N	69:00	65	121	216	5.8	48,000	199	
	354	WP620	N4	1625/1713	32:57N/38:29N	69:00	65	121	216	5.8	31,000	216	
28 March 1958 Mission 33													
717 PN	359	WPL657	N1	1300/1349	44:00N/49:34N	71:00	55	155	220	11.5	280,000	261	
	360	WPL658	N2	1349/1437	49:41N/55:11N	71:00	55	155	220	11.2	610,000	457	
	361	WPL659	N3	1439/1528	55:25N/60:51N	71:00	55	155	220	11.5	590,000	301	
718 PS	363	WPL957	N1	1420/1509	21:27N/26:57N	71:00	55.7/53.7	155	207	12.3	29,000	28	
	364	WPL958	N2	1509/1557	27:04N/32:34N	71:00	53.7/54.6	155	210	12.2	66,000	80	
	365	WPL959	N3	1558/1646	32:42N/38:12N	71:00	54.7/55	155	216	11.5	13,800	93	
	366	WPL960	N4	1647/1733	38:20N/43:50N	71:00	55	155	220	10.8	13,900	83	
--- RN	367	WP621	N1	1359/1537	16:00N/27:02N	69:00	56.9/66.2	118	210	11.3	18,000	104	
	368	WP622	N2	1539/1715	27:16N/38:18N	69:00	66.3/67.1	118	213	10.8	31,000	160	
	369	WP623	N3	1723/1900	38:18N/27:16N	69:00	66.8/68.2	115	213	10.0	26,000	156	
	370	WP624	N4	1902/2038	27:02N/16:00N	69:00	68.3/70.2	112	210	9.2	40,000	246	
--- RS	371	WP625	N1	1310/1359	16:00N/10:30N	69:00	55.6/54.2	155	193	13.1	≤ 440	2	
	372	WP626	N2	1359/1447	10:21N/04:49N	69:00	55	155	205	12.1	≤ 480	2	
	373	WP627	N3	1448/1537	04:41N/01:09S	69:00	55	155	205	12.3	≤ 470	3	
	374	WP628	N4	1538/1626	01:00S/06:32S	69:00	55	155	205	12.1	≤ 480	3	
1 April 1958 Mission 32													
716 11N	375	WPL669	N1	1253/1446	44:00N/56:01N	71:00	55.4/64.6	121	220	14.3	95,000	262	
	376	WPL670	N2	1447/1630	56:08N/68:09N	71:00	64.5/65	121	217	12.4	26,000	71	
	377	WPL671	N3	1632/1832	68:14N/56:09N	71:00	65	121	217	14.4	14,200	58	
	378	WPL672	N4	1833/2004	56:02N/44:00N	71:00	65	121	220	10.7	84,000	173	
718 PS	379	WPL681	N1	1344/1529	44:00N/32:06N	71:00	61.8/64.9	121	220	12.8	155,000	218	
	380	WPL682	N2	1530/1715	31:59N/20:05N	71:00	65	121	213	12.8	186,000	274	
	381	WPL683	N3	1715/1900	20:00N/31:53N	71:00	65	121	213	12.8	140,000	242	
	382	WPL684	N4	1901/2046	32:00N/44:00N	71:00	65	121	220	12.3	165,000	168	
--- RN	383	WP633	N1	1359/1535	16:00N/27:02N	69:00	64/64.5	122	210	12.5	60,000	136	
	384	WP634	N2	1537/1713	27:16N/38:18N	69:00	64.5	122	217	11.9	300,000	250	
	385	WP635	N3	1721/1857	38:18N/27:16N	69:00	64/65	121	217	11.7	230,000	224	
	386	WP636	N4	1859/2035	27:02N/16:00N	69:00	65	121	210	12.0	61,000	140	
--- RS	387	WP641	N1	1308/1446	16:00N/04:58N	69:00	64.8/64.5	121	205	12.6	16,500	108	
	388	WP642	N2	1448/1624	04:49N/06:18S	69:00	64.4/65.1	121	201	12.7	22,000	137	
	389	WP643	N3	1632/1808	06:18S/04:44N	69:00	64.8/65.2	121	201	12.6	24,000	175	
	390	WP644	N4	1810/1946	04:58N/16:00N	69:00	65.4/65.2	121	205	12.2	19,600	99	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
4 April 1958 Mission 34													
718 PS	395	WPL725	N1	1301/1350	43:52N/38:49N	71:00	45/45.5	165	220	16.6	106,000	174	
	396	WPL726	N2	1353/1441	38:23N/33:11N	71:00	45.5/45	165	217	16.6	109,000	219	
	397	WPL727	N3	1445/1533	32:45N/27:33N	71:00	45	165	213	17.0	16,300	77	
	398	WPL728	N4	1537/1625	27:07N/21:55N	71:00	45	165	210	17.6	980	5	
716 PS	391	WPL717	N1	1345/1433	44:00N/38:20N	71:00	55/54.7	155	219	11.3	139,000	231	
	392	WPL718	N2	1434/1522	38:13N/32:30N	71:00	54.7	155	214	11.6	320,000	247	
	393	WPL719	N3	1523/1612	32:23N/26:40N	71:00	54.7/54.5	156	205	12.6	250,000	207	
	394	WPL720	N4	1612/1700	26:33N/20:50N	71:00	54.5	157	200	12.9	40,000	43	
--- RN	403	WP653	N1	1358/1453	16:00N/21:18N	69:00	60	135	198	10.2	188,000	125	
	404	WP654	N2	1453/1535	21:25N/26:39N	69:00	60	135	205	7.5	930,000	457	
	405	WP655	N3	1536/1624	26:16N/32:00N	69:00	60	135	210	8.3	159,000	202	
	406	WP656	N4	1625/1713	32:07N/37:10N	69:00	60	135	221	7.8	240,000	254	
--- RN	399	WP649	N1	1313/1400	16:05N/21:30N	69:00	65	121	211	5.8	15,600	164	
	400	WP650	N2	1401/1450	21:37N/27:03N	69:00	65	121	208	6.2	17,600	147	
	401	WP651	N3	1451/1539	27:10N/32:36N	69:00	65	121	213	5.9	16,500	118	
	402	WP652	N4	1540/1627	32:43N/38:00N	69:00	65	121	219	5.6	55,000	167	
8 April 1958 Mission 35													
716 PN	407	WPL733	N1	1300/1349	44:00N/49:42N	71:00	55	155	227	11.0	67,000	113	
	408	WPL734	N2	1349/1437	49:49N/55:15N	71:00	55	155	226	11.0	210,000	183	
	409	WPL735	N3	1438/1526	55:22N/60:48N	71:00	55	155	224	11.0	146,000	176	
	410	WPL736	N4	1529/1617	61:04N/66:27N	71:00	55	155	222	11.1	720,000	771	
--- PR	419	WP729	N1	1345/1433	44:00N/38:40N	71:00	54.5/55.5	155	226	11.0	78,000	122	
	420	WP730	N2	1435/1523	38:26N/33:06N	71:00	54.5/55.5	155	215	11.7	46,000	80	
	421	WP731	N3	1525/1613	32:52N/27:16N	71:00	55	155	208	12.0	17,000	38	
	422	WP732	N4	1614/1704	27:02N/21:40N	71:00	55	155	203	12.8	1,710	8	
--- RN	411	WP645	N1	1359/1535	16:00N/27:02N	69:00	62.4/64	125	203	13.9	17,400	126	
	*412	WP646	N2	1537/1647	27:16N/28:25N	69:00	63.2/65.1	124	215	8.1	21,000	137	
	413	WP647	N3	1622/1713	32:06N/38:18N	69:00	61.2/63.4	121	210	12.1	21,000	119	
	414	WP648	N4	1721/1857	38:18N/27:26N	69:00	63.4/67.3	113	212	9.7	28,000	176	
--- RS	415	WP701	N1	1310/1358	16:00N/10:30N	69:00	56	150	201	11.5	601	≤ 4	
	416	WP702	N2	1359/1458	10:21N/04:49N	69:00	55	150	195	15.0	380	≤ 4	
	418	WP704	N4	1538/1626	01:00 S/06:32 S	69:00	55	150	198	12.0	≤ 480	2	
	417	WP703	N3	1740/1823	00:51 S/04:41N	69:00	55	150	198	10.8	320	2	
15 April 1958 Mission 36													
716 PN	427	WPL757	N1	1300/1348	44:00N/49:35N	71:00	55	155	223	11.1	102,000	219	
	428	WPL758	N2	1349/1437	49:42N/55:22N	71:00	55	155	220	11.2	94,000	170	
	429	WPL759	N3	1439/1530	55:36N/61:16N	71:00	55	155	225	11.6	139,000	217	
	430	WPL760	N4	1530/1618	61:36N/67:16N	71:00	55	155	222	11.1	99,000	227	
718 PS	423	WPL705	N1	1420/1509	21:27N/26:49N	71:00	52.9/53.8	155	198	13.7	15,900	27	
	424	WPL706	N2	1511/1559	27:02N/32:24N	71:00	54/54.8	155	213	11.8	59,000	116	
	425	WPL707	N3	1604/1649	32:37N/37:59N	71:00	54.5/54.8	155	217	11.5	74,000	205	
	426	WPL708	N4	1651/1738	38:12N/43:34N	71:00	54.8/55.1	155	219	11.0	500,000	458	
--- RN	431	WP705	N1	1359/1534	16:00N/27:10N	69:00	56.2/66.2	122	210	12.2	23,000	107	
	432	WP706	N2	1537/1713	27:24N/38:04N	69:00	66/66.3	115	219	10.0	30,000	218	
	433	WP707	N3	1721/1858	38:04N/26:55N	69:15/69:30	66.2/68.9	113	221	9.2	42,000	199	
	434	WP708	N4	1859/2035	26:41N/17:15N	69:30/69:40	68.8/69.5	109	218	8.3	28,000	159	
--- RS	435	WP709	N1	1310/1353	16:00N/10:51N	69:00	54.5	155	199	11.4	400	3	
	436	WP710	N2	1400/1446	10:37N/05:17N	69:00	54.5	155	195	12.5	1,100	3	
	437	WP711	N3	1450/1537	04:56N/00:02 S	69:00	55	155	197	12.5	740	2	
	438	WP712	N4	1540/1625	00:23 S/05:56 S	69:00	55	155	197	11.9	290	2	

* Exposure of HASP No. 412 interrupted for 35 minutes due to flame out of aircraft.

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
25 April 1958 Mission 38												
717 PN	447	WPL801	N1	1306/1354	44:00N/49:50N	71:00	55	155	220	11.2	71,000	124
	448	WPL802	N2	1356/1444	50:04N/55:54N	71:00	55	155	221	11.2	50,000	120
	450	WPL804	N4	1611/1644	49:44N/46:11N	71:00	63.8/63.4	125	220	4.2	14,400	108
716 PS	443	WPL797	N1	1345/1433	44:00N/39:33N	71:00	55	155	218	11.3	55,000	103
	444	WPL798	N2	1434/1522	39:26N/33:59N	71:00	55	155	211	11.7	32,000	67
	445	WPL799	N3	1523/1612	33:52N/28:25N	71:00	55	155	209	12.2	7,200	15
	446	WPL800	N4	1612/1700	28:18N/22:51N	71:00	55/54.5	155	203	12.3	5,900	15
--- RN	455	WP753	N1	1359/1538	16:00N/27:02N	69:00	58.3/66	121	209	12.4	31,000	87
	456	WP754	N2	1539/1716	27:16N/38:18N	69:00	66/67	118	213	10.9	11,700	100
	457	WP755	N3	1725/1857	38:18N/27:16N	69:00	66.8/68.2	115	213	9.5	12,900	118
	458	WP756	N4	1858/2041	27:02N/16:00N	69:00	68.2/69.4	110	214	9.3	37,000	134
--- RS	451	WP729	N1	1308/1444	16:00N/05:01N	69:00	56.6/55.4	155	195	25.3	1,950	7
	452	WP730	N2	1513/1623	01:39N/06:11S	69:00	55.2/55.7	155	194	18.7	185	3
	453	WP731	N3	1630/1807	06:11S/04:44N	69:00	58.5/61.6	135	203	17.1	4,000	25
	454	WP732	N4	1807/1943	04:58N/16:00N	69:00	61.6/62.2	135	203	16.4	64,000	122
2 May 1958 Mission 39												
717 PN	459	WPL1008	N1	1300/1348	44:00N/49:44N	71:00	55	152	226	10.5	85,000	176
	460	WPL1009	N2	1349/1442	49:51N/56:11N	71:00	55	153	227	11.9	77,000	176
	461	WPL1010	N3	1443/1526	56:18N/61:26N	71:00	55	150	229	9.1	82,000	221
	462	WPL1011	N4	1527/1615	61:33N/67:16N	71:00	55	150	230	10.1	101,000	231
716 PS	463	WPL1016	N1	1345/1432	44:00N/38:22N	71:00	55	150	216	10.8	91,000	182
	464	WPL1017	N2	1435/1523	38:08N/32:30N	71:00	55	150	210	11.2	63,000	147
	465	WPL1018	N3	1525/1612	32:16N/26:38N	71:00	55	150	206	11.2	58,000	141
	466	WPL1019	N4	1614/1701	26:31N/20:53N	71:00	55	150	204	11.5	36,000	94
--- RN	467	WP817	N1	1000/1134	16:00N/27:02N	69:00	51.5/66.5	120	208	11.6	29,000	118
	468	WP818	N2	1137/1313	27:16N/38:18N	69:00	66.8/67.3	117	213	10.4	12,200	156
	469	WP819	N3	1321/1457	38:18N/27:16N	69:00	66.8/68.6	115	215	9.7	9,400	91
	470	WP820	N4	1459/1635	27:02N/16:00N	69:00	68.7/70.3	111	213	8.8	24,000	151
--- RS	471	WP821	N1	0910/1045	16:00N/04:58N	69:00	55	155	195	25.4	2,600	3
	472	WP822	N2	1048/1225	04:44N/06:18S	69:00	54	155	198	26.4	≤ 174	3
	473	WP823	N3	1232/1408	06:18S/04:44N	69:00	59	135	203	17.9	2,400	19
	474	WP824	N4	1410/1545	04:58N/16:00N	69:00	60	135	202	17.2	44,000	110
6 May 1958 Mission 40												
717 PN	475	WPL1020	N1	1300/1348	44:00N/49:40N	71:00	55	155	218	11.4	158,000	275
	476	WPL1021	N2	1349/1437	49:47N/55:27N	71:00	55	155	226	10.9	174,000	328
	477	WPL1022	N3	1438/1526	55:34N/61:26N	71:00	55	155	228	10.8	112,000	244
	478	WPL1023	N4	1527/1615	61:33N/67:25N	71:00	55.7	155	226	10.7	61,000	126
716 PS	479	WPL1024	N1	1345/1433	44:00N/39:28N	71:00	55	155	214	11.6	72,000	129
	480	WPL1025	N2	1434/1522	39:21N/33:49N	71:00	55	155	211	11.7	48,000	64
	481	WPL1026	N3	1524/1612	33:35N/28:03N	71:00	55	155	207	12.0	15,400	42
	482	WPL1027	N4	1614/1702	27:49N/22:17N	71:00	55	155	207	12.0	7,100	18
--- RN	483	WP749	N1	0958/1133	16:00N/27:02N	69:00	65/65.5	121	210	11.8	40,000	148
	484	WP750	N2	1136/1312	27:16N/37:42N	69:00	65.5/66.3	119	215	11.0	39,000	171
	485	WP751	N3	1321/1457	37:42N/26:55N	69:00	66.1/68.3	118	217	10.4	28,000	116
	486	WP752	N4	1459/1635	26:41N/16:00N	69:00	68.3/70.4	112	215	8.9	26,000	146
--- RS	487	WP825	N1	0910/1047	16:00N/04:30N	69:00	55	155	193	26.2	660	4
	488	WP826	N2	1048/1225	04:16N/05:08S	69:00	55	158	192	27.2	7,200	1
	489	WP827	N3	1232/1409	05:08S/05:54N	69:00	59.5	135	199	18.1	5,700	20
	490	WP828	N4	1410/1546	06:08N/16:00N	69:00	60.5	135	198	17.7	24,000	60

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
9 May 1958 Mission 41												
716 PS	503	WPL861	N1	1300/1348	44:00N/40:00N	71:00	45	165	225	16.0	31,000	79
	504	WPL862	N2	1356/1444	39:20N/35:20N	71:00	45	163	217	16.7	26,000	72
	505	WPL863	N3	1452/1540	34:40N/30:40N	71:00	45	165	210	17.2	8,700	34
	506	WPL864	N4	1547/1635	30:05N/26:05N	71:00	45	165	207	17.4	≤ 460	2
717 PS	499	WPL689	N1	1345/1433	44:00N/38:46N	71:00	55	150	222	10.5	64,000	133
	500	WPL690	N2	1438/1526	38:13N/32:59N	71:00	55	150	213	11.0	50,000	121
	501	WPL691	N3	1531/1619	32:26N/26:12N	71:00	55	150	208	11.3	72,000	203
	502	WPL692	N4	1623/1711	25:46N/20:32N	71:00	55	150	203	11.7	31,000	63
--- RN	495	WP833	N1	0957/1044	16:00N/21:28N	69:00/68:38	59	135	203	8.8	29,000	66
	496	WP834	N2	1047/1134	21:42N/27:09N	68:38/68:45	59.5	135	213	8.0	72,000	153
	497	WP835	N3	1137/1223	27:23N/30:42N	68:45/69:06	60	135	211	7.9	82,000	166
	498	WP836	N4	1227/1315	32:56N/38:26N	69:06/69:14	60	135	218	7.9	84,000	169
--- RN	491	WP829	N1	0912/1000	16:00N/21:32N	69:00/68:58	62.6	128	209	7.1	65,000	179
	492	WP830	N2	1002/1051	21:46N/27:24N	68:58/69:18	62.7	124	211	6.8	41,000	122
	493	WP831	N3	1052/1140	27:38N/33:17N	69:16/69:12	64	124	215	6.2	17,300	132
	494	WP832	N4	1142/1229	33:31N/39:24N	69:12/69:08	64/64.7	124	223	5.8	14,500	99
24 May 1958 Mission 42												
718 PN	507	WPL809	N1	1300/1348	44:00N/49:34N	71:00	55	150	219	10.8	95,000	169
	508	WPL810	N2	1349/1437	49:41N/55:15N	71:00	55	150	223	10.5	154,000	216
	509	WPL811	N3	1438/1526	55:22N/60:56N	71:00	55	150	223	10.5	119,000	211
	510	WPL812	N4	1527/1615	61:03N/66:37N	71:00	55	150	222	10.5	127,000	211
716 PS	511	WPL813	N1	1345/1433	44:00N/38:28N	71:00	55	155	216	11.5	159,000	221
	512	WPL814	N2	1434/1522	38:21N/32:49N	71:00	55	155	208	12.0	122,000	129
	513	WPL815	N3	1524/1612	32:35N/27:03N	71:00	55	155	204	12.2	191,000	108
705 RS	519	WP841	N1	0910/1043	16:00N/04:48N	69:00	55	155	195	24.9	42,000	19
	520	WP842	N2	1048/1224	04:32N/06:22S	69:00	55	155	193	25.7	25,000	12
	521	WP843	N3	1232/1408	06:22S/03:52N	69:00	60	135	197	18.0	18,900	29
	522	WP844	N4	1410/1546	04:08N/16:00N	69:00	61	135	199	17.3	93,000	156
29 May 1958 Mission 43												
714/RN	523	WP845	N1	1359/1428	16:00N/19:20N	69:00	55/67	135	203	5.1	125,000	107
705 RS	524	WP857	N1	1310/1446	16:00N/04:58N	69:00	55	155	195	25.7	184,000	23
	525	WP858	N2	1452/1626	04:58N/16:00N	69:00	59	135	201	17.7	78,000	160
3 June 1958 Mission 54												
715 RO	526	WP853	N1	1245/1445	19:20N/18:18N	66:00	46.4/45.5	160	204	41.7	910	2
	527	WP854	N2	1446/1646	18:25N/17:47N	66:00/66:10	45.8/56.4	144	195	45.3	78,000	48
	528	WP855	N3	1646/1846	17:54N/17:47N	66:00/66:10	56.8/63.2	127	211	17.2	86,000	174
	529	WP856	N4	1847/2017	17:54N/17:47N	66:00/66:15	63.2/68	110	213	8.5	73,000	211
6 June 1958 Mission 55												
714 RO	530	WP865	N1	1245/1445	18:32N/18:25N	66:00	46	180	203	49.5	1,830	5
	531	WP866	N2	1448/1645	18:46N/18:53N	66:00	57	146	203	25.9	123,000	77
715 RO	532	WP869	N1	1645/1846	18:32N/18:32N	66:00	63	126	208	17.2	71,000	115
	533	WP870	N2	1846/2057	18:39N/18:48N	66:00	63.4/68/57.3	108	213	12.3	75,000	159
10 June 1958 Mission 56												
714 RO	534	WP873	N1	1245/1450	18:32N	66:00	45	182	206	51.3	750	1
	535	WP874	N2	1451/1650	19:07N	66:00	54.4/55.6	146	199	28.0	178,000	75
705 RO	536	WP861	N1	1400/1600	18:32N	66:00	63	125	208	16.8	120,000	131
	537	WP862	N2	1600/1802	18:39N/18:46N	66:00	66	118	215	13.7	43,000	116

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
13 June 1958 Mission 57													
715	538	WP877	N1	1245/1445	18:32N/18:04N	66:00	45.6	182	225	45.3	8,100	16	
RO	539	WP878	N2	1450/1650	18:39N/18:16N	66:00	55.5	146	202	27.9	93,000	184	
714	540	WP885	N1	1401/1604	18:46N/18:32N	66:00	63.3/63.8	127	205	17.3	58,000	115	
RO	541	WP886	N2	1602/1802	18:39N/18:32N	66:00	63.7/70.1	109	210	11.0	54,000	171	
17 June 1958 Mission 60A													
714	542	WP889	N1	1145/1345	18:32N	66:00	46	182	205	49.7	2,300	2	
RO	543	WP890	N2	1347/1547	19:00N/18:32N	66:00	54	156	200	32.5	43,000	34	
	544	WP891	N3	1548/1745	18:53N/18:32N	66:00	57	146	203	25.9	170,000	56	
	545	WP892	N4	1747/1945	18:46N/18:32N	66:00	60	135	205	21.0	72,000	85	
705	546	WP881	N1	1300/1500	18:32N/18:39N	66:00	62	126	208	18.0	42,000	98	
RO	547	WP882	N2	1501/1704	18:46N/19:04N	66:00	64	121	209	15.6	67,000	149	
	548	WP883	N3	1703/1903	19:18N/19:21N	66:00/66:04	66	118	210	13.9	93,000	173	
	549	WP884	N4	1903/2102	19:21N/19:07N	66:04/66:00	66/69.5	110	212	11.4	90,000	186	
20 June 1958 Mission 60B													
705	550	WP929	N1	1245/1414	18:28N/18:50N	66:00/67:50	45.1	182	206	38.0	10,900	19	
RO	551	WP930	N2	1419/1549	18:34N/18:55N	67:50/66:00	53.3	156	201	24.7	47,000	37	
	552	WP931	N3	1551/1720	19:23N/17:52N	66:00/67:48	56.1	147	201	20.6	96,000	127	
	553	WP932	N4	1723/1853	17:42N/19:28N	67:41/66:04	59	135	201	16.9	67,000	100	
714	554	WP925	N1	1200/1330	18:34N/18:05N	66:00/67:50	63.6	126	201	13.2	69,000	142	
RO	555	WP926	N2	1331/1500	17:58N/18:32N	67:50/66:00	65.6	121	204	11.3	122,000	182	
	556	WP927	N3	1501/1629	18:39N	66:00/67:50	67.6	116	203	9.9	55,000	172	
	557	WP928	N4	1630/1859	18:39N/18:41N	67:50/66:00	67.6/70.5	110	205	8.6	38,000	157	
24 June 1958 Mission 61A													
714	558	WP937	N1	1212/1300	16:00N/21:04N	69:00	60	135	206	8.5	64,000	106	
RN	559	WP938	N2	1302/1350	21:18N/26:50N	69:00	60	135	208	8.4	90,000	166	
	560	WP939	N3	1352/1440	27:04N/32:04N	69:00	60	135	209	8.3	67,000	207	
	561	WP940	N4	1442/1530	32:18N/37:40N	69:00	60	135	211	8.2	76,000	229	
705	562	WP933	N1	1310/1358	16:00N/10:27N	69:00	60	135	205	8.5	71,000	75	
RS	563	WP934	N2	1400/1448	10:13N/05:05N	69:00	60	135	205	8.5	270,000	120	
	564	WP935	N3	1450/1538	04:51N/00:50S	69:00	60	135	203	8.7	137,000	94	
	565	WP936	N4	1540/1627	01:04S/05:45S	69:00	60	135	201	8.6	71,000	70	
28 June 1958 Mission 62													
714	566	WP941	N1	1212/1300	16:00N/21:32N	69:00	60	135	206	8.5	47,000	76	
RN	567	WP942	N2	1302/1350	21:46N/27:18N	69:00	60.6	135	207	8.3	96,000	173	
	568	WP943	N3	1352/1440	27:32N/33:04N	69:00	60.6	135	208	8.2	73,000	140	
	569	WP944	N4	1442/1530	33:18N/38:40N	69:00	60.6	135	211	8.0	66,000	155	
715	570	WP945	N1	1310/1400	16:00N/10:28N	69:00	60.2	135	205	8.8	131,000	92	
RS	571	WP946	N2	1405/1448	09:34N/04:45N	69:00	60.2	135	204	7.7	181,000	114	
	572	WP947	N3	1450/1538	04:31N/01:05S	69:00	60.3	135	203	8.6	95,000	82	
	573	WP948	N4	1545/1627	01:54S/06:00S	69:00	60.3/60.5	135	203	7.5	103,000	110	
1 July 1958 Mission 60C													
715	574	WP953	N1	1235/1405	18:04N/17:47N	67:50/67:16	45/44	160	215	30.1	1,790	2	
RO	575	WP954	N2	1410/1539	17:47N/19:30N	66:37/66:45	51.2/52.2	156	201	25.2	3,100	3	
	576	WP955	N3	1545/1715	19:30N/17:47N	67:23/67:04	54.6/56.1	146	203	20.5	11,000	24	
	577	WP956	N4	1720/1849	17:47N/19:30N	66:37/66:59	58.8/59.4	135	205	16.2	38,000	80	
714	578	WP949	N1	1145/1315	18:28N/17:51N	66:00/67:50	63.6	126	208	12.7	70,000	209	
RO	579	WP950	N2	1320/1450	17:47N/19:07N	67:15/66:00	65.6	121	211	10.9	71,000	162	
	580	WP951	N3	1455/1625	19:30N/17:47N	66:26/67:05	67.6	116	213	9.4	178,000	227	
	581	WP952	N4	1630/1800	17:47N/19:30N	66:34/67:08	68.4/70	109	217	7.7	116,000	232	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
4 July 1958 Mission 61-B												
715 RN	582	WP965	N1	1212/1300	16:00N/21:32N	69:00	60.4	135	208	8.3	70,000	100
	583	WP966	N2	1302/1351	21:46N/27:18N	69:00	60.4	135	205	8.6	38,000	88
	584	WP967	N3	1352/1440	27:32N/33:00N	69:00	60.4	135	205	8.4	56,000	133
	585	WP968	N4	1442/1529	33:14N/38:41N	69:00	60.4	135	243	7.8	64,000	157
714 RS	586	WP961	N1	1310/1359	16:00N/10:40N	69:00	60	135	208	8.6	73,000	96
	587	WP962	N2	1400/1448	10:26N/04:55N	69:00	60.3	135	205	8.5	92,000	73
	588	WP963	N3	1450/1538	04:41N/00:54S	69:00	60.6	135	206	8.3	107,000	68
	589	WP964	N4	1540/1628	01:08S/06:42S	69:00	60.6	135	206	8.3	74,000	84

8 July 1958 Mission 60-D

705	590	WP989	N1	1240/1410	18:27N/18:41N	66:00/67:50	44.6	182	226	34.7	36,000	32
RO	591	WP990	N2	1415/1545	18:05N/18:59N	67:50/66:00	53.2	156	204	24.9	19,000	22
	593	WP992	N4	1547/1717	18:17N/17:50N	66:00/67:50	56.1	146	203	20.4	280,000	171
	592	WP991	N3	1719/1849	17:40N/19:32N	67:45/66:00	59	138	205		1,050,000	500
715	594	WP1000	N1	1150/1319	18:24N/19:30N	66:00/66:52	63	127	205	13.0	51,000	148
RO	595	WP1001	N2	1322/1452	19:30N/17:38N	67:09/66:55	64.6	121	208	11.5	51,000	180
	596	WP1002	N	1454/1625	17:38N/19:30N	66:38/67:09	66.3	115	210	10.0	50,000	199
	597	WP1003	N	1626/1756	19:30N/17:38N	67:30/67:10	67.3	115	211	9.4	32,000	156

Date	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
<u>12 September - 2 October 1958 North Flight</u>												
12 Sept.	961	FA-21	H	1652/1855	71:20N/74:30N	156:40/ 156:30	65.5/66.3	119	223	30.6	2,800	74
17 Sept.	962	FA-23	H	1715/1950	71:00N	157:00	50	133	225	76.8	11,600	126
19 Sept.	963	FA-24	H	1644/1844	71:00N	157:00	60	135	223	43.5	12,200	175
27 Sept.	964	FA-26	H	1649/1849	71:00N	157:00	50	133	225	59.5	15,000	187
24 Sept.	965	FA-27	H	1709/1928	71:00N	157:00	63.5/65	123	222	39.0	3,000	53
27 Sept.	966	FA-28	H	1727/1927	71:00N	157:00	64/64.5	123	223	33.4	2,600	69
1 Oct.	967	FA-29	H	1721/1916	71:00N	157:00/ 166:00	60	135	223	41.7	5,300	150
2 Oct.	968	FA-30	H	1717/1847	71:00N/73:00N	157:00/ 156:00	50	134	223	45.3	1,450	116

Isotope, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
12 September 1958 Mission 1													
718 RE	598	WP1052	N1	1147/1235	10:00N/04:25N	66:03/65:30	62.5/63.5	127	206	7.0	450,000	718	
	599	WP1053	N2	1237/1325	04:11N/04:15S	65:28/64:55	63.5/65	123	206	6.5	290,000	599	
	600	WP1054	N3	1327/1415	01:30S/06:52S	64:55/64:10	65/65.5	120	206	6.0	220,000	437	
	601	WP1055	N4	1417/1504	07:05S/12:30S	64:08/63:33	65.5/66.3	119	206	5.7	107,000	271	
716 RE	605	WP1047	N1	1342/1429	01:24S/06:42S	64:55/64:13	67	118	206	5.6	260,000	477	
	602	WP1045	N2	1431/1519	06:57S/12:24S	64:10/63:35	67	117	206	5.4	150,000	427	
	603	WP1044	N3	1521/1609	12:39S/18:07S	63:32/63:05	67	118	206	5.5	101,000	228	
	604	WP1046	N4	1611/1659	18:20S/23:45S	63:02/61:25	66	115	206	5.3	29,000	159	
16 September 1958 Mission 2													
705 RS	610	WP1160	N1	1516/1602	06:00S/00:41S	64:00	60	136	205	8.3	107,000	256	
	611	WP1161	N2	1604/1650	00:37S/04:53N	64:00	60	136	204	8.3	220,000	419	
	612	WP1162	N3	1652/1738	05:07N/10:18N	64:00	60	135	202	8.3	270,000	430	
	613	WP1163	N4	1740/1826	10:32N/16:00N	64:00	60	135	201	8.4	310,000	480	
19 September 1958 Mission 3A													
715/RS	615	WP1165	N2	1522/1607	07:47S/02:36S	64:00	60	135	201	8.2	175,000	286	
	618	WE673	N1	1528/1628	09:00S/15:30S	62:00	60	135	208	10.5	65,000	291	
	619	WE674	N2	1630/1724	15:30S/22:00S	62:00	60	140	208	10.0	7,200	50	
	620	WE675	N3	1726/1819	22:00S/28:30S	62:00	60.5	140	209	9.7	7,200	98	
	621	WE676	N4	1820/1917	28:30S/35:00S	62:00	60.5	145	214	10.6	7,900	84	
23 September 1958 Mission 4													
705 RN	625	WP529	N1	1450/1541	38:00N/32:29N	64:00	60	135	211	8.7	29,000	134	
	626	WP530	N2	1543/1629	32:15N/26:52N	64:00	60	135	211	7.9	28,000	133	
	627	WP531	N3	1631/1717	26:38N/21:19N	64:00	60	135	210	8.0	55,000	129	
	628	WP532	N4	1719/1805	21:05N/15:46N	64:00	60	135	209	8.0	370,000	382	
715 RS	629	WP1152	N1	1510/1556	06:00S/00:41S	64:00	60	135	205	8.2	180,000	211	
	630	WP1153	N2	1558/1644	00:27S/04:53N	64:00	60	138	205	8.5	170,000	143	
	632	WP1155	N4	1734/1820	10:37N/15:57N	64:00	60	138	207	8.4	310,000	262	
716 ES	622	WE781	N1	1225/1326	35:00S/40:00S	62:00	31.6/40.3	170	225	28.0	3,200	7	
	623	WE783	N3	1537/1722	40:00S	62:00	40	170	220	43.1	4,800	10	
	624	WE784	N4	1723/1825	40:00S/35:00S	62:00	40	170	220	25.5	5,700	17	
30 September 1958 Mission 3B													
716 EN	633	WE665	N1	1535/1634	09:30S/16:00S	62:00	60	135	209	10.3	90,000	121	
	634	WE666	N2	1636/1716	16:00S/23:30S	62:00	60	135	209	7.0	10,100	67	
	635	WE667	N3	1720/1836	23:30S/28:30S	62:00	60.5	135	211	12.9	9,500	72	
	636	WE668	N4	1937/2025	28:30S/35:00S	62:00	60.5	135	205	8.4	18,700	79	
717 ES	637	WE653	N1	1443/1531	57:00S/52:00S	62:00	60	135	209	8.3	10,200	75	
	638	WE654	N2	1532/1616	52:00S/47:00S	62:00	60	135	220	7.2	9,900	96	
	639	WE655	N3	1616/1657	47:00S/42:00S	62:00	61	135	218	6.5	10,800	99	
	640	WE656	N4	1658/1758	42:00S/35:00S	62:00	61	135	211	10.0	18,500	79	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
3 October 1958 Mission 5												
715 RN	649	WP533	N1	1536/1622	38:00N/32:41N	64:00	60	134	212	7.7	36,000	153
	650	WP534	N2	1624/1711	32:27N/27:07N	64:00	60	135	210	8.1	36,000	144
	651	WP535	N3	1712/1759	26:53N/21:34N	64:00	60	135	208	8.2	136,000	244
	652	WP536	N4	1800/1845	21:20N/16:00N	64:00	60	135	208	7.9	220,000	345
714 RS	653	WP1048	N1	1517/1607	07:52 S/01:59 S	64:00	60	135	203	9.0	610,000	319
	654	WP1049	N2	1609/1656	01:45 S/04:08N	64:00	60	135	203	8.5	2,700,000	1294
	655	WP1050	N3	1701/1749	04:22N/10:15N	64:00	60	135	203	8.7	430,000	426
	656	WP1051	N4	1753/1841	10:29N/15:53N	64:00	60	138	205	8.9	280,000	370
718 EN	* 642	WE610	N2	1531/1618	09:30 S/15:15 S	62:00	60	135	205	12.8	62,000	98
	643	WE611	N3	1620/1720	15:15 S/22:40 S	62:00	60	135	205	10.7	29,000	63
	644	WE612	N4	1720/1819	22:10 S/28:40 S	62:00	60	135	213	10.0	17,500	73
	* 642	WE610	N2	1820/1845	28:50 S/31:43 S	62:00	60	135	205	12.8	62,000	98
716 ES	645	WE605	N1	1455/1541	57:00 S/51:29 S	62:00	59.6	135	219	7.7	8,100	69
	646	WE606	N2	1546/1636	51:29 S/45:53 S	62:00	60	135	219	8.2	9,100	67
	647	WE607	N3	1636/1711	45:53 S/40:17 S	62:00	60.5	135	219	5.7	6,300	76
	648	WE608	N4	1711/1757	40:17 S/35:00 S	62:00	60.5	135	213	7.8	8,700	87
7 October 1958 Mission 6												
714 RN	663	WP537	N1	1515/1600	38:00N/32:41N	64:00	59.5	135	213	7.7	38,000	154
	664	WP538	N2	1603/1649	32:27N/27:07N	64:00	60	135	211	7.9	30,000	119
	665	WP539	N3	1651/1736	26:53N/21:34N	64:00	60	135	209	7.9	41,000	113
	666	WP540	N4	1739/1824	21:20N/16:00N	64:00	60	135	208	7.9	73,000	200
705 RS	667	WP1040	N1	1356/1421	01:12N/04:53N	64:00	60	138	208	4.5	2,800,000	1826
	668	WP1041	N2	1423/1509	05:07N/10:26N	64:00	60.2	138	207	8.3	1,570,000	1000
	669	WP1042	N3	1511/1557	10:40N/16:00N	64:00	60.5	138	207	8.3	122,000	225
718 ES	660	WE613	N1	1141/1225	35:00 S/40:00 S	62:00	51.2/60	135	211	7.8	9,800	64
	661	WE615	N3	1425/1623	42:53 S/44:46 S	62:00	60	135	215	19.8	7,800	64
	662	WE616	N4	1736/1820	40:00 S/35:00 S	62:00/59:00	60.8/50.2	160	211	12.6	14,800	49
717 ES	657	WE517	N1	1210/1258	35:00 S/40:00 S	62:00	60/63	130	213	7.4	22,000	90
	658	WE519	N3	1526/1626	45:00 S	62:00	65/67	118	215	6.7	25,000	200
	659	WE520	N4	1811/1857	40:00 S/35:00 S	62:00/59:00	59	141	215	8.6	18,800	65
10 October 1958 Mission 7												
714 RN	670	WP545	N1	1455/1541	38:00N/32:41N	64:00	60	135	203	8.3	26,000	152
	671	WP546	N2	1543/1630	32:27N/27:07N	64:00	60	135	201	8.7	23,000	153
	672	WP547	N3	1632/1717	26:53N/21:34N	64:00	60	135	204	8.1	25,000	131
	673	WP548	N4	1719/1804	21:20N/16:00N	64:00	60	135	205	8.0	52,000	188
705 RS	674	WP549	N1	1517/1607	07:45 S/02:20 S	64:00	60	135	203	9.0	1,720,000	1348
	675	WP550	N2	1609/1659	02:06 S/03:26N	64:00	60	135	203	9.0	1,840,000	1069
	676	WP551	N3	1701/1751	03:40N/09:19N	64:00	60	135	205	8.9	950,000	949
	677	WP552	N4	1753/1843	09:33N/15:18N	64:00	60	135	205	8.9	153,000	392
716 ES	678	WE521	N1	1141/1227	35:00 S/40:28 S	62:00	60	135	215	7.7	13,400	93
	679	WE522	N2	1228/1322	40:28 S/46:50 S	62:00	60	135	217	8.9	10,200	74
	680	WE523	N3	1322/1407	46:50 S/51:30 S	62:00	60	135	213	7.6	8,800	97
	681	WE524	N4	1408/1453	51:30 S/57:00 S	62:00	60	135	209	7.8	9,600	32
14 October 1958 Mission 8												
705 RS	688	WP557	N1	1510/1556	06:00 S/00:41 S	64:00	60	135	205	8.2	670,000	862
	689	WP558	N2	1558/1644	00:27 S/04:53N	64:00	60	135	205	8.2	770,000	899
	690	WP559	N3	1646/1732	05:07N/10:26N	64:00	60	135	205	8.2	1,100,000	1274
	691	WP560	N4	1734/1820	10:40N/16:00N	64:00	60	135	203	8.3	440,000	570
718 ES	682	WE881	N1	1207/1307	35:00 S/40:00 S	62:00	34.4/38.5	170	215	26.5	26,000	103
	683	WE883	N3	1507/1706	40:30 S/44:30 S	62:00	39/27	170	220	51.1	3,300	15
	684	WE884	N4	1712/1804	40:00 S/35:00 S	62:00/59:30	26.6/29.2	170	223	26.9	≤ 210	2

* Sample number 642 exposed twice.

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr-90	
17 October 1958 Mission 9													
715 RN	692	WP569	N1	1455/1541	38:00N/33:00N	64:00	60	135	234	7.0	26,000	181	
	693	WP570	N2	1543/1629	32:46N/27:46N	64:00	60	135	233	7.0	70,000	187	
	694	WP571	N3	1631/1717	27:34N/22:34N	64:00	60	135	233	7.0	360,000	580	
	695	WP572	N4	1719/1805	22:20N/17:20N	64:00	60	135	225	7.3	350,000	473	
705 RS	696	WP565	N1	1517/1607	07:45 S/04:59 S	64:00	60	135	223	8.0	920,000	1101	
	697	WP566	N2	1609/1659	01:45 S/04:01N	64:00	60	135	228	7.8	970,000	1124	
	698	WP567	N3	1701/1751	04:15N/10:04N	64:00	60	135	228	7.8	320,000	491	
	699	WP568	N4	1753/1843	10:15N/16:00N	64:00	60	135	223	8.0	157,000	567	
717 EN	700	WE889	N1	1214/1306	35:00 S/28:42 S	62:00	60	135	209	9.1	10,800	80	
	701	WE890	N2	1308/1400	28:42 S/22:38 S	62:00	60	135	207	9.2	10,200	76	
	702	WE891	N3	1402/1459	22:38 S/15:50 S	62:00	60	135	205	10.1	270,000	218	
716 ES	704	WE893	N1	1147/1233	35:00 S/40:00 S	62:00	60	135	208	8.0	8,400	79	
	705	WE894	N2	1233/1331	40:00 S/46:40 S	62:00	60	135	208	10.1	7,800	44	
	706	WE895	N3	1332/1423	46:40 S/51:50 S	62:00	60	135	210	8.8	4,400	65	
	707	WE896	N4	1424/1536	49:10 S/40:50 S	62:00	60	135	213	12.2	2,800	36	
19 October 1958 Mission 12A													
714 RP	708	WP573	N1	1303/1411	20:00N/25:49N	71:00	50	160	197	21.7	4,800	14	
	709	WP574	N2	1416/1452	27:53N/31:53N	71:00	50	160	200	11.3	11,100	43	
	710	WP575	N3	1495/1550	32:07N/37:56N	71:00	50	160	210	16.4	22,000	82	
	711	WP576	N4	1555/1647	38:49N/44:00N	71:00	50	160	215	15.1	32,000	77	
715 RP	712	WP577	N1	1226/1314	20:00N/25:49N	71:00	55	155	200	12.6	23,000	66	
	713	WP578	N2	1319/1410	26:03N/31:53N	71:00	56	155	205	12.7	29,000	79	
	714	WP579	N3	1412/1504	32:07N/37:56N	71:00	56	155	209	12.6	33,000	130	
	715	WP580	N4	1505/1614	38:10N/44:00N	71:00	55	155	215	16.6	56,000	190	
705 RP	716	WP581	N1	1158/1247	20:00N/25:49N	71:00	60	135	205	8.7	330,000	927	
	717	WP582	N2	1251/1344	26:03N/32:10N	71:00	60	135	205	9.5	290,000	393	
	718	WP583	N3	1345/1435	32:13N/38:17N	71:00	59.5	135	214	8.6	21,000	172	
	719	WP584	N4	1438/1519	38:31N/44:07N	71:00	59	135	217	7.0	770,000	576	
21 October 1958 Mission 12B													
717 ES	720	WE897	N1	1149/1244	35:00 S/40:00 S	62:00	52/60	150	205	12.5	13,400	61	
	721	WE899	N3	1430/1630	42:00 S/43:00 S	62:00	59.9/61	135	215	20.2	5,900	78	
	722	WE900	N4	1818/1908	40:00 S/35:00 S	62:00/58:00	60/51.2	150	211	12.6	23,000	66	
716 ES	723	WE877	N1	1214/1252	35:00 S/40:00 S	62:00	64.2/65.6	124	215	4.8	13,600	129	
	724	WE879	N3	1504/1704	41:55 S/43:55 S	62:00	68/63	111	215	11.7	13,200	103	
	725	WE880	N4	1705/1757	40:00 S/35:00 S	62:00/58:00	60.9/59.5	134	215	8.7	12,600	86	
22 October 1958 Mission 12D													
715 PN	726	WPL593	N1	1230/1425	44:00N/55:53N	71:00	50/60	148	218	25.2	104,000	224	
	727	WPL594	N2	1427/1600	56:07N/66:00N	71:00	60/65	128	218	13.1	8,800	124	
	728	WPL595	N3	1609/1733	66:00N/56:07N	68:30	66/68	115	220	8.7	2,600	46	
	729	WPL596	N4	1735/1918	55:53N/44:00N	68:30	68/70	112	218	9.4	6,600	88	
714 PO	730	WPL773	N1	1300/1400	44:00N	71:00	40	170	216	24.9	940	34	
	731	WPL774	N2	1406/1506	44:00N	71:00	50	160	206	18.1	35,000	42	
	732	WPL775	N3	1515/1645	44:00N	71:00	60	135	210	15.6	1,550,000	1033	
	733	WPL776	N4	1655/1855	44:00N	71:00	65.6/69	112	214	11.6	103,000	187	
23 October 1958 Mission 12E													
715 PN	739	WP585	N1	1229/1419	44:00N/55:53N	71:00	50.4/59.6	160	217	27.3	82,000	164	
	740	WP586	N2	1420/1553	56:07N/66:00N	71:00	59.6/64.6	135	217	14.2	14,100	127	
	741	WP587	N3	1602/1727	66:00N/56:07N	68:30	64.8/67.9	121	216	9.6	3,900	58	
	742	WP588	N4	1728/1902	55:53N/44:00N	68:30	67.9/69.4	112	214	8.9	27,000	76	

Table 4 2 (continued)

AC No.	HASP No.	Alt. Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	5.90	
25 October 1958 Mission 13A													
ES	734	WE989	N1	1442/1232	35:00S/40:23S	62:00	60	135	211	8.6	7,700	68	
	735	WE990	N2	1233/1324	40:30S/45:43S	62:00	60	135	214	8.6	7,700	74	
	736	WE991	N3	1324/1409	45:50S/51:23S	62:00	60	135	215	7.6	8,000	92	
	737	WE992	N4	1410/1438	51:30S/57:00S	62:00	60	135	215	4.7	6,700	55	
29 October 1958 Mission 13B													
PR	759	WP993	N1	1300/1354	44:00N/38:14N	71:00	50	160	217	15.5	38,000	119	
	760	WP994	N2	1356/1449	38:00N/32:21N	71:00	50	160	215	15.4	290,000	240	
	761	WP995	N3	1451/1543	32:07N/26:34N	71:00	50	160	217	14.9	13,500	28	
PR	755	WP997	N1	1218/1309	44:00N/38:10N	71:00	55	155	217	12.1	440,000	236	
	756	WP998	N2	1311/1401	37:56N/32:07N	71:00	55	155	215	12.0	38,000	128	
	757	WP999	N3	1403/1454	31:56N/26:03N	71:00	55	155	208	12.7	112,000	216	
	758	WP---	N4	1456/1544	25:49N/20:00N	71:00	55	155	203	12.3	48,000	59	
PR	751	WP985	N1	1248/1338	44:00N/38:10N	71:00	60	135	217	8.3	2,900,000	1827	
	752	WP986	N2	1341/1433	37:56N/32:07N	71:00	60	135	215	8.7	240,000	409	
	753	WP987	N4	1526/1617	25:49N/20:00N	71:00	60	135	203	9.2	230,000	273	
EN	743	WE901	N1	1215/1308	35:00S/28:26S	62:00	60	135	208	9.3	8,400	67	
	744	WE902	N2	1308/1403	28:26S/22:00S	62:00	60	135	208	9.4	17,900	79	
	745	WE903	N3	1403/1457	22:00S/15:50S	62:00	60	135	198	10.0	14,300	69	
	746	WE904	N4	1457/1549	15:50S/09:36S	62:00	60	135	195	9.8	38,000	121	
ES	747	WE905	N1	1448/1232	35:00S/40:00S	62:00	60	135	211	7.5	27,000	96	
	748	WE906	N2	1232/1319	40:00S/46:00S	62:00	60	135	213	8.0	12,200	76	
	749	WE907	N3	1320/1407	46:00S/51:00S	62:00	60	135	223	7.6	18,100	140	
5 November 1958 Mission 14													
RN	769	WP1969	N1	1456/1542	38:00N/32:46N	64:00	60	135	205	8.2	15,100	146	
	770	WP1970	N2	1544/1630	32:32N/27:18N	64:00	60	135	204	8.3	200,000	351	
	771	WP1971	N3	1632/1718	27:04N/21:50N	64:00	60	135	203	8.3	187,000	425	
	772	WP1972	N4	1720/1806	21:36N/16:22N	64:00	60	135	203	8.3	180,000	396	
RS	773	WP1981	N1	1510/1556	06:00S/00:45S	64:00	60	140	204	8.7	158,000	370	
	774	WP1982	N2	1558/1645	00:31S/04:44N	64:00	60	140	201	9.1	151,000	405	
	775	WP1983	N3	1646/1732	04:58N/10:13N	64:00	60	140	203	8.8	149,000	388	
	776	WP1984	N4	1734/1820	13:27N/15:42N	64:00	60	140	202	8.8	107,000	227	
ES	766	WE861	N1	1443/1230	35:00S/40:00S	62:00	49.8/60.8	141	208	9.3	14,500	91	
	767	WE863	N3	1445/1642	43:12S/44:50S	62:00	60	135	219	19.2	8,700	83	
	768	WE864	N4	1825/1915	40:00S/35:00S	62:00/58:00	50	160	208	15.0	15,200	60	
ES	763	WE805	N1	1217/1256	35:00S/40:00S	62:00	60.4/64.3	124	213	5.2	10,200	95	
	764	WE807	N3	1458/1701	41:48S/44:00S	62:00	66.7/69.0	118	217	12.9	10,700	125	
	765	WE808	N4	1847/1945	40:00S/35:00S	62:00/58:00	61.4/60.2	138	213	10.2	27,000	169	
7 November 1958 Mission 11													
RS	777	WP1973	N1	1519/1609	07:45S/02:00S	64:00	60	135	201	9.1	250,000	446	
	778	WP1974	N2	1611/1701	01:46S/03:59N	64:00	60	135	202	9.1	166,000	309	
	779	WP1975	N3	1703/1753	04:13N/09:58N	64:00	60	138	203	9.3	230,000	424	
	780	WP1976	N4	1755/1852	10:12N/16:45N	64:00	60	138	204	10.6	103,000	257	
EN	781	WE941	N1	1225/1313	35:00S/28:48S	62:00	60	135	213	8.2	12,500	55	
	782	WE942	N2	1315/1411	28:34S/22:22S	62:00	60	135	211	9.5	13,400	57	
	783	WE943	N3	1412/1504	22:08S/15:56S	62:00	60	135	207	9.2	39,000	197	
	784	WE944	N4	1507/1601	15:42S/09:30S	62:00	60	135	207	9.5	133,000	224	
ES	785	WE865	N1	1447/1227	35:00S/40:49S	62:00	60	135	215	6.7	10,800	88	
	786	WE866	N2	1228/1312	40:33S/45:52S	62:00	60	135	220	7.3	8,500	77	
	787	WE867	N3	1313/1406	46:06S/51:26S	62:00	60	135	221	8.6	7,800	53	
	788	WE868	N4	1407/1456	51:40S/57:00S	62:00	60	135	223	8.2	8,000	72	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	90 Sr	
15 November 1958 Mission 15													
705 RN	797	WP4557	N1	1501/1551	38:00N/27:10N	64:00	60	137	205	9.1	240,000	305	
	798	WP4558	N2	1636/1729	26:56N/16:34N	64:00	60	137	204	9.7	570,000	663	
716 EN	789	WE961	N1	1209/1311	35:00 S/28:48 S	62:00	59.5	135	209	10.9	7,600	83	
	790	WE962	N2	1313/1407	28:34 S/22:22 S	62:00	60	135	209	9.4	60,000	133	
	791	WE963	N3	1408/1502	22:08 S/15:56 S	62:00	60	135	215	9.1	167,000	314	
	792	WE964	N4	1504/1555	15:42 S/09:30 S	62:00	60	135	219	8.4	133,000	260	
718 ES	793	WE957	N1	1146/1231	35:00 S/40:40 S	62:00	60	135	211	7.7	7,000	52	
	794	WE958	N2	1233/1317	40:54 S/45:40 S	62:00	60	135	217	7.3	8,000	74	
	795	WE959	N3	1319/1358	45:54 S/51:24 S	62:00	60	135	223	6.3	6,300	43	
	796	WE960	N4	1400/1441	51:45 S/57:00 S	62:00	60.5	135	227	6.4	8,300	79	
16 November 1958 Mission 17A													
714 RP	801	WP4124	N1	1301/1357	20:00N/25:17N	71:00	60.5/50.9	160	202	16.9	23,000	43	
	802	WP4125	N2	1357/1450	25:30N/30:47N	71:00	50	160	204	16.3	30,000	48	
	803	WP4126	N3	1451/1545	31:00N/36:17N	71:00	50	160	205	16.5	27,000	51	
	804	WP4127	N4	1547/1642	36:30N/41:47N	71:00	50	160	207	16.5	10,200	28	
18 November 1958 Mission 17B													
705 PN	805	WP637	N1	1212/1306	44:00N/49:15N	71:00	50	160	214	15.8	73,000	84	
	806	WP638	N2	1308/1401	49:28N/54:43N	71:00	50	160	215	15.4	500,000	466	
	807	WP639	N3	1403/1458	54:56N/60:05N	71:00	50	160	217	15.8	172,000	280	
	808	WP640	N4	1459/1558	60:18N/66:28N	71:00	50	160	219	16.8	240,000	261	
714 PN	809	WP977	N1	1229/1409	44:00N/55:00N	71:00	60/63.2	135	218	15.7	86,000	201	
	810	WP978	N2	1411/1551	55:13N/66:13N	71:00	63.2/63.7	127	215	13.9	6,800	50	
	811	WP979	N3	1555/1725	66:20N/55:30N	71:00	63.7/66	124	217	11.2	5,900	46	
	812	WP980	N4	1727/1859	55:16N/44:26N	71:00	66/69	118	220	9.5	12,100	112	
718 ES	813	WPL937	N1	1148/1231	35:00 S/40:00 S	62:00	50/60	148	218	9.4	4,500	50	
	814	WPL939	N3	1434/1634	42:32 S/44:57 S	62:00	60	135	221	19.5	4,500	49	
	815	WPL940	N4	1830/1920	40:00 S/35:00 S	62:00/58:00	50	160	218	14.3	6,000	52	
716 ES	816	WPL941	N1	1215/1256	35:00 S/40:00 S	62:00	58.7/61.8	130	218	6.2	21,000	121	
	817	WPL929	N3	1500/1628	43:45 S/40:00 S	62:00	64/64.3	121	221	10.5	12,600	146	
	818	WPL930	N4	1636/1723	40:00 S/35:00 S	62:00/58:00	57.3/57	140	217	9.0	22,000	99	
20 November 1958 Special No. 2													
705 PN	819	WP973	N1	1310/1355	45:28N/50:20N	73:50/75:05	60	135	221	7.3	75,000	245	
	820	WP974	N2	1356/1443	50:26N/55:17N	75:08/77:44	60	135	220	7.7	29,000	126	
	821	WP975	N3	1731/1816	54:48N/50:00N	66:49/70:20	65	121	220	5.3	15,700	104	
	822	WP976	N4	1817/1904	49:53N/44:39N	70:25/73:30	65	121	221	5.5	29,000	181	
21 November 1958 Mission 17C													
718 EN	823	WE513	N1	1215/1306	35:00 S/28:48 S	62:00	60	135	213	8.6	20,000	30	
	824	WE514	N2	1308/1402	28:34 S/22:22 S	62:00	60	135	211	9.2	33,000	103	
	825	WE515	N3	1404/1458	22:08 S/15:56 S	62:00	60	135	207	9.5	25,000	81	
	826	WE516	N4	1500/1551	15:24 S/09:30 S	62:00	60	135	205	9.1	54,000	125	
717 ES	827	WE509	N1	1145/1229	35:00 S/40:19 S	62:00	60	135	219	7.2	8,700	62	
	828	WE510	N2	1231/1318	40:33 S/45:52 S	62:00	60	135	220	7.7	10,800	73	
	829	WE511	N3	1320/1406	46:06 S/51:26 S	62:00	60	135	221	7.5	9,200	49	
	830	WE512	N4	1409/1457	51:40 S/57:00 S	62:00	60	135	223	7.9	8,600	67	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
22 November 1958 Mission 18												
705 PR	831	WP1553	N1	1204/1250	44:00N/38:15N	71:00	55	155	216	11.0	129,000	232
	832	WP1554	N2	1252/1342	38:01N/32:16N	71:00	55	155	208	12.5	107,000	213
	833	WP1555	N3	1344/1434	32:02N/26:17N	71:00	55	155	203	12.8	59,000	160
714 PR	835	WP1665	N1	1129/1221	44:00N/38:10N	71:00	60	135	216	8.7	114,000	215
	836	WP1666	N2	1223/1311	37:56N/32:33N	71:00	60	135	212	8.2	128,000	255
	837	WP1667	N3	1313/1404	32:19N/26:29N	71:00	60	135	210	8.8	139,000	232
	838	WP1668	N4	1407/1500	26:15N/20:04N	71:00	60	135	206	9.4	106,000	188
25 November 1958 Mission 16												
705 RN	845	WP1072	N1	1455/1546	38:00N/32:08N	64:00	60	135	205	9.1	99,000	248
	846	WP1073	N2	1548/1629	31:54N/27:12N	64:00	60	135	204	7.4	80,000	244
	847	WP1074	N3	1631/1717	26:58N/21:41N	64:00	60	135	204	8.3	93,000	240
	848	WP1075	N4	1719/1805	21:24N/16:10N	64:00	60	135	203	8.3	82,000	203
714 RS	849	WP1128	N1	1540/1556	06:00 S/00:48 S	64:00	60	135	201	8.4	65,000	189
	850	WP1129	N2	1558/1644	00:34 S/04:38 N	64:00	60	135	202	8.3	61,000	189
	851	WP1130	N3	1647/1732	04:52N/10:04N	64:00	60	135	202	8.2	104,000	287
	852	WP1131	N4	1737/1823	10:38N/15:50N	64:00	60	135	203	8.3	93,000	208
718 ES	842	WE537	N1	1159/1258	35:00 S/40:00 S	62:00	29.8/39.6	170	226	27.9	1,030	2
	843	WE539	N3	1507/1706	40:00 S	62:00	40	170	213	50.3	3,400	6
	844	WE540	N4	1748/1849	39:05 S/34:50 S	62:00/58:30	30	170	236	43.6	≤ 240	1
717 ES	839	WE533	N1	1220/1322	35:00 S/40:00 S	62:00	39/50.1	160	211	20.2	6,000	23
	840	WE535	N3	1525/1727	42:20 S/40:30 S	62:00	50.3/50.4	160	214	35.4	11,400	35
	841	WE536	N4	1731/1822	40:00 S/35:00 S	62:00/58:00	54.7/55.8	150	214	11.5	40,000	167
28 November 1958 Mission 19												
714 RS	853	WP1625	N1	1519/1607	07:45 S/02:01 S	64:00	60	135	202	8.7	23,000	77
	854	WP1626	N2	1609/1700	01:47 S/03:57N	64:00	60	135	202	9.2	35,000	112
	855	WP1627	N3	1701/1754	04:11N/09:55N	64:00	60	135	203	9.6	78,000	164
	856	WP1628	N4	1755/1841	10:09N/15:53N	64:00	60	135	204	8.3	81,000	200
717 EN	857	WE545	N1	1215/1306	35:00 S/29:09 S	62:00	60	135	211	8.7	14,000	66
	858	WE546	N2	1308/1402	28:55 S/22:53 S	62:00	60	135	207	9.5	13,900	59
	859	WE547	N3	1403/1456	22:39 S/16:45 S	62:00	60	135	203	9.7	11,800	62
	860	WE548	N4	1459/1559	16:31 S/09:30 S	62:00	60	135	202	10.9	13,600	54
716 ES	861	WE541	N1	1145/1229	35:00 S/40:19 S	62:00	59.5	135	213	7.5	23,000	77
	862	WE542	N2	1231/1317	40:33 S/45:52 S	62:00	60	135	215	7.7	7,300	57
	863	WE543	N3	1319/1405	46:06 S/51:26 S	62:00	60	135	216	7.7	7,300	74
	864	WE544	N4	1407/1453	51:40 S/57:00 S	62:00	60.5	135	218	7.5	7,800	69
3 December 1958 Mission 20A												
705 RN	865	WP1669	N1	1455/1541	38:00N/32:43N	64:00	60	136	207	8.2	61,000	166
	866	WP1670	N2	1543/1628	32:29N/27:19N	64:00	60	136	206	8.0	122,000	340
	867	WP1671	N3	1630/1716	27:05N/21:48N	64:00	60	135	205	8.2	77,000	175
	868	WP1672	N4	1718/1805	21:34N/16:10N	64:00	60	135	204	8.4	44,000	86
714 RS	869	WP1617	N1	1507/1554	06:00 S/00:54 S	64:00	60	135	202	8.5	22,000	75
	870	WP1618	N2	1556/1642	00:40 S/04:19N	64:00	60	135	203	8.3	43,000	104
	871	WP1619	N3	1644/1732	04:33N/09:45N	64:00	60	135	203	8.7	51,000	109
	872	WP1620	N4	1734/1820	09:59N/14:58N	64:00	60	135	204	8.3	48,000	106
716 ES	877	WE553	N1	1142/1239	35:00 S/39:50 S	62:00	30.4/40	170	224	25.1	1,010	6
	878	WE555	N3	1449/1649	40:05 S/40:30 S	62:00	40	170	213	50.8	4,300	26
	879	WE556	N4	1655/1809	40:00 S/35:00 S	62:00/58:00	30	170	231	36.5	780	≤ 5
717 ES	880	WE549	N1	1213/1303	35:00 S/39:50 S	62:00	40/50	165	216	17.5	8,600	29
	881	WE551	N3	1508/1708	41:37 S/42:30 S	62:00	50	160	219	34.1	12,400	61
	882	WE552	N4	1728/1819	40:00 S/35:00 S	62:00/58:00	55	150	216	11.6	17,200	65

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
5 December 1958 Mission 21												
714 RS	873	WP1088	N1	1522/1612	07:45 S/02:03 S	64:00	60	135	201	9.1	40,000	92
	874	WP1089	N2	1614/1704	01:49 S/03:53 N	64:00	60	135	201	9.1	63,000	102
	875	WP1090	N3	1706/1756	04:07 N/09:49 N	64:00	60	135	202	9.1	57,000	127
	876	WP1091	N4	1758/1848	10:03 N/15:45 N	64:00	60	135	202	9.1	63,000	106
718 ES	883	WE561	N1	1446/1230	35:00 S/40:30 S	62:00	60	135	215	7.4	10,300	96
	884	WE562	N2	1232/1320	40:43 S/46:12 S	62:00	60	135	220	7.8	5,500	58
	885	WE563	N3	1322/1409	46:26 S/51:31 S	62:00	60	135	222	7.6	1,970	25
	886	WE564	N4	1411/1454	51:44 S/57:00 S	62:00	60	135	224	6.9	5,300	86
9 December 1958 Mission 22												
705 RN	887	WP1100	N1	1514/1554	38:00 N/32:50 N	64:00	50	160	204	12.3	19,900	42
	888	WP1101	N2	1556/1639	32:37 N/28:00 N	64:00	50	160	201	13.4	21,000	44
	889	WP1102	N3	1651/1726	26:43 N/22:45 N	64:00	50	160	200	11.0	≤ 310	≤ 3
	890	WP1103	N4	1813/1836	17:55 N/16:05 N	64:00	50	160	197	7.3	8,200	≤ 12
714 RS	891	WE1308	N1	1512/1600	06:00 S/00:52 S	64:00	50	160	196	15.4	930	≤ 6
	892	WE1309	N2	1602/1650	00:40 S/04:28 N	64:00	50	160	197	15.3	360	≤ 2
	893	WE1310	N3	1653/1742	04:40 N/09:48 N	64:00	50	160	197	15.6	920	≤ 3
	894	WE1311	N4	1747/1837	10:19 N/15:27 N	64:00	50	160	197	16.0	1,230	4
718 EN	911	WE569	N1	1220/1313	35:00 S/28:48 S	62:00	50	160	209	15.9	8,800	35
	912	WE570	N2	1314/1413	28:35 S/22:22 S	62:00	50	160	206	17.8	6,300	14
	913	WE571	N3	1414/1516	22:09 S/15:56 S	62:00	50	160	197	19.8	4,400	6
	914	WE572	N4	1517/1607	15:43 S/09:30 S	62:00	50	160	195	16.1	2,500	≤ 5
716 ES	915	WE565	N1	1140/1235	35:00 S/40:00 S	62:00	50	160	213	15.9	7,000	25
	916	WE566	N2	1237/1327	40:14 S/45:21 S	62:00	50	160	217	14.4	8,600	36
	917	WE567	N3	1329/1418	45:35 S/51:26 S	62:00	50	160	221	13.9	9,900	46
	918	WE568	N4	1421/1509	51:40 S/57:00 S	62:00	50	160	223	13.5	4,200	33
12 December 1958 Mission 23												
705 RN	903	WP1104	N1	1450/1537	38:00 N/32:51 N	64:00	60	135	205	8.3	91,000	330
	904	WP1105	N2	1539/1626	32:37 N/27:26 N	64:00	60	135	204	8.4	106,000	257
	905	WP1106	N3	1628/1715	27:12 N/22:03 N	64:00	60	135	204	8.5	59,000	169
	906	WP1107	N4	1717/1804	21:49 N/16:40 N	64:00	60	135	203	8.6	48,000	177
714 RS	907	WP1096	N1	1521/1607	07:45 S/02:01 S	64:00	60	140	200	8.9	48,000	156
	908	WP1097	N2	1609/1659	01:47 S/03:57 N	64:00	60	140	201	9.6	60,000	184
	909	WP1098	N3	1707/1751	04:52 N/09:55 N	64:00	60	140	202	8.4	82,000	203
	910	WP1099	N4	1753/1843	10:09 N/15:53 N	64:00	60	140	203	9.5	96,000	206
717 EN	895	WE573	N1	1220/1312	35:00 S/29:08 S	62:00	60	135	211	8.9	14,700	67
	896	WE574	N2	1314/1409	28:55 S/23:03 S	62:00	60	135	202	10.0	10,800	54
	897	WE575	N3	1410/1508	22:50 S/16:10 S	62:00	60	135	199	10.8	10,400	45
	898	WE576	N4	1510/1606	15:56 S/09:30 S	62:00	60	135	197	10.5	10,200	59
718 ES	899	WE577	N1	1220/1304	35:00 S/40:50 S	62:00	60	135	215	7.4	6,700	43
	* 900	WE578	N2	1306/1348	41:03 S/46:31 S	62:00	60	135	219	7.6	4,400	49
	901	WE579	N3	1350/1438	46:44 S/52:30 S	62:00	60	135	223	7.7	6,600	76
	902	WE580	N4	1440/1523	52:43 S/57:06 S	62:00	60	135	233	6.6	8,000	106

* HASP No. 900 was exposed an additional 4 minutes at end of flight from 1523 to 1527.

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr 90
16 December 1958 Mission 24												
714 RN	927	WP1112	N1	1457/1539	38:00N/33:04N	64:00	55	155	202	10.8	105,000	279
	928	WP1113	N2	1541/1636	32:51N/26:57N	64:00	55	155	199	14.4	19,300	41
	929	WP1114	N3	1650/1729	25:27N/21:29N	64:00	54.5	155	196	10.6	6,500	16
	930	WP1115	N4	1731/1815	21:16N/16:14N	64:00	55	155	195	11.8	4,800	9
705 RS	931	WP1192	N1	1517/1607	07:45 S/02:23 S	64:00	55	150	193	12.8	4,100	13
	932	WP1193	N2	1715/1805	04:55N/10:17N	64:00	55	150	193	12.8	3,200	9
	933	WP1194	N3	1820/1857	11:54N/15:52N	64:00	55	150	195	9.4	4,500	10
716 EN	919	WE581	N1	1148/1237	35:00 S/28:48 S	62:00	55	150	210	11.5	11,100	29
	920	WE582	N2	1239/1333	28:34 S/22:22 S	62:00	55	150	199	13.4	5,500	20
	922	WE584	N4	1434/1528	15:42 S/09:30 S	62:00	55	150	195	13.9	1,830	7
717 ES	923	WE585	N1	1216/1301	35:00 S/40:19 S	62:00	55	150	213	10.4	16,900	71
	924	WE586	N2	1303/1351	40:33 S/45:52 S	62:00	55	150	219	10.6	6,800	54
	925	WE587	N3	1353/1440	46:06 S/51:26 S	62:00	55	150	225	10.1	7,800	62
	926	WE588	N4	1442/1527	51:40 S/57:00 S	62:00	55	150	229	9.5	6,100	60
19 December 1958 Mission 25												
714 RN	935	WP1132	N1	1452/1535	38:00N/32:32N	64:00	64.5	121	207	5.5	83,000	321
	936	WP1133	N2	1537/1623	32:18N/26:58N	64:00	65	121	205	5.9	155,000	514
	937	WP1134	N3	1626/1712	26:44N/21:16N	64:00	65	121	202	6.0	53,000	242
	938	WP1135	N4	1715/1801	21:02N/15:34N	64:00	65	121	201	6.1	86,000	356
705 RS	939	WP1076	N1	1517/1610	07:45 S/01:45 S	64:00	65	121	203	6.9	83,000	328
	940	WP1077	N2	1612/1704	01:34 S/04:22N	64:00	65	121	203	6.8	137,000	446
	941	WP1078	N3	1706/1756	04:36N/10:16N	64:00	65	121	204	6.5	157,000	691
	942	WP1079	N4	1758/1846	10:30N/15:56N	64:00	65	121	204	6.2	168,000	509
717 EN	943	WE589	N1	1144/1233	35:00 S/28:48 S	62:00	64.5	121	216	6.0	9,700	56
	944	WE590	N2	1235/1330	28:34 S/22:22 S	62:00	65	121	209	7.0	9,600	61
	945	WE591	N3	1332/1430	22:08 S/15:56 S	62:00	65	121	207	7.3	8,500	46
	946	WE592	N4	1432/1525	15:42 S/09:30 S	62:00	65	121	207	6.7	12,000	68
718 ES	947	WE593	N1	1216/1302	35:00 S/40:19 S	62:00	65	121	214	5.6	6,800	52
	948	WE594	N2	1304/1352	40:33 S/45:52 S	62:00	65	121	216	5.8	5,600	50
	949	WE595	N3	1354/1441	46:06 S/51:26 S	62:00	65	121	220	5.5	5,200	49
	950	WE596	N4	1443/1531	51:40 S/57:00 S	62:00	65	121	223	5.5	4,400	43
23 December 1958 Mission 20B												
705 RN	951	WP1144	N1	1552/1644	38:00N/32:38N	64:00	60	135	219	8.1	90,000	---
	952	WP1145	N2	1643/1732	32:24N/26:56N	64:00	60	135	214	8.5	156,000	316
	953	WP1146	N3	1734/1820	26:42N/21:34N	64:00	60	135	209	8.0	130,000	248
	954	WP1147	N4	1822/1908	21:20N/16:05N	64:00	60	135	205	8.2	94,000	195
716 EO	955	WE597	N1	1148/1250	35:00 S/39:48 S	62:00	30.6/40.2	170	228	28.2	1,060	2
	956	WE598	N2	1251/1403	40:00 S/35:00 S	62:00/58:00	40.9/30.4	175	235	35.9	128	4
	957	WE600	N4	1705/1805	35:00 S/34:10 S	57:30/59:30	30	170	214	31.2	670	2
718 ES	958	WE601	N1	1220/1309	35:00 S/39:48 S	62:00	40/50	165	208	17.8	3,400	16
	959	WE603	N3	1513/1714	41:52 S/42:37 S	62:00	50	160	205	37.0	6,300	21
	960	WE604	N4	1819/1909	40:00 S/35:00 S	62:00/58:00	55	155	200	13.0	10,400	36

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	St. 90
6 January 1959 Mission 26												
714 RN	977	WP1028	N1	1455/1544	38:00N/32:42N	64:00	49.9	160	208	14.8	72,000	211
	978	WP1029	N2	1545/1639	32:29N/26:53N	64:00	50.1	160	195	17.4	16,400	38
	979	WP1030	N3	1640/1727	26:40N/21:28N	64:00	50	160	193	15.4	3,100	9
	980	WP1031	N4	1730/1819	21:15N/15:52N	64:00	50	160	193	15.9	430	18
715 RS	981	WP1032	N1	1510/1602	06:00S/00:52S	64:00	53/49.8	160	195	16.6	1,110	4
	982	WP1033	N2	1603/1651	00:39S/04:29N	64:00	49.8/48.8	160	194	15.5	≤ 300	3
	983	WP1034	N3	1652/1742	04:42N/09:52N	64:00	48.8/49.9	160	193	16.7	≤ 280	14
	984	WP1035	N4	1743/1833	10:03N/15:11N	64:00	49.9/50.3	160	193	16.3	570	≤ 1
717 EN	969	WE625	N1	1145/1243	35:00S/28:44S	62:00	50	160	211	17.2	7,000	40
	970	WE626	N2	1245/1343	28:31S/22:15S	62:00	50	160	201	18.1	1,850	11
	971	WE627	N3	1348/1453	22:15S/28:31S	62:00	50	160	201	20.2	2,300	10
	972	WE628	N4	1455/1555	28:44S/35:00S	62:00	50	160	211	17.9	6,800	38
718 ES	973	WE629	N1	1217/1308	35:00S/40:25S	62:00	50	160	213	14.9	6,200	26
	974	WE630	N2	1310/1403	40:37S/46:00S	62:00	50	160	215	15.4	7,900	45
	975	WE631	N3	1404/1454	46:12S/51:34S	62:00	50	160	219	14.2	9,300	46
	976	WE632	N4	1456/1547	51:46S/57:00S	62:00	50	160	223	14.1	10,300	50
9 January 1959 Mission 27												
714 RS	993	WP1136	N1	1515/1607	07:45S/02:01S	64:00	60	135	200	9.5	28,000	119
	994	WP1137	N2	1608/1700	01:47S/03:57N	64:00	60	135	200	9.5	42,000	157
	995	WP1138	N3	1701/1752	04:11N/09:55N	64:00	60	135	201	9.3	54,000	190
	996	WP1139	N4	1753/1845	10:09N/15:53N	64:00	60	135	202	9.4	50,000	157
718 EN	985	WE637	N1	1145/1239	35:00S/28:57S	62:00	60	135	211	9.2	7,100	61
	986	WE638	N2	1241/1335	28:27S/22:19S	62:00	60	135	209	9.5	7,300	53
	987	WE639	N3	1336/1431	22:05S/15:55S	62:00	60	135	207	9.8	7,900	55
	988	WE640	N4	1433/1531	15:41S/09:30S	62:00	60.1	135	207	10.2	11,900	58
716 ES	989	WE633	N1	1214/1303	35:00S/40:12S	62:00	59.7	135	213	8.4	11,500	90
	990	WE634	N2	1305/1352	40:25S/45:42S	62:00	59.7	135	215	8.0	7,200	74
	991	WE635	N3	1354/1443	45:55S/51:14S	62:00	60	135	219	8.1	4,700	66
	992	WE636	N4	1445/1530	51:27S/57:00S	62:00	60	135	223	7.2	5,900	85
13 January 1959 Mission 20C												
714 RS	997	WP1080	N1	1510/1557	06:00S/00:56S	64:00	60	135	205	8.3	29,000	146
	1000	WP1083	N4	1744/1831	10:36N/15:40N	64:00	60	140	207	8.7	41,000	150
716 ES	1001	WE642	N1	1149/1256	35:00S/39:48S	62:00	30/40	175	222	32.6	350	2
	1002	WE643	N3	1500/1700	40:00S/40:27S	62:00	40	170	213	50.8	2,200	16
	1003	WE644	N4	1704/1810	40:00S/35:00S	62:00/58:00	30	175	229	34.3	620	< 1
717 ES	1004	WE645	N1	1420/1514	35:00S/39:48S	62:00	40.6/50.8	164	212	19.0	3,400	14
	1005	WE647	N3	1714/1914	41:24S/42:30S	62:00	50	160	214	34.8	6,500	36
	1006	WE648	N4	1947/2039	40:00S/35:00S	62:00/58:00	55	155	205	13.1	8,200	36
16 January 1959 Mission 29												
714 RN	1007	WP1180	N1	1451/1538	38:00N/32:38N	64:00	64.5	121	208	6.1	21,000	127
	1008	WP1181	N2	1539/1627	32:24N/27:16N	64:00	65	121	208	6.0	18,800	155
	1009	WP1182	N3	1629/1717	27:02N/21:40N	64:00	65	121	207	6.1	45,000	282
	1010	WP1183	N4	1719/1806	21:26N/16:04N	64:00	65	121	207	6.0	75,000	347
705 RS	1011	WP1116	N1	1717/1806	07:45S/02:03S	64:00	65	121	205	6.3	80,000	385
	1012	WP1117	N2	1809/1859	01:49S/03:53N	64:00	65	121	205	6.3	82,000	308
	1013	WP1118	N3	1901/1950	04:07N/09:49N	64:00	65	121	205	6.3	112,000	323
	1014	WP1119	N4	1954/2043	10:03N/15:45N	64:00	65	121	206	6.2	91,000	313
717 EN	1015	WE652	N1	1143/1236	35:00S/28:47S	62:00	62.7/65	121	217	6.5	7,400	61
	1016	WE649	N2	1238/1332	28:34S/22:21S	62:00	65	121	213	6.6	6,400	58
	1017	WE650	N3	1335/1431	22:08S/15:55S	62:00	65	121	213	6.8	7,900	65
	1018	WE651	N4	1432/1525	15:43S/09:30S	62:00	65	121	213	6.5	16,700	106
718 ES	1019	WE669	N1	1213/1259	35:00S/40:19S	62:00	64	123	219	5.8	6,900	86
	1020	WE670	N2	1301/1347	40:32S/45:51S	62:00	64.5	121	221	5.5	8,800	100
	1021	WE671	N3	1349/1435	46:04S/51:23S	62:00	64.5	121	223	5.4	7,700	93
	1022	WE672	N4	1642/1730	40:19S/35:00S	62:00	50	170	225	14.5	6,300	30

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	8r ⁹⁰
19 January 1959 Mission 30A												
714 RP	1023	WP1172	N1	1228/1318	20:00N/25:49N	71:00	64/65	124	206	6.6	64,000	288
	1024	WP1173	N2	1320/1412	26:03N/31:52N	71:00	65/65.5	121	208	6.6	48,000	290
	1025	WP1174	N3	1412/1504	32:07N/37:56N	71:00	65.5/66.5	120	213	6.0	37,000	245
	1026	WP1175	N4	1505/1554	38:10N/44:00N	71:00	66.5/66.5	117	213	5.5	13,200	139
22 January 1959 Mission 30B												
718 EN	1027	WE681	N1	1147/1245	35:00S/28:36S	62:00	50	160	203	17.9	2,500	12
	1028	WE682	N2	1246/1348	28:30S/22:22S	62:00	49.8	160	203	19.3	810	1
	1029	WE683	N3	1350/1447	22:09S/15:58S	62:00	50	160	203	17.6	≤ 193	< 1
	1030	WE684	N4	1448/1547	15:52S/09:30S	62:00	50	160	201	18.4	≤ 250	< 1
717 ES	1031	WE677	N1	1215/1304	35:00S/40:24S	62:00	49.8/50.6	160	213	14.3	5,200	27
	1032	WE678	N2	1306/1355	40:37S/45:57S	62:00	49.8/50.1	160	216	14.1	5,100	30
	1033	WE679	N3	1356/1446	46:11S/51:35S	62:00	50.1/49.8	160	219	14.4	5,600	27
	1034	WE680	N4	1448/1535	51:48S/57:00S	62:00	49.8/49.4	160	223	13.2	6,700	43
25 January 1959 Mission 30D												
714 PR	1035	WP1288	N1	1140/1230	44:00N/38:26N	71:00	60	135	213	8.5	49,000	266
	1036	WP1287	N2	1232/1322	38:42N/32:38N	71:00	60	135	212	8.4	48,000	243
	1037	WP1285	N3	1324/1415	32:24N/26:50N	71:00	60	135	208	9.0	52,000	232
	1038	WP1286	N4	1417/1505	25:56N/20:22N	71:00	60	135	206	8.5	58,000	180
28 January 1959 Mission 28												
714 RN	1039	WP1120	N1	1225/1312	16:00N/20:50N	64:00	55	150	193	12.1	5,900	15
	1040	WP1121	N2	1314/1400	21:03N/25:56N	64:00	55	150	193	11.8	4,000	10
	1041	WP1122	N3	1402/1449	26:09N/31:11N	64:00	55	150	195	12.1	13,300	29
	1042	WP1123	N4	1454/1642	31:36N/36:38N	64:00	55	150	200	11.9	32,000	121
705 RS	1043	WP1064	N1	1153/1242	16:00N/10:14N	64:00	55	155	193	13.2	5,100	17
	1044	WP1065	N2	1244/1333	10:00N/04:14N	64:00	55	155	193	13.4	11,200	58
717 EN	1047	WE689	N1	1213/1308	35:00S/28:47S	62:00	55	155	203	14.1	3,600	18
	1048	WE690	N2	1309/1404	28:34S/22:21S	62:00	55	155	203	14.1	2,900	12
	1049	WE691	N3	1409/1501	21:47S/15:55S	62:00	55	155	201	13.5	1,620	6
	1050	WE692	N4	1502/1557	15:43S/09:30S	62:00	55	155	200	14.3	2,300	6
716 ES	1051	WE701	N1	1308/1353	35:00S/40:19S	62:00	55	155	205	11.3	5,800	28
	1052	WE702	N2	1355/1441	40:32S/45:51S	62:00	55	155	221	10.7	6,700	47
	1053	WE703	N3	1443/1528	46:04S/51:23S	62:00	55	155	225	10.3	5,400	59
	1054	WE704	N4	1713/1803	40:00S/35:00S	62:00/58:00	66/67.5	116	221	5.1	5,200	66
3 February 1959 Mission 30E												
715 RN	1063	WP1273	N1	1239/1327	16:00N/21:12N	64:00	48.6/50.6	160	195	15.5	≤ 890	3
	1064	WP1274	N2	1329/1418	21:25N/26:43N	64:00	50.6/49	160	196	15.7	1,460	3
	1065	WP1275	N3	1424/1512	27:16N/31:55N	64:00	49/47.8	160	201	15.2	≤ 1,290	3
714 RS	1067	WP1269	N1	1158/1247	16:00N/10:42N	64:00	50	160	195	15.8	≤ 1,090	2
	1068	WP1270	N2	1249/1338	10:29N/05:11N	64:00	50	160	195	15.8	1,270	2
	1069	WP1271	N3	1342/1429	04:45N/00:19S	64:00	50	160	195	15.1	≤ 680	2
	1070	WP1272	N4	1431/1521	00:32S/05:56S	64:00	50	160	195	16.1	≤ 1,070	2
716 EN	1055	WE717	N1	1143/1241	35:00S/28:49S	62:00	50	160	205	17.7	780	3
	1056	WE718	N2	1243/1341	28:36S/22:25S	62:00	50	160	203	17.9	640	3
	1057	WE719	N3	1343/1441	22:12S/16:01S	62:00	50	160	203	17.9	600	3
	1058	WE720	N4	1443/1540	15:48S/09:30S	62:00	50	160	201	17.8	≤ 260	3
717 ES	1059	WE721	N1	1213/1303	35:00S/40:22S	62:00	50	160	208	15.0	2,600	10
	1060	WE722	N2	1305/1355	40:35S/45:59S	62:00	50	160	215	14.5	4,800	26
	1061	WE723	N3	1356/1446	46:10S/51:32S	62:00	50	160	217	14.2	5,500	50
	1062	WE724	N4	1448/1537	51:45S/57:00S	62:00	50	160	217	14.1	5,700	47

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	LAS (Kt)	Temp. (*K)	10 ³ SCF	cpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
6 February 1959 Mission 31													
714 RN	1071	WP1305	N1	1235/1318	16:00N/21:02N	64:00	59.3	135	194	8.3	36,000	104	
	1072	WP1306	N2	1320/1408	21:15N/26:23N	64:00	60	135	194	9.1	32,000	101	
	1073	WP1307	N3	1410/1456	26:36N/31:32N	64:00	60	135	195	8.7	39,000	144	
	1074	WP1308	N4	1458/1553	31:45N/37:53N	64:00	59.6	135	200	10.2	45,000	159	
705 RS	1075	WP1301	N1	1151/1245	16:00N/09:58N	64:00	60	135	193	10.4	33,000	133	
	1076	WP1302	N2	1247/1336	09:14N/04:02N	64:00	60	135	194	9.2	19,400	70	
	1077	WP1303	N3	1338/1426	03:48N/01:40S	64:00	60	135	194	9.1	16,900	59	
	1078	WP1304	N4	1428/1522	01:54S/07:42S	64:00	60	135	195	10.2	13,700	45	
716 EN	1079	WE725	N1	1140/1234	35:00S/28:47S	62:00	60	135	209	9.4	7,500	88	
	1080	WE726	N2	1236/1330	28:33S/22:21S	62:00	60	135	209	9.4	5,300	49	
	1081	WE727	N3	1332/1427	22:08S/15:55S	62:00	60	135	207	9.7	5,300	31	
	1082	WE728	N4	1429/1523	15:43S/09:30S	62:00	60	135	207	9.5	7,300	38	
718 ES	1083	WE729	N1	1215/1303	35:00S/40:12S	62:00	60	135	208	8.4	5,200	41	
	1084	WE730	N2	1305/1352	40:25S/45:51S	62:00	60	135	213	7.9	4,200	57	
	1085	WE731	N3	1354/1442	46:04S/51:02S	62:00	60	135	217	8.0	5,200	60	
	1086	WE732	N4	1444/1534	51:15S/57:00S	62:00	60	135	221	8.2	5,500	61	
10 February 1959 Mission 32													
715 RS	1095	WP1417	N1	1153/1245	16:00N/10:24N	64:00	55	154	194	13.8	1,830	≤ 14	
	1096	WP1419	N2	1247/1335	10:11N/04:55N	64:00	55	155	195	12.8	1,740	8	
	1097	WP1420	N3	1337/1433	04:42N/01:13S	64:00	55	155	195	15.0	1,610	5	
	1098	WP1418	N4	1435/1532	01:26S/07:34S	64:00	55	155	195	15.2	1,130	5	
718 EN	1087	WE741	N1	1145/1239	35:00S/28:47S	62:00	55	155	209	13.4	3,200	19	
	1088	WE742	N2	1241/1333	28:33S/22:35S	62:00	55	155	201	13.5	2,100	12	
	1089	WE743	N3	1335/1433	22:28S/19:55S	62:00	55	155	201	15.2	2,200	6	
	1090	WE744	N4	1438/1535	15:43S/09:30S	62:00	55	155	201	15.4	1,910	6	
717 ES	1091	WE737	N1	1210/1258	35:00S/40:19S	62:00	55	155	209	11.9	6,200	23	
	1092	WE738	N2	1300/1346	40:32S/45:51S	62:00	55	155	216	11.0	6,300	40	
	1093	WE739	N3	1348/1432	46:04S/51:00S	62:00	55	155	219	10.3	6,800	43	
	1094	WE740	N4	1434/1524	51:14S/57:00S	62:00	55	155	219	11.8	5,000	42	
14 February 1959 Mission 33													
715 RN	1107	WP1465	N1	1225/1313	16:00N/21:14N	64:00	65	121	204	6.3	47,000	256	
	1108	WP1466	N2	1315/1402	21:27N/26:41N	64:00	65	121	207	5.9	51,000	199	
	1109	WP1467	N3	1405/1454	26:54N/32:14N	64:00	65	121	209	6.2	33,000	177	
	1110	WP1468	N4	1455/1545	32:27N/37:54N	64:00	65	121	211	6.1	29,000	198	
705 RS	1111	WP1464	N1	1155/1243	16:00N/10:16N	64:00	64.4	121	204	6.6	58,000	280	
	1112	WP1462	N2	1245/1335	10:02N/04:18N	64:00	64.6	120	204	6.4	57,000	243	
	1113	WP1463	N3	1337/1426	04:04N/01:32S	64:00	64.9	121	204	6.3	41,000	166	
	1114	WP1498	N4	1428/1520	01:46S/07:42S	64:00	65	121	204	6.7	41,000	193	
717 EN	1099	WE745	N1	1141/1240	35:00S/28:47S	62:00	63/65	121	213	7.5	4,800	56	
	1100	WE746	N2	1242/1336	28:33S/22:21S	62:00	65	121	208	6.8	6,400	61	
	1101	WE747	N3	1338/1435	22:08S/15:55S	62:00	65	121	208	7.2	9,700	81	
	1102	WE748	N4	1437/1531	15:43S/09:30S	62:00	65	121	208	6.8	13,800	91	
718 ES	1103	WE749	N1	1214/1300	35:00S/40:19S	62:00	63.2/64.9	127	215	6.3	4,400	48	
	1104	WE750	N2	1302/1349	40:32S/45:51S	62:00	64.8	121	217	5.7	4,900	54	
	1105	WE751	N3	1351/1441	46:04S/51:30S	62:00	64.8	121	219	6.0	4,800	63	
	1106	WE752	N4	1443/1530	51:43S/57:00S	62:00	64.8	121	221	5.5	5,200	49	
17 February 1959 Mission 34													
715 RS	1121	WP1473	N1	1153/1245	16:00N/10:18N	64:00	55	155	191	14.2	2,600	8	
	1122	WP1474	N2	1247/1310	10:05N/07:17N	64:00	55	155	191	6.4	3,400	13	
716 EN	1115	WE761	N1	1145/1238	35:00S/28:47S	62:00	55	155	204	13.5	2,500	12	
	1116	WE762	N2	1240/1344	28:33S/22:21S	62:00	55	152	195	16.6	2,600	10	
	1117	WE763	N3	1350/1440	22:21S/28:33S	62:00	55	156	203	12.9	3,200	10	
	1118	WE764	N4	1442/1547	28:47S/35:00S	62:00	55	155	198	17.2	2,900	13	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
20 February 1959 Mission 35												
714 RN	1125	WP1561	N1	1234/1321	16:00N/21:28N	64:00	63.7/64.8	121	211	5.9	58,000	241
	1126	WP1562	N2	1323/1409	21:42N/27:10N	64:00	64.8/65	121	211	5.7	43,000	218
	1127	WP1563	N3	1411/1457	27:24N/32:52N	64:00	65	121	210	5.8	31,000	217
	1128	WP1564	N4	1459/1540	33:06N/37:58N	64:00	65	122	213	5.1	35,000	175
715 RS	1129	WP1673	N1	1153/1245	16:00N/10:16N	64:00	65	121	209	6.5	66,000	291
	1130	WP1674	N2	1248/1335	10:02N/04:18N	64:00	65	121	206	6.0	58,000	188
	1131	WP1675	N3	1337/1427	04:04N/01:40 S	64:00	65	121	206	6.4	43,000	183
	1132	WP1676	N4	1429/1520	01:54 S/07:44 S	64:00	65	121	206	6.5	36,000	160
716 EN	1133	WE765	N1	1140/1234	35:00 S/28:47 S	62:00	64/65	121	209	6.9	5,800	52
	1134	WE766	N2	1236/1329	28:33 S/22:21 S	62:00	65	121	203	6.9	6,500	50
	1135	WE767	N3	1331/1426	22:08 S/15:55 S	62:00	65	121	207	7.0	11,100	72
	1136	WE768	N4	1428/1522	15:43 S/09:30 S	62:00	65	121	207	6.8	22,000	111
717 ES	1137	WE769	N1	1215/1305	35:00 S/40:28 S	62:00	48.2/47.9	162	211	16.0	3,900	18
	1138	WE770	N2	1307/1359	40:41 S/46:04 S	62:00	48.1/48.2	162	217	16.2	5,100	27
	1139	WE771	N3	1401/1454	46:17 S/51:31 S	62:00	47.9/48.2	162	221	15.9	6,300	29
	1140	WE772	N4	1456/1550	51:43 S/57:00 S	62:00	48/48.2	161	225	15.8	4,900	24
24 February 1959 Mission 36												
714 RN	1149	WP1713	N1	1222/1312	16:00N/21:27N	64:00	64.3/65	121	208	6.3	56,000	233
	1150	WP1714	N2	1313/1358	21:41N/26:47N	64:00	65/66	121	209	5.6	52,000	233
	1151	WP1715	N3	1405/1446	27:35N/32:21N	64:00	66/66.2	118	210	4.7	42,000	243
	1152	WP1716	N4	1447/1533	32:35N/37:55N	64:00	66/66.6	118	211	5.2	66,000	302
715 RS	1153	WP1749	N1	1151/1241	16:00N/10:14N	64:00	61.8/66	120	205	6.6	55,000	236
	1154	WP1750	N2	1243/1333	10:00N/04:14N	64:00	66.2/67.4	117	206	5.7	69,000	341
	1155	WP1751	N3	1335/1425	04:00N/01:46 S	64:00	67.4/68.2	115	206	5.3	60,000	311
	1156	WP1752	N4	1427/1517	02:00 S/07:55 S	64:00	68.2/69	112	206	5.1	52,000	248
716 EN	1141	WE785	N1	1145/1239	35:00 S/28:47 S	62:00	63.3/65.3	124	205	7.4	5,700	47
	1142	WE786	N2	1241/1334	28:33 S/22:21 S	62:00	65.3/66.2	118	205	6.4	6,500	58
	1143	WE787	N3	1336/1431	22:08 S/15:55 S	62:00	66.2/67.5	116	205	6.2	7,700	58
	1144	WE788	N4	1433/1528	15:43 S/09:30 S	62:00	67.5/68.5	113	205	5.7	35,000	177
718 ES	1145	WE773	N1	1240/1258	35:00 S/40:19 S	62:00	55	155	209	11.9	5,500	33
	1146	WE774	N2	1260/1335	40:32 S/45:51 S	62:00	55	155	211	11.1	7,100	43
	1147	WE775	N3	1337/1424	46:04 S/51:23 S	62:00	55	155	213	11.5	6,800	48
	1148	WE776	N4	1426/1506	51:36 S/57:00 S	62:00	55	155	215	9.7	7,800	* 67
28 February 1959 Mission 37												
705 RN	1157	WP2057	N1	1224/1311	16:00N/21:24N	64:00	55	155	196	12.5	4,000	13
	1158	WP2058	N2	1313/1331	21:38N/23:28N	64:00	55	155	197	4.8	3,100	14
715 RS	1161	WP2061	N1	1206/1256	16:00N/10:18N	64:00	57.4/55.8	155	196	13.0	2,500	9
	1162	WP2062	N2	1258/1347	10:04N/04:22N	64:00	55.6/55	155	196	13.0	6,000	17
	1163	WP2063	N3	1349/1439	04:08N/01:34 S	64:00	54.8/55	155	195	13.3	1,600	4
	1164	WP2064	N4	1441/1532	01:48 S/07:37 S	64:00	55/55.2	155	194	13.8	1,770	6
718/EN	1165	WE789	N1	1140/1235	35:00 S/28:47 S	62:00	55	155	205	14.0	2,600	12
716 ES	1167	WE793	N1	1210/1255	35:00 S/40:19 S	62:00	62.5/64.9	121	213	5.7	5,100	51
	1168	WE794	N2	1256/1345	40:32 S/45:51 S	62:00	64.9/64.8	121	219	5.9	5,700	73
	1169	WE795	N3	1346/1437	46:04 S/51:23 S	62:00	64.9/65	121	221	6.0	5,800	63
	1170	WE796	N4	1440/1627	51:36 S/57:00 S	62:00	64.4/66.4	121	225	12.4	5,300	59

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
3 March 1959 Mission 38												
715 RN	1179	WP2069	N1	1225/1311	16:00N/21:12N	64:00	65	121	206	5.9	47,000	262
	1180	WP2070	N2	1313/1400	21:26N/26:44N	64:00	65	121	208	5.9	49,000	280
	1181	WP2071	N3	1405/1451	27:18N/32:30N	64:00	65	121	204	6.0	50,000	252
	1182	WP2072	N4	1453/1539	32:44N/37:56N	64:00	65	121	204	6.0	37,000	227
714 RS	1183	WP2065	N1	1152/1243	16:00N/10:24N	64:00	64.5	122	204	6.8	51,000	282
	1184	WP2066	N2	1245/1339	10:11N/04:33N	64:00	65	121	201	7.2	42,000	224
	1185	WP2067	N3	1340/1430	04:20N/01:38 S	64:00	65	121	200	6.6	41,000	227
	1186	WP2068	N4	1432/1522	01:51 S/07:35 S	64:00	65	121	200	6.6	31,000	124
716 EN	1171	WE777	N1	1140/1237	35:00 S/28:47 S	62:00	61.6/65	120	208	7.3	5,600	59
	1172	WE778	N2	1239/1331	28:35 S/22:21 S	62:00	65	121	208	6.6	6,200	52
	1173	WE779	N3	1333/1438	22:08 S/15:55 S	62:00	65	119	210	7.9	10,100	80
	1174	WE780	N4	1440/1528	15:43 S/09:30 S	62:00	65	123	210	6.1	14,400	105
718 ES	1175	WE797	N1	1215/1304	35:00 S/40:02 S	62:00	40	170	221	20.2	390	2
	1176	WE798	N2	1306/1359	40:14 S/44:54 S	62:00	40	170	223	21.7	1,380	11
6 March 1959 Mission 39												
714 RN	1187	WP2221	N1	1225/1312	16:00N/21:16N	64:00	64.6/65.9	119	208	5.7	47,000	296
	1188	WP2222	N2	1314/1400	21:30N/26:46N	64:00	66.1/66.5	118	207	5.4	44,000	209
	1189	WP2223	N3	1401/1449	27:00N/32:24N	64:00	66.5/67.3	116	207	5.4	43,000	221
	1190	WP2224	N4	1450/1537	32:38N/38:02N	64:00	67.3/67.5	113	208	4.9	47,000	237
705 RS	1191	WP2073	N1	1151/1244	16:00N/10:18N	64:00	62/62.4	130	206	8.4	28,000	92
	1192	WP2074	N2	1246/1336	10:04N/04:22N	64:00	62.4/64.6	121	205	6.8	45,000	208
	1193	WP2075	N3	1338/1428	04:08N/01:34 S	64:00	64.6/65	120	207	6.2	44,000	197
	1194	WP2076	N4	1430/1521	01:48 S/07:38 S	64:00	65/67	118	205	6.2	24,000	120
716 EN	1195	WE981	N1	1145/1239	35:00 S/28:47 S	62:00	64.6/65.5	122	215	6.6	5,300	46
	1196	WE982	N2	1240/1339	28:33 S/22:21 S	62:00	65.5/66.5	118	215	6.4	6,400	67
	1197	WE983	N3	1340/1435	22:08 S/15:55 S	62:00	66.5/67.5	115	215	5.6	7,800	60
	1198	WE984	N4	1436/1530	15:43 S/09:30 S	62:00	67.5/68.2	111	215	5.1	22,000	143
718 ES	1199	WE985	N1	1210/1310	35:00 S/40:31 S	62:00	48	164	208	19.9	≤ 440	< 1
	1200	WE986	N2	1312/1412	40:44 S/46:04 S	62:00	48	163	215	18.9	470	8
	1201	WE987	N3	1414/1507	46:16 S/51:29 S	62:00	48	158	223	15.4	2,600	18
	1202	WE988	N4	1509/1603	51:41 S/57:00 S	62:00	48	156	227	15.1	5,500	39
10 March 1959 Mission 40												
705 RN	1211	WP2225	N1	1224/1309	16:00N/21:15N	64:00	60	135	197	8.5	32,000	147
	1212	WP2226	N2	1311/1359	21:29N/26:51N	64:00	60	135	198	8.8	28,000	116
	1213	WP2227	N3	1401/1447	27:05N/32:20N	64:00	60	135	200	8.4	29,000	133
	1214	WP2228	N4	1450/1533	32:40N/37:55N	64:00	60	135	203	7.8	28,000	165
715 RS	1215	WP2229	N1	1153/1246	16:00N/10:16N	64:00	60	135	198	9.8	22,000	99
	1216	WP2230	N2	1248/1341	10:03N/04:26N	64:00	60	135	198	9.9	19,600	80
	1217	WP2231	N3	1342/1436	04:13N/01:37 S	64:00	60	135	198	10.1	12,100	51
	1218	WP2232	N4	1438/1532	01:50 S/07:40 S	64:00	60	135	198	10.0	6,100	23
718 EN	1203	WE977	N1	1142/1235	35:00 S/28:47 S	62:00	60	135	208	9.3	4,600	53
	1204	WE978	N2	1237/1332	28:35 S/22:21 S	62:00	60	135	215	9.2	5,100	55
	1205	WE979	N3	1334/1434	22:08 S/15:55 S	62:00	60	135	213	10.1	4,900	42
	1206	WE980	N4	1436/1530	15:43 S/09:30 S	62:00	60	135	213	9.1	5,900	35
716 ES	1207	WE973	N1	1216/1306	35:00 S/40:19 S	62:00	54.8/54.6	155	215	12.2	3,800	30
	1208	WE974	N2	1349/1407	44:13 S/43:51 S	62:00	54/55	155	215	4.4	5,200	57
	1209	WE975	N3	1408/1440	46:04 S/51:23 S	62:00	55/55	155	223	7.3	5,200	53
	1210	WE976	N4	1440/1530	51:36 S/57:00 S	62:00	55/54.6	155	228	11.1	5,500	57

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	(dpm/1000 SCF)	
											Total Beta	8.90
13 March 1959 Mission 41												
705	1227	WP2237	N1	1224/1311	16:00N/21:14N	64:00	55.3	155	196	12.3	5,600	22
RN	1228	WP2238	N2	1313/1359	21:28N/26:50N	64:00	55	155	198	12.1	10,600	40
	1229	WP2239	N3	1401/1447	27:04N/32:18N	64:00	55	155	200	12.0	13,300	62
	1230	WP2240	N4	1449/1525	32:32N/37:54N	64:00	54.7	155	202	11.9	28,000	101
714	1231	WP2233	N1	1154/1244	16:00N/10:25N	64:00	55	155	196	13.2	3,800	18
RS	1232	WP2234	N2	1246/1336	10:12N/04:44N	64:00	55	155	194	13.4	4,500	10
	1233	WP2235	N3	1338/1433	04:31N/01:25 S	64:00	54.5	155	194	15.0	1,680	5
716	1219	WE801	N1	1144/1237	35:00 S/28:47 S	62:00	55	155	203	13.5	3,600	19
EN	1220	WE802	N2	1239/1332	28:35 S/22:21 S	62:00	55.3/55.1	155	197	14.1	1,120	8
	1221	WE803	N3	1333/1432	22:08 S/15:55 S	62:00	55.1/55.1	155	198	15.6	600	6
	1222	WE804	N4	1434/1527	15:43 S/09:30 S	62:00	55	155	198	14.0	≤ 330	4
718	1223	WE817	N1	1210/1254	35:00 S/40:14 S	62:00	55	121	203	5.8	4,600	65
ES	1224	WE818	N2	1256/1346	40:32 S/45:51 S	62:00	55	121	197	6.7	5,000	63
	1225	WE819	N3	1348/1435	46:04 S/51:23 S	62:00	55	121	198	6.3	8,100	77
	1226	WE820	N4	1437/1520	51:36 S/57:00 S	62:00	55.3	121	198	5.8	4,400	55
17 March 1959 Mission 42												
714	1243	WP1377	N1	1230/1318	16:00N/21:08N	64:00	64.6	121	210	6.0	38,000	187
RN	1244	WP1379	N2	1320/1407	21:35N/26:43N	64:00	65	121	211	5.8	40,000	195
	1245	WP1380	N3	1409/1455	26:56N/32:04N	64:00	65	121	213	5.6	45,000	206
705	1247	WP2249	N1	1153/1244	16:00N/10:16N	64:00	64.7	121	207	6.5	43,000	222
RS	1248	WP2250	N2	1246/1335	10:02N/04:18N	64:00	65	121	206	6.2	36,000	204
	1249	WP2251	N3	1337/1427	04:04N/01:40 S	64:00	65	121	206	6.4	30,000	163
	1250	WP2252	N4	1429/1519	01:54 S/07:50 S	64:00	65	121	205	6.4	23,000	106
718	1235	WE961	N1	1119/1214	35:00 S/28:47 S	62:00	58.7/64.8	126	213	7.6	5,800	59
EN	1236	WE962	N2	1216/1313	28:35 S/22:21 S	62:00	65	121	201	7.5	8,300	65
	1237	WE963	N3	1315/1412	22:08 S/15:55 S	62:00	65	121	199	7.4	12,400	87
	1238	WE964	N4	1414/1510	15:43 S/09:30 S	62:00	65	121	201	7.4	13,600	98
717	1239	WE957	N1	1215/1309	35:00 S/39:44 S	62:00	40	172	223	22.1	1,850	11
ES	1240	WE958	N2	1311/1405	39:54 S/44:44 S	62:00	40	174	225	22.6	1,660	13
	1241	WE959	N3	1407/1505	44:54 S/49:34 S	62:00	40	175	227	24.1	950	8
	1242	WE960	N4	1507/1605	49:45 S/54:45 S	62:00	40	180	229	25.1	360	3
20 March 1959 Mission 43												
705	1251	WP1381	N1	1226/1310	16:00N/21:02N	64:00	63.7/64.8	124	207	5.9	36,000	254
RN	1252	WP1382	N2	1313/1358	21:16N/26:31N	64:00	64.8/65.8	122	205	5.7	29,000	269
	1253	WP1383	N3	1359/1448	26:45N/32:13N	64:00	65.8/66.4	119	207	5.8	41,000	198
	1254	WP1384	N4	1450/1538	32:27N/37:55N	64:00	66.4/66.5	117	208	5.5	31,000	218
715	1255	WP1385	N1	1153/1246	16:00N/10:02N	64:00	65	121	206	6.7	36,000	201
RS	1256	WP1386	N2	1248/1338	09:48N/04:20N	64:00	65	121	205	6.4	31,000	161
	1257	WP1387	N3	1340/1430	04:06N/01:28 S	64:00	65	121	203	6.5	30,000	133
	1258	WP1388	N4	1432/1523	01:36 S/07:21 S	64:00	65	121	203	6.6	21,000	140
717	1259	WE949	N1	1135/1228	35:00 S/28:47 S	62:00	63.4/66	124	213	6.8	6,400	53
EN	1260	WE950	N2	1229/1325	28:33 S/22:21 S	62:00	66.1/67.3	119	208	6.6	6,900	49
	1261	WE951	N3	1326/1427	22:08 S/15:55 S	62:00	67.4/68.3	114	213	6.2	12,800	96
	1262	WE952	N4	1428/1524	15:43 S/09:30 S	62:00	68.3/68.6	111	215	5.3	28,000	190
718	1263	WE953	N1	1240/1331	35:00 S/40:22 S	62:00	48	162	211	16.4	1,120	8
ES	1264	WE954	N2	1333/1426	40:35 S/45:59 S	62:00	48	162	213	16.7	1,030	5
	1265	WE955	N3	1428/1522	46:10 S/51:32 S	62:00	48	162	213	17.1	1,690	16
	1266	WE956	N4	1524/1616	51:45 S/57:00 S	62:00	48	162	213	16.4	2,700	23

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	cpm/1000 SCF	
											Total Beta	Sr 90
24 March 1959 Mission 44												
714 RN	1267	WP1389	N1	1226/1313	16:00N/21:16N	64:00	55	155	193	12.7	2,500	9
	1268	WP1390	N2	1315/1402	21:30N/26:52N	64:00	55	155	198	12.4	7,400	21
	1269	WP1391	N3	1404/1450	27:06N/32:22N	64:00	55	155	203	11.8	17,400	61
	1270	WP1392	N4	1452/1536	32:36N/37:58N	64:00	55	155	210	10.9	20,000	108
715 RS	1271	WP1393	N1	1153/1246	16:00N/09:56N	64:00	55	155	193	14.3	3,400	8
	1272	WP1394	N2	1248/1338	09:42N/04:00N	64:00	55	155	193	13.5	1,760	5
	1273	WP1395	N3	1340/1430	03:46N/01:56S	64:00	55	155	193	13.5	1,840	5
	1274	WP1396	N4	1432/1523	02:10S/08:00S	64:00	55	155	193	13.8	2,600	8
716 EN	1283	WE933	N1	1145/1239	25:00S/29:00S	62:00	55	155	206	13.5	1,870	11
	1284	WE934	N2	1241/1337	28:46S/22:46S	62:00	55	155	205	14.1	1,220	4
	1285	WE935	N3	1339/1434	22:32S/16:32S	62:00	54.7	155	199	14.4	≤ 1,140	3
	1286	WE936	N4	1436/1531	16:18S/10:18S	62:00	55	155	201	14.3	1,630	8
718 ES	1287	WE937	N1	1210/1259	35:00S/40:20S	62:00	55	156	205	12.5	3,400	24
	1288	WE938	N2	1301/1344	40:33S/45:52S	62:00	55	156	211	10.6	4,200	37
	1289	WE939	N3	1346/1433	46:06S/51:26S	62:00	55	156	216	11.3	5,100	46
	1290	WE940	N4	1435/1523	51:39S/57:02S	62:00	55	157	215	11.7	4,300	48
27 March 1959 Mission 45												
715 RN	1275	WP1409	N1	1227/1314	16:00N/21:10N	64:00	65	121	206	6.0	33,000	203
	1276	WP1410	N2	1315/1401	21:24N/26:34N	64:00	64.4/65.4	121	208	5.9	36,000	207
	1277	WP1411	N3	1402/1449	26:48N/31:58N	64:00	65.4/65.4	121	209	5.8	34,000	189
	1278	WP1412	N4	1451/1533	32:12N/37:56N	64:00	65.6/65.9	121	212	5.0	40,000	290
714 RS	1279	WP1405	N1	1151/1242	16:00N/10:24N	64:00	64.8	121	206	6.6	41,000	234
	1280	WP1406	N2	1244/1334	10:10N/04:26N	64:00	65	121	206	6.4	41,000	220
	1281	WP1407	N3	1336/1426	04:12N/01:32S	64:00	65	121	206	6.4	27,000	159
	1282	WP1408	N4	1428/1520	01:46S/07:44S	64:00	65	121	206	6.6	23,000	158
716 EN	1291	WE929	N1	1143/1230	35:00S/28:58S	62:00	61.8/64.5	121	213	5.9	4,800	60
	1292	WE930	N2	1231/1332	28:45S/22:39S	62:00	64.4/65	121	214	7.4	4,800	66
	1293	WE931	N3	1333/1424	22:25S/16:19S	62:00	65.2/65	121	215	6.2	5,800	60
	1294	WE932	N4	1425/1526	16:15S/22:21S	62:00	65/66	121	215	7.4	11,000	74
717 ES	1295	WE925	N1	1210/1255	35:00S/40:21S	62:00	64.5	121	213	5.6	5,400	74
	1296	WE926	N2	1257/1345	40:35S/45:57S	62:00	64.8	121	217	5.8	5,000	60
	1297	WE927	N3	1347/1433	46:10S/51:29S	62:00	65	121	223	5.3	5,100	70
	1298	WE928	N4	1435/1523	51:35S/46:15S	62:00	65	121	223	5.5	5,300	63
1 April 1959 Mission 46												
705 RN	1300	WP1430	N2	1402/1448	32:27N/27:11N	64:00	65/65.8	120	211	5.6	35,000	221
	1301	WP1431	N3	1450/1536	26:57N/21:41N	64:00	65.8/66.7	117	210	5.2	36,000	164
	1302	WP1432	N4	1538/1625	21:27N/16:03N	64:00	66.7/67.7	115	210	5.1	41,000	215
714 RS	1303	WP1433	N1	1512/1602	07:45S/01:59S	4:0	66.8/68.8	112	209	5.1	37,000	203
	1304	WP1434	N2	1603/1650	01:52S/03:32N	64:00	68.8/69.3	110	209	4.4	49,000	225
	1305	WP1435	N3	1652/1745	03:46N/09:52N	64:00	69.3/70	110	209	4.9	58,000	301
	1306	WP2257	N4	1747/1838	10:06N/15:58N	64:00	70.2/70.8	107	210	4.4	67,000	410
3 April 1959 Mission 47												
715 RN	1307	WP1453	N1	1225/1312	16:00N/21:12N	64:00	60	135	202	8.5	15,600	70
	1308	WP1454	N2	1314/1400	21:26N/26:38N	64:00	60	135	204	8.3	22,000	117
	1309	WP1455	N3	1402/1450	26:52N/32:18N	64:00	60	135	206	8.5	21,000	123
	1310	WP1456	N4	1452/1540	32:32N/37:58N	64:00	60	135	208	8.4	27,000	154
714 RS	1311	WP1437	N1	1154/1244	16:00N/10:24N	64:00	60	135	202	9.1	14,500	66
	1312	WP1438	N2	1246/1336	10:10N/04:34N	64:00	60	135	202	9.1	14,700	56
	1313	WP1439	N3	1338/1428	04:20N/01:16S	64:00	60	135	202	9.1	10,400	42
	1314	WP1440	N4	1430/1526	01:30S/07:46S	64:00	60	135	202	10.2	6,700	44
716 ES	1315	WE821	N1	1242/1327	35:00S/40:00S	64:00	40	170	213	19.0	1,170	8
	1316	WE823	N2	1746/1834	39:48S/35:00S	64:00	40	170	213	20.3	910	8
718 ES	1317	WE825	N1	1205/1252	35:00S/40:00S	64:00	50	160	215	13.6	3,300	23
	1318	WE827	N2	1747/1832	39:48S/35:00S	64:00	50	160	215	13.1	3,800	26

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
7 April 1959 Mission 48													
714 RN	1327	WP1477	N1	1425/1512	16:00N/21:12N	64:00	55	155	199	12.3	5,000	23	
	1328	WP1478	N2	1514/1603	21:25N/26:51N	64:00	55	155	203	12.5	7,700	44	
	1329	WP1479	N3	1605/1653	27:04N/32:24N	64:00	55	155	205	12.1	17,200	110	
	1330	WP1480	N4	1655/1743	32:37N/37:57N	64:00	55	155	210	11.9	29,000	208	
715 RS	1331	WP1485	N1	1352/1445	16:00N/10:16N	64:00	55	155	198	14.0	1,250	8	
	1332	WP1486	N2	1447/1539	10:03N/04:25N	64:00	55	155	197	13.8	≤ 1,330	6	
	1333	WP1487	N3	1541/1634	04:12N/01:32S	64:00	55	155	197	14.1	≤ 900	2	
	1334	WP1488	N4	1638/1731	01:58S/07:42S	64:00	55	155	197	14.1	≤ 820	2	
717 EN	1323	WE921	N1	1240/1334	35:00S/28:48S	62:00	55	155	205	13.6	3,400	33	
	1324	WE922	N2	1336/1431	28:34S/22:19S	62:00	55	155	205	13.9	1,830	7	
	1325	WE923	N3	1433/1533	22:06S/15:58S	62:00	55	155	203	15.3	1,280	8	
	1326	WE924	N4	1535/1624	16:00S/22:13S	62:00	55	155	203	12.5	1,330	7	
716 ES	1319	WE917	N1	1332/1418	35:00S/40:20S	64:00	55	155	205	11.6	4,500	58	
	1320	WE918	N2	1420/1458	40:34S/45:54S	64:00	55	155	217	9.0	4,600	55	
	1321	WE919	N3	1500/1553	46:08S/51:25S	64:00	55	155	225	12.1	4,800	59	
	1322	WE920	N4	1555/1639	51:38S/46:21S	64:00	55.5	155	225	9.9	5,100	47	
10 April 1959 Mission 49													
715 RN	1335	WP1501	N1	1231/1317	16:00N/21:14N	64:00	55	121	207	5.8	29,000	184	
	1336	WP1502	N2	1319/1405	21:28N/26:42N	64:00	65	121	209	5.8	32,000	175	
	1337	WP1503	N3	1407/1453	26:56N/32:10N	64:00	65	121	207	5.8	28,000	222	
	1338	WP1504	N4	1455/1544	32:24N/37:58N	64:00	65	121	207	6.2	31,000	221	
705 RS	1339	WP1489	N1	1151/1244	16:00N/10:10N	64:00	64.5	121	205	6.5	37,000	182	
	1340	WP1490	N2	1243/1333	09:56N/04:06N	64:00	65	121	204	6.5	28,000	156	
	1341	WP1491	N3	1338/1425	03:31N/01:57S	64:00	65.3	121	203	6.1	30,000	158	
717 ES	1342	WE833	N1	1155/1240	35:00S/40:00S	64:00	59.5	136	211	7.9	5,400	51	
	1343	WE835	N3	1808/1850	39:46S/36:20S	64:00/60.50	60.5	137	214	7.2	4,800	51	
718 ES	1344	WE829	N1	1225/1308	35:00S/40:00S	64:00	64/65	122	213	5.4	4,700	59	
	1345	WE831	N3	1842/1925	39:46S/35:00S	64:00	68.3	114	215	4.4	4,700	56	
14 April 1959 Sea Fish Special No. 3													
6676	1354	SF01	H1	1543/1619	60:00N/65:00N	118:00	34.3/35.2	264	226	67.3	41,000	134	
	1355	SF02	H2	1619/1700	65:00N/70:00N	118:00	35.2/35.5	260	226	74.3	30,000	129	
	1356	SF03	H3	1700/1740	70:00N/75:00N	118:00	35.5/36	260	226	71.9	50,000	164	
	1357	SF04	H4	1740/1823	75:00N/80:00N	118:00	36/37.3	258	226	74.4	51,000	173	
	1361	SF05	H13	1740/1935	75:00N/90:00N	118:00	36/38.3	258	226	197.9	64,000	287	
	1358	SF06	H5	1823/1904	80:00N/85:00N	118:00	37.3/38	249	226	61.1	43,000	151	
	1359	SF07	H6	1901/1935	85:00N/90:00N	118:00	38/38.3	244	226	52.7	77,000	309	
	1360	SF08	H14	1901/1935	85:00N/90:00N	118:00	38/38.3	244	226	52.7	113,000	383	
	1362	SF09	H7	1942/2021	90:00N/85:00N	118:00	38.3/38.7	242	226	58.9	67,000	212	
	1363	SF10	H8	2021/2055	85:00N/80:00N	118:00	38.7/39.6	244	226	50.8	55,000	215	
	1364	SF11	H9	2055/2130	80:00N/75:00N	118:00	39.6/40.3	237	226	49.0	48,000	234	
	1365	SF12	H10	2130/2207	75:00N/70:00N	118:00	40.3/41.5	233	226	49.2	27,000	129	
	1366	SF13	H11	2207/2252	70:00N/65:00N	118:00	41.5/41.7	202	226	55.0	33,000	137	
	1367	SF14	H12	2252/2330	65:00N/60:00N	118:00	41.9/42.6	226	226	46.6	65,000	278	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
17 April 1959 Mission 51													
705 RN	1346	WP1544	N1	1226/1313	16:00N/21:20N	64:00	55	155	194	12.6	3,400	14	
	1347	WP1542	N2	1315/1402	21:33N/26:39N	64:00	55	155	203	12.0	8,000	41	
	1348	WP1543	N3	1404/1455	26:52N/32:32N	64:00	55	155	208	12.7	17,100	104	
	1349	WP1544	N4	1457/1538	32:45N/37:57N	64:00	55	155	211	10.0	23,000	127	
714 RS	1350	WP1545	N1	1153/1244	16:00N/10:16N	64:00	55	155	194	13.7	2,200	10	
	1351	WP1546	N2	1246/1336	10:02N/04:18N	64:00	55	155	195	13.4	1,090	3	
	1352	WP1547	N3	1338/1428	04:04N/01:40 S	64:00	55	155	195	13.4	≤ 160	3	
	1353	WP1548	N4	1430/1520	01:54 S/07:44 S	64:00	55	155	195	13.4	≤ 950	3	
718 ES	1371	WE849	N1	1230/1318	35:00 S/40:00 S	64:00	40	170	219	19.8	500	4	
	1372	WE850	N2	1320/1805	40:12 S/40:00 S	64:00	40	170	218	117.8	880	6	
	1373	WE851	N3	1807/1849	39:48 S/35:00 S	64:00	40	170	219	17.4	720	4	
716 ES	1368	WE837	N1	1200/1248	35:00 S/40:00 S	64:00	50	160	217	13.8	2,300	13	
	1369	WE838	N2	1250/1740	40:14 S/40:00 S	64:00	50	160	218	82.9	3,400	16	
	1370	WE839	N3	1742/1822	39:46 S/35:00 S	64:00	50	160	217	11.5	2,300	24	
19 April 1959 Mission 52X													
714 RP	1374	WP1589	N1	1157/1311	20:00N/27:36N	71:00	60	135	201	13.5	24,000	147	
	1375	WP1590	N2	1312/1353	27:43N/32:08N	71:00	60	135	206	7.2	23,000	161	
	1376	WP1591	N3	1355/1451	32:20N/37:48N	71:00	60	135	211	9.6	26,000	151	
	1377	WP1592	N4	1453/1549	38:00N/44:00N	71:00	60	135	216	9.4	28,000	164	
715 RP	1378	WP1605	N1	1300/1352	20:00N/25:27N	71:00	60.8/66	120	211	6.4	24,000	177	
	1379	WP1606	N2	1353/1452	25:39N/32:03N	71:00	66/66.6	118	211	6.7	30,000	233	
	1380	WP1607	N3	1454/1546	32:16N/38:02N	71:00	66.6/67	117	215	5.7	24,000	235	
	1381	WP1608	N4	1548/1643	38:15N/44:00N	71:00	67/67.1	115	217	5.7	13,200	150	
24 April 1959 Mission 52													
705 PN	1382	WP1585	N1	1349/1438	44:00N/49:15N	71:00	50.8/50	160	218	14.3	17,700	97	
	1384	WP1587	N3	1531/1620	55:00N/60:21N	71:00	49.4/49.6	160	221	13.9	22,000	95	
	1385	WP1588	N4	1622/1711	60:34N/66:00N	71:00	49.6/49.8	160	221	13.9	21,000	109	
715 PN	1386	WP1629	N1	1320/1408	44:00N/49:21N	71:00	60	135	221	7.8	26,000	264	
	1388	WP1631	N3	1458/1543	55:13N/60:30N	71:00	60	135	222	7.4	24,000	265	
	1389	WP1632	N4	1545/1631	60:44N/66:00N	71:00	60	135	226	7.3	29,000	220	

Date	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
<u>22-29 April 1959 North Flight</u>												
22 Apr.	1663	FAS-48	H	1831/0006	70:00N	154:00	61	130	225	111.6	16,100	196
22 Apr.	1664	FAS-49	H	1900/0034	70:00N/71:00N	154:00/ 157:00	63/67	121	225	87.0	24,000	257
25 Apr.	1665	FAS-50	H	1831/2249	70:00N/71:00N	154:00/ 155:00	50	133	225	127.8	6,600	53
25 Apr.	1666	FA-51	H	1900/0039	70:00N	154:00	60	135	225	121.7	18,300	219
28 Apr.	1667	FA-52	H	1806/2301	71:00N/72:00N	155:00/ 157:00	50	133	225	146.2	15,400	146
29 Apr.	1668	FA-54	H	1800/2244	70:00N	154:00/ 156:00	62/65	125	225	82.5	16,900	179

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr 90
24 April 1959 Mission 53												
718	1390	WE909	N1	1155/1239	35:00 S/40:00 S	64:00	60	135	216	7.4	5,000	72
ES	1391	WE911	N3	1725/1805	39:46 S/35:00 S	64:00	60	135	216	6.7	5,000	70
716	1392	WE873	N1	1224/1306	35:00 S/40:00 S	64:00	63.4/64	124	216	5.4	4,500	61
ES	1393	WE875	N3	1811/1859	39:46 S/35:00 S	64:00	66.6	121	216	5.5	4,400	64
26 April 1959 Mission 53X												
705	1394	WP1577	N1	1206/1257	44:00N/38:06N	71:00	60	135	217	8.5	26,000	228
PR	1395	WP1578	N2	1259/1354	37:52N/31:52N	71:00	60	135	211	9.4	25,000	182
	1396	WP1579	N3	1410/1444	29:40N/25:52N	71:00	60	135	207	6.0	26,000	178
	1397	WP1580	N4	1446/1537	25:38N/19:52N	71:00	60	135	201	9.3	24,000	166
714	1398	WP1597	N1	1139/1230	44:00N/38:06N	71:00	58.5/62	135	219	8.2	27,000	199
PR	1399	WP1598	N2	1232/1323	37:52N/31:58N	71:00	62.2/63.7	124	217	6.7	27,000	219
	1400	WP1599	N3	1325/1420	31:44N/25:10N	71:00	63.7/64.6	122	213	6.9	31,000	306
	1401	WP1600	N4	1422/1504	24:56N/19:58N	71:00	64.6/65.5	120	207	5.2	26,000	196
28 April 1959 Mission 54												
714	1402	WP1601	N1	1226/1311	16:00N/21:00N	64:00	60	135	196	8.5	19,700	155
RN	1403	WP1602	N2	1313/1400	21:14N/26:28N	64:00	60	135	206	8.3	11,900	79
	1404	WP1603	N3	1402/1456	26:42N/32:30N	64:00	60	135	211	9.2	18,400	155
	1405	WP1604	N4	1457/1544	32:44N/37:58N	64:00	60	135	213	7.9	21,000	147
705	1406	WP1593	N1	1152/1244	16:00N/10:08N	64:00	59.5	135	203	9.5	12,100	83
RS	1407	WP1594	N2	1246/1336	09:54N/04:08N	64:00	60	135	203	9.0	10,400	55
	1408	WP1595	N3	1339/1427	03:54N/01:32S	64:00	60	135	203	8.7	6,800	33
	1409	WP1596	N4	1429/1511	01:46S/07:46S	64:00	60	135	203	7.6	3,600	26
716	1410	WE913	N1	1140/1244	32:23S/26:23S	59:04/60:36	60	135	215	10.8	4,600	53
ER	1411	WE914	N2	1247/1329	26:10S/20:04S	60:40/62:32	60	135	211	7.2	5,000	38
	1412	WE915	N3	1343/1430	18:30S/13:14S	62:35/63:29	60	135	213	7.9	3,900	17
	1413	WE916	N4	1436/1527	12:34S/06:52S	63:30/64:11	60	135	213	8.6	3,500	20
1 May 1959 Mission 55												
705	1414	WP1609	N1	1226/1311	16:00N/21:18N	64:00	55	155	193	12.1	3,400	18
RN	1415	WP1610	N2	1313/1401	21:32N/26:56N	64:00	55	155	201	12.4	3,100	16
	1416	WP1611	N3	1402/1448	27:03N/32:21N	64:00	55	155	205	11.7	7,400	45
	1417	WP1612	N4	1450/1536	32:35N/37:59N	64:00	55	155	209	11.4	16,600	118
711	1418	WE1040	N1	1230/1333	35:00S/40:00S	64:00	40	170	219	26.0	660	7
ES	1419	WE1042	N3	1709/1800	39:49S/35:00S	64:00	40	170	219	21.1	930	6
717	1420	WE1012	N1	1200/1241	35:00S/40:00S	64:00	50	160	213	12.0	1,350	14
ES	1421	WE1014	N3	1745/1825	39:47S/35:00S	64:00	49.5	163	213	12.2	2,300	18
5 May 1959 Mission 56												
714	1427	WP1721	N1	1520/1612	07:45S/01:51S	64:00	65.2/67.3	118	207	6.1	19,900	154
RS	1428	WP1722	N2	1614/1704	01:37S/04:03N	64:00	67.3/68.6	117	207	5.5	23,000	175
	1429	WP1723	N3	1706/1758	04:17N/10:11N	64:00	68.7/68.8	112	208	5.1	34,000	223
	1430	WP1724	N4	1800/1851	10:25N/16:11N	64:00	69.1/70.3	110	209	4.7	38,000	296
718	1422	WE1048	N1	1140/1234	35:00S/28:47S	62:00	60.6/64.6	123	211	7.1	6,500	73
EN	1423	WE1049	N2	1235/1328	28:14S/22:21S	62:00	64.6/65.2	121	207	6.7	7,500	75
	1424	WE1050	N3	1329/1426	22:08S/15:55S	62:00	65.3/66.9	118	208	6.7	8,000	73
	1425	WE1051	N4	1427/1522	15:42S/09:30S	62:00	66.9/67.9	115	215	5.7	20,000	154
717/ES	1426	WE1044	N1	1225/1259	35:00S/40:16S	64:00	55	155	211	8.3	3,600	29

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HARP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
8 May 1959 Mission 57													
705 RN	1431	WP1725	N1	1225/1311	16:00N/21:18N	64:00	50	135	206	8.1	10,000	56	
	1432	WP1726	N2	1313/1405	21:32N/27:32N	64:00	60	135	208	9.1	11,100	72	
	1433	WP1727	N3	1406/1448	27:39N/32:21N	64:00	60	135	210	7.3	19,000	141	
	1434	WP1728	N4	1450/1536	32:35N/37:59N	64:00	60	135	212	7.8	19,500	157	
714 RS	1435	WP1729	N1	1152/1243	16:00N/10:08N	64:00	60	135	206	9.0	11,500	65	
	1436	WP1730	N2	1245/1335	09:54N/04:10N	64:00	60	135	206	8.8	11,100	65	
	1437	WP1731	N3	1337/1431	03:56N/02:02S	64:00	60	135	206	9.5	6,900	40	
	1438	WP1732	N4	1433/1428	02:36S/07:46S	64:00	60/61.3	135	206	9.3	6,300	33	
717 ES	1439	WE1052	N1	1200/1244	35:00S/40:00S	64:00	60	135	213	7.4	5,100	66	
	1440	WE1054	N3	1803/1845	39:46S/35:00S	64:00	60	135	213	7.1	5,200	64	
718 ES	1441	WE1056	N1	1225/1309	35:00S/40:00S	64:00	64.3/64.5	121	213	5.4	4,400	63	
	1442	WE1058	N3	1745/1828	39:46S/35:00S	64:00	67.5/67.5	120	213	4.8	5,500	63	
12 May 1959 Mission 58													
705 RN	1450	WP1733	N1	1155/1311	16:00N/21:16N	64:00	55	155	197	12.2	3,200	21	
	1451	WP1734	N2	1315/1359	21:44N/26:44N	64:00	55	155	199	11.5	2,300	13	
714 RS	1452	WP1737	N1	1151/1242	16:00N/10:04N	64:00	55	155	197	13.5	1,020	3	
	1453	WP1738	N2	1244/1334	09:50N/04:08N	64:00	55	155	196	13.3	≤ 1,040	3	
	1454	WP1739	N3	1336/1423	03:54N/01:48S	64:00	55	155	195	12.6	≤ 920	3	
	1455	WP1740	N4	1425/1514	02:02S/07:44S	64:00	55	155	194	13.2	≤ 440	3	
718 EN	1443	WE1216	N1	1140/1234	35:00S/28:47S	62:00	55	150	213	12.4	3,300	36	
	1444	WE1217	N2	1236/1334	28:35S/22:21S	62:00	55	152	213	13.6	1,690	14	
	1445	WE1218	N3	1334/1442	22:08S/15:55S	62:00	55/56	148	209	15.4	520	3	
717 ES	1446	WE1000	N1	1228/1313	35:00S/40:16S	64:00	64/65.6	124	215	5.7	5,100	65	
	1447	WE1001	N2	1314/1401	40:29S/45:43S	64:00	65.6/66.3	120	215	5.5	3,100	57	
	1448	WE1002	N3	1403/1450	46:02S/51:23S	64:00	66.3/67.2	118	215	5.1	3,800	51	
	1449	WE1003	N4	1451/1536	51:37S/57:00S	64:00	67.2/67.7	115	215	4.6	2,800	64	
15 May 1959 Mission 59													
717 ES	1456	WE1220	N1	1210/1248	35:00S/39:00S	64:00	40	170	214	16.0	1,730	16	
	1457	WE1222	N3	1614/1710	39:48S/35:00S	64:00	40	170	214	23.6	2,200	22	
718 ES	1458	WE1224	N1	1253/1320	35:00S/40:00S	64:00	50	160	215	7.8	3,800	41	
	1459	WE1226	N3	1735/1819	39:47S/35:00S	64:00	50	160	215	12.8	3,400	40	
17 May 1959 Mission 60X													
714 RP	1460	WP1757	N1	1223/1316	20:00N/25:52N	71:00	55	155	200	13.8	3,300	22	
	1461	WP1758	N2	1318/1409	26:06N/31:58N	71:00	55	156	204	13.1	7,800	57	
	1462	WP1759	N3	1411/1507	32:12N/39:16N	71:00	55	154	213	13.4	16,700	131	
	1463	WP1760	N4	1509/1551	39:30N/44:00N	71:00	55	154	221	9.7	19,000	164	
715 RP	1464	WP1797	N1	1155/1246	20:00N/25:20N	71:00	60	135	206	9.0	14,400	100	
	1465	WP1798	N2	1248/1344	25:34N/31:58N	71:00	60	135	209	9.7	14,200	116	
	1466	WP1799	N3	1346/1439	32:12N/38:04N	71:00	60	135	216	8.9	18,200	136	
	1467	WP1800	N4	1441/1531	38:18N/44:00N	71:00	60	135	221	8.1	18,000	173	
705 RP	1468	WP1741	N1	1253/1344	20:00N/25:52N	71:00	63/64.2	127	212	7.1	21,000	173	
	1469	WP1742	N2	1346/1436	26:06N/31:58N	71:00	64.2/65	123	214	6.3	28,000	201	
	1470	WP1743	N3	1441/1530	32:12N/38:04N	71:00	64.9/65.1	121	217	5.9	26,000	194	
	1471	WP1744	N4	1532/1619	38:18N/44:00N	71:00	65.2/66.2	121	221	5.4	21,000	241	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	LAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
20 May 1959 Mission 60												
714 PN	1472	WP1841	N1	1256/1356	44:00N/49:48N	71:00	45	165	209	21.6	18,600	109
	1473	WP1842	N2	1358/1454	50:00N/54:54N	71:00	45	165	219	19.2	17,300	109
	1474	WP1843	N3	1455/1549	55:06N/60:24N	71:00	45	165	223	18.2	11,700	77
	1475	WP1844	N4	1551/1623	60:36N/63:46N	71:00	45	165	226	10.7	8,600	55
715 PN	1476	WP1861	N1	1219/1309	44:00N/49:44N	71:00	55	155	220	11.7	16,200	129
	1477	WP1862	N2	1311/1411	49:58N/56:10N	71:00	55	155	221	14.0	17,700	137
	1478	WP1863	N3	1413/1457	56:24N/61:50N	71:00	55	155	225	10.0	17,200	143
	1479	WP1864	N4	1459/1554	62:04N/68:00N	71:00	55	155	227	12.4	16,200	134
718 EN	1480	WE1232	N1	1141/1235	35:00 S/28:47 S	62:00	58/64.9	125	213	7.3	5,500	71
	1481	WE1233	N2	1237/1330	28:33S/22:21 S	62:00	65/64.9	121	209	6.7	9,300	105
	1482	WE1234	N3	1332/1426	22:08 S/15:55 S	62:00	64.9/65.7	121	205	6.9	10,700	105
	1483	WE1235	N4	1428/1522	15:41 S/09:30 S	62:00	65.7/66	121	209	6.7	14,800	125
717 ES	1484	WE1228	N1	1234/1327	35:00 S/40:21 S	64:00	45	165	213	18.7	1,900	25
	1485	WE1229	N2	1329/1422	40:33 S/45:54 S	64:00	45	165	208	19.2	1,620	14
	1486	WE1230	N3	1424/1518	46:06 S/51:27 S	64:00	45	165	211	19.4	2,100	21
	1487	WE1231	N4	1520/1614	51:39 S/57:00 S	64:00	45	165	217	18.6	1,800	19
22 May 1959 Mission 61												
717 ES	1488	WE1236	N1	1200/1245	35:00 S/40:00 S	64:00	60	134	213	7.5	5,300	63
	1489	WE1238	N3	1804/1846	39:46 S/35:00 S	64:00	61	134	213	6.8	5,700	70
718 ES	1490	WE1240	N1	1226/1311	35:00 S/40:00 S	64:00	64/64.6	124	213	5.7	5,100	62
	1491	WE1242	N3	1441/1521	39:46 S/35:00 S	64:00	66	120	213	4.6	6,400	66
24 May 1959 Mission 61X												
714 PR	1492	WPL1012	N1	1205/1254	44:00N/38:16N	71:00	60	135	213	8.3	14,800	138
	1493	WPL1013	N2	1256/1346	38:02N/32:26N	71:00	60	135	211	8.5	15,700	116
	1494	WPL1014	N3	1348/1446	32:12N/25:12N	71:00	60	135	211	9.9	16,200	135
	1495	WPL1015	N4	1448/1529	24:58N/20:04N	71:00	60	135	211	7.0	16,400	118
715 PR	1496	WPL1084	N1	1135/1225	44:00N/38:14N	71:00	61.4/64.9	126	218	6.5	19,800	207
	1497	WPL1085	N2	1227/1317	38:00N/32:14N	71:00	64.9/65.4	120	216	5.9	18,900	224
	1498	WPL1086	N3	1319/1410	32:00N/26:14N	71:00	65.5/66.3	118	215	5.8	21,000	234
	1499	WPL1087	N4	1412/1502	26:00N/20:00N	71:00	66.3/67.4	114	213	5.2	23,000	270
26 May 1959 Mission 62												
714 RN	1500	WP1865	N1	1229/1322	16:00N/24:52N	64:00	60	135	207	7.3	10,700	104
	1501	WP1866	N2	1323/1406	21:59N/26:45N	64:00	60	135	212	7.1	15,100	146
	1502	WP1867	N3	1407/1503	26:52N/32:50N	64:00	60	135	212	9.5	15,100	156
	1503	WP1868	N4	1504/1552	32:57N/38:01N	64:00	60	135	212	8.2	15,500	112
716 RE	1508	WPL1088	N1	1153/1243	16:00N/10:14N	64:00	60	135	203	9.0	5,200	63
	1509	WPL1089	N2	1245/1335	10:00N/04:14N	64:00	60	135	203	9.0	4,300	40
	1510	WPL1090	N3	1337/1433	04:00N/01:46 S	64:00	60	135	204	10.0	3,700	37
	1511	WPL1091	N4	1435/1529	02:00 S/07:45 S	64:00	60	135	204	9.7	3,000	23
717 ER	1504	WE1628	N1	1143/1243	32:21 S/25:21 S	59:05/60:55	60	135	207	10.5	3,300	48
	1505	WE1629	N2	1245/1345	25:08 S/18:42 S	60:59/62:57	60	135	207	10.5	3,700	44
	1506	WE1630	N3	1348/1448	18:18 S/11:34 S	63:03/63:38	60	135	207	10.5	4,500	39
	1507	WE1631	N4	1451/1551	11:17 S/04:28 S	63:41/64:32	60	135	207	10.5	2,400	18
718 ES	1512	WE1632	N1	1230/1318	35:00 S/40:19 S	64:00	51	158	213	13.3	610	8
	1513	WE1633	N2	1320/1408	40:32 S/45:50 S	64:00	51	158	211	13.4	1,070	19
	1514	WE1634	N3	1410/1458	46:03 S/51:21 S	64:00	51	158	218	13.1	2,700	47
	1515	WE1635	N4	1500/1549	51:34 S/57:00 S	64:00	51	159	221	13.3	3,600	55

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (100 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	8r ⁹⁰
29 May 1959 Mission 63												
718	1516	WE1248	N1	1240/1258	35:00 S/40:00 S	64:00	40	170	215	20.1	1,320	22
ES	1517	WE1250	N3	1611/1703	39:48 S/35:00 S	64:00	40	170	215	21.7	1,850	23
716	1518	WE1244	N1	1230/1320	35:00 S/40:00 S	64:00	50	160	218	44.3	2,700	50
ES	1519	WE1246	N3	1715/1804	39:47 S/35:00 S	64:00	51/43	160	218	44.2	2,900	44
2 June 1959 Mission 64												
715	1520	WP1885	N1	1443/1528	38:00N/32:44N	64:00	65/66.8	121	213	5.4	19,100	215
RN	1521	WP1886	N2	1530/1645	32:30N/27:14N	64:00	66.8/67.2	116	210	4.9	24,000	205
	1522	WP1887	N3	1617/1703	27:00N/24:38N	64:00	67.2/67.7	116	208	5.0	22,000	192
	1523	WP1888	N4	1705/1751	21:24N/16:02N	64:00	67.7/68.2	115	208	4.9	21,000	200
714	1528	---	H1	1440/1250	16:00N/08:12N	66:13/64:00	63	126	209	22.7	15,500	149
RS	1529	---	H2	1256/1322	07:30N/04:24N	64:00	63	126	208	8.5	10,100	108
	1530	---	H3	1325/1415	04:10N/01:36 S	64:00	63	126	206	16.5	10,000	113
	1531	---	H4	1421/1507	02:18 S/07:42 S	64:00	63	126	205	15.5	8,100	66
	1524	WP1897	N1	1516/1606	07:45 S/02:05 S	64:00	66.5/69.3	114	208	5.2	22,000	179
	1525	WP1898	N2	1607/1658	01:58 S/03:50N	64:00	69.3/70.2	109	208	4.7	24,000	191
	1526	WP1899	N3	1659/1752	03:57N/09:51N	64:00	70.2/70.4	108	211	4.6	28,000	230
	1532	---	H5	1659/1750	03:57N/09:49N	64:00	70.2/70.4	108	211	10.1	30,000	275
	1527	WP1900	N4	1753/1845	10:03N/16:00N	64:00	70.4/70.5	107	214	4.4	32,000	309
	1533	---	H6	1753/1845	10:03N/16:00N	64:00	70.4/70.5	107	214	10.1	35,000	332
716	1538	WE1276	N1	1440/1247	35:00 S/30:45 S	62:00	61.2/64.4	127	213	5.1	4,800	66
EN	1539	WE1277	N2	1221/1259	30:45 S/35:00 S	62:00	64/65	121	213	4.7	4,400	64
	1540	WE1278	N3	1304/1324	35:07 S/35:00 S	61:53/58:30	65	121	213	2.8	4,100	75
	1541	WE1279	N4	1326/1826	35:00 S	62:00	65	121	213	36.6	4,600	57
718	1534	WE1280	N1	1230/1316	35:00 S/40:18 S	64:00	64.4/65	124	215	5.8	5,400	64
ES	1535	WE1281	N2	1318/1404	40:31 S/45:49 S	64:00	64.8/64.8	121	219	5.4	6,300	60
	1536	WE1282	N3	1406/1452	46:03 S/51:21 S	64:00	64.9/66	121	221	3.3	5,700	80
	1537	WE1283	N4	1454/1541	51:35 S/57:00 S	64:00	66/66.6	121	223	5.2	4,600	64
5 June 1959 Mission 65												
715	1546	WP1909	N1	1226/1312	16:00N/21:08N	64:00	60	135	204	8.3	8,800	72
RN	1547	WP1910	N2	1314/1400	21:21N/26:29N	64:00	60	135	206	8.1	10,600	86
	1548	WP1911	N3	1402/1454	26:42N/32:30N	64:00	60	135	208	9.1	12,300	109
	1549	WP1912	N4	1456/1543	32:43N/37:57N	64:00	60	135	211	8.0	14,300	115
714	1553	WP1904	N1	1153/1242	16:00N/10:14N	64:00	59.7	135	205	8.8	8,700	70
RS	1550	WP1901	N2	1245/1335	10:00N/04:14N	64:00	60	135	205	8.9	7,100	52
	1551	WP1902	N3	1337/1426	04:00N/01:38 S	64:00	60	135	205	8.7	4,600	37
	1554	---	H1	1337/1426	04:00N/01:38 S	64:00	60	135	205	19.8	5,200	35
	1552	WP1903	N4	1428/1519	01:52 S/07:44 S	64:00	60	135	205	9.1	3,100	31
	1555	---	H2	1442/1519	03:28 S/07:44 S	64:00	60	135	205	14.9	5,200	30
	1556	---	H3	1538/1612	05:34 S/01:40 S	64:00	55	155	199	19.5	1,030	4
718	1542	WE1288	N1	1200/1243	35:00 S/40:00 S	64:00	60	135	213	7.3	4,900	68
ES	1543	WE1290	N3	1739/1822	39:46 S/35:00 S	64:00	60	135	213	7.3	4,700	64
716	1544	WE1284	N1	1230/1313	35:00 S/40:00 S	64:00	64.2/65	123	213	5.4	4,700	67
ES	1545	WE1286	N3	1834/1912	39:46 S/35:00 S	64:00	69.2/70.1	109	213	3.3	5,500	79

Isotopus, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
9 June 1959 Mission 66													
715 RN	1565	WP2129	N1	1226/1312	16:00N/21:16N	64:00	55	155	200	12.0	5,700	50	
	1566	WP2130	N2	1312/1400	21:19N/26:45N	64:00	55	155	201	12.3	3,700	28	
	1567	WP2131	N3	1401/1440	26:52N/31:20N	64:00	55	155	202	10.0	5,500	53	
	1568	WP2132	N4	1444/1604	30:33N/21:47N	64:14/66:31	55	155	201	20.7	4,200	55	
714 RS	1569	WP1925	N1	1153/1243	16:00N/10:26N	64:00	55	155	200	13.1	6,300	64	
	1570	WP1926	N2	1245/1336	10:12N/04:32N	64:00	55	155	200	13.3	4,800	26	
	1571	WP1927	N3	1338/1432	04:18N/01:42E	64:00	55	155	200	14.1	900	6	
	1572	WP1928	N4	1434/1526	01:56E/07:44E	64:00	55	155	200	13.5	680	6	
716 EN	1557	WE1292	N1	1145/1243	35:00E/29:02E	62:00	45	165	213	20.5	790	9	
	1558	WE1293	N2	1244/1343	28:50E/22:57E	62:00	45	165	211	21.1	710	9	
	1559	WE1294	N3	1344/1440	22:45E/16:54E	62:00	45	165	213	19.8	180	< 1	
	1560	WE1295	N4	1443/1530	16:42E/11:26E	62:00	45	165	215	16.4	140	< 1	
718 ES	1561	WE1296	N1	1234/1330	35:00E/39:52E	64:00	45	165	211	20.0	690	5	
	1562	WE1297	N2	1332/1429	40:04E/44:56E	64:00	45	165	209	20.6	670	5	
	1563	WE1298	N3	1431/1528	45:08E/50:10E	64:00	45	165	209	20.6	1,450	15	
	1564	WE1299	N4	1530/1627	50:22E/55:14E	64:00	45	165	209	20.6	1,680	22	
10 June 1959 Mission of Opportunity													
716 EO	1635	WE1356	N1	1219/1307	34:49E/33:50E	58:33/65:45	45	165	215	16.7	470	9	
	1636	WE1357	N2	1309/1409	33:47E/32:55E	65:56/68:50	45	165	215	21.1	1,330	9	
	1637	WE1358	N3	1417/1445	34:37E/34:59E	68:25/63:10	45	165	215	9.8	970	9	
	1638	WE1359	N4	1447/1533	35:00E/35:18E	62:58/57:50	45	165	215	16.1	670	9	
12 June 1959 Mission 67													
705 RN	1573	WP2133	N1	1225/1311	16:00N/21:22N	64:00	62.6/63.6	128	211	6.6	20,000	161	
	1574	WP2134	N2	1315/1359	21:50N/26:58N	64:00	64	126	213	5.9	17,000	152	
	1575	WP2135	N3	1401/1443	27:12N/32:06N	64:00	64/64.6	123	214	5.4	19,400	179	
	1581	---	H1	1401/1443	27:12N/32:06N	64:00	54/64.6	124	214	12.4	19,700	209	
	1576	WP2136	N4	1446/1534	32:20N/38:04N	64:00	64.6	123	215	6.0	18,900	216	
	1582	---	H2	1446/1534	32:20N/38:04N	64:00	64.6	123	215	13.7	20,000	236	
	1583	---	H3	1539/1615	38:00N/33:36N	64:14/64:38	60	135	215	13.7	19,000	186	
	1584	---	H4	1621/1651	33:09N/29:30N	64:42/65:18	60	135	214	11.4	19,700	245	
	1585	---	H5	1653/1727	29:14N/25:21N	65:21/65:42	60	135	212	13.1	14,600	143	
	1586	---	H6	1729/1805	25:06N/20:58N	65:55/66:40	60	136	211	14.1	12,300	134	
	714 RS	1577	WP2137	N1	1153/1245	16:00N/10:10N	64:00	64/65	122	210	6.7	16,400	165
		1578	WP2138	N2	1247/1340	09:56N/03:58N	64:00	65	122	209	6.7	17,000	152
1579		WP2139	N3	1342/1429	03:44N/01:32E	64:00	65	122	209	6.0	20,000	139	
1580		WP2140	N4	1433/1524	01:59E/07:43E	64:00	65	121	209	6.4	13,400	205	
716 ES	1589	WE1260	N1	1227/1319	35:00E/40:00E	64:00	50	160	213	15.2	270	7	
	1590	WE1262	N3	1818/1904	39:47E/35:00E	64:00	50.5	160	213	13.3	1,510	7	
14 June 1959 Mission 68X													
714 RP	1591	WP2153	N1	1223/1314	20:00N/25:52N	71:00	55	155	203	13.0	7,300	72	
	1592	WP2154	N2	1316/1407	26:06N/31:58N	71:00	55	155	205	12.8	9,400	71	
	1593	WP2155	N3	1410/1500	32:19N/38:04N	71:00	55	155	210	12.4	10,900	105	
	1594	WP2156	N4	1502/1555	38:18N/44:00N	71:00	55	155	215	12.7	13,600	136	
705 RP	1599	WP2145	N1	1154/1245	20:00N/25:52N	71:00	60	137	210	9.0	16,600	143	
	1603	---	H1	1154/1245	20:00N/25:52N	71:00	60	137	210	20.2	15,800	136	
	1600	WP2146	N2	1247/1338	26:06N/31:58N	71:00	60	137	210	9.0	17,900	167	
	1604	---	H2	1247/1338	26:06N/31:58N	71:00	60	137	210	20.2	14,500	149	
	1601	WP2147	N3	1340/1431	32:12N/38:04N	71:00	60	137	214	8.8	18,900	147	
	1605	---	H3	1340/1431	32:12N/38:04N	71:00	60	137	214	19.8	21,000	192	
	1602	WP2148	N4	1433/1522	38:18N/44:00N	71:00	60	137	217	8.3	14,500	128	
	1606	---	H4	1433/1522	38:18N/44:00N	71:00	60	137	214	18.7	21,000	146	
715 RP	1607	WP2245	N1	1255/1346	20:00N/25:52N	71:00	64.4/65.2	123	209	6.6	16,300	177	
	1611	---	H1	1255/1346	20:00N/25:52N	71:00	64.4/65.2	123	209	15.1	21,000	215	
	1608	WP2246	N2	1348/1439	26:06N/31:58N	71:00	65.2/65.3	121	215	6.2	19,200	186	
	1612	---	H2	1348/1439	26:06N/31:58N	71:00	65.2/65.3	121	215	13.9	23,000	213	
	1609	WP2247	N3	1441/1532	32:12N/38:04N	71:00	65.2/65.8	119	218	5.8	22,000	161	
	1613	---	H3	1441/1532	32:12N/38:04N	71:00	65.2/65.8	119	218	13.2	19,800	200	
	1610	WP2248	N4	1534/1624	38:18N/44:00N	71:00	65.8/66	118	220	5.4	22,000	243	
	1614	---	H4	1534/1624	38:18N/44:00N	71:00	65.8/66	118	220	12.3	22,000	228	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	90 Sr	
16 June 1959 Mission 68													
705 PN	1615	WP2157	N1	1224/1316	44:00N/49:40N	71:00	50	160	220	14.7	12,100	128	
	1616	WP2158	N2	1319/1411	50:00N/55:50N	71:00	50	164	221	15.2	11,000	89	
	1617	WP2159	N3	1413/1506	56:04N/62:00N	71:00	50	159	222	14.7	12,800	106	
	1619	---	H1	1413/1506	56:04N/62:00N	71:00	50	159	222	32.6	14,100	117	
	1618	WP2160	N4	1508/1559	62:13N/68:00N	71:00	50	160	223	14.3	12,900	109	
	1620	---	H2	1508/1559	62:13N/68:00N	71:00	50	160	223	31.5	17,200	141	
	1621	---	H3	1605/1650	67:43N/62:42N	70:15/68:30	55	155	206	24.7	15,300	192	
	1622	---	H4	1710/1735	60:28N/57:41N	68:30	55	156	216	13.1	16,000	155	
	1623	---	H5	1738/1824	57:21N/52:13N	68:30	55	155	216	24.0	15,100	163	
1624	---	H6	1826/1911	52:00N/47:00N	68:30/72:14	55.6	155	222	22.2	15,900	166		
714 PN	1625	WP2165	N1	1220/1309	44:14N/49:49N	71:00	60	135	223	7.9	14,200	190	
	1626	WP2166	N2	1311/1401	50:03N/55:52N	71:00	60	135	225	7.9	17,500	181	
	1627	WP2167	N3	1403/1453	56:06N/61:56N	71:00	60	135	226	7.9	20,000	227	
	1629	---	H1	1403/1452	56:06N/61:56N	71:00	60	135	226	17.5	19,200	258	
	1628	WP2168	N4	1454/1546	62:08N/68:00N	71:00	60	135	228	8.1	19,900	211	
	1630	---	H2	1454/1546	62:08N/68:00N	71:00	60	135	228	18.4	17,800	242	
	1631	---	H3	1552/1638	67:39N/62:52N	70:10/68:30	61.2/64.8	121	228	12.1	17,600	238	
	1632	---	H4	1641/1730	62:38N/56:47N	68:30	65	121	226	12.7	24,000	286	
	1633	---	H5	1732/1813	56:33N/54:43N	68:30	65	122	225	10.8	19,800	250	
1634	---	H6	1815/1859	51:29N/47:08N	68:30/72:14	65	121	223	11.6	22,000	279		
717 RE	1655	WP1277	N1	1147/1334	16:00N/03:42N	64:00	65/66	124	208	13.8	17,100	162	
	1656	WP1278	N2	1336/1524	03:29N/08:57 S	64:00	66/68	118	203	12.7	15,800	172	
	1657	WP1279	N3	1538/1713	10:45 S/23:00 S	64:00	68/69	111	208	9.3	15,600	132	
	1658	WP1280	N4	1715/1910	23:14 S/33:35 S	64:00	69/70.5	108	213	10.0	8,200	122	
718 EO	1669	WE1364	N1	1205/1305	35:00 S	62:00	50	165	213	18.3	640	7	
	1670	WE1365	N2	1311/1411	35:00 S	62:00	55	155	213	14.5	1,070	12	
	1671	WE1366	N3	1422/1552	35:00 S	62:00	65	121	213	11.0	6,400	87	
	1672	WE1367	N4	1554/1824	35:00 S	62:00	66/68.2	118	213	15.9	6,700	90	
716 ES	1659	WE1360	N1	1202/1246	35:00 S/39:54 S	64:00	55	140	213	9.0	2,300	18	
	1660	WE1361	N2	1248/1329	40:06 S/45:00 S	64:00	55	140	213	8.4	3,000	35	
	1661	WE1362	N3	1331/1417	45:12 S/50:06 S	64:00	55	140	213	9.5	3,700	52	
	1662	WE1363	N4	1432/1541	49:00 S/42:00 S	64:00	55	140	213	14.2	4,000	61	
19 June 1959 Mission 69													
705 PO	1639	---	H1	1205/1302	42:48N/44:05N	73:48/72:44	50	160	221	35.5	13,300	106	
	1640	---	H2	1304/1409	43:52N/44:25N	72:56/70:45	50	160	221	40.8	10,800	110	
	1641	---	H3	1411/1511	44:24N/43:39N	71:06/70:12	50	160	221	37.4	12,400	102	
	1642	---	H4	1513/1616	43:50N/42:26N	70:06/71:16	50	160	221	39.3	11,800	104	
	1643	---	H5	1618/1719	42:23N/42:36N	70:58/73:03	50	160	221	38.0	12,100	108	
	1644	---	H6	1721/1824	42:35N/43:22N	72:47/73:44	50	160	221	39.3	11,700	111	
715 PO	1645	---	H1	1244/1343	42:23N/42:36N	70:58/72:55	65	121	220	15.8	21,000	235	
	1646	---	H2	1345/1445	42:35N/42:53N	72:36/73:45	65	121	220	16.2	18,800	240	
	1647	---	H3	1447/1549	42:42N/43:48N	73:47/72:59	65	121	220	16.6	23,000	237	
	1648	---	H4	1551/1653	43:36N/44:21N	72:10/71:32	65	121	220	16.6	23,000	250	
	1649	---	H5	1655/1757	44:19N/44:25N	71:51/69:50	65	121	220	16.6	14,600	245	
	1650	---	H6	1759/1900	44:28N/43:28N	70:07/70:18	65	121	220	16.5	25,000	260	
718 ER	1651	WP1416	N1	1243/1429	32:23 S/20:08 S	59:03/62:29	62.4/65.2	121	213	13.5	6,100	94	
	1652	WP1417	N2	1431/1610	19:53 S/08:15 S	62:33/63:56	65.2/66.4	118	215	11.2	15,900	182	
	1653	WP1418	N3	1612/1758	08:01 S/01:24N	63:59/65:30	66.4/67.6	115	215	11.0	26,000	292	
	1654	WP1419	N4	1800/1946	04:38N/17:13N	65:32/66:57	67.6/70	111	215	9.7	33,000	368	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
24 June 1959 Mission 69X													
705 PR	1673	WPL1040	N1	1437/1230	44:00N/37:52N	74:00	60	136	218	8.9	15,900	186	
	1677	---	H1	1437/1230	44:00N/37:52N	74:00	60	136	218	19.9	17,900	201	
	1674	WPL1041	N2	1232/1331	37:38N/30:48N	71:00	60	136	215	10.0	13,600	152	
	1678	---	H2	1232/1331	37:38N/30:48N	71:00	60	136	215	22.6	10,700	186	
	1675	WPL1042	N3	1333/1416	30:34N/25:39N	71:00	60	136	211	7.4	9,900	106	
	1679	---	H3	1333/1416	30:34N/25:39N	71:00	60	136	211	16.9	10,800	111	
	1676	WPL1043	N4	1418/1505	25:25N/20:01N	71:00	60	137	207	8.4	10,900	118	
	1680	---	H4	1418/1505	25:25N/20:01N	71:00	60	137	207	19.0	13,900	139	
715 PR	1681	WPL1056	N1	1207/1257	44:00N/38:19N	71:00	60/64.6	128	223	6.5	18,400	223	
	1685	---	H1	1207/1256	44:00N/38:19N	71:00	60/64.6	128	223	14.5	19,600	250	
	1682	WPL1057	N2	1259/1349	38:05N/32:24N	71:00	64.7/65.4	120	219	5.8	20,000	220	
	1686	---	H2	1256/1347	38:05N/32:24N	71:00	64.7/65.4	120	219	13.7	20,000	215	
	1683	WPL1058	N3	1351/1445	32:10N/26:02N	71:00	65.7/66.2	118	216	6.0	19,100	219	
	1687	---	H3	1349/1445	32:10N/26:02N	71:00	65.7/66.2	118	216	14.2	21,000	230	
	1684	WPL1059	N4	1447/1538	25:48N/20:00N	71:00	66/67	117	214	5.6	18,500	219	
	1688	---	H4	1445/1538	25:48N/20:00N	71:00	66/67	117	214	13.2	21,000	267	
23 June 1959 Mission 70													
705 RN	1689	---	H1	1210/1245	21:05N/25:03N	66:38/65:55	63	127	210	11.4	15,800	208	
	1690	---	H2	1247/1323	25:16N/29:20N	65:53/65:18	63	127	211	11.7	20,000	199	
	1694	---	H3	1325/1400	29:34N/33:37N	65:16/64:37	63	127	213	11.2	17,400	198	
	1692	---	H4	1402/1439	33:52N/38:00N	64:36/64:14	63	127	214	11.7	19,600	186	
	1695	WP1565	N1	1444/1529	38:00N/32:44N	64:00	63/65	124	218	5.6	19,300	192	
	1696	WP1566	N2	1531/1616	32:30N/27:06N	64:00	65/66	120	217	5.2	19,400	216	
	1697	WP1567	N3	1618/1704	26:52N/21:28N	64:00	66/67	117	215	5.0	20,000	219	
	1693	---	H5	1618/1704	26:52N/21:28N	64:00	66/67	117	215	11.4	18,400	203	
	1698	WP1568	N4	1706/1751	21:14N/15:58N	64:00	67/68	113	214	4.4	21,000	216	
	1694	---	H6	1706/1751	21:14N/15:58N	64:00	67/68	113	214	10.2	25,000	254	
	715 RS	1700	WP1569	N1	1515/1604	07:45 S/02:03 S	64:00	66.4/68.3	115	208	5.3	19,800	221
		1701	WP1570	N2	1605/1655	01:56 S/03:53 N	64:00	68.3	112	209	5.0	28,000	298
1702		WP1571	N3	1656/1748	04:00N/10:03N	64:00	68.3/69	111	209	5.0	31,000	348	
1703		WP1572	N4	1749/1839	10:10N/16:00N	64:00	69/70	109	210	4.6	27,000	296	
1699		---	H1	1440/1839	16:00N/ 07:45 S/16:00N	66:13/64:00 66.4/70	63/ 66.4/70	118	209	109.3	19,500	193	
717 EN	1721	WE1426	N1	1206/1233	35:00 S/28:47 S	62:00	64/63.6	128	215	3.7	11,200	151	
	1722	WE1425	N2	1235/1328	28:33 S/22:20 S	62:00	63.6/65.2	120	218	6.4	12,800	146	
	1723	WE1424	N3	1330/1427	22:07 S/15:53 S	62:00	65.2/66.4	117	211	6.5	13,400	175	
	1724	WE1427	N4	1428/1522	15:38 S/09:32 S	62:00	66.4/67.6	116	215	5.7	16,500	185	
716 ES	1725	WE1420	N1	1232/1320	35:00 S/40:18 S	64:00	64.8/66	122	221	5.6	5,000	81	
	1726	WE1421	N2	1322/1404	40:31 S/45:49 S	64:00	66/67	120	216	4.8	6,700	94	
	1727	WE1422	N3	1405/1455	46:03 S/51:21 S	64:00	66.9/67.5	116	216	5.4	5,600	74	
	1728	WE1423	N4	1457/1543	51:35 S/57:00 S	64:00	67.5/67.8	113	216	4.5	4,400	71	
26 June 1959 Mission 71													
705 RN	1704	WP1753	N1	1226/1311	16:00N/21:14N	64:00	63.9/64.5	124	212	6.0	16,600	168	
	1705	WP1754	N2	1312/1359	21:21N/26:43N	64:00	64.5/64.0	122	212	5.8	18,400	167	
	1706	WP1755	N3	1400/1448	26:50N/32:12N	64:00	64.9/65.1	121	214	5.8	17,900	216	
	1708	---	H1	1400/1448	26:50N/32:12N	64:00	64.9/65.1	121	214	13.3	22,000	233	
	1707	WP1756	N4	1448/1539	32:19N/38:00N	64:00	65.1/65.3	121	214	6.1	19,200	192	
	1709	---	H2	1448/1539	32:19N/38:00N	64:00	65.1/65.3	121	214	13.9	16,900	208	
	1710	---	H3	1543/1618	38:00N/33:54N	64:14/64:37	60.6	135	216	12.9	21,000	209	
	1711	---	H4	1620/1656	33:47N/29:58N	64:38/65:10	60	135	213	13.8	15,500	154	
	1712	---	H5	1702/1731	28:57N/25:23N	65:11/65:50	60	135	210	11.5	14,100	137	
	1713	---	H6	1734/1810	25:18N/21:05N	65:52/66:38	60	135	209	14.3	13,100	134	
	715 RS	1714	WP1697	N1	1153/1246	16:00N/10:06N	64:00	65	121	213	6.5	17,400	157
		1715	WP1698	N2	1248/1338	09:52N/04:18N	64:00	65	121	214	6.1	15,000	128
1716		WP1699	N3	1340/1432	04:04N/01:50 S	64:00	65	121	215	6.3	13,500	128	
1718		---	H1	1340/1432	04:04N/01:50 S	64:00	65	121	215	14.3	15,900	125	
1717		WP1700	N4	1434/1526	02:04 S/07:45 S	64:00	65	121	213	6.3	12,100	108	
1719		---	H2	1434/1526	02:04 S/07:45 S	64:00	65	121	213	14.5	13,200	119	
1720		---	H3	1530/1624	07:45 S/01:56 S	64:00	60	135	208	21.4	3,200	28	
717 ES		1729	WE1436	N1	1234/1326	35:00 S/40:00 S	64:00	40	170	215	21.7	1,110	15
	1730	WE1438	N3	1614/1724	39:46 S/35:00 S	64:00	40	170	215	22.6	1,070	15	
716 ES	1731	WE1432	N1	1205/1251	35:00 S/40:00 S	64:00	50	160	213	13.4	1,380	15	
	1732	WE1434	N3	1728/1815	39:46 S/35:00 S	64:00	50	160	213	13.7	1,850	28	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 StCF			
											Total Beta	Sr ⁹⁰		
1 July 1959 Mission 72														
705 RN	1733	WP1805	N1	1226/1312	16:00N/21:18N	64:00	60	135	206	8.1	10,800	103		
	1734	WP1806	N2	1314/1400	21:32N/26:50N	64:00	60	135	207	8.1	13,400	107		
	1735	WP1807	N3	1405/1449	27:26N/32:22N	64:00	60	135	208	7.6	14,100	109		
	1737	---	H1	1402/1448	27:04N/32:21N	64:00	60	135	208	18.2	13,300	145		
	1736	WP1808	N4	1452/1537	32:36N/38:00N	64:00	60	135	211	7.7	13,900	135		
	1738	---	H2	1448/1536	32:35N/38:00N	64:00	60	135	211	18.6	16,100	167		
	1739	---	H3	1543/1615	38:00N/34:06N	64:14/64:35	63.8/65	124	215	9.1	17,500	223		
	1740	---	H4	1617/1650	33:50N/30:00N	64:36/65:12	65	121	215	9.0	18,800	248		
	1741	---	H5	1652/1727	29:56N/25:41N	65:14/65:48	65	121	214	9.7	22,000	254		
	1742	---	H6	1730/1807	29:27N/21:05N	65:51/66:38	65	121	213	10.4	18,300	212		
	715 RS	1743	WP1809	N1	1153/1247	16:00N/10:10N	64:00	60	136	206	9.6	8,400	73	
		1744	WP1810	N2	1249/1343	09:56N/04:13N	64:00	60	135	206	9.4	6,100	66	
1745		WP1811	N3	1345/1448	03:59N/02:47 S	64:00	60	135	206	11.2	3,600	31		
1747		---	H1	1345/1448	03:59N/02:47 S	64:00	60	135	206	25.4	4,700	39		
1746		WP1812	N4	1449/1533	03:01 S/07:45 S	64:00	60	135	206	7.7	3,600	31		
1748		---	H2	1449/1533	03:15 S/07:45 S	64:00	60	135	206	17.4	4,500	42		
1749		---	H3	1537/1628	07:45 S/04:59 S	64:00	63/65	125	213	15.0	16,000	138		
1750		---	H4	1631/1720	04:45 S/03:47N	64:00	65/65.2	125	213	14.3	19,200	193		
1751		---	H5	1722/1811	04:01N/09:40N	64:00	65.3/65.1	125	213	14.1	18,100	183		
1752		---	H6	1813/1910	09:54N/16:00N	64:05/66:14	65.1/64.8	128	213	17.1	17,200	184		
2 July 1959 Mission 73A														
716 ES		1753	WE1440	N1	1229/1312	35:00 S/40:00 S	64:00	60	135	215	7.2	4,500	51	
	1754	WE1442	N3	1812/1852	39:46 S/35:00 S	64:00	60	135	215	6.7	5,100	62		
717 ES	1755	WE1444	N1	1159/1246	35:00 S/40:00 S	64:00	63.2/63	125	215	6.2	6,400	96		
	1756	WE1446	N3	1822/1905	39:46 S/35:00 S	64:00	66.8/61.6	122	215	5.3	6,500	82		
3 July 1959 Mission 73B														
715 RS	1761	---	H1	1140/1232	16:00N/10:11N	66:13/64:09	64.5/66	120	210	14.6	17,500	190		
	1762	---	H2	1235/1325	09:57N/04:14N	64:05/64:00	65.6/66.5	118	209	13.2	21,000	210		
	1763	---	H3	1327/1417	04:00N/01:45 S	64:00	66.5/66.9	117	209	12.7	30,000	253		
	1764	---	H4	1420/1508	02:06 S/07:38 S	64:00	66.9/68	114	209	11.4	30,000	252		
	1757	WP1821	N1	1512/1600	07:38 S/01:54 S	64:00	68.1/68.3	112	209	4.7	26,000	297		
	1758	WP1822	N2	1603/1647	01:40 S/03:28N	64:00	68.3/68.7	111	209	4.3	29,000	322		
	1759	WP1823	N3	1648/1739	03:42N/09:48N	64:00	68.7/69.1	110	209	4.8	27,000	286		
	1765	---	H5	1604/1739	01:40 S/09:42N	64:00	68.3/69.1	110	209	20.7	29,000	264		
	1760	WP1824	N4	1741/1831	10:02N/16:02N	64:00	69.1/69.7	110	210	4.6	24,000	230		
	1766	---	H6	1741/1831	09:56N/16:02N	64:00	69.1/69.7	110	210	10.4	23,000	237		

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr ⁹⁰	
7 July 1959 Mission 74													
705 RN	1767	WP1933	N1	1228/1312	16:00N/21:14N	64:00	63.3/64	124	212	5.8	15,700	158	
	1768	WP1934	N2	1314/1402	21:28N/26:56N	64:00	64.1/64.2	124	212	6.3	17,400	176	
	1769	WP1935	N3	1403/1445	27:10N/32:17N	64:00	64.1/65	122	216	5.2	19,600	179	
	1771	---	H1	1403/1445	27:10N/32:17N	64:00	64.1/65	122	216	11.8	21,000	208	
	1770	WP1936	N4	1448/1533	32:31N/38:00N	64:00	65	122	218	5.5	17,600	182	
	1772	---	H2	1448/1533	32:31N/38:00N	64:00	65	122	218	12.5	20,000	196	
	1773	---	H3	1537/1613	38:00N/33:49N	64:14/64:35	60	138	213	14.1	15,500	122	
	1774	---	H4	1615/1647	33:35N/29:43N	64:36/65:13	60	137	211	12.6	14,900	122	
	1775	---	H5	1650/1722	29:29N/25:33N	65:16/65:49	60	135	207	12.9	14,100	136	
	1776	---	H6	1725/1801	25:19N/21:05N	65:53/66:38	59.8/58.5	135	205	14.4	12,800	110	
714 RS	1777	WP1921	N1	1154/1246	16:00N/10:08N	64:00	65	121	212	6.4	14,100	174	
	1778	WP1922	N2	1248/1338	09:54N/04:14N	64:00	65	121	212	6.1	14,000	165	
	1779	WP1923	N3	1340/1431	04:00N/01:46S	64:00	65	121	212	6.3	16,500	166	
	1781	---	H1	1340/1431	04:00N/01:46S	64:00	65	121	212	14.3	15,900	165	
	1782	---	H3	1433/1523	02:00S/07:45S	64:00	65	121	203	14.9	11,700	148	
	1783	---	H4	1528/1621	07:45S/01:57S	64:00	60	135	203	21.4	4,800	49	
	1784	---	H5	1623/1719	01:43S/03:44N	64:00	60	135	203	22.8	5,100	48	
	1780	WP1924	N4	1709/1815	03:58N/10:32N	64:00/64:16	60	135	212	11.2	5,500	37	
	1785	---	H6	1817/1908	10:44N/16:00N	64:21/66:14	60	135	203	20.8	8,000	93	
	718 EN	1786	WE1829	N1	1508/1602	09:30S/15:32S	63:50/63:35	65	121	213	6.6	12,400	136
1787		WE1830	N2	1604/1658	15:56S/21:48S	62:53	65	121	213	6.6	6,000	95	
1788		WE1831	N3	1700/1755	22:02S/28:10S	61:00	65	121	215	6.7	7,600	111	
1789		WE1832	N4	1757/1852	28:24S/34:32S	58:30/59:30	65	121	215	6.7	6,200	84	
717 EO	1794	WE1452	N1	1132/1232	35:11S	62:00	50	160	217	17.2	2,000	25	
	1795	WE1453	N2	1235/1335	35:11S	62:00	55	155	217	14.3	3,000	35	
	1796	WE1454	N3	1345/1515	35:11S	62:00	65	121	217	10.8	6,300	93	
	1797	WE1455	N4	1517/1608	35:11S	62:00	65.9/67.6	118	217	5.4	6,400	73	
716 ES	1790	WE1448	N1	1232/1328	35:00S/41:02S	64:00	55	155	217	13.3	3,600	50	
	1791	WE1449	N2	1330/1418	41:15S/46:25S	64:00	55	155	217	11.4	5,000	78	
	1792	WE1450	N3	1420/1504	46:38S/51:26S	64:00	55	155	223	10.6	4,200	81	
	1793	WE1451	N4	1506/1554	51:39S/56:49S	64:00	55	155	223	11.1	3,900	66	
10 July 1959 Mission 75													
715 RN	1802	WP1917	N1	1226/1311	16:00N/21:03N	64:00	60	135	206	8.3	7,200	96	
	1803	WP1918	N2	1329/1402	23:03N/26:52N	64:00	58.8/60	135	210	5.8	11,800	130	
	1804	WP1919	N3	1403/1452	27:06N/32:23N	64:00	60	135	213	7.9	9,400	116	
	1806	---	H1	1405/1452	27:06N/32:23N	64:00	60	135	213	18.0	11,600	145	
	1805	WP1920	N4	1455/1542	32:37N/38:00N	64:00	60	135	214	7.9	9,400	120	
	1807	---	H2	1455/1542	32:37N/38:00N	64:00	60	135	214	17.9	11,100	142	
	1808	---	H3	1548/1620	38:00N/33:52N	64:14/64:35	59.2/64.6	121	216	9.0	17,100	189	
	1809	---	H4	1626/1657	33:29N/29:45N	64:36/65:13	64.6	121	214	8.7	19,400	233	
	1810	---	H5	1659/1732	29:30N/25:33N	65:18/65:49	65	121	213	9.2	17,400	181	
	1811	---	H6	1735/1810	25:19N/21:05N	65:52/66:38	65	121	212	9.8	16,000	206	
	714 RS	1812	WP1997	N1	1158/1248	16:00N/10:18N	64:00	60	135	200	9.2	6,900	77
		1813	WP1998	N2	1251/1342	10:04N/04:15N	64:00	60	135	200	9.3	6,500	60
1814		WP1999	N3	1346/1435	03:34N/01:47S	64:00	60	135	200	9.0	5,100	54	
1816		---	H1	1346/1435	03:45N/01:48S	64:00	60	135	200	20.4	5,200	54	
1817		---	H2	1437/1532	02:02S/07:45S	64:00	60	135	200	22.8	3,800	50	
1818		---	H3	1535/1622	06:57S/01:48S	64:00	65	121	213	13.1	18,300	228	
1819		WP2000	N4	1602/1703	04:33S/02:07N	64:00	65	121	200	8.1	18,200	200	
1819		---	H4	1622/1713	01:34S/04:10N	64:00	65	124	213	14.6	21,000	246	
1820		---	H5	1715/1850	04:24N/09:33N	64:00	65	121	213	12.5	21,000	217	
1821		---	H6	1803/1857	09:40N/16:00N	64:00/66:13	65	123	211	15.8	19,900	207	
717 ES		1798	WE1460	N1	1200/1248	35:00S/40:00S	64:00	40	170	215	20.1	430	8
		1799	WE1462	N3	1605/1722	40:17S/35:00S	64:00	40	170	217	32.0	570	10
718 ES	1800	WE1464	N1	1232/1322	35:00S/40:00S	64:00	50	160	215	14.5	1,820	28	
	1801	WE1466	N3	1739/1817	39:47S/35:00S	64:00	50	160	215	11.0	1,510	22	

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Br 90
14 July 1959 Mission 76												
715 RN	1822	---	H1	1211/1244	21:05N/24:55N	66:38/65:09	63.5/65	122	208	10.0	15,200	176
	1823	---	H2	1246/1322	25:09N/29:13N	65:55/65:19	64.9/65.2	119	208	9.9	17,000	213
	1824	---	H3	1325/1401	29:27N/33:32N	65:17/64:37	65.1/65.2	122	208	10.4	17,800	236
	1825	---	H4	1403/1439	33:46N/38:00N	64:36/64:14	65.2/65.6	121	208	10.1	15,800	223
	1828	WP2009	N1	1444/1529	38:00N/32:52N	64:00	65.5/66.6	118	219	4.9	17,000	218
	1829	WP2010	N2	1531/1617	32:38N/27:17N	64:00	66.6/67	115	216	4.8	17,900	213
	1830	WP2011	N3	1619/1706	27:03N/21:42N	64:00	67/67.7	114	215	4.8	17,100	234
	1826	---	H5	1619/1706	27:03N/21:42N	64:00	67/67.7	114	215	10.8	18,200	249
	1831	WP2012	N4	1708/1756	21:28N/16:00N	64:00	67.7/68.5	111	215	4.5	19,100	260
	1827	---	H6	1708/1756	21:28N/16:00N	64:00	67.7/68.5	111	215	10.1	21,000	279
714 RS	1832	FD253	H1	1144/1237	16:00N/10:20N	66:13/64:11	63/64.8	124	208	16.2	16,200	179
	1833	FD254	H2	1239/1331	10:06N/04:17N	64:07/64:00	64.8/65.4	121	208	15.0	16,900	239
	1834	FD255	H3	1353/1424	04:03N/01:39S	64:00	65.4/65.7	120	208	8.7	20,000	213
	1835	FD256	H4	1426/1519	01:53S/07:45S	64:00	65.8/67	117	208	13.8	18,600	213
	1838	WP2013	N1	1522/1614	07:45S/01:56S	64:00	67.5/67.5	114	213	5.3	18,200	226
	1839	WP2014	N2	1615/1704	01:42S/04:07N	64:00	67.5/68.6	112	213	4.7	14,000	355
	1840	WP2015	N3	1706/1754	04:21N/09:56N	64:00	68.6/69	111	213	4.4	26,000	280
	1836	FD257	H5	1706/1754	04:21N/09:56N	64:00	68.6/69	111	213	10.1	30,000	350
	1841	WP2016	N4	1756/1846	10:10N/16:00N	64:00	68.9/69.5	109	213	4.4	27,000	282
	1837	FD258	H6	1756/1846	10:10N/16:00N	64:00	68.9/69.5	109	213	10.2	30,000	311
16 July 1959 Mission 77A												
717 ES	1864	WE1476	N1	1200/1244	35:00S/40:00S	64:00	63.2/64.4	121	216	5.4	9,600	104
	1865	WE1478	N3	1753/1835	39:46S/35:00S	64:00	68/68.2	112	216	4.0	10,100	139
17 July 1959 Mission 77B												
705 RN	1842	WP1993	N1	1207/1313	19:35N/21:29N	64:00	64	128	214	2.2	17,100	182
	1843	WP1994	N2	1315/1401	21:43N/27:07N	64:00	64	128	215	6.3	17,200	187
	1844	WP1995	N3	1403/1442	27:21N/31:55N	64:00	64/64.7	124	215	5.0	16,800	202
	1846	FD264	H1	1403/1442	27:21N/31:55N	64:00	64/64.7	124	215	11.4	21,000	219
	1845	WP1996	N4	1445/1534	32:09N/38:00N	64:00	64.7/65.3	124	216	6.1	16,900	215
	1847	FD263	H2	1445/1534	32:09N/38:00N	64:00	64.7/65.3	124	216	13.9	18,000	244
	1848	FD262	H3	1539/1614	38:00N/33:50N	64:14/64:36	60.5	135	214	13.5	17,900	226
	1849	FD261	H4	1617/1652	33:36N/29:38N	64:37/65:16	60	135	213	13.6	18,700	197
	1850	FD260	H5	1656/1734	29:24N/24:55N	65:18/65:56	60	136	211	14.9	14,400	174
	1851	FD259	H6	1739/1809	24:33N/21:05N	66:01/66:39	60	135	209	11.8	12,300	140
715 RS	1852	WP2005	N1	1155/1244	16:00N/10:23N	64:00	65	121	219	5.8	17,200	182
	1853	WP2006	N2	1246/1339	10:09N/04:11N	64:00	65	121	218	6.3	13,700	146
	1854	WP2007	N3	1344/1433	03:57N/01:54S	64:00	65	121	219	6.2	16,700	182
	1856	FD271	H1	1344/1433	03:57N/01:54S	64:00	65	121	219	14.1	17,100	221
	1855	WP2008	N4	1434/1519	02:08S/07:45S	64:00	65.5	121	214	5.3	15,100	178
	1857	FD272	H2	1434/1519	02:08S/07:45S	64:00	65.5	121	214	12.1	18,900	166
	1858	FD273	H3	1529/1619	07:45S/02:08S	64:00	60	135	214	19.1	4,500	46
	1859	FD274	H4	1623/1727	01:54S/03:01N	64:00	60	135	214	24.4	4,000	44
	1860	FD275	H5	1729/1812	05:15N/09:59N	64:00/64:04	60	135	214	16.4	4,700	49
	1861	FD276	H6	1815/1911	10:13N/16:00N	64:09/66:15	60	135	216	21.2	8,900	103

Isotopes, Inc.

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
19 July 1959 Mission 78X												
705 RP	1866	WP2017	N1	1324/1415	20:00N/25:52N	71:00	60	134	207	8.9	10,100	114
	1870	FD277	H1	1324/1415	20:00N/25:52N	71:00	60	134	207	20.1	13,400	121
	1867	WP2018	N2	1417/1508	26:06N/31:58N	71:00	60	134	210	8.7	12,100	137
	1871	FD278	H2	1417/1508	26:06N/31:58N	71:00	60	134	210	19.7	14,300	127
	1868	WP2019	N3	1511/1601	32:12N/38:04N	71:00	60	135	213	8.4	15,400	161
	1872	FD279	H3	1511/1601	32:12N/38:04N	71:00	60	135	213	18.9	17,700	176
	1869	WP2020	N4	1605/1652	38:18N/44:07N	71:00	60	135	214	7.9	12,600	142
	1873	FD280	H4	1605/1652	38:18N/44:07N	71:00	60	135	214	17.7	15,300	140
714 RP	1874	WP2025	N1	1156/1247	20:00N/25:52N	71:00	63.8/64.7	123	211	6.6	15,200	158
	1878	FD367	H1	1156/1247	20:00N/25:52N	71:00	63.8/64.7	123	211	15.1	15,900	161
	1875	WP2026	N2	1249/1343	26:06N/31:58N	71:00	65	121	213	6.6	17,100	187
	1879	FD368	H2	1249/1343	26:06N/31:58N	71:00	65	121	213	15.2	16,900	224
	1876	WP2027	N3	1345/1436	32:12N/38:04N	71:00	65	121	216	6.1	18,100	189
	1880	FD369	H3	1345/1436	32:12N/38:04N	71:00	65	121	216	14.0	17,300	203
	1877	WP2028	N4	1438/1527	38:18N/44:07N	71:00	65	121	217	5.9	19,400	208
	1881	FD370	H4	1438/1527	38:18N/44:07N	71:00	65	121	217	13.3	18,100	162
715 RP	1882	WP2021	N1	1252/1343	20:00N/25:52N	71:00	65/66	115	211	5.7	15,300	174
	1886	FD373	H1	1252/1343	20:00N/25:52N	71:00	65/66	115	211	13.1	17,200	180
	1883	WP2022	N2	1345/1436	26:06N/31:58N	71:00	66/66.4	115	215	5.5	15,800	186
	1887	FD374	H2	1345/1436	26:06N/31:58N	71:00	66/66.4	115	215	12.5	16,000	198
	1884	WP2023	N3	1438/1530	32:12N/38:04N	71:00	66.4/66.7	117	218	5.5	15,800	226
	1888	FD375	H3	1438/1530	32:12N/38:04N	71:00	66.4/66.7	117	218	12.5	18,800	200
	1885	WP2024	N4	1532/1622	38:18N/44:07N	71:00	66.7/67	115	221	5.0	17,100	193
	1889	FD376	H4	1532/1622	38:18N/44:07N	71:00	66.7/67	115	221	11.4	18,100	190
21 July 1959 Mission 78												
714 PN	1890	WPL1049	N1	1150/1246	44:00N/49:19N	71:00	45	165	222	19.0	4,100	49
	1891	WPL1050	N2	1248/1344	49:53N/55:16N	71:00	45	165	224	18.8	7,400	65
	1892	WPL1051	N3	1346/1442	55:30N/61:06N	71:00	45	165	228	18.5	8,100	76
	1894	FD157	H1	1346/1442	55:30N/61:06N	71:00	45	165	228	41.3	8,600	69
	1893	WPL1048	N4	1444/1541	61:20N/67:08N	71:00	45	165	231	18.6	7,600	66
	1895	FD158	H2	1444/1541	61:20N/67:08N	71:00	45	165	231	41.5	8,300	81
	1896	FD159	H3	1551/1639	67:20N/61:57N	70:00/68:30	55	155	229	23.4	16,200	190
	1897	FD160	H4	1642/1730	61:43N/55:57N	68:30	55	155	226	23.5	18,200	161
	1898	FD161	H5	1732/1821	55:43N/50:22N	60:30/70:20	55	155	222	24.6	16,600	144
	1899	FD162	H6	1823/1913	50:01N/45:13N	70:27/73:48	55	155	218	25.8	11,200	117
705 PN	1901	WPL1093	N2	1215/1303	50:06N/55:52N	71:00	62.8/63.3	125	226	6.0	16,200	189
	1902	WPL1094	N3	1305/1394	56:06N/61:56N	71:00	63.1/63.1	125	228	6.1	17,000	197
	1904	FD151	H1	1305/1394	56:06N/61:56N	71:00	63.1/63.1	125	228	14.0	18,600	207
	1903	WPL1095	N4	1357/1447	62:10N/68:00N	71:00	63.1/63.7	126	230	6.3	14,700	133
	1905	FD152	H2	1357/1447	62:10N/68:00N	71:00	63.1/63.7	126	230	14.4	16,700	212
	1906	FD153	H3	1453/1542	67:39N/62:04N	70:15/68:30	60	135	229	17.0	17,000	218
	1907	FD154	H4	1545/1634	61:50N/56:00N	68:30	60	135	227	17.4	16,900	219
	1908	FD155	H5	1637/1726	55:46N/50:31N	68:30/70:17	60	135	224	17.7	13,700	215
	1909	FD156	H6	1729/1817	50:18N/44:57N	70:20/73:38	60	135	221	17.6	16,700	218
	1910	FD157	H7	1817/1906	45:13N/30:00E	64:00	60	135	207	9.4	3,800	50
717 EN	1930	WE1484	N1	1141/1235	35:00S/29:14S	64:00	59.3	135	208	9.5	3,600	48
	1931	WE1485	N2	1236/1330	29:00S/23:00S	64:00	60	135	207	9.4	3,800	50
	1932	WE1486	N3	1331/1426	22:46S/16:32S	64:00	60	135	205	9.8	4,600	63
	1933	WE1487	N4	1429/1516	16:18S/13:04S	64:00	60	135	203	8.5	3,800	41
716 ES	1934	WE1480	N1	1240/1325	35:00S/40:02S	64:00	45	165	215	15.7	≤ 430	3
	1935	WE1481	N2	1326/1415	40:15S/45:17S	64:00	45	165	219	16.6	620	12
	1936	WE1482	N3	1418/1504	45:30S/50:06S	64:00	45	165	219	15.8	2,700	39
	1937	WE1483	N4	1505/1547	50:19S/52:47S	64:00	45	165	219	14.2	2,600	33

Table 4.2 (continued)

AC No:	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	St ⁹⁰
23 July 1959 Mission 79A												
717	1938	WE1508	N1	1339/1435	35:00S/40:00S	64:00	40	170	213	23.7	≤ 440	4
ES	1939	WE1510	N3	1520/1610	39:48S/35:00S	64:00	40	170	213	21.2	≤ 320	3
716	1940	WE1488	N1	1300/1358	35:00S/40:00S	64:00	50	160	213	16.9	3,100	52
ES	1941	WE1490	N3	1801/1852	39:48S/35:00S	64:00	50	160	213	14.9	2,500	36
24 July 1959 Mission 79B												
705	1920	WPL1144	N1	1222/1317	44:00N/49:44N	71:00	50	161	214	16.1	6,800	58
PN	1921	WPL1145	N2	1317/1409	50:10N/55:55N	71:00	50	160	218	14.7	7,300	79
	1922	WPL1146	N3	1416/1506	56:08N/61:58N	71:00	50	160	223	14.0	9,700	107
	1924	FD055	H1	1416/1506	56:08N/61:58N	71:00	50	160	223	30.9	13,700	97
	1923	WPL1147	N4	1508/1602	62:11N/68:00N	71:00	50	162	229	14.8	12,400	121
	1925	FD056	H2	1508/1602	62:11N/68:00N	71:00	50	162	229	32.5	15,300	136
	1926	FD057	H3	1610/1700	67:45N/62:08N	70:13/68:30	55	157	229	24.7	16,700	171
	1927	FD058	H4	1708/1750	61:54N/56:13N	68:30	55	156	225	21.1	17,600	175
	1928	FD059	H5	1752/1841	55:59N/50:29N	68:30/70:16	55	156	223	24.8	14,300	152
	1929	FD060	H6	1843/1926	50:15N/45:13N	70:22/73:47	55	157	217	22.6	14,500	151
715	1910	WPL1060	N1	1156/1247	44:00N/49:52N	71:00	60	135	220	8.4	15,700	174
PN	1911	WPL1061	N2	1248/1341	49:59N/55:54N	71:00	60	135	223	8.6	16,400	177
	1912	WPL1062	N3	1342/1430	56:05N/61:34N	71:00	60	135	226	7.6	15,900	199
	1914	FD133	H1	1342/1430	56:05N/61:34N	71:00	60	135	226	17.1	16,700	233
	1913	WPL1063	N4	1433/1523	61:48N/67:46N	71:00	60	135	230	7.7	17,100	205
	1915	FD134	H2	1433/1523	61:48N/67:46N	71:00	60	135	230	17.4	17,200	201
	1916	FD135	H3	1533/1624	67:26N/61:50N	70:05/68:30	65	121	230	13.0	13,300	226
	1917	FD136	H4	1625/1709	61:33N/56:06N	68:30	65	121	228	11.1	16,300	214
	1918	FD137	H5	1713/1758	55:52N/50:32N	68:30/70:18	65	121	225	11.6	16,000	211
	1919	FD138	H6	1801/1848	50:18N/45:28N	70:22/73:50	65	121	223	12.4	17,400	239
26 July 1959 Mission 79X												
705	1942	WPL1068	N1	1202/1252	44:00N/38:16N	71:00	58.2/60	134	215	8.4	11,600	103
PR	1946	FD289	H1	1202/1252	44:00N/38:16N	71:00	58.2/60	134	215	19.0	12,000	137
	1943	WPL1069	N2	1254/1343	38:02N/32:10N	71:00	60	136	215	8.3	12,300	117
	1944	WPL1070	N3	1345/1435	31:56N/26:05N	71:00	60	135	215	8.4	10,000	126
	1945	WPL1071	N4	1437/1527	25:51N/20:00N	71:00	60	136	215	8.5	12,000	122
714	1947	WPL1008	N1	1141/1242	44:00N/38:09N	71:00	61.5/64.1	125	209	8.4	15,400	211
PR	1951	FD175	H1	1141/1242	44:00N/38:09N	71:00	61.5/64.1	125	209	19.4	14,200	186
	1948	WPL1009	N2	1243/1325	37:55N/32:04N	71:00	64/64.9	122	209	5.5	16,800	204
	1952	FD176	H2	1243/1325	37:55N/32:04N	71:00	64/64.9	122	209	12.4	17,200	193
	1949	WPL1010	N3	1326/1417	31:50N/26:05N	71:00	65	121	209	6.3	16,100	188
	1953	FD177	H3	1326/1417	31:50N/26:05N	71:00	65	121	209	14.5	15,900	174
	1950	WPL1011	N4	1427/1511	25:51N/20:00N	71:00	65	121	209	5.5	15,600	184
	1954	FD178	H4	1427/1511	25:51N/20:00N	71:00	65	121	209	12.6	15,800	141
715	1955	WPL1064	N1	1233/1320	44:00N/38:21N	71:00	61/64.8	121	220	5.9	16,400	198
PR	1959	FD493	H1	1233/1320	44:00N/38:21N	71:00	61/64.8	121	220	13.7	13,400	246
	1956	WPL1065	N2	1323/1415	38:07N/32:07N	71:00	64.9/65.5	120	216	6.1	17,800	188
	1960	FD494	H2	1323/1415	38:07N/32:07N	71:00	64.9/65.5	120	216	13.9	16,400	227
	1957	WPL1066	N3	1419/1507	31:53N/26:07N	71:00	65.7/66.3	118	216	5.3	17,500	201
	1961	FD495	H3	1419/1507	31:53N/26:07N	71:00	65.7/66.3	118	216	12.1	13,900	225
	1958	WPL1067	N4	1509/1605	25:53N/20:00N	71:00	66.3/67	118	215	6.2	16,600	208
	1962	FD496	H4	1509/1605	25:53N/20:00N	71:00	66.3/67	118	215	13.9	17,800	228

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr. ⁹⁰
28 July 1959 Mission 80												
714 RO	1963	WP1793	N1	1200/1300	18:31N/17:56N	67:05	50	160	207	18.1	960	9
	1964	WP1794	N2	1339/1407	18:40N/18:10N	67:18/67:05	52	156	205	7.8	1,400	17
	1967	FD439	H1	1302/1407	18:40N/18:10N	67:05	52	156	205	39.9	2,100	24
	1965	WP1795	N3	1410/1520	18:24N/18:59N	67:05	54	152	202	18.0	3,300	33
	1968	FD440	H2	1410/1523	18:24N/18:59N	67:05	54	152	202	41.5	3,400	33
	1966	WP1796	N4	1522/1636	19:13N/20:17N	67:05/67:11	56	147	202	17.0	5,900	48
	1969	FD441	H3	1524/1636	19:20N/20:17N	67:05/67:11	56	147	202	36.9	6,000	40
	1970	FD442	H4	1639/1728	20:10N/18:52N	67:18/67:05	58	141	205	22.2	6,200	56
717	1971	FD443	H5	1742/1825	19:13N/17:55N	67:05	60	135	207	17.1	8,500	96
	1972	FD444	H6	1827/1932	18:09N/18:10N	67:05	62	130	208	23.0	8,700	133
715 RO	1973	WP2205	N1	1202/1322	18:31N/20:17N	67:05/67:08	64	124	210	10.7	12,500	138
	1977	FD469	H1	1202/1322	18:31N/20:17N	67:05/67:08	64	124	210	24.6	13,900	147
	1974	WP2206	N2	1334/1509	19:08N/17:32N	67:18/67:05	65.6/66.2	118	210	11.0	15,000	172
	1978	FD470	H2	1334/1509	19:08N/17:32N	67:18/67:05	65.6/66.2	118	210	24.9	14,400	203
	1975	WP2207	N3	1542/1723	19:28N/18:10N	67:18/67:05	67.3/67.3	114	211	10.5	15,900	177
	1979	FD471	H3	1542/1723	19:28N/18:10N	67:18/67:05	67.3/67.3	114	211	24.1	20,000	224
	1976	WP2208	N4	1731/1946	18:59N/19:33N	67:05	68.6/71	109	211	11.9	17,500	215
	1980	FD472	H4	1731/1946	18:59N/19:33N	67:05	68.6/71	109	211	27.2	21,000	250
718 EO	1981	WE1516	N1	1153/1315	35:00 S	62:00	48	160	215	25.2	840	12
	1982	WE1517	N2	1320/1452	35:00 S	62:00	53	155	213	23.6	2,600	50
	1983	WE1518	N3	1455/1640	35:00 S	62:00	58	140	212	20.0	4,500	65
	1984	WE1519	N4	1645/1920	35:00 S	62:00	62	130	211	23.9	5,800	82
717 EO	1985	WE1512	N1	1125/1220	35:00 S	62:00	43	170	217	21.1	≤ 440	4
	1986	WE1513	N2	1236/1406	35:00 S	62:00	63.8/65.4	120	210	11.0	7,500	117
	1987	WE1514	N3	1411/1606	35:00 S	62:00	67/68.8	110	209	11.1	8,600	112
	1988	WE1515	N4	1610/1830	35:00 S	62:00	69.6/70	108	209	12.6	10,500	132
30 July 1959 Mission 81A												
718 ES	1989	WE1529	N2	1225/1311	35:00 S/40:00 S	64:00	60	135	210	8.0	4,500	69
	1990	WE1531	N4	1819/1900	39:46 S/35:00 S	64:00	60	135	210	7.1	5,200	69
716 ES	1991	WE1520	N1	1159/1244	35:00 S/40:00 S	64:00	64.5	121	210	5.7	7,200	96
	1992	WE1522	N3	1753/1831	39:46 S/35:00 S	64:00	69.5/70.7	112	210	3.5	12,700	152
31 July 1959 Mission 81B												
714 RN	1993	WP1689	N1	1226/1240	16:00N/21:14N	64:00	60	134	208	4.1	3,700	47
	1994	FD385	H1	1314/1359	21:28N/26:42N	64:00	59.7	133	208	18.0	9,200	109
	1995	FD387	H3	1402/1448	26:56N/32:10N	64:00	60	134	215	17.3	8,700	100
	1996	FD388	H4	1451/1538	32:24N/38:00N	64:00	60	135	214	17.9	12,700	139
	1997	FD389	H5	1544/1618	38:00N/33:54N	64:14/64:35	65	121	210	9.7	17,400	178
	1998	FD390	H6	1621/1808	33:40N/21:05N	64:36/66:38	65	119	212	29.3	16,500	173
715 RS	1999	WP1685	N1	1157/1246	16:00N/10:20N	64:00	60	135	211	8.4	6,600	74
	2000	WP1686	N2	1252/1335	10:06N/04:26N	64:00	59/60	135	210	7.5	5,700	55
	2001	FD379	H1	1346/1431	04:05N/01:35 S	64:00	60.2/60.2	135	212	17.2	5,500	59
	2002	FD380	H2	1432/1524	01:49 S/07:45 S	64:00	60.1/60.8	135	212	19.9	6,000	58
	2003	FD381	H3	1528/1614	07:45 S/02:07 S	64:00	64.8/65.1	121	205	13.7	17,700	175
	2004	FD382	H4	1617/1707	01:53 S/04:06N	64:00	65	121	204	14.6	16,500	195
	2005	FD383	H5	1708/1800	04:20N/10:19N	64:00/64:12	65	121	200	15.8	14,500	158
	2006	FD384	H6	1803/1853	10:33N/16:00N	64:16/66:14	65	121	200	15.2	11,600	167

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	TAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sp. 90
4 August 1959 Mission 82												
705 RN	2041	FD409	H1	1210/1245	21:05N/25:06N	66:38/65:55	62.7/63.5	125	209	11.1	14,800	175
	2042	FD410	H2	1247/1323	25:19N/29:29N	65:53/65:16	63.5/63.7	124	211	11.1	16,400	228
	2043	FD411	H3	1325/1359	29:43N/33:46N	65:13/64:36	63.9/64.4	124	214	10.1	16,100	210
	2014	FD412	H4	1402/1437	34:00N/38:00N	64:35/64:14	64.6/64.4	122	215	10.0	16,300	216
	2007	WP1521	N1	1440/1525	38:00N/32:41N	64:00	64.3/65.7	120	218	5.3	16,700	188
	2008	WP1522	N2	1527/1614	32:27N/27:04N	64:00	65.7/66.4	118	219	5.1	16,300	190
	2009	WP1523	N3	1616/1707	26:47N/24:00N	64:00	66.4/67.3	115	216	5.3	14,500	192
	2015	FD413	H5	1616/1707	26:47N/24:00N	64:00	66.4/67.3	115	216	12.0	15,500	184
2010	WP1524	N4	1708/1749	20:46N/16:00N	64:00	66.9/67.9	112	213	4.0	18,300	205	
	2016	FD414	H6	1708/1749	20:46N/16:00N	64:00	66.9/67.9	112	213	9.2	14,800	205
714 RS	2021	FD397	H1	1140/1234	16:00N/10:17N	66:13/64:10	63.4/65.4	121	209	15.5	13,800	172
	2022	FD398	H2	1236/1323	10:03N/04:23N	64:05/64:00	65.4/65.8	119	210	12.8	15,800	178
	2023	FD399	H3	1325/1417	04:09N/01:37S	64:00	66/66.6	116	211	13.1	21,000	262
	2024	FD400	H4	1419/1507	01:51S/07:45S	64:00	66.6/67.4	114	212	11.5	24,000	256
	2017	WP1525	N1	1512/1602	07:45S/01:59S	64:00	67.6/67.8	110	213	4.7	23,000	278
	2018	WP1526	N2	1604/1656	01:45S/04:15N	64:00	67.9/68.7	113	213	5.1	22,000	284
	2019	WP1527	N3	1657/1746	04:29N/10:00N	64:00	68.7/69.6	111	214	4.5	27,000	275
	2025	FD401	H5	1657/1746	04:29N/10:00N	64:00	68.7/69.6	111	214	10.3	25,000	284
2020	WP1528	N4	1748/1838	10:14N/16:00N	64:00	69.5/69.8	104	215	4.0	22,000	273	
	2026	FD402	H6	1748/1838	10:14N/16:00N	64:00	69.5/69.8	104	215	9.2	22,000	253
718 ES	2047	WE1539	N1	1240/1328	35:00S/40:00S	64:00	40	170	213	20.7	1,450	19
	2048	WE1537	N3	1525/1618	39:48S/35:00S	64:00	40	170	213	22.4	1,080	18
716 ES	2049	WE1532	N1	1200/1245	35:00S/40:00S	64:00	50	160	213	13.1	1,340	24
	2050	WE1534	N3	1701/1747	39:48S/35:00S	64:00	50	160	213	13.3	1,990	30
6 August 1959 Mission 83A												
717 ES	2051	WE1540	N1	1223/1304	35:00S/40:00S	64:00	60	135	214	6.9	5,500	75
	2052	WE1542	N3	1747/1829	39:46S/35:00S	64:00	60.5	135	214	7.0	5,400	76
718 ES	2053	WE1544	N1	1159/1244	35:00S/40:00S	64:00	64.7/65.8	120	215	5.4	7,900	118
	2054	WE1546	N3	1754/1900	39:46S/35:00S	64:00	69.3/71	110	215	5.7	17,300	185
7 August 1959 Mission 83B												
705 RN	2027	WP1533	N1	1226/1312	16:00N/21:18N	64:00	64.5/65	121	212	5.7	13,700	154
	2028	WP1534	N2	1314/1400	21:32N/26:50N	64:00	65	121	213	5.6	14,500	178
	2029	WP1535	N3	1402/1447	27:04N/32:14N	64:00	65	121	214	5.5	13,900	182
	2031	FD415	H1	1402/1447	27:04N/32:14N	64:00	65	121	214	12.5	16,800	168
	2030	WP1536	N4	1449/1536	32:28N/38:00N	64:00	65	121	215	5.7	14,700	188
	2032	FD416	H2	1449/1536	32:28N/38:00N	64:00	65	121	215	13.0	18,600	198
	2033	FD417	H3	1541/1618	38:00N/33:47N	64:14/64:36	60	135	213	14.3	14,100	183
	2034	FD418	H4	1620/1658	33:33N/29:29N	64:37/65:18	60	135	212	14.6	10,900	157
2035	FD419	H5	1701/1755	29:09N/25:16N	65:21/65:53	60	135	211	13.2	11,000	140	
	2036	FD420	H6	1738/1813	25:02N/21:05N	65:54/66:38	60	138	210	14.0	8,900	126
715 RS	2037	WP2253	N1	1153/1244	16:00N/10:16N	64:00	65	121	212	6.3	11,800	161
	2038	WP2254	N2	1245/1335	10:02N/04:18N	64:00	65	121	212	6.1	14,800	176
	2039	WP2255	N3	1337/1427	04:04N/01:40S	64:00	65	121	212	6.1	15,700	185
	2041	FD427	H1	1337/1427	04:04N/01:40S	64:00	65	121	212	14.0	15,700	167
	2040	WP2256	N4	1429/1520	01:54S/07:45S	64:00	65	121	212	6.3	14,900	155
	2042	FD428	H2	1429/1520	01:54S/07:45S	64:00	65	121	212	14.3	15,500	165
	2043	FD429	H3	1524/1625	07:45S/00:45S	64:00	60	135	208	23.9	3,900	49
	2044	FD430	H4	1627/1708	00:31S/04:11N	64:00	60	135	208	16.2	5,800	81
2045	FD431	H5	1710/1801	04:25N/10:11N	64:00/64:11	60	135	208	20.4	5,000	63	
	2046	FD432	H6	1803/1854	10:25N/16:00N	64:17/66:14	60	135	208	20.2	5,500	73

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
8 August 1959 Mission 84													
716 ER	2055	WE1548	N1	1133/1208	32:21 S/28:17 S	59:05/59:59	61.8/64	130	210	5.2	7,100	89	
	2056	WE1549	N2	1210/1249	28:04 S/24:06 S	60:03/61:18	64	126	209	5.4	7,300	89	
	2057	WE1550	N3	1253/1328	23:51 S/19:53 S	61:22/62:34	64.3/65.1	126	213	4.6	8,500	124	
	2058	WE1551	N4	1330/1406	19:39 S/15:37 S	62:38/63:22	65.1/64.6	126	215	4.7	8,300	110	
717 ER	2059	WE1552	N1	1416/1454	15:37 S/11:29 S	63:19/63:38	64.9/65.7	121	215	4.6	13,100	158	
	2060	WE1553	N2	1454/1532	11:15 S/07:09 S	63:39/64:08	65.7/66.4	120	215	4.3	16,500	203	
	2061	WE1554	N3	1532/1608	06:55 S/02:03 S	64:12/64:45	66.4/67.4	119	215	3.9	18,800	252	
	2062	WE1555	N4	1610/1646	02:40 S/01:31 N	64:47/65:13	67.5/67.8	115	213	3.7	19,900	246	
718 ER	2063	WE1580	N1	1703/1739	01:33 N/05:37 N	65:13/65:37	67.5/67.9	113	215	3.6	24,000	292	
	2064	WE1581	N2	1741/1817	05:51 N/09:53 N	65:38/66:00	68/68.5	111	215	3.4	20,000	267	
	2065	WE1582	N3	1819/1855	10:09 N/14:16 N	66:02/66:29	68.5/69.1	110	214	3.2	21,000	249	
	2066	WE1583	N4	1857/1933	14:30 N/18:30 N	66:31/67:05	69.1/64.5	110	213	3.4	20,000	231	
21 August 1959 Sea Fish Special 7													
370	2067	SF15	H1	1526/1605	60:00 N/65:00 N	120:00	34.7/35	260	230	69.8	1,880	21	
	2068	SF16	H2	1605/1647	65:00 N/70:00 N	120:00	35/36	259	230	74.2	1,650	19	
	2069	SF17	H3	1647/1729	70:00 N/75:00 N	120:00	36/36.1	258	230	72.9	1,720	18	
	2070	SF18	H4	1729/1809	75:00 N/80:00 N	120:00	36.1/37.2	252	230	65.8	2,600	34	
	2071	SF20	H5	1809/1849	80:00 N/85:00 N	120:00	37.2/37.6	249	230	63.6	2,200	31	
	2341	SF19	H13	1729/1853	75:00 N/85:26 N	120:00/118:00	36.1/37.6	252	230	137.6	2,400	43	
	2072	SF21	H6	1849/1934	85:00 N/90:00 N	120:00	37.6/38.3	248	230	70.0	2,900	39	
	2320	SF22	H14	1849/1934	85:00 N/90:00 N	120:00	37.6/38.3	248	230	69.9	3,200	40	
	2073	SF24	H7	1934/2022	90:00 N/85:00 N	120:00	38.3/39.4	242	230	67.6	2,900	28	
	2074	SF25	H8	2022/2103	85:00 N/80:00 N	120:00	39.4/40.2	234	230	56.0	3,200	44	
	2342	SF23	H15	1934/2115	90:00 N/78:28 N	120:00/120:10	38.3/40.2	242	230	143.4	2,900	33	
	2075	SF26	H9	2103/2143	80:00 N/75:00 N	120:00	40.2/40.6	232	230	52.7	2,200	29	
	2076	SF27	H10	2143/2223	75:00 N/70:00 N	120:00	40.6/41.4	229	230	50.9	3,400	36	
	2077	SF28	H11	2223/2304	70:00 N/65:00 N	120:00	41.4/42.6	226	230	49.8	2,200	25	
	2078	SF29	H12	2304/2345	65:00 N/60:00 N	120:00	42.6/43.4	220	230	46.6	2,000	28	
15 September 1959 Mission 1 A													
715 MN	2079	WP1960	N1	1457/1547	50:17 N/55:13 N	102:30/106:18	55	155	215	12.0	8,700	117	
	2080	WP1959	N2	1551/1646	55:25 N/60:22 N	106:28/111:35	55	155	218	12.8	10,000	121	
	2081	WP1958	N3	1648/1737	60:34 N/65:14 N	111:46/118:40	55	155	218	11.6	8,100	116	
	2083	FD462	H1	1648/1737	60:34 N/65:14 N	111:46/118:40	55	155	218	25.3	9,800	124	
	2082	WP1957	N4	1739/1836	65:25 N/69:52 N	119:00/129:00	55	155	220	13.3	9,400	126	
	2084	FD461	H2	1739/1836	65:25 N/69:52 N	119:00/129:00	55	155	220	29.1	9,500	136	
	2085	FD460	H3	1845/1934	69:52 N/65:41 N	129:00/119:30	60	135	221	18.0	13,400	186	
	2086	FD459	H4	1936/2020	65:30 N/60:57 N	119:00/112:18	60	135	219	16.3	12,700	188	
	2087	FD458	H5	2023/2111	60:46 N/55:47 N	112:04/106:49	60.3	135	218	17.8	12,800	185	
	2088	FD457	H6	2116/2208	55:34 N/50:17 N	106:38/102:30	60.3	135	218	19.3	12,000	204	
717 MN	2089	WP1965	N1	1402/1448	50:17 N/55:13 N	102:30/106:18	60.8/63.4	127	218	6.4	11,300	124	
	2090	WP1966	N2	1450/1542	55:25 N/60:22 N	106:28/111:35	63.4/65	123	221	6.4	12,200	154	
	2091	WP1967	N3	1545/1635	60:34 N/65:14 N	111:46/118:40	65/65.5	121	220	5.8	14,900	169	
	2093	FD451	H1	1545/1635	60:34 N/65:14 N	111:46/118:40	65/65.5	121	220	13.1	11,500	178	
	2092	WP1968	N4	1638/1728	65:25 N/69:52 N	119:00/129:00	65.5/66	120	222	5.6	14,900	185	
718 LN	2098	WP981	N1	1510/1555	27:42 N/33:03 N	98:07	61.6/62.6	125	216	6.3	11,400	182	
	2099	WP982	N2	1557/1644	33:17 N/38:38 N	98:07	62.6/63.4	126	218	6.4	11,800	186	
	2100	WP983	N3	1646/1734	38:52 N/44:13 N	98:07	63.4/64.8	121	218	5.8	12,700	190	
	2102	FD163	H1	1646/1734	38:52 N/44:13 N	98:07	63.4/64.8	121	218	13.3	14,000	187	
	2101	WP984	N4	1736/1822	44:27 N/49:48 N	98:07	64.8/65.5	121	218	5.4	10,600	193	
	2103	FD164	H2	1736/1822	44:27 N/49:48 N	98:07	64.8/65.5	121	218	12.3	10,600	194	
	2104	FD165	H3	1834/1917	49:48 N/44:27 N	98:07	65.5/67.4	118	218	10.6	12,600	229	
	2105	FD166	H4	1919/2004	44:13 N/38:52 N	98:07	67.4/68.1	115	218	10.0	12,500	231	
	2106	FD167	H5	2006/2049	38:38 N/33:17 N	98:07	67.9/68.5	115	218	9.5	14,500	222	
	2107	FD168	H6	2081/2137	33:03 N/27:42 N	98:07	68.5/69.4	113	216	9.8	13,800	234	

Table 4.2 (continued)

											dpm/1000 SCF		
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	Total Beta	Sr ⁹⁰	
16 September 1959 Mission 1B													
714 LS	2094	WP773	N1	1510/1549	27:44 N/24:46 N	98:03/94:30	64/65.5	122	213	4.9	11,900	169	
	2095	WP774	N2	1551/1632	24:37 N/21:24 N	94:19/90:40	65.3/65.4	121	214	5.0	11,900	177	
	2097	WP776	N4	1634/1733	22:32 N	90:47	65.4/66.5	116	214	6.8	13,800	195	
	2096	WP775	N3	1735/1830	22:32 N	90:47	66.5/67.5	119	214	5.8	14,600	223	
18 September 1959 Mission 2													
715 MN	2108	WP1941	N1	1812/1857	69:00 N/65:00 N	126:35/118:18	55.2	155	221	10.4	8,000	131	
	2109	WP1942	N2	1859/1944	64:49 N/60:15 N	118:00/111:25	55	155	218	10.6	8,600	129	
	2110	WP1943	N3	1946/2044	60:04 N/55:23 N	111:10/106:24	55	155	218	13.7	8,400	140	
	2111	WP1944	N4	2046/2130	55:09 N/50:17 N	106:14/102:30	55	155	218	10.4	9,000	126	
717 MN	2112	WP1945	N1	1354/1442	50:17 N/55:18 N	102:30/106:23	60	135	221	7.8	13,800	230	
	2113	WP1946	N2	1444/1530	55:32 N/60:21 N	106:32/111:34	60	135	221	7.5	12,100	184	
	2114	WP1947	N3	1532/1623	60:31 N/65:22 N	111:46/118:51	60	135	220	8.3	12,000	161	
	2116	FD476	H1	1543/1623	61:34 N/65:22 N	113:06/118:51	60	135	220	14.8	12,700	161	
	2115	WP1948	N4	1625/1713	65:33 N/69:52 N	119:13/129:00	60	135	222	7.8	13,000	188	
	2117	FD477	H2	1625/1713	65:33 N/69:52 N	119:13/129:00	60	135	222	17.5	13,600	214	
	2118	FD478	H3	1721/1808	69:52 N/65:44 N	129:00/119:33	63	121	222	12.4	11,700	170	
	2119	FD479	H4	1810/1855	65:33 N/60:44 N	119:13/112:03	65	121	221	12.0	14,200	177	
	2120	FD480	H5	1857/1949	60:31 N/55:35 N	111:46/106:37	65	121	222	13.8	14,600	197	
	714 LN	2121	WP1	N1	1144/1231	27:42 N/33:03 N	98:07	60	135	209	8.2	8,500	130
		2122	WP2	N2	1233/1319	33:17 N/38:38 N	98:07	60	135	212	7.8	10,300	151
2123		WP3	N3	1321/1407	38:52 N/44:13 N	98:07	60	135	215	7.7	11,100	166	
2125		FD025	H1	1321/1407	38:52 N/44:13 N	98:07	60	135	215	17.5	12,200	176	
2124		WP4	N4	1409/1458	44:27 N/49:48 N	98:07	60	135	218	8.1	11,900	165	
2126		FD026	H2	1409/1458	44:27 N/49:48 N	98:07	60	135	218	18.3	12,100	191	
2127		FD027	H3	1505/1552	49:48 N/44:27 N	98:07	62.9/64.7	123	218	13.2	11,300	175	
2128		FD028	H4	1554/1641	44:13 N/38:52 N	98:07	64.7/65	121	215	13.2	13,100	202	
2129		FD029	H5	1643/1726	38:38 N/33:17 N	98:07	64.5	121	212	12.2	10,900	165	
2130		FD030	H6	1728/1814	33:03 N/27:42 N	98:07	64.8	121	209	13.3	12,300	169	
718 LS	2131	WP989	N1	1126/1216	27:44 N/23:40 N	98:05/93:24	60	135	206	8.8	7,200	89	
	2132	WP990	N2	1218/1310	23:12 N/19:23 N	92:53/88:42	60	135	205	9.2	5,400	70	
	2133	WP991	N3	1313/1402	19:12 N/15:04 N	88:31/84:09	60	135	206	8.7	6,000	70	
	2135	FD127	H1	1313/1402	19:12 N/15:04 N	88:31/84:09	60	135	206	19.6	6,200	79	
	2134	WP992	N4	1405/1457	14:53 N/10:56 N	83:59/80:07	60	135	206	9.2	5,000	63	
	2136	FD128	H2	1405/1457	14:53 N/10:56 N	83:59/80:07	60	135	206	20.8	5,600	74	
	2137	FD129	H3	1508/1545	10:56 N/14:53 N	80:07/83:59	64.5	121	209	10.8	14,700	147	
	2138	FD130	H4	1547/1637	15:04 N/19:12 N	84:09/88:31	65	121	211	14.1	12,300	168	
	2139	FD131	H5	1640/1728	19:23 N/23:30 N	88:42/93:13	65	121	212	13.5	11,600	153	
	2140	FD132	H6	1731/1824	23:40 N/27:44 N	93:24/98:05	65	121	215	14.6	11,500	151	
22 September 1959 Mission 3A													
717 MN	2155	FD499	H1	1455/1531	50:17 N/53:20 N	102:30/104:41	40	170	218	33.6	1,580	22	
	2156	FD500	H2	1533/1609	53:30 N/56:29 N	104:48/107:26	40	170	219	33.5	1,800	23	
	2157	FD501	H3	1611/1648	56:39 N/59:34 N	107:34/110:40	40	170	221	34.1	2,500	27	
	2158	FD502	H4	1650/1725	59:43 N/62:33 N	110:49/114:25	40	170	222	32.2	3,000	53	
	2159	FD503	H5	1727/1805	62:41 N/65:21 N	114:37/118:50	40	170	223	34.8	3,300	43	
	2160	FD504	H6	1807/1840	65:30 N/68:00 N	119:08/124:15	40	170	225	30.0	4,800	67	
	2151	WP1497	N1	1846/1933	68:00 N/64:03 N	124:15/116:40	50	160	225	13.0	6,300	111	
	2152	WP1498	N2	1940/2019	63:50 N/59:36 N	116:23/110:42	50	160	224	10.8	8,400	103	
	2153	WP1499	N3	2020/2102	59:26 N/54:58 N	110:28/106:05	50	160	224	11.7	8,100	135	
	2154	WP1500	N4	2104/2148	54:49 N/50:17 N	105:54/102:30	50	160	222	12.3	6,500	90	
714 LN	2143	FD181	H1	1445/1512	27:43 N/30:12 N	98:07	40	170	218	25.6	≤ 220	3	
	2144	FD182	H2	1514/1541	30:24 N/32:52 N	98:07	40	170	218	25.6	≤ 220	2	
	2141	WP9	N1	1745/1832	43:45 N/39:48 N	98:07	45	165	218	16.2	1,910	15	
	2142	WP10	N2	1838/1912	39:29 N/35:44 N	98:07	45	165	218	12.6	910	8	
718 LN	2145	WP5	N1	1344/1430	27:43 N/32:37 N	98:07	50	161	215	13.6	750	12	
	2146	WP6	N2	1431/1506	32:50 N/37:45 N	98:07	50	160	215	10.0	≤ 570	12	
23 September 1959 Mission 3B													
705 LN	2161	WP13	N1	2025/2112	27:43 N/32:44 N	98:07	50	160	205	14.4	1,280	17	
	2162	WP14	N2	2113/2156	32:51 N/37:43 N	98:07	50	160	206	13.0	1,380	20	
	2163	WP15	N3	2158/2242	37:55 N/42:51 N	98:07	50	160	207	13.2	2,600	34	
	2164	WP16	N4	2244/2331	43:05 N/48:00 N	98:07	50	160	213	13.7	4,400	66	

Table 4, 2 (continued)

											dpm/1000 SCF		
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (K)	Temp. (°K)	10 ³ SCF	Total Beta	90 Gr.	
25 September 1959 Mission 4													
718 LN	2165	WP25	N1	1514/1558	27:43 N/33:03 N	98:07	63.6/64.3	123	214	5.8	11,400	206	
	2166	WP26	N2	1600/1647	33:17 N/38:37 N	98:07	64.3/65.7	121	215	5.7	13,300	212	
	2167	WP27	N3	1649/1734	38:51 N/44:11 N	98:07	65.7/66	119	218	5.1	13,700	212	
	2168	WP28	N4	1736/1821	44:25 N/49:45 N	98:07	66/66	118	220	4.9	12,000	218	
705 LS	2169	WP21	N1	1443/1530	27:32 N/23:49 N	97:49/93:22	63/64.2	125	213	6.4	10,500	174	
	2170	WP22	N2	1532/1623	23:40 N/19:37 N	93:10/88:42	64/65.6	122	213	6.3	11,400	153	
	2171	WP23	N3	1625/1715	19:26 N/15:15 N	88:30/84:17	65.5/66	119	212	5.8	13,100	177	
	2172	WP24	N4	1717/1804	15:05 N/10:40 N	84:07/79:56	66/66.3	118	211	5.4	14,500	234	
29 September 1959 Mission 5A													
718 LN	2193	WP33	N1	1514/1601	27:43 N/33:10 N	98:07	60	135	219	7.7	8,300	122	
	2194	WP34	N2	1602/1648	33:17 N/38:37 N	98:07	60	135	219	7.6	7,300	139	
	2195	WP35	N3	1650/1734	38:51 N/44:11 N	98:07	60	135	219	7.2	10,800	157	
	2196	WP36	N4	1737/1820	44:25 N/49:45 N	98:07	60	135	219	7.1	11,200	172	
705 LS	2197	WP29	N1	1439/1525	27:43 N/24:15 N	98:07/93:54	60	135	215	7.7	7,400	100	
	2198	WP30	N2	1527/1617	24:06 N/20:26 N	93:43/89:37	60	135	214	8.5	7,700	111	
	2199	WP31	N3	1619/1706	20:16 N/16:32 N	89:26/85:35	60	135	213	7.9	5,900	87	
	2200	WP32	N4	1708/1755	16:22 N/12:35 N	85:24/81:43	60	135	212	8.0	5,900	88	
30 September 1959 Mission 5B													
716 MN	2182	FD433	H1	1429/1504	50:17 N/53:20 N	102:31/104:54	45	165	223	26.4	380	5	
	2181	FD434	H2	1506/1540	53:29 N/56:27 N	104:50/107:25	45	165	224	25.1	1,290	16	
	2180	FD435	H3	1542/1618	56:38 N/59:32 N	107:36/110:37	45	165	225	26.5	3,200	53	
	2179	FD436	H4	1623/1703	59:43 N/62:31 N	110:50/114:25	45	165	224	30.0	5,000	71	
	2178	FD437	H5	1705/1744	62:41 N/65:21 N	114:37/118:53	45	165	220	29.4	5,100	58	
	2177	FD438	H6	1747/1822	65:30 N/68:00 N	119:09/124:15	45	165	217	27.2	5,700	70	
	2173	WP1357	N1	1826/1907	68:00 N/63:50 N	124:15/120:05	55	155	221	9.5	9,900	156	
	2174	WP1358	N2	1909/1939	63:36 N/60:20 N	119:53/117:25	55	155	223	6.9	13,200	187	
	2175	WP1359	N3	1942/2019	60:06 N/55:55 N	117:18/114:45	55	155	224	8.5	10,800	197	
	2176	WP1360	N4	2021/2034	55:40 N/54:15 N	114:40/111:17	55	155	223	3.0	15,600	227	
	717 MN	2183	WP1297	N1	1354/1445	50:17 N/55:26 N	102:31/106:30	59.5	135	224	8.2	12,300	198
		2184	WP1298	N2	1447/1536	55:39 N/60:36 N	106:42/111:52	60	135	222	7.9	12,000	201
		2185	WP1299	N3	1538/1628	60:48 N/65:30 N	112:06/119:10	60	135	221	8.1	12,500	222
		2187	FD445	H1	1838/1628	60:48 N/65:30 N	112:06/119:10	60	135	221	18.4	15,700	224
		2186	WP1300	N4	1630/1728	65:41 N/69:53 N	119:28/129:00	60	135	219	9.5	13,100	218
		2188	FD446	H2	1630/1728	65:41 N/69:53 N	119:28/129:00	60	135	219	21.5	12,800	236
2189		FD447	H3	1734/1822	69:53 N/65:41 N	129:00/119:28	64.5	121	221	13.1	12,100	214	
2190		FD448	H4	1824/1906	65:30 N/60:48 N	119:10/112:06	64.8	121	221	11.3	12,100	237	
2191		FD449	H5	1909/1952	60:36 N/55:39 N	111:52/106:42	65	121	222	11.4	11,800	201	
2192		FD450	H6	1954/2039	55:26 N/50:17 N	106:30/102:31	65	121	221	12.0	13,300	230	
1 October 1959 Mission 6A													
705 LN	2221	WP41	N1	1517/1606	27:43 N/32:18 N	98:07	40	170	216	20.4	< 340	4	
	2222	WP42	N2	1607/1655	32:29 N/37:16 N	98:07	40	170	216	19.7	< 350	3	
	2223	WP43	N3	1658/1744	37:27 N/42:08 N	98:07	40	170	217	19.1	< 120	< 1	
	2224	WP44	N4	1748/1832	42:30 N/47:00 N	98:07	40	170	218	18.2	1,900	22	
718 LN	2225	WP37	N1	1428/1521	26:48 N/32:46 N	98:07	50	160	199	16.9	< 340	3	
	2226	WP38	N2	1523/1608	32:53 N/37:56 N	98:07	50	160	204	13.8	3,300	43	
	2227	WP39	N3	1609/1656	38:03 N/42:52 N	98:07	50	160	212	13.8	5,800	88	
	2228	WP40	N4	1658/1739	43:05 N/48:00 N	98:07	50	160	220	11.6	5,800	76	
2 October 1959 Mission 6B													
717 MN	2205	FD325	H1	1432/1510	50:17 N/52:14 N	102:31/103:54	30	175	231	44.1	670	7	
	2206	FD326	H2	1511/1559	52:21 N/55:06 N	103:59/106:12	30	175	231	55.6	< 102	< 1	
	2207	FD327	H3	1602/1630	55:13 N/56:53 N	106:18/107:50	30	175	233	32.8	< 174	< 1	
	2208	FD328	H4	1632/1654	57:00 N/58:09 N	107:57/109:07	30	175	233	25.3	< 230	< 1	
	2209	FD329	H5	1655/1730	58:16 N/60:11 N	109:12/111:23	30	175	233	39.7	< 360	3	
	2210	FD330	H6	1731/1751	60:19 N/61:15 N	111:31/112:42	30	175	232	23.1	< 680	10	
	2201	WP2177	N1	1753/1835	61:15 N/57:22 N	112:42/108:18	35	173	229	19.5	< 179	1	
	2202	WP2178	N2	1836/1853	57:12 N/55:54 N	108:09/106:57	35	173	230	7.8	< 450	< 3	
	2203	WP2179	N3	1853/1714	55:45 N/53:30 N	106:47/104:54	35	173	230	9.5	< 370	< 1	
	2204	WP2180	N4	1714/1742	53:21 N/50:17 N	104:45/102:31	35	173	229	13.0	< 620	5	
716 MN	2215	FD319	H1	1355/1436	50:17 N/53:08 N	102:31/104:36	40	170	228	36.8	1,640	23	
	2216	FD320	H2	1437/1516	53:18 N/56:07 N	104:43/107:07	40	170	228	35.0	< 250	2	
	2217	FD321	H3	1519/1558	56:17 N/59:02 N	107:17/110:04	40	170	228	35.0	< 330	2	
	2218	FD322	H4	1602/1639	59:12 N/61:48 N	110:15/113:25	40	170	226	33.5	< 110	14	
	2219	FD323	H5	1643/1717	61:57 N/64:30 N	113:37/117:26	40	170	223	31.1	< 460	2	
	2220	FD324	H6	1721/1756	64:40 N/67:00 N	117:42/122:00	40	170	221	31.8	< 560	3	
	2211	WP2105	N1	1805/1852	67:00 N/63:12 N	122:00/115:15	50	160	219	13.5	3,600	48	
	2212	WP2106	N2	1853/1927	62:55 N/58:56 N	115:00/109:57	50	160	218	9.7	3,100	38	
	2213	WP2107	N3	1929/2011	58:45 N/44:34 N	109:44/105:47	50	160	218	12.1	3,100	38	
	2214	WP2108	N4	2013/2058	54:25 N/50:17 N	105:32/102:31	50	160	223	12.7	3,500	44	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude ("W)	Altitude (1000 ft.)	LAS (Kt)	Temp. ("K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
6 October 1959 Mission 7													
716 MN	2233	FD 337	H1	1424/1514	50:17N/55:26N	102:31/106:30	55	155	217	25.9	9,900	216	
	2234	FD 338	H2	1516/1605	55:39N/60:36N	106:42/111:52	55	155	222	25.1	9,700	240	
	2235	FD 339	H3	1610/1658	60:48N/65:30N	112:06/119:10	55	155	224	24.3	11,300	235	
	2236	FD 340	H4	1701/1749	65:41N/69:52N	119:28/129:00	55	155	223	24.4	11,700	281	
	2229	WP1441	N1	1801/1850	69:52N/65:41N	129:00/119:28	60	135	223	7.8	10,300	201	
	2237	FD 341	H5	1801/1850	69:52N/65:41N	129:00/119:28	60	135	223	17.6	13,000	303	
	2230	WP1442	N2	1852/1940	65:30N/60:48N	119:10/112:06	60	135	223	7.7	13,400	210	
	2238	FD 342	H6	1852/1940	65:30N/60:48N	119:10/112:06	60	135	223	17.4	11,500	297	
	2231	WP1443	N3	1942/2035	60:36N/55:39N	111:52/106:42	60	135	221	8.6	12,500	223	
	2232	WP1444	N4	2037/2127	55:26N/50:17N	106:30/102:31	60	135	219	8.2	12,000	242	
715 MN	2239	WP2049	N1	1354/1449	50:17N/55:26N	102:31/106:30	60.2/65.2	124	219	6.9	9,800	160	
	2240	WP2050	N2	1451/1543	55:39N/60:36N	106:42/111:52	65.2/65.8	120	221	5.9	11,200	177	
	2241	WP2051	N3	1545/1634	60:48N/65:30N	112:06/119:10	65.8/66.2	118	221	5.3	10,000	162	
	2243	FD 331	H1	1545/1634	60:48N/65:30N	112:06/119:10	65.8/66.2	118	221	12.0	12,100	184	
	2242	WP2052	N4	1636/1728	65:41N/69:52N	119:28/129:00	66.2/67.2	116	222	5.3	8,700	162	
	2244	FD 332	H2	1636/1728	65:41N/69:52N	119:28/129:00	66.2/67.2	116	222	12.1	9,500	153	
	2245	FD 333	H3	1731/1823	69:52N/65:41N	129:00/119:28	67.2/67.7	113	222	11.2	11,100	169	
	2246	FD 334	H4	1824/1912	65:30N/60:48N	119:10/112:06	67.7/68.2	112	221	10.2	10,900	173	
	2247	FD 335	H5	1914/2009	60:36N/55:39N	111:52/106:42	68.2/69	111	221	11.2	11,400	195	
	2248	FD 336	H6	2010/2058	55:26N/50:17N	106:30/102:31	69/70	109	220	9.4	11,800	155	
714 LN	2249	WP45	N1	1514/1600	27:43N/33:03N	98:07	65.6/66	118	214	5.3	11,100	208	
	2250	WP46	N2	1602/1650	33:17N/38:37N	98:07	66.2/66.6	117	215	5.2	12,100	194	
	2251	WP47	N3	1652/1739	38:51N/44:11N	98:07	66.6/67.4	116	219	4.8	13,500	221	
	2253	WC235	H1	1652/1739	38:51N/44:11N	98:07	66.6/67.4	116	219	11.0	14,300	242	
	2252	WP48	N4	1741/1826	44:25N/49:55N	98:07	67.2/67.6	114	219	4.5	11,300	186	
	2254	WC236	H2	1741/1826	44:25N/49:55N	98:07	67.2/67.6	114	219	10.1	11,000	225	
	2255	WC237	H3	1835/1924	49:55N/44:25N	98:07	67/68.6	112	219	10.3	15,200	239	
	2256	WC238	H4	1927/2013	44:11N/38:54N	98:07	68.6/69.4	110	219	9.4	13,100	237	
	2257	WC239	H5	2015/2102	38:37N/33:17N	98:07	69.5/70.2	108	215	9.3	12,300	214	
	2258	WC240	H6	2105/2152	33:03N/27:43N	98:07	70.2/71	107	214	8.8	12,900	235	
705 LS	2259	WP49	N1	1436/1523	27:43N/24:13N	98:07/93:51	62.7/63.6	128	215	6.6	10,300	174	
	2260	WP50	N2	1525/1608	24:04N/20:26N	93:40/89:37	63.4/64.7	123	212	5.5	10,400	161	
	2261	WP51	N3	1610/1654	20:16N/16:32N	89:26/85:35	64.9/65.4	121	210	5.5	11,500	168	
	2262	WP52	N4	1657/1742	16:22N/12:35N	85:24/81:43	65.4/66	120	211	5.4	13,400	140	
8 October 1959 Mission 8A													
705 LN	2276	WP54	N1	1516/1559	27:43N/32:49N	98:07	60	135	208	7.5	8,000	126	
	2277	WP53	N2	1603/1648	33:17N/38:37N	98:07	60	135	212	7.7	8,000	155	
	2278	WP56	N3	1650/1735	38:51N/44:11N	98:07	60	135	215	7.6	10,200	168	
	2279	WP55	N4	1736/1821	44:25N/49:45N	98:07	60	135	217	7.4	10,700	168	
714 LS	2280	WP57	N1	1442/1529	27:48N/24:13N	98:12/93:51	60	135	206	8.2	8,000	123	
	2281	WP58	N2	1530/1620	24:04N/20:26N	93:40/89:37	60	135	205	8.8	8,000	124	
	2282	WP59	N3	1623/1709	20:11N/16:32N	89:22/85:35	60	135	204	8.3	6,800	95	
	2284	WC283	H1	1622/1709	20:16N/16:32N	89:26/85:35	60	135	204	19.2	8,200	97	
	2283	WP60	N4	1711/1800	16:22N/12:35N	85:24/81:43	60	135	206	8.6	5,400	66	
	2285	WC284	H2	1711/1800	16:22N/12:35N	85:24/81:43	60	135	206	19.4	5,900	62	
	2286	WC285	H3	1810/1856	12:35N/16:22N	81:43/85:24	65	121	215	12.7	8,100	140	
	2287	WC286	H4	1858/1936	16:32N/19:40N	85:35/88:49	65	121	212	10.7	8,300	142	
	2288	WC287	H5	1945/2029	20:26N/24:04N	89:37/93:40	65	121	210	12.6	7,900	169	
	2289	WC288	H6	2032/2118	24:13N/27:48N	93:51/98:07	65	121	213	12.7	8,600	41	
9 October 1959 Mission 8B													
715 MO	2266	FD 481	H1	1408/1437	48:21N/47:00N	101:18/102:43	30	175	224	34.5	≤ 250	< 1	
	2264	WP1854	N2	1443/1532	46:44N/48:20N	102:43/101:55	40	170	219	20.2	1,990	29	
	2265	WP1856	N4	1538/1636	48:20N	102:30/101:33	50	160	218	16.6	6,700	104	
717 MO	2267	WP909	N1	1346/1426	48:20N/46:29N	101:22/100:23	45	165	218	13.8	4,100	71	
	2271	FD 361	H1	1346/1426	48:20N/46:29N	101:22/100:23	45	165	218	30.9	4,800	55	
	2268	WP910	N2	1429/1519	46:46N/46:39N	100:17/102:18	50	160	218	14.3	7,900	120	
	2272	FD 362	H2	1429/1519	46:46N/46:39N	100:17/102:18	50	160	218	31.6	8,100	115	
	2269	WP911	N3	1523/1623	46:39N	101:47/101:30	55	155	219	14.0	9,900	182	
	2273	FD 363	H3	1523/1623	46:39N	101:47/101:30	55	155	219	30.6	10,700	180	
	2270	WP912	N4	1628/1727	46:39N/46:44N	100:55/102:44	60	135	220	9.7	11,600	200	
	2274	FD 364	H4	1628/1727	46:39N/46:44N	100:55/102:44	60	135	220	22.0	12,300	227	
	2275	FD 365	H5	1733/1807	46:44N/48:20N	101:42/101:18	64	123	218	9.7	15,000	257	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	9r 90	
13 October 1959 Mission 9													
717 MN	2292	FD 307	H1	1433/1507	50:17N/52:09N	102:31/103:49	30	175	224	41.0	280	1	
	2293	FD 308	H2	1510/1542	52:14N/54:00N	103:54/105:16	30	175	224	38.1	150	≤ 1	
	2294	FD 309	H3	1544/1614	54:07N/55:55N	105:24/106:55	30	175	224	35.1	330	3	
	2295	FD 310	H4	1616/1647	55:04N/57:45N	107:03/108:44	30	175	223	36.4	550	4	
	2296	FD 311	H5	1649/1718	57:52N/59:35N	108:50/110:40	30	175	223	34.0	670	6	
	2297	FD 312	H6	1720/1752	59:42N/61:25N	110:47/112:55	30	175	222	37.7	380	2	
	2290	WP2033	N1	1754/1826	61:25N/59:50N	112:55/109:52	35	173	220	15.4	1,200	36	
	2291	WP2034	N2	1827/2003	58:40N/50:17N	109:41/102:31	35	173	221	46.1	250	28	
716 MN	2302	FD 283	H1	1402/1443	50:17N/53:06N	102:31/104:34	40	170	217	38.4	2,600	40	
	2303	FD 284	H2	1444/1522	53:15N/56:04N	104:40/107:03	40	170	218	35.4	2,800	50	
	2304	FD 286	H4	1624/1610	56:12N/58:54N	107:11/109:55	40	170	218	42.9	3,100	40	
	2305	FD 287	H5	1615/1654	59:04N/61:43N	110:04/113:16	40	170	219	36.3	2,300	36	
	2306	FD 288	H6	1710/1726	62:53N/64:07N	113:30/117:20	40.5	170	219	15.1	2,500	32	
	2298	WP1449	N1	1808/1845	67:00N/63:12N	122:00/115:23	50	160	221	10.4	8,200	111	
	2299	WP1450	N2	1847/1923	63:02N/59:03N	115:07/110:03	50	160	220	10.3	8,300	115	
	2300	WP1451	N3	1924/1959	58:51N/54:42N	109:52/105:50	50	160	219	10.1	4,000	66	
718 LN	2345	WP69	N1	1515/1558	27:43N/32:24N	98:07	45	165	205	15.8	390	7	
	2346	WP70	N2	1600/1638	32:35N/37:16N	98:07	45	165	205	13.9	420	2	
	2347	WP71	N3	1640/1719	37:27N/42:08N	98:07	45	165	205	14.3	560	6	
	2348	WP72	N4	1721/1804	42:19N/47:00N	98:07	45	165	205	15.8	1,170	15	
714 LN	2349	WP65	N1	1447/1540	27:43N/32:37N	98:07	50	160	197	16.9	1,090	12	
	2350	WP66	N2	1541/1627	32:50N/37:45N	98:07	50	160	197	14.8	620	5	
	2351	WP67	N3	1629/1718	37:58N/42:52N	98:07	50	160	197	15.6	1,250	14	
	2353	WC307	H1	1629/1718	37:58N/42:52N	98:07	50	160	197	34.5	1,570	19	
	2352	WP68	N4	1720/1808	43:05N/48:00N	98:07	50	160	197	15.5	4,000	66	
	2354	WC308	H2	1720/1808	43:05N/48:00N	98:07	50	160	197	34.1	4,700	71	
	2355	WC309	H3	1816/1857	48:00N/43:05N	98:07	55	150	201	22.4	8,400	129	
	2356	WC310	H4	1900/1943	42:52N/37:58N	98:07	55	150	201	23.5	6,300	88	
	2357	WC311	H5	1945/2028	37:45N/32:50N	98:07	55	150	201	23.5	3,600	53	
14 October 1959 Sea Fish Special No. 8													
369	2307	SF30	H1	1744/1823	60:00N/65:00N	120:00	34.7/35	263	223	73.7	460	5	
	2308	SF31	H2	1823/1902	65:00N/70:00N	120:00	35/35.5	258	223	70.9	1,090	14	
	2309	SF32	H3	1902/1941	70:00N/75:00N	120:00	35.5/36	258	223	70.3	1,300	20	
	2310	SF33	H4	1941/2020	75:00N/80:00N	120:00	36/36.7	254	223	67.9	1,510	21	
	2311	SF35	H5	2020/2059	80:00N/85:00N	120:00	36.7/37	253	223	66.5	1,500	20	
	2343	SF34	H14	1941/2059	75:00N/85:00N	120:00	36/37	249	223	131.1	2,000	23	
	2312	SF36	H6	2059/2141	85:00N/90:00N	120:00	37/38	249	223	68.8	2,200	35	
	2343	SF37	H7	2059/2141	85:00N/90:00N	120:00	37/38	249	223	68.8	1,700	29	
	2344	SF38	H8	2141/2229	90:00N/85:00N	120:00	38/38.7	245	223	75.1	1,710	25	
	2315	SF40	H9	2229/2310	85:00N/80:00N	120:00	38.7/39.8	242	223	61.1	1,260	17	
	2344	SF39	H15	2141/2318	90:00N/78:00N	120:00	38/40	245	223	148.3	2,700	34	
	2316	SF41	H10	2310/2352	80:00N/75:00N	120:00	39.8/40.7	237	223	58.9	1,890	32	
	2317	SF42	H11	2352/0035	75:00N/70:00N	120:00	40.7/41.5	233	223	57.9	1,870	26	
	2318	SF43	H12	0035/0118	70:00N/65:00N	120:00	41.5/42.3	228	223	55.0	2,200	30	
	2319	SF44	H13	0118/0159	65:00N/60:00N	120:00	42.3/43.4	225	223	49.7	1,720	29	
15 October 1959 Mission 10A													
705 LN	2358	WP61	N1	1512/1558	27:43N/33:03N	98:07	63.4/64.2	125	213	6.1	10,600	187	
	2359	WP62	N2	1600/1645	33:17N/38:37N	98:07	64.4/65.4	122	214	5.5	11,000	167	
	2360	WP63	N3	1648/1736	38:51N/44:11N	98:07	65/65.6	120	215	5.6	11,200	193	
	2362	WC193	H1	1648/1736	38:51N/44:11N	98:07	65/65.6	120	215	12.8	11,600	190	
	2361	WP64	N4	1738/1825	44:25N/49:45N	98:07	65.6/66.2	118	215	5.4	9,700	202	
	2363	WC194	H2	1738/1825	44:25N/49:45N	98:07	65.6/66.2	118	215	12.2	11,400	219	
	2365	WC196	H4	1839/1918	49:45N/44:25N	98:07	66/67	115	215	9.3	11,000	184	
	2366	WC198	H6	2008/2058	38:37N/32:17N	98:07	68/68	113	213	11.2	10,700	196	
714 LS	2367	WP985	N1	1438/1523	27:43N/24:18N	98:07/93:56	64.6/66	120	214	5.4	12,700	201	
	2368	WP986	N2	1524/1613	24:08N/20:26N	93:45/89:37	66.1/66.8	116	213	5.4	10,700	208	
	2369	WP987	N3	1616/1704	20:16N/16:32N	89:26/85:35	66.9/67.5	114	213	5.0	12,800	209	
	2371	WC199	H1	1616/1704	20:16N/16:32N	89:26/85:35	66.9/67.5	114	213	11.4	12,400	207	
	2370	WP988	N4	1706/1754	16:22N/12:35N	85:24/81:43	67.6/68	113	212	4.8	13,200	222	
	2372	WC200	H2	1706/1754	16:22N/12:35N	85:24/81:43	67.6/68	113	212	11.0	15,600	250	
	2373	WC201	H3	1802/1848	12:35N/16:22N	81:43/85:24	68/68.6	111	212	10.1	13,300	228	
	2374	WC202	H4	1850/1934	16:32N/20:16N	85:35/89:26	68.6/69	110	213	9.1	15,900	247	
	2375	WC203	H5	1937/2022	20:26N/24:04N	89:37/93:40	69/69.8	109	213	9.2	14,900	280	
	2376	WC204	H6	2024/2109	24:13N/27:52N	93:51/98:17	69.8/70.2	108	214	8.7	12,400	208	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude ("W)	Altitude (1000 ft.)	IAS (Kt)	Temp. ("K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Ar ⁹⁰
16 October 1959 Mission 10B												
714 MN	2321	WP2029	N1	1425/1515	50:17N/55:26N	102:31/106:30	55	155	215	12.0	6,100	111
	2322	WP2030	N2	1517/1610	55:39N/60:36N	106:42/111:52	55	155	217	12.6	8,000	180
	2323	WP2031	N3	1612/1703	60:48N/65:30N	112:06/119:10	55	155	219	12.0	9,100	161
	2325	1	H1	1612/1703	60:48N/65:30N	112:06/119:10	55	155	219	26.2	10,300	178
	2324	WP2032	N4	1705/1756	65:41N/69:53N	119:28/129:00	55	155	223	11.6	10,900	174
	2326	2	H2	1705/1756	65:41N/69:53N	119:28/129:00	55	155	223	25.4	13,500	215
	2327	3	H3	1805/1852	69:53N/65:41N	129:00/119:28	60	135	220	17.2	11,600	186
	2328	4	H4	1854/1942	65:30N/60:48N	119:10/112:06	60	135	217	18.0	11,200	199
	2329	5	H5	1944/2029	60:36N/55:39N	111:52/106:42	60	135	217	16.7	11,600	185
	2330	6	H6	2032/2118	55:26N/50:17N	106:30/102:31	60	135	215	17.3	11,400	196
717 MN	2331	WP1253	N1	1407/1454	50:17N/55:26N	102:31/106:30	62.2/64	125	215	6.3	11,100	166
	2332	WP1254	N2	1454/1550	55:39N/60:36N	106:42/111:52	64/65.2	122	216	6.8	10,600	180
	2333	WP1255	N3	1552/1640	60:48N/65:30N	112:06/119:10	65.2/66.2	118	216	5.5	10,200	198
	2335	7	H1	1552/1640	60:48N/65:30N	112:06/119:10	65.2/66.2	118	216	12.5	11,100	183
	2334	WP1256	N4	1642/1731	65:41N/69:53N	119:28/129:00	66.2/67.4	116	216	5.1	10,100	143
	2336	8	H2	1642/1731	65:41N/69:53N	119:28/129:00	66.2/67.4	116	216	11.6	11,000	160
	2337	9	H3	1738/1830	69:53N/65:41N	129:00/119:28	67/68	114	216	11.9	10,800	135
	2338	10	H4	1832/1926	65:30N/60:48N	119:10/112:06	68/68.2	112	215	11.7	12,100	154
	2339	11	H5	1927/2007	60:36N/55:39N	111:52/106:42	68.2/69	111	216	8.5	12,700	145
	2340	12	H6	2008/2058	55:26N/50:17N	106:30/102:31	69/70	109	215	9.9	10,600	170
20 October 1959 Mission 11												
715 MN	2381	FD 301	H1	1426/1503	50:17N/53:11N	102:31/104:36	45	165	215	28.9	1,680	22
	2382	FD 302	H2	1504/1526	53:20N/55:00N	104:43/106:07	45	165	215	17.6	2,400	33
	2383	FD 303	H3	1528/1629	55:06N/59:28N	106:13/110:32	45.1/44.3	165	216	47.8	2,100	22
	2384	FD 304	H4	1631/1708	59:38N/62:23N	110:42/114:10	44.3/45	165	216	29.0	1,770	22
	2385	FD 305	H5	1709/1747	62:34N/65:12N	114:22/118:35	45	165	216	29.4	3,200	24
	2386	FD 306	H6	1749/1823	65:22N/68:00N	118:50/124:15	45	165	218	26.6	3,100	37
	2377	WP1245	N1	1834/1906	68:00N/64:03N	124:15/116:43	55	155	218	7.7	9,600	151
	2378	WP1246	N2	1908/1940	63:52N/59:40N	116:27/110:47	55	155	218	7.6	9,100	157
	2379	WP1247	N3	1941/2022	59:26N/55:06N	110:34/106:13	55	155	218	9.7	7,800	133
	2380	WP1248	N4	2023/2107	54:54N/50:17N	106:03/102:31	55	155	217	10.6	5,800	87
717 MN	2387	WP1329	N1	1359/1449	50:17N/55:26N	102:31/106:30	60	135	217	8.3	9,500	142
	2388	WP1330	N2	1452/1550	55:39N/60:36N	106:42/111:52	60	135	216	9.6	11,400	176
	2389	WP1331	N3	1551/1647	60:48N/65:30N	112:06/119:10	60	135	216	9.2	10,700	217
	2390	WP1332	N4	1648/1743	65:41N/69:53N	119:28/129:00	60	135	216	9.0	12,500	208
705 RO	2391	FD 13	H1	1251/1350	18:30N	67:08	55	155	200	33.6	1,190	21
	2392	FD 14	H2	1358/1457	18:30N	67:08	60	135	207	23.5	7,200	110
	2393	FD 15	H3	1506/1635	18:30N	67:08	65	121	211	25.2	10,000	161
	2394	FD 16	H4	1701/1840	18:30N	67:08	67.5/67.8	112	213	22.3	12,500	240
	2395	FD 17	H5	1842/2021	18:30N	67:08	67.7/69	111	214	21.3	16,000	246
718 RS	2396	WP81	N1	1233/1328	15:00N/09:24N	67:00	60	139	206	10.2	5,200	74
	2397	WP82	N2	1328/1417	09:10N/03:38N	67:00	60	140	209	8.9	4,000	60
	2398	WP83	N3	1419/1507	03:24N/02:13E	67:00	60	138	209	8.7	3,000	57
	2400	FD 7	H1	1419/1507	03:24N/02:13E	67:00	60	138	209	19.6	4,400	64
	2399	WP84	N4	1509/1557	02:27E/08:00E	67:00	60	135	209	8.3	2,700	---
	2401	FD 8	H2	1509/1557	02:27E/08:00E	67:00	60	135	209	18.7	3,200	51
	2402	FD 9	H3	1602/1651	08:00E/02:27E	67:00	65	121	209	14.2	8,200	146
	2403	FD 10	H4	1653/1740	02:13E/03:24N	67:00	65	121	209	13.3	11,600	164
	2404	FD 11	H5	1742/1823	03:38N/09:50N	67:00	65	121	209	14.7	13,100	202
	2405	FD 12	H6	1827/1915	10:04N/15:00N	67:00	65	124	210	14.1	12,100	189
714 RS	2406	WP85	N1	1203/1254	15:00N/09:25N	67:00	65.5/65.6	118	213	6.0	12,300	200
	2407	WP86	N2	1256/1342	09:11N/03:37N	67:00	65.5/66.5	118	212	5.3	13,800	229
	2408	WP87	N3	1344/1433	03:23N/02:11E	67:00	66.5/66.8	116	212	5.4	13,600	206
	2410	FD 1	H1	1344/1433	03:23N/02:11E	67:00	66.5/66.8	116	212	12.1	15,700	214
	2409	WP88	N4	1436/1527	02:25E/08:00E	67:00	67.1/68	113	212	5.2	11,200	170
	2411	FD 2	H2	1436/1527	02:25E/08:00E	67:00	67.1/68	113	212	11.9	10,600	142
	2412	FD 3	H3	1532/1622	08:00E/02:25E	67:00	68.7/68.8	111	212	11.0	10,900	194
	2413	FD 4	H4	1624/1712	02:11E/03:23N	67:00	68.4/68.7	110	212	10.4	15,800	328
	2414	FD 5	H5	1714/1800	03:37N/09:11N	67:00	69/69.5	109	212	9.4	20,000	330
	2415	FD 6	H6	1806/1853	09:25N/15:00N	67:00	69.7/70.7	107	213	9.1	19,400	273

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	St ⁹⁰
22 October 1959 Mission 12												
717 MN	2420	FD 25	H1	1430/1457	50:17N/52:12N	102:31/103:51	30	175	227	31.8	≤ 450	< 1
	2421	FD 26	H2	1500/1525	52:20N/54:15N	104:00/105:28	30	175	227	30.0	≤ 97	1
	2422	FD 27	H3	1529/1606	54:20N/56:10N	105:37/107:08	30	175	226	43.7	≤ 66	1
	2423	FD 28	H4	1608/1635	56:18N/58:03N	107:16/108:58	30	175	225	32.0	≤ 178	< 1
	2424	FD 29	H5	1639/1706	58:11N/59:45N	109:07/110:50	30	175	225	32.0	≤ 530	4
	2425	FD 30	H6	1708/1729	59:53N/61:25N	111:00/112:55	30	175	224	24.4	≤ 940	8
	2416	WP1781	N1	1731/1804	61:25N/58:54N	112:55/109:53	35	173	222	15.7	1,460	18
	2417	WP1782	N2	1807/1840	58:45N/56:03N	109:42/107:03	35	173	223	15.6	880	13
	2418	WP1783	N3	1841/1918	55:52N/53:11N	106:50/104:37	35	173	222	17.4	990	8
	2419	WP1784	N4	1918/1948	53:00N/50:17N	104:30/102:31	35	173	222	14.3	890	10
716 MN	2430	FD 13	H1	1400/1437	50:17N/52:46N	102:31/104:18	40	170	216	34.8	900	15
	2431	FD 14	H2	1439/1527	52:56N/56:09N	104:27/107:07	40	170	217	44.5	830	19
	2432	FD 15	H3	1529/1613	56:17N/58:58N	107:16/109:58	40	170	219	40.9	1,390	24
	2433	FD 16	H4	1616/1650	59:06N/61:49N	110:07/113:24	40	170	219	38.6	2,300	44
	2434	FD 17	H5	1652/1730	61:55N/64:29N	113:35/117:21	40	170	219	35.8	2,800	49
	2435	FD 18	H6	1733/1807	64:38N/67:00N	117:37/122:00	40	170	221	30.9	3,600	43
	2426	WP1249	N1	1810/1853	67:00N/62:47N	122:00/114:47	50	160	221	12.1	7,200	115
	2427	WP1250	N2	1854/1932	62:36N/59:02N	114:32/110:03	50	160	220	10.7	4,500	71
	2428	WP1251	N3	1932/2009	58:54N/54:51N	109:51/105:52	50	160	219	10.4	4,300	62
	2429	WP1252	N4	2010/2052	54:39N/50:17N	105:42/102:31	50	160	217	12.1	3,100	40
718 RS	2440	WP97	N1	1132/1227	15:00N/09:24N	67:00	60	135	223	8.8	5,300	85
	2441	WP98	N2	1229/1306	09:10N/04:38N	67:00	60	135	223	5.9	5,200	82
705 RS	2439	WP89	N1	1205/1256	15:00N/09:18N	67:00	64/64.2	124	213	6.7	10,700	175
	2438	WP90	N2	1258/1346	09:11N/03:37N	67:00	64.4/64.3	122	212	6.2	12,100	194
	2437	FD 31	H1	1416/1505	03:51N/09:32N	67:00	65.6/65.8	119	212	13.3	11,600	218
	2436	FD 32	H2	1507/1554	09:46N/15:00N	67:00	65.8/66.6	118	212	12.1	12,000	189
27 October 1959 Mission 13A												
716 MN	2442	WP1321	N1	1425/1519	50:17N/55:34N	102:31/106:20	55	155	222	12.5	6,800	134
	2443	WP1322	N2	1521/1611	55:47N/60:41N	106:30/112:00	55	155	223	11.5	8,500	138
	2444	WP1323	N3	1614/1705	60:54N/65:37N	112:15/119:28	55	155	223	11.9	8,100	129
	2446	FD 31	H1	1614/1705	60:54N/65:37N	112:15/119:28	55	155	223	25.9	9,200	149
	2445	WP1324	N4	1707/1755	65:48N/69:53N	119:48/129:00	55	155	222	11.1	7,000	97
	2447	FD 32	H2	1707/1755	65:48N/69:53N	119:48/129:00	55	155	222	24.3	6,800	129
	2448	FD 33	H3	1801/1847	69:53N/65:29N	129:00/119:15	60	135	222	16.8	10,800	189
	2449	FD 34	H4	1849/1937	65:16N/60:34N	118:52/114:52	60	135	223	17.4	11,500	218
	2450	FD 35	H5	1940/2025	60:23N/55:30N	111:35/106:17	60	135	222	16.4	11,800	225
	2451	FD 36	H6	2026/2112	55:19N/50:17N	106:05/102:31	60	135	221	16.7	12,600	201
715 MN	2452	WP1929	N1	1357/1452	50:17N/55:44N	102:31/106:28	61.2/65.6	123	218	6.9	9,000	160
	2453	WP1930	N2	1454/1549	55:54N/60:52N	106:35/112:15	65.6	116	219	5.9	10,500	197
	2454	WP1931	N3	1551/1639	61:03N/65:39N	112:30/119:32	65.6/66	117	220	5.2	10,900	194
	2456	FD 19	H1	1651/1639	61:03N/65:39N	112:30/119:32	65.6/66	117	220	11.8	11,100	223
	2455	WP1932	N4	1641/1732	65:50N/69:53N	119:51/129:00	66/66.6	117	221	5.3	9,700	191
	2457	FD 20	H2	1641/1732	65:50N/69:53N	119:51/129:00	66/66.6	117	221	12.2	10,300	206
	2458	FD 21	H3	1735/1821	69:53N/65:27N	129:00/119:07	66.5/67.2	116	221	10.7	11,700	203
	2459	FD 22	H4	1824/1910	65:15N/60:40N	118:50/112:00	67.2/67.7	113	220	10.2	10,100	208
	2460	FD 23	H5	1912/1958	60:26N/55:37N	111:43/106:22	67.8/68.8	111	219	9.7	13,500	224
	2461	FD 24	H6	1959/2049	55:23N/50:17N	106:10/102:31	69/70	110	218	9.9	12,100	227
28 October 1959 Mission 13B												
714 LN	2467	WE1652	N1	1509/1556	27:43N/33:03N	98:07	65.1/65.6	121	212	5.7	10,000	167
	2468	WE1653	N2	1558/1643	33:17N/38:37N	98:07	65.6/66.3	118	213	5.1	11,100	183
	2469	WE1654	N3	1645/1731	38:51N/44:11N	98:07	66.3/66.7	116	214	5.0	9,100	196
	2471	WC169	H1	1645/1731	38:51N/44:11N	98:07	66.3/66.7	116	214	11.5	12,700	191
	2470	WE1655	N4	1733/1819	44:25N/49:45N	98:07	66.7/67.4	114	215	4.7	11,400	210
	2472	WC170	H2	1733/1819	44:25N/49:45N	98:07	66.7/67.4	114	215	10.8	9,900	192
	2473	WC171	H3	1829/1916	49:45N/44:25N	98:07	67.2/68.5	113	215	10.6	10,500	168
	2474	WC172	H4	1918/2004	44:11N/38:51N	98:07	68.3/68.9	111	214	9.5	11,600	218
	2475	WC173	H5	2007/2054	38:37N/33:17N	98:07	68.9/69.7	109	213	9.7	12,100	193
	2476	WC174	H6	2057/2143	33:03N/27:43N	98:07	69.8/70.4	108	212	9.1	11,900	225
718 LO	2462	WC175	H1	1531/1631	29:29N	99:17	59.7/59	135	212	23.5	7,800	110
	2463	WC176	H2	1638/1756	29:29N	99:17	62.4/62.5	127	212	25.3	8,800	148
	2464	WC177	H3	1803/1933	29:29N	99:17	65.2/67	117	212	23.1	9,600	148
	2465	WC178	H4	1938/2108	29:29N	99:17	67.9/69	112	212	19.9	11,900	149
	2466	WC179	H5	2108/2243	29:29N	99:17	69/70.2	109	212	19.4	10,300	185
705 LS	2477	WE1648	N1	1442/1529	27:43N/24:13N	98:07/93:51	61.2/64	127	212	6.4	9,600	170
	2478	WE1649	N2	1531/1615	24:04N/20:26N	93:40/89:37	64.2/65	122	212	5.5	13,700	171
	2479	WE1650	N3	1617/1701	20:16N/16:32N	89:26/85:35	65/65.4	120	212	5.3	10,400	150
	2480	WE1651	N4	1703/1747	16:22N/12:35N	85:24/81:43	65.4/66.2	119	212	5.1	11,900	204

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	90 Sr	
30 October 1959 Mission 14													
715 MO	2481	WP2209	N1	1405/1435	48:20N/46:41N	101:57/102:43	30	175	218	16.2	1,000	13	
	2485	FD 43	H1	1405/1435	48:20N/46:41N	101:57/102:43	30	175	218	36.5	≤ 780	10	
	2482	WP2210	N2	1440/1529	46:40N/48:20N	102:10/101:15	39.5	170	221	20.3	1,700	23	
	2483	WP2211	N3	1538/1640	48:20N	102:12/101:51	50	160	221	17.3	3,200	53	
	2484	WP2212	N4	1649/1744	48:20N/48:17N	102:42/102:44	57	146	221	11.0	3,700	74	
717 MO	2486	WP1325	N1	1348/1424	48:20N/46:39N	101:20/100:42	45	165	222	12.0	4,500	78	
	2490	FD 37	H1	1348/1424	48:20N/46:39N	101:20/100:42	45	165	222	26.9	5,000	78	
	2487	WP1326	N2	1429/1518	47:03N/46:40N	100:17/102:30	50	160	222	13.7	3,900	69	
	2491	FD 38	H2	1429/1518	47:03N/46:40N	100:17/102:30	50	160	222	30.4	4,200	75	
	2488	WP1327	N3	1522/1622	46:40N	101:45/102:00	55	155	221	14.0	7,000	116	
	2492	FD 39	H3	1522/1622	46:40N	101:45/102:00	55	155	221	30.5	7,800	117	
	2489	WP1328	N4	1626/1726	46:40N	101:15/101:15	60	135	221	9.8	11,800	196	
	2493	FD 40	H4	1626/1726	46:40N	101:15/101:15	60	135	221	22.1	11,400	156	
	2494	FD 41	H5	1730/1900	46:40N/48:20N	100:20/102:39	64.3	123	221	25.4	11,400	216	
	2495	FD 42	H6	1903/2031	48:15N/46:52N	102:45/100:17	64.6/69.7	110	218	18.3	14,600	205	
	705 LN	2496	WE1584	N1	1514/1558	27:43N/33:03N	98:07	60	135	208	7.8	6,200	120
		2497	WE1585	N2	1600/1647	33:17N/38:37N	98:07	60	135	210	8.0	9,600	223
2498		WE1586	N3	1649/1733	38:51N/44:11N	98:07	60	135	216	7.4	8,600	227	
2500		WC163	H1	1649/1733	38:51N/44:11N	98:07	60	135	216	16.6	12,000	148	
2499		WE1587	N4	1736/1820	44:25N/49:45N	98:07	60	135	216	7.4	11,000	187	
2501		WC164	H2	1736/1820	44:25N/49:45N	98:07	60	135	216	16.8	12,000	208	
2502		WC165	H3	1830/1914	49:45N/44:25N	98:07	64.5	123	219	12.6	9,500	245	
2503		WC166	H4	1917/2003	44:11N/38:51N	98:07	65	121	217	12.7	14,900	184	
2504		WC167	H5	2006/2051	38:37N/33:17N	98:07	65	121	213	12.7	13,300	208	
2505		WC168	H6	2054/2137	33:03N/27:43N	98:07	65	121	211	12.2	11,500	195	
714 LS		2506	WE1588	N1	1439/1524	27:43N/24:24N	98:07/94:05	60	135	206	7.9	6,200	85
		2508	WC295	H1	1528/1618	24:09N/20:26N	93:46/89:37	60	135	203	20.2	7,100	101
	2507	WE1589	N2	1620/1716	20:16N/16:32N	89:26/85:35	60	135	204	10.0	4,800	85	
	2509	WC296	H2	1620/1716	20:16N/16:32N	89:26/85:35	60	135	204	22.7	6,300	88	
3 November 1959 Mission 15													
718 LN	2519	WC187	H1	1515/1542	27:43N/30:20N	98:07	41	170	216	24.6	≤ 230	≤ 1	
	2520	WC188	H2	1544/1609	30:31N/33:09N	98:07	41	170	215	22.9	≤ 250	≤ 1	
	2521	WC189	H3	1611/1639	33:20N/36:15N	98:07	41	170	215	25.7	≤ 220	≤ 2	
	2522	WC190	H4	1641/1709	36:26N/39:01N	98:07	41	170	214	24.8	≤ 117	≤ 1	
	2523	WC191	H5	1712/1733	39:12N/41:46N	98:07	41	170	214	19.3	≤ 150	≤ 2	
	2524	WC192	H6	1736/1755	41:57N/43:42N	98:07	41	170	214	17.5	≤ 166	≤ 2	
	2515	WP101	N1	1803/1841	43:42N/40:22N	98:07	45	165	209	13.9	≤ 910	12	
	2516	WP102	N2	1843/1931	40:10N/36:09N	98:07	45	165	208	17.4	≤ 330	≤ 1	
	2517	WP103	N3	1933/2019	35:57N/31:56N	98:07	45/45	165	207	16.2	≤ 360	3	
	2518	WP104	N4	2021/2107	31:44N/27:43N	98:07	45	165	210	16.5	≤ 139	3	
	714 LN	2525	WP105	N1	1443/1526	27:43N/32:37N	98:07/97:07	50	160	201	13.6	≤ 340	≤ 1
		2526	WP106	N2	1530/1614	32:50N/37:44N	97:07/98:07	50	160	202	13.6	≤ 510	6
2527		WP107	N3	1615/1702	37:58N/42:52N	98:07	50	160	205	14.4	1,040	21	
2529		WC205	H1	1614/1704	37:58N/42:52N	98:07	50	160	205	33.7	1,270	21	
2528		WP108	N4	1703/1750	43:06N/48:00N	98:07	50	160	207	14.0	1,810	28	
2530		WC207	H3	1704/1750	43:20N/48:00N	98:07	50	160	207	30.4	1,690	34	
2531		WC208	H4	1757/1839	48:00N/43:06N	98:07	55	150	207	21.9	4,200	68	
2532		WC209	H5	1841/1948	42:52N/35:25N	98:07	55	150	205	35.5	3,500	70	
705 LO	2510	WC289	H1	1530/1629	29:00N	99:00	55	150	196	33.1	1,380	24	
	2511	WC290	H2	1633/1733	29:00N	99:00	60	135	205	24.0	7,100	124	
	2512	WC291	H3	1741/1911	29:00N	99:00	64.6/65.5	120	208	25.7	11,100	199	
	2513	WC292	H4	1918/2058	29:00N	99:00	67.3/68.1	112	211	22.9	11,300	185	
2514	WC293	H5	2101/2241	29:00N	99:00	68.5/69.5	109	211	20.9	10,800	182		

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
6 November 1959 Mission 16												
716 MN	2533	WP1881	N1	1427/1527	50:17N/56:14N	102:31/106:57	55	155	215	14.4	8,100	127
	2534	WP1882	N2	1528/1625	56:20N/61:05N	107:07/112:32	55	155	216	13.6	8,500	157
	2535	WP1883	N3	1627/1724	61:15N/66:17N	112:47/120:40	55	155	216	13.6	8,400	183
	2537	FD49	H1	1627/1724	61:15N/66:17N	112:47/120:40	55	155	216	29.7	11,400	175
	2536	WP1884	N4	1726/1822	66:28N/71:00N	121:00/132:30	55	155	215	13.4	7,300	129
	2538	FD50	H2	1726/1822	66:28N/71:00N	121:00/132:30	55	155	215	29.4	10,700	160
	2539	FD51	H3	1825/1914	71:00N/66:33N	132:30/142:12	60	135	213	18.7	9,700	189
	2540	FD52	H4	1916/2007	66:21N/61:23N	120:49/112:58	60	135	214	19.5	9,500	171
	2541	FD53	H5	2009/2058	61:11N/56:00N	112:38/106:45	60	135	215	18.6	9,900	167
	2542	FD54	H6	2100/2152	55:56N/50:17N	106:31/102:31	60.5	135	216	19.2	10,300	189
717 MN	2543	WP2185	N1	1420/1516	50:17N/55:46N	102:31/106:30	59.1/64.5	126	216	7.6	8,900	158
	2544	WP2186	N2	1518/1614	55:56N/61:05N	106:41/112:32	64.7/65.7	119	215	6.5	10,900	187
	2545	WP2187	N3	1616/1742	61:15N/66:17N	112:46/120:40	65.7/67	116	213	6.1	11,000	163
	2547	FD55	H1	1616/1742	61:15N/66:17N	112:46/120:40	65.7/67	116	213	13.9	11,500	171
	2546	WP2188	N4	1714/1815	66:28N/71:00N	121:00/132:30	67/68.3	113	212	6.2	10,500	161
	2548	FD56	H2	1714/1815	66:28N/71:00N	121:00/132:30	67/68.3	113	212	14.1	10,900	189
	2549	FD57	H3	1819/1906	71:00N/66:33N	132:30/142:12	68.2/68.7	111	211	10.4	11,900	193
	2550	FD58	H4	1910/1958	66:21N/61:25N	120:49/112:58	68.7/69.5	110	211	10.0	12,300	197
	2551	FD59	H5	2000/2047	61:10N/56:00N	112:39/106:44	69.4/69.3	110	213	9.6	14,000	199
	2552	FD60	H6	2049/2140	55:46N/50:17N	106:30/102:31	69.3/69.9	109	215	10.1	14,100	236
718 LN	2553	WP117	N1	1513/1558	27:43N/33:03N	98:07	63.9/64.8	118	211	5.5	9,800	172
	2554	WP118	N2	1602/1647	33:17N/38:37N	98:07	64.8/65.5	116	211	5.2	10,400	187
	2555	WP119	N3	1649/1735	38:51N/44:11N	98:07	65.7/66.6	115	213	5.0	11,000	186
	2556	WP120	N4	1737/1825	44:25N/49:45N	98:07	66.7/67	114	216	4.8	11,400	188
	2558	WC302	H2	1737/1825	44:25N/49:45N	98:07	66.7/67	114	216	11.0	12,200	208
	2559	WC303	H3	1836/1921	49:45N/44:25N	98:07	66.5/67.9	113	216	10.3	11,000	191
	2560	WC304	H4	1923/2042	44:11N/38:51N	98:07	68.2/68.9	110	213	10.4	11,800	230
	2561	WC305	H5	2014/2101	38:37N/33:17N	98:07	68.9/59.7	123	211	14.4	10,700	179
2562	WC306	H6	2103/2150	33:03N/27:43N	98:07	59.5/59.5	138	211	18.9	7,600	159	
705 LS	2563	WP113	N1	1439/1523	27:43N/24:13N	98:07/93:51	63.3/64.4	123	211	5.8	7,700	143
	2564	WP114	N2	1525/1611	24:04N/20:26N	93:40/89:37	64.3/64.9	121	212	5.7	8,900	140
	2565	WP115	N3	1612/1659	20:16N/16:32N	89:26/85:35	64.9/65.7	120	212	5.6	7,800	128
	2567	WC277	H1	1612/1659	20:16N/16:32N	89:26/85:35	64.9/65.7	120	212	12.8	12,200	203
	2566	WP116	N4	1701/1748	16:22N/12:35N	85:24/81:43	65.6/66.3	118	211	5.4	9,100	144
	2568	WC278	H2	1701/1748	16:22N/12:35N	85:24/81:43	65.6/66.3	118	211	12.3	12,300	193
	2569	WC279	H3	1757/1842	12:35N/16:22N	81:43/85:24	65.8/67.2	117	211	11.3	12,100	204
	2570	WC280	H4	1844/1930	16:32N/20:16N	85:35/89:26	67.3/68.1	114	212	11.0	12,700	208
	2571	WC281	H5	1932/2017	20:26N/24:04N	89:37/93:40	67.9/67.9	112	212	10.1	12,400	248
	2572	WC282	H6	2019/2103	24:13N/27:43N	93:51/98:07	68/68.5	111	211	9.9	14,200	249
10 November 1959 Mission 17A												
718 LN	2573	WP125	N1	1517/1604	27:43N/33:03N	98:07	59.8	135	206	8.4	9,000	152
	2574	WP126	N2	1606/1654	33:17N/38:37N	98:07	60	135	212	8.1	9,300	152
	2575	WP127	N3	1656/1742	38:51N/44:11N	98:07	60	135	215	7.8	8,700	135
	2577	FD037	H1	1656/1742	38:51N/44:11N	98:07	60	135	215	17.7	8,400	147
	2576	WP128	N4	1744/1832	44:25N/49:45N	98:07	60	135	217	7.9	7,000	117
	2578	FD038	H2	1744/1832	44:25N/49:45N	98:07	60	135	217	17.8	11,500	175
	2579	FD039	H3	1841/1927	49:45N/44:25N	98:07	65	121	216	12.7	10,300	164
	2580	FD040	H4	1929/2018	44:11N/38:58N	98:07	65.2	121	215	13.2	11,400	168
	2581	FD041	H5	2020/2110	38:44N/33:00N	98:07	65.5	121	214	13.7	10,600	181
	2582	FD042	H6	2112/2156	32:46N/27:43N	98:07	65.5	121	214	11.9	11,200	181
714 LS	2583	WP129	N1	1438/1523	27:43N/24:13N	98:07/93:51	60	135	203	8.0	8,000	122
	2584	WP130	N2	1525/1609	24:04N/20:26N	93:40/89:37	60	135	201	8.1	5,800	100
	2585	WP131	N3	1611/1657	20:16N/16:32N	89:26/85:35	60	135	200	8.4	4,000	64
	2587	FD049	H1	1611/1657	20:16N/16:32N	89:26/85:35	60	135	200	19.1	5,100	74
	2586	WP132	N4	1659/1746	16:22N/12:35N	85:24/81:43	60	135	199	8.6	4,600	90
	2588	FD050	H2	1659/1746	16:22N/12:35N	85:24/81:43	60	135	199	19.4	4,800	63
	2589	FD051	H3	1754/1840	12:35N/16:22N	81:43/85:24	65	121	212	12.8	13,200	162
	2590	FD052	H4	1842/1927	16:32N/20:08N	85:35/89:17	65	121	213	12.5	9,800	138
	2591	FD053	H5	1929/2019	20:16N/24:04N	89:26/93:40	65	121	214	13.9	10,300	153
	2592	FD054	H6	2021/2110	24:13N/27:43N	93:51/98:07	65	121	215	13.5	11,200	179

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude ("W)	Altitude (1000 ft.)	IAS (Kt)	Temp. ("K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Str 90	
11 November 1959 Mission 17B													
715 MN	2597	M61	H1	1428/1511	50:17N/53:26N	102:31/104:35	45	165	215	33.6	4,200	74	
	2593	WP2121	N1	1749/1829	68:00N/63:53N	124:15/11:6:37	55	155	211	9.9	8,700	152	
	2594	WP2122	N2	1831/1910	63:40N/59:30N	116:16/11:7:33	55	155	212	9.5	9,100	143	
	2595	WP2123	N3	1912/1957	59:18N/55:03N	110:18/10:1:47	55	155	213	10.9	5,800	114	
	2596	WP2124	N4	1959/2041	54:49N/50:17N	105:37/102:31	54.5	155	213	10.3	8,200	138	
716 MN	2578	WPL1140	N1	1355/1434	50:17N/55:51N	102:31/106:35	60	135	211	10.1	7,000	147	
	2599	WPL1141	N2	1501/1554	56:34N/64:13N	107:18/112:42	60	135	210	9.2	8,300	142	
	2600	WPL1142	N3	1557/1655	61:24N/66:25N	113:00/120:56	60	135	208	10.1	8,900	174	
	2602	M67	H1	1557/1655	61:24N/66:25N	113:00/120:56	60	135	208	23.0	11,300	184	
	2601	WPL1143	N4	1656/1755	66:35N/71:00N	121:14/132:30	60	135	207	10.4	8,500	143	
	2603	M69	H3	1656/1755	66:35N/71:00N	121:14/132:30	60	135	207	23.5	10,100	175	
	2604	M70	H4	1756/1846	71:00N/66:30N	132:30/121:07	64.8	121	204	15.1	10,000	175	
	2605	M71	H5	1849/1938	66:18N/61:24N	120:45/113:00	65	121	204	14.5	11,000	162	
	2606	M72	H6	1941/2033	61:11N/56:00N	112:38/106:45	65	121	209	14.9	10,000	157	
12 November 1959 Mission 18A													
718 LN	2627	FD 139	H1	1514/1543	27:43N/30:20N	98:07	40	170	213	28.0	≤ 200	< 1	
	2628	FD 140	H2	1546/1627	30:31N/33:09N	98:07	40	170	212	39.6	≤ 144	2	
	2629	FD 141	H3	1630/1701	33:20N/35:57N	98:07	40	170	212	30.1	≤ 290	2	
	2630	FD 142	H4	1704/1735	36:08N/38:46N	98:07	41	170	211	28.8	≤ 300	3	
	2631	FD 143	H5	1737/1810	38:57N/41:34N	98:07	44	165	210	27.1	≤ 210	2	
	2632	FD 144	H6	1813/1843	41:45N/44:23N	98:07	44	165	211	24.5	1,510	28	
	2623	WP137	N1	1850/1930	44:23N/40:22N	98:07	45	165	211	14.3	1,210	17	
	2624	WP138	N2	1932/2011	40:10N/36:09N	98:07	45	165	209	14.1	≤ 330	5	
	2625	WP139	N3	2013/2052	35:57N/31:56N	98:07	45	165	209	14.1	≤ 570	5	
	2626	WP140	N4	2054/2133	31:44N/27:43N	98:07	45	165	206	14.2	≤ 162	2	
	705 LN	2633	WP133	N1	1441/1526	27:43N/32:37N	98:07	50	159	206	13.6	1,010	14
		2634	WP134	N2	1528/1615	32:50N/37:45N	98:07	50	160	209	13.9	2,200	36
2635		WP135	N3	1616/1705	37:58N/42:52N	98:07	50	160	211	14.7	3,400	47	
2637		FD 115	H1	1616/1705	37:58N/42:52N	98:07	50	160	211	32.3	4,000	61	
2636		WP136	N4	1707/1754	43:05N/48:00N	98:07	50	160	214	13.6	6,100	95	
2638		FD 117	H3	1709/1754	43:24N/48:00N	98:07	50	160	214	28.9	7,400	137	
2639		FD 118	H4	1800/1844	48:00N/43:05N	98:07	55	151	212	22.7	10,700	146	
2640		FD 119	H5	1846/1926	42:52N/37:58N	98:07	55	150	210	20.7	9,500	141	
2641		FD 120	H6	1928/2055	37:45N/27:43N	98:07	55	150	206	46.1	3,800	59	
13 November 1959 Mission 18B													
717 MN	2611	M73	H1	1433/1502	50:17N/52:09N	102:31/103:42	30	175	216	35.5	≤ 400	4	
	2612	M74	H2	1504/1530	52:15N/54:02N	103:49/105:03	30	175	216	31.8	≤ 900	11	
	2607	WPL1052	N1	1700/1730	61:30N/58:54N	113:05/109:48	35	173	215	14.4	1,590	29	
	2608	WPL1053	N2	1732/1802	58:44N/56:05N	109:38/106:48	35	173	214	15.0	2,100	30	
	2609	WPL1054	N3	1806/1834	55:55N/53:17N	106:38/104:30	35	173	215	13.7	1,930	31	
	2610	WPL1055	N4	1836/1910	53:06N/49:56N	104:21/102:17	35	173	215	16.6	1,830	29	
716 MN	2617	M79	H1	1400/1440	50:17N/53:10N	102:31/104:25	40	170	216	37.6	3,300	60	
	2618	M80	H2	1442/1522	53:19N/56:08N	104:31/106:49	40	170	216	37.6	3,500	52	
	2619	M81	H3	1523/1608	56:16N/59:05N	107:00/110:00	40	170	215	42.4	2,500	50	
	2620	M82	H4	1610/1652	59:13N/61:49N	110:11/113:33	40	170	215	39.6	3,200	47	
	2621	M83	H5	1652/1739	61:58N/64:33N	113:46/117:37	40	170	214	44.0	2,700	45	
	2622	M84	H6	1740/1751	64:41N/65:25N	117:51/119:06	40	170	215	10.4	3,900	69	
	2613	WP2181	N1	1757/1827	65:25N/63:06N	119:06/115:24	50	160	212	8.8	7,500	135	
	2614	WP2182	N2	1828/1858	62:54N/58:53N	115:08/109:48	50	160	212	8.6	6,800	99	
	2615	WP2183	N3	1858/1947	58:41N/54:43N	109:36/105:35	50	160	212	14.4	6,600	106	
	2616	WP2184	N4	1947/2028	54:31N/50:17N	105:26/102:31	50	160	212	12.0	7,000	147	
17 November 1959 Mission 19													
714/LN	2642	WG223	H1	1649/1750	38:51N/44:11N	98:07	67/68	115	210	14.5	12,400	182	
705 LS	2643	WP141	N1	1512/1557	27:43N/24:13N	98:07/93:51	62.5/64.1	126	212	6.1	9,400	152	
	2644	WP142	N2	1559/1643	24:04N/20:06N	93:40/89:37	64.1/64.9	122	211	5.6	8,100	165	
	2645	WP143	N3	1645/1731	20:16N/16:32N	89:26/85:35	64.9/65.5	121	210	5.7	8,300	145	
	2646	WP144	N4	1733/1817	16:42N/12:35N	85:24/81:43	65.5/66.3	119	211	5.2	8,700	183	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	cpm/1000 SCF	
											Total Beta	Sp ⁹⁰
19 November 1959 Mission 20												
716 MN	2651	M85	H1	1426/1503	50:17N/53:13N	102:31/104:28	45	165	214	29.1	3,300	53
	2652	M86	H2	1505/1534	53:23N/56:16N	104:35/107:00	45	165	214	23.2	2,800	42
	2653	M87	H3	1539/1609	56:25N/59:11N	107:10/110:08	45	165	215	24.2	3,300	54
	2654	M88	H4	1612/1652	59:20N/62:13N	110:19/114:08	45	165	215	31.3	4,600	65
	2655	M89	H5	1653/1726	62:23N/65:13N	114:23/118:45	45	165	216	25.3	4,500	72
	2656	M90	H6	1729/1802	65:23N/68:00N	119:02/124:15	45	165	218	25.5	6,000	97
	2647	WP1857	N1	1807/1847	68:00N/64:07N	124:15/116:55	55	155	214	9.6	8,500	149
	2648	WP1858	N2	1849/1927	63:53N/59:44N	116:35/110:48	55	155	214	9.2	9,300	143
	2649	WP1859	N3	1930/2012	59:31N/55:09N	110:32/105:55	55	155	215	10.1	7,400	118
	2650	WP1860	N4	2025/2056	53:23N/50:17N	104:36/102:31	55	155	214	7.5	8,000	125
717 MN	2657	WP1777	N1	1356/1454	50:25N/55:40N	102:36/106:25	60	135	214	9.8	7,000	103
	2658	WP1778	N2	1456/1552	55:50N/61:34N	106:36/113:08	60	135	214	9.6	9,400	167
	2659	WP1779	N3	1553/1648	61:40N/66:22N	113:14/120:52	60	135	212	9.3	9,300	153
	2660	WP1780	N4	1650/1746	66:33N/71:00N	121:15/132:30	60	135	212	9.5	8,200	133
714 LN	2661	WP149	N1	1520/1607	27:43N/33:03N	98:07	64.9/66	120	208	5.9	8,800	148
	2662	WP150	N2	1609/1655	33:17N/38:37N	98:07	66	118	209	5.4	10,400	158
	2663	WP151	N3	1657/1743	38:51N/44:11N	98:07	66/67.1	116	209	5.2	10,400	191
	2665	FD 7	H1	1657/1743	38:51N/44:11N	98:07	66/67.1	116	209	11.8	11,100	188
	2664	WP152	N4	1745/1835	44:25N/49:45N	98:07	67.1/67.6	114	209	5.2	11,900	178
	2666	FD 8	H2	1745/1835	44:25N/49:45N	98:07	67.1/67.6	114	209	11.9	13,600	228
	2667	FD 9	H3	1842/1928	49:45N/44:25N	98:07	67/68.5	113	208	11.0	13,000	263
	2668	FD 10	H4	1930/2017	44:11N/38:51N	98:07	68.8/69.1	110	207	10.1	12,100	233
	2669	FD 11	H5	2019/2105	38:37N/33:17N	98:07	69.4/70.4	109	205	9.7	12,700	228
	2670	FD 12	H6	2107/2153	33:03N/27:43N	98:07	70.4/71	107	205	9.2	14,300	242
705 LS	2671	WP145	N1	1444/1529	27:43N/24:13N	98:07/93:51	60	135	206	7.9	6,100	98
	2672	WP146	N2	1531/1616	24:04N/20:26N	93:40/89:37	60	135	205	8.0	6,300	100
	2673	WP147	N3	1618/1704	20:16N/16:32N	89:26/85:35	60	135	204	8.2	5,100	80
	2675	FD 1	H1	1618/1704	20:16N/16:32N	89:26/85:35	60	135	204	18.4	5,300	88
	2674	WP148	N4	1706/1751	16:22N/12:35N	85:24/81:43	60	135	203	8.1	5,000	92
	2676	FD 3	H3	1800/1846	12:35N/16:22N	81:43/85:24	65	121	202	13.7	9,400	153
	2677	FD 5	H5	1848/1935	16:32N/20:16N	85:35/89:26	65	121	205	13.8	8,900	145
	2678	FD 6	H6	1937/2022	20:26N/24:04N	89:37/93:40	65.2	121	206	13.1	8,400	122
24 November 1959 Mission 21A												
716 MN	2683	M97	H1	1447/1515	50:17N/54:18N	102:31/103:10	30	175	228	32.9	≤ 260	4
	2684	M98	H2	1517/1546	51:23N/52:21N	103:12/103:50	30	175	228	34.1	≤ 167	≤ 2
	2685	M99	H3	1549/1727	52:25N/55:35N	103:54/106:20	30	175	228	115.1	400	4
	2686	M100	H4	1729/1810	55:42N/57:24N	106:27/108:29	30	175	225	48.6	820	13
	2687	M101	H5	1812/1842	57:50N/59:31N	108:37/110:32	30	175	225	35.6	960	17
	2679	WP1705	N1	1844/1905	59:31N/57:52N	110:32/108:40	35	173	223	10.2	1,660	27
	2680	WP1706	N2	1906/1926	57:40N/56:04N	108:28/106:45	35	173	223	9.5	≤ 1,430	21
	2681	WP1707	N3	1927/2002	55:54N/52:42N	106:37/104:07	35	173	224	16.6	≤ 770	11
	2682	WP1708	N4	2002/2026	52:27N/50:17N	103:55/102:31	35	173	225	11.3	≤ 610	7
	2688	M102	H6	1850/2026	59:00N/50:17N	109:55/102:31	35	173	224	103.3	1,190	9
715 MN	2693	M91	H1	1400/1420	50:17N/54:35N	102:31/103:20	39.5	170	222	18.7	2,600	28
	2694	M92	H2	1422/1442	51:42N/53:00N	103:26/104:19	39.5	170	222	18.6	2,900	26
	2689	WP2117	N1	1447/1516	53:15N/54:56N	104:29/105:44	40	170	222	11.8	2,600	20
	2695	M93	H3	1447/1516	53:15N/54:56N	104:29/105:44	40	170	222	26.7	2,500	24
	2690	WP2118	N2	1524/1540	54:56N/53:17N	105:44/104:30	50	160	220	4.5	6,600	74
	2696	M94	H4	1524/1540	54:56N/53:17N	105:44/104:30	50	160	220	10.0	6,800	---
	2691	WP2119	N3	1541/1556	53:04N/51:23N	104:22/103:13	50	160	220	4.2	7,600	61
	2697	M95	H5	1541/1556	53:04N/51:23N	104:22/103:13	50	160	220	9.4	7,300	---
	2692	WP2120	N4	1558/1624	51:10N/48:12N	103:06/101:15	50	160	220	7.3	6,600	71
	2698	M96	H6	1558/1624	51:10N/48:12N	103:06/101:15	50	160	220	16.3	8,100	78
718 LN	2703	FD 19	H1	1532/1554	27:43N/30:20N	98:07	40	170	217	20.6	≤ 550	4
	2704	FD 20	H2	1557/1627	30:31N/32:59N	98:07	40	170	216	28.2	≤ 103	1
	2704	FD 21	H3	1632/1707	33:20N/33:57N	98:07	40	170	216	32.9	≤ 170	2
	2706	FD 22	H4	1710/1747	36:08N/38:46N	98:07	40	170	220	34.2	≤ 920	9
	2707	FD 23	H5	1750/1831	38:57N/41:34N	98:07	40	170	217	38.4	2,000	33
	2708	FD 24	H6	1835/1900	41:53N/43:35N	98:07	40	170	217	23.4	2,200	45
	2699	WP157	N1	1907/1933	43:25N/40:22N	98:07	45	165	218	9.0	3,200	61
	2700	WP158	N2	1935/2007	40:10N/36:09N	98:07	45	165	220	10.8	≤ 970	14
	2701	WP159	N3	2010/2045	35:57N/31:56N	98:07	45	165	218	12.1	≤ 290	3
	2702	WP160	N4	2047/2125	31:44N/27:43N	98:07	45	165	211	13.7	≤ 167	1

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
25 November 1959 Mission 21B												
714 LN	2709	WP153	N1	1450/1537	27:43N/32:37N	98:07	50	160	201	14.6	≤ 240	3
	2710	WP154	N2	1539/1627	32:50N/37:45N	98:07	50	160	205	14.7	≤ 400	4
	2711	WP155	N3	1629/1720	37:58N/42:52N	98:07	50	160	209	15.3	1,660	26
	2713	FD 13	H1	1629/1720	37:58N/42:52N	98:07	50	160	209	33.7	1,950	32
	2712	WP156	N4	1722/1808	43:05N/48:00N	98:07	50	160	213	13.6	5,100	83
	2714	FD 14	H2	1722/1808	43:05N/48:00N	98:07	50	160	213	30.0	6,400	83
	2715	FD 15	H3	1817/1856	48:00N/43:05N	98:07	55	150	218	19.4	10,600	182
	2716	FD 16	H4	1858/1943	42:52N/37:58N	98:07	55	150	214	23.1	5,400	91
	2717	FD 17	H5	1945/2032	37:45N/32:50N	98:07	55	150	209	24.5	2,600	38
	2718	FD 18	H6	2034/2121	32:37N/27:43N	98:07	55	150	205	25.1	6,100	85
1 December 1959 Mission 22												
715 MN	2719	WP2189	N1	1425/1520	50:17N/55:43N	102:31/106:26	55	155	218	13.0	6,100	107
	2720	WP2190	N2	1522/1616	55:54N/61:05N	106:38/112:30	55	155	221	12.6	8,000	135
	2721	WP2191	N3	1618/1714	61:16N/66:20N	112:46/120:46	55	155	222	13.0	6,700	120
	2723	M109	H1	1618/1714	61:16N/66:20N	112:46/120:46	55	155	222	26.1	7,700	161
	2722	WP2192	N4	1716/1813	66:31N/71:00N	121:09/132:30	55	155	222	13.2	8,600	145
	2724	M110	H2	1716/1813	66:31N/71:00N	121:09/132:30	55	155	222	28.9	10,400	173
	2725	M111	H3	1817/1908	71:00N/66:33N	132:30/121:11	60	135	222	18.6	10,800	173
	2726	M112	H4	1910/2000	66:22N/61:26N	120:48/113:00	60	135	222	18.3	10,900	196
	2727	M113	H5	2002/2051	61:13N/55:54N	112:42/106:38	60	135	220	18.1	10,200	188
	2728	M114	H6	2053/2145	55:43N/50:17N	106:26/102:31	60	135	218	19.4	10,000	153
716 MN	2729	WP1369	N1	1356/1449	50:17N/55:43N	102:31/106:26	59.6/63.9	124	218	6.9	8,800	155
	2730	WP1370	N2	1449/1546	55:54N/61:05N	106:38/112:30	63.9/65.5	124	219	6.8	9,700	172
	2731	WP1371	N3	1547/1645	61:16N/66:13N	112:46/120:32	65.5/66.3	118	221	6.3	10,200	189
	2733	M115	H1	1547/1645	61:16N/66:13N	112:46/120:32	65.5/66.3	118	221	14.4	12,300	198
	2732	WP1372	N4	1646/1740	66:24N/71:00N	120:54/132:30	66.3/67.3	114	222	5.3	10,400	184
	2734	M116	H2	1646/1740	66:24N/71:00N	120:54/132:30	66.3/67.3	114	222	12.3	14,400	228
	2735	M117	H3	1749/1836	71:00N/66:31N	132:30/121:09	67.3/67.9	113	222	10.0	11,100	192
	2736	M118	H4	1837/1928	66:20N/61:24N	120:46/112:58	67.9/68.9	111	221	10.6	13,200	222
	2737	M119	H5	1931/2029	61:11N/56:00N	112:40/106:45	68.9/69.6	110	219	11.6	13,000	204
	2738	M120	H6	2030/2121	55:47N/50:17N	106:31/102:31	69.7/70.8	108	218	9.4	13,600	225
718 RO	2740	FD 87	H1	1245/1343	48:30N	67:08	55.1/56.8	150	195	32.8	1,220	20
	2741	FD 88	H2	1345/1444	48:30N	67:08	59.5/60.6	134	204	23.5	5,200	100
	2742	FD 89	H3	1448/1618	48:30N	67:08	63.8/66	121	211	25.2	11,000	207
	2743	FD 90	H4	1624/1804	48:30N	67:08	67.1/68.6	117	213	23.5	10,300	210
	2739	WP1801	N1	1805/1944	48:30N	67:08	68.6/68.9	110	215	8.7	10,500	179
	2744	FD 91	H5	1805/1944	48:30N	67:08	68.6/68.9	110	215	19.7	14,000	196
714 RS	2745	WP1813	N1	1234/1324	15:00N/09:25N	67:00	60	135	204	9.0	4,100	66
	2746	WP1814	N2	1326/1415	09:11N/03:37N	67:00	60	135	204	8.7	3,300	65
	2747	WP1815	N3	1417/1507	03:23N/02:11S	67:00	60	135	204	9.0	3,700	60
	2749	FD 81	H1	1417/1507	03:23N/02:11S	67:00	60	135	204	20.3	4,800	72
	2748	WP1816	N4	1510/1558	02:32S/08:00S	67:00	60	135	203	8.7	2,900	46
	2750	FD 82	H2	1510/1558	02:32S/08:00S	67:00	60	135	203	19.6	2,800	54
	2751	FD 83	H3	1605/1653	08:00S/02:25S	67:00	65	121	209	13.7	6,000	106
	2752	FD 84	H4	1659/1745	01:50S/03:23N	67:00	65	121	209	13.2	7,400	107
	2753	FD 85	H5	1748/1836	03:37N/09:11N	67:00	65	121	210	13.5	8,700	156
	2754	FD 86	H6	1839/1926	09:25N/15:00N	67:00	65	121	211	13.3	9,900	166
705 RS	2755	WP1817	N1	1204/1254	15:00N/09:25N	67:00	64.4/65.1	122	211	6.4	5,900	146
	2756	WP1818	N2	1256/1345	09:11N/03:37N	67:00	65/65.8	120	210	5.9	8,200	140
	2757	WP1819	N3	1347/1435	03:23N/02:11S	67:00	65.8/66.3	118	209	5.6	8,000	142
	2759	FD 75	H1	1347/1435	03:23N/02:11S	67:00	65.8/66.3	118	209	12.8	10,700	152
	2758	WP1820	N4	1437/1526	02:25S/08:00S	67:00	66.4/66.4	117	210	5.4	7,900	150
	2760	FD 76	H2	1437/1526	02:25S/08:00S	67:00	66.4/66.4	117	210	12.3	8,800	169
	2761	FD 77	H3	1532/1623	08:00S/02:25S	67:00	65.9/67.2	117	209	13.2	8,700	181
	2762	FD 78	H4	1625/1714	02:11S/03:23N	67:00	67.2/68.4	113	211	11.1	12,600	213
	2763	FD 79	H5	1716/1803	03:37N/09:11N	67:00	68.4/69	111	213	9.8	13,000	210
	2764	FD 80	H6	1805/1853	09:25N/15:00N	67:00	69.1/69.2	109	214	9.6	14,900	205

Table 4.2 (continued)

AC No.	IIASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	90 Sr
3 December 1959 Mission 23												
715 MN	2769	M121	H1	1427/1503	50:17N/53:22N	102:31/104:34	45	165	214	27.9	1,940	27
	2770	M122	H2	1505/1540	53:31N/56:30N	104:41/107:11	45	165	217	26.8	3,000	60
	2771	M123	H3	1542/1618	56:39N/59:30N	107:22/110:30	45	165	219	27.7	5,700	83
	2772	M124	H4	1620/1654	59:39N/62:26N	110:38/114:30	45	165	221	25.9	5,400	82
	2773	M125	H5	1656/1730	62:38N/65:21N	114:41/119:00	45	165	222	25.8	6,500	119
	2774	M126	H6	1733/1807	65:30N/68:00N	119:15/124:15	45	165	220	26.0	6,600	107
	2765	WP1213	N1	1812/1853	68:00N/64:00N	124:15/116:45	55	155	220	9.6	7,800	142
	2766	WP1214	N2	1895/1937	63:48N/59:37N	116:27/110:38	55	155	222	9.7	9,000	167
	2767	WP1215	N3	1940/2023	59:25N/55:04N	110:23/105:49	55	155	221	10.0	7,400	117
	2768	WP1216	N4	2025/2107	54:48N/50:17N	105:35/102:31	55	155	217	10.0	5,800	98
716 MN	2775	WP1961	N1	1358/1452	50:17N/55:55N	102:31/106:38	60	135	217	9.0	9,500	135
	2776	WP1962	N2	1456/1549	56:08N/61:26N	106:52/113:00	60	135	219	8.7	9,800	144
	2777	WP1963	N3	1552/1648	61:36N/66:28N	113:15/121:00	60	135	219	9.3	8,900	150
	2779	M127	H1	1552/1648	61:36N/66:28N	113:15/121:00	60	135	219	21.0	9,300	153
	2778	WP1964	N4	1653/1745	66:38N/71:00N	121:20/132:30	60	135	218	8.6	8,400	141
	2780	M128	H2	1653/1745	66:38N/71:00N	121:20/132:30	60	135	218	19.4	10,100	176
	2781	M129	H3	1750/1841	71:00N/66:24N	132:30/120:55	65	121	215	14.1	10,300	173
	2782	M130	H4	1843/1927	66:13N/61:13N	120:35/112:42	65.1	121	217	12.1	13,400	171
	2783	M131	H5	1930/2019	61:00N/55:53N	112:25/106:37	65.2	121	218	13.1	11,500	218
	2784	M132	H6	2030/2114	55:16N/50:17N	106:00/102:31	65.2	121	217	12.0	10,300	210
714 RS	2785	WE1684	N1	1234/1327	15:00N/09:25N	67:00	60	135	202	9.6	3,100	49
	2786	WE1685	N2	1329/1419	09:11N/03:37N	67:00	60	135	202	9.1	2,500	46
	2787	WE1686	N3	1421/1512	03:23N/02:11S	67:00	60	135	202	9.2	3,100	44
	2789	FD105	H1	1421/1512	03:23N/02:11S	67:00	60	135	202	21.0	2,700	48
	2788	WE1687	N4	1514/1603	02:25S/08:00S	67:00	60	135	202	8.8	2,300	43
	2790	FD106	H2	1514/1603	02:25S/08:00S	67:00	60	135	202	19.9	3,000	48
2791	FD107	H3	1611/1659	08:00S/02:25S	67:00	65	121	207	13.9	7,000	101	
718 RS	2792	WE1680	N1	1205/1257	15:07N/09:25N	67:00	65/65.8	119	207	6.3	8,100	164
	2793	WE1681	N2	1259/1348	09:11N/03:37N	67:00	65.7/66.9	116	206	5.6	8,700	178
	2794	WE1682	N3	1350/1439	03:23N/02:11S	67:00	66.8/67.5	115	206	5.4	7,900	115
	2796	FD99	H1	1350/1439	03:23N/02:11S	67:00	66.8/67.5	115	206	12.3	7,600	160
	2795	WE1683	N4	1441/1529	02:25S/08:00S	67:00	67.4/68	113	210	4.9	8,300	154
	2797	FD101	H3	1441/1529	02:25S/08:00S	67:00	67.4/68	113	210	11.3	9,300	163
	2798	FD102	H4	1534/1622	08:00S/02:25S	67:00	67.9/68.6	112	213	10.7	10,900	168
	2799	FD103	H5	1624/1713	02:11S/03:23N	67:00	68.6/69.5	110	212	10.2	10,300	192
	2800	FD104	H6	1716/1745	03:37N/07:00N	67:00	69.5	108	212	5.9	13,500	241
	8 December 1959 Mission 24A											
714 LN	2806	WE203	N1	1850/1928	44:23N/40:22N	98:07	45	165	209	13.9	2,000	34
	2807	WE202	N2	1931/2012	40:10N/36:00N	98:07	45	165	211	14.6	1,570	25
	2808	WE201	N3	2012/2055	35:57N/31:56N	98:07	45	165	212	15.3	≤ 851	11
705 LN	2811	WE208	N1	1452/1539	27:43N/32:37N	98:07	50	160	211	13.9	≤ 660	10
	2812	WE209	N2	1541/1629	32:50N/37:45N	98:07	50	160	212	14.1	1,070	21
	2813	WE210	N3	1631/1722	37:58N/42:52N	98:07	50	160	210	15.2	3,400	54
	2815	FD312	H1	1631/1722	37:58N/42:52N	98:07	50	160	210	33.5	3,600	58
	2814	WE211	N4	1724/1814	43:05N/48:00N	98:07	50	160	210	14.9	5,400	90
	2816	FD313	H2	1724/1814	43:05N/48:00N	98:07	50	160	210	32.8	5,800	100
	2817	FD314	H3	1820/1902	48:00N/43:05N	98:07	55.5	150	211	21.3	10,700	122
	2818	FD315	H4	1904/1946	42:52N/37:58N	98:07	55.5	150	211	21.1	6,600	109
	2819	FD316	H5	1948/2032	37:45N/32:50N	98:07	55.5	150	211	22.3	6,000	95
	2820	FD317	H6	2035/2119	32:37N/27:43N	98:07	55.5	150	209	22.6	4,700	74
718 LO	2801	FD306	H1	1350/1450	29:29N	99:17	55	150	208	31.5	4,100	69
	2802	FD307	H2	1457/1556	29:29N	99:17	60	135	208	23.3	6,300	113
	2803	FD308	H3	1603/1732	29:29N	99:17	65	121	210	25.3	9,300	162
	2804	FD309	H4	1742/1921	29:29N	99:17	68/68.7	112	211	22.2	10,900	166
	2805	FD310	H5	1926/2105	29:29N	99:17	69.2/71	108	213	19.5	13,200	190

Table 4.2 (continued)

												dpm/1000 SCF	
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	Total Data	90	
9 December 1959 Mission 24B													
716 MN	2825	M139	H1	1433/1507	50:17N/52:13N	102:31/103:46	30	175	219	41.1	< 139	3	
	2821	WP1661	N1	1637/1732	61:30N/59:49N	113:05/109:42	35	173	218	16.6	7,300	19	
	2822	WP1662	N2	1733/1813	58:39N/59:16N	109:30/106:02	35	173	218	19.3	1,190	19	
	2823	WP1663	N3	1814/1840	55:07N/52:49N	105:54/104:10	35	173	218	12.8	940	13	
	2824	WP1664	N4	1842/1907	52:36N/50:17N	104:02/102:31	35	173	218	12.1	< 480	4	
715 MN	2830	M133	H1	1357/1438	50:17N/53:13N	102:31/104:28	40	170	217	38.4	1,330	28	
	2831	M134	H2	1441/1518	53:22N/56:11N	104:35/106:54	40	170	219	34.4	1,980	38	
	2832	M135	H3	1521/1606	56:20N/59:00N	107:03/109:55	40	170	219	41.8	2,100	35	
	2833	M136	H4	1608/1647	59:09N/61:44N	110:05/113:25	40	170	220	36.1	2,900	49	
	2834	M137	H5	1649/1724	61:53N/64:23N	113:37/117:21	40	170	220	32.4	3,000	58	
	2835	M138	H6	1727/1802	64:31N/67:00N	117:37/122:00	40	170	220	32.4	3,300	73	
	2826	WP1989	N1	1805/1846	67:00N/63:14N	122:00/115:37	50	160	218	11.7	6,700	137	
	2827	WP1990	N2	1849/1928	63:02N/59:00N	115:20/109:55	50	160	217	11.2	6,100	124	
	2828	WP1991	N3	1930/2010	59:47N/54:50N	109:39/105:40	50	160	216	11.5	5,300	83	
	2829	WP1992	N4	2012/2054	53:36N/50:17N	105:30/102:31	50	160	215	12.2	2,900	40	
10 December 1959 Mission 25A													
718 LN	2843	WE00220	N1	1647/1732	27:43N/33:03N	98:07	64/65.1	121	210	5.6	8,400	165	
	2847	FD 318	H1	1647/1732	27:43N/33:03N	98:07	64/65.1	121	210	12.8	9,200	175	
	2844	WE00221	N2	1734/1822	33:17N/38:37N	98:07	65.1/65.9	119	211	5.7	9,600	187	
	2845	WE00222	N3	1824/1915	38:51N/44:11N	98:07	65.9/66.7	117	213	5.4	14,100	217	
	2846	WE00223	N4	1917/2009	44:25N/49:45N	98:07	66.7/67.1	115	214	5.4	12,300	183	
	2848	FD 319	H2	1917/2009	44:25N/49:45N	98:07	66.7/67.1	115	214	12.4	13,700	199	
	2849	FD 320	H3	2016/2059	49:45N/44:25N	98:07	66.8/68.2	115	214	9.8	13,600	216	
	2850	FD 321	H4	2101/2145	44:11N/38:51N	98:07	68.5/68.9	111	213	9.2	13,400	237	
	2851	FD 322	H5	2147/2232	38:37N/33:17N	98:07	68.9/69.7	110	211	9.4	11,500	223	
	2852	FD 323	H6	2234/2316	33:03N/27:43N	98:07	69.7/70.7	109	210	8.4	11,500	191	
705 LS	2836	WE00216	N1	1659/1743	27:43N/24:13N	98:07/93:51	63.4/65	123	208	5.9	6,400	109	
	2837	WE00217	N2	1745/1830	24:04N/20:26N	93:40/89:37	65/65.8	121	207	5.7	7,800	144	
	2838	WE00218	N3	1832/1915	20:16N/16:32N	89:26/85:35	65.8/66.2	120	206	5.2	8,400	120	
	2840	FD 330	H1	1832/1915	20:16N/16:32N	89:26/85:35	65.8/66.2	120	206	11.9	8,200	141	
	2839	WE00219	N4	1917/2002	16:22N/12:35N	85:24/81:43	66.2/66.5	118	206	5.3	8,300	149	
	2841	FD 333	H4	2012/2059	12:35N/16:22N	81:43/85:24	66.2/67	116	206	12.1	9,200	173	
	2842	FD 334	H5	2149/2233	20:26N/24:04N	89:37/93:40	68/69	111	207	10.1	9,000	153	
11 December 1959 Mission 25B													
715 MN	2853	WP2093	N1	1425/1524	50:17N/55:46N	102:31/106:30	55	155	215	14.2	4,700	92	
	2854	WP2094	N2	1525/1618	55:56N/60:58N	106:40/112:22	55	155	216	12.7	5,700	109	
	2855	WP2095	N3	1618/1714	61:10N/66:16N	112:37/120:37	55	155	217	13.2	7,100	150	
	2857	M145	H1	1618/1714	61:10N/66:16N	112:37/120:37	55	155	217	28.8	8,500	161	
	2856	WP2096	N4	1715/1814	66:28N/71:00N	121:00/132:30	55	155	221	13.7	7,200	136	
	2858	M146	H2	1715/1814	66:28N/71:00N	121:00/132:30	55	155	221	30.0	8,900	163	
	2859	M147	H3	1823/1916	71:00N/66:39N	132:30/121:25	60	135	219	19.5	10,500	203	
	2860	M148	H4	1916/2001	66:28N/61:34N	121:00/113:13	60	135	216	17.0	10,400	199	
	2861	M149	H5	2002/2052	61:21N/56:06N	112:54/106:51	60	135	214	19.1	11,100	179	
	2862	M150	H6	2053/2145	55:53N/50:17N	106:38/102:31	60	135	213	19.7	11,400	168	
716 MN	2863	WP1373	N1	1356/1455	50:17N/55:54N	102:31/106:38	60.4/64	126	211	8.3	9,300	142	
	2864	WP1374	N2	1457/1552	56:05N/61:12N	106:49/112:41	63.9/64.9	121	212	6.9	9,300	166	
	2865	WP1375	N3	1554/1652	61:23N/66:23N	112:56/120:50	64.9/65.9	119	215	6.8	10,600	166	
	2867	M151	H1	1554/1652	61:23N/66:23N	112:56/120:50	64.9/65.9	119	215	15.5	11,400	197	
	2866	WP1376	N4	1654/1753	66:32N/71:00N	121:10/132:30	66.1/66.4	118	217	6.5	12,800	166	
	2868	M152	H2	1654/1753	66:32N/71:00N	121:10/132:30	66.1/66.4	118	217	14.6	15,600	202	
	2869	M153	H3	1757/1843	71:00N/66:32N	132:30/121:10	66.4/67	116	217	11.0	17,700	227	
	2870	M154	H4	1846/1930	66:20N/61:23N	120:47/112:56	67/68.8	113	215	10.2	15,100	212	
	2871	M155	H5	1932/2016	61:10N/56:00N	112:38/106:45	68.8/69.5	111	212	9.3	12,900	208	
	2872	M156	H6	2019/2105	55:46N/50:17N	106:30/102:30	69.6/70.4	109	211	9.3	19,100	234	
15 December Mission 26A													
716 MN	2877	M157	H1	1417/1454	50:17N/53:23N	102:31/104:34	45	165	220	28.3	2,800	50	
	2878	M158	H2	1459/1532	53:33N/56:30N	104:43/107:12	45	165	222	25.0	3,400	61	
	2879	M159	H3	1535/1609	56:40N/59:27N	107:22/110:25	45	165	223	25.7	3,600	53	
	2880	M160	H4	1611/1646	51:37N/62:18N	110:38/114:15	45	165	224	25.9	3,700	51	
	2881	M161	H5	1648/1723	62:28N/65:10N	114:30/118:42	45	165	224	25.9	4,800	67	
	2882	M162	H6	1726/1801	65:20N/68:00N	118:56/124:15	45	165	225	26.1	4,100	41	
	2873	WP1653	N1	1805/1851	68:00N/64:00N	124:15/116:45	55	155	225	10.5	10,100	144	
	2874	WP1654	N2	1854/1936	63:47N/59:37N	116:28/110:38	55.5	155	223	9.7	8,400	133	
	2875	WP1655	N3	1938/2012	59:24N/55:40N	110:23/106:15	55.5	155	221	7.8	7,000	122	
	2876	WP1656	N4	2020/2110	54:47N/49:18N	105:42/101:40	55.5	155	219	11.6	6,400	122	
715 MN	2883	WP1345	N1	1409/1459	50:17N/56:03N	102:31/106:45	60	135	218	8.3	6,500	133	
	2884	WP1346	N2	1459/1607	56:14N/61:23N	106:58/112:57	60	135	222	11.0	9,300	194	
	2885	WP1347	N3	1607/1656	61:43N/66:27N	113:11/121:00	60.2	135	223	7.8	10,000	173	
	2886	WP1348	N4	1657/1750	66:38N/71:00N	121:21/132:30	60.5	135	225	8.3	10,700	211	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr ⁹⁰
16 December 1959 Mission 26B												
718 LN	2887	WE228	N1	1519/1609	27:43N/33:03N	98:07	59.5	135	210	8.7	6,600	115
	2888	WE229	H2	1611/1657	33:17N/38:37N	98:07	59.5	135	212	7.9	6,900	134
	2889	WE230	N3	1659/1747	38:51N/44:11N	98:07	59.5	135	215	8.2	9,200	146
	2891	FD348	H1	1659/1747	38:51N/44:11N	98:07	59.5	135	215	18.7	9,000	171
	2890	WE231	N4	1749/1837	44:25N/49:45N	98:07	59.5	135	216	8.0	9,200	151
	2892	FD349	H2	1749/1837	44:25N/49:45N	98:07	59.5	135	216	18.2	7,900	157
	2893	FD350	H3	1846/1935	49:45N/44:25N	98:07	65.2	120	216	13.1	12,000	208
	2894	FD351	H4	1937/2022	44:11N/38:51N	98:07	65.2	121	215	12.3	11,100	184
	2895	FD352	H5	2025/2108	38:37N/33:17N	98:07	65.2	120	212	12.0	10,700	193
	2896	FD353	H6	2110/2202	33:03N/27:43N	98:07	65.2	121	210	14.7	9,800	139
714 LS	2897	WE232	N1	1452/1531	27:43N/24:13N	98:07/93:51	60	135	207	6.9	5,700	95
	2898	WE233	N2	1533/1624	24:04N/20:26N	93:40/89:37	60	135	203	9.3	3,000	70
	2899	WE234	N3	1626/1717	20:16N/16:32N	89:26/85:35	60	135	200	9.3	1,970	32
17 December 1959 Mission 27A												
715 MN	2904	M163	H1	1423/1458	50:17N/53:44N	102:31/104:49	50	160	224	21.5	6,200	126
	2905	M164	H2	1501/1536	53:55N/57:11N	104:58/107:53	50	160	225	21.4	6,000	121
	2906	M165	H3	1538/1614	57:21N/60:38N	108:05/111:55	50	160	227	21.8	5,700	94
	2907	M166	H4	1616/1700	60:48N/64:18N	112:07/117:08	50	160	227	26.6	7,100	113
	2908	M167	H5	1702/1734	64:28N/67:03N	117:31/122:08	50	160	227	19.4	7,200	148
	2909	M168	H6	1738/1809	67:12N/69:52N	122:27/129:00	50	160	227	19.1	9,100	184
	2900	WP1709	N1	1814/1859	69:52N/65:38N	129:00/119:30	55	155	228	10.2	8,200	158
	2901	WP1710	N2	1904/1949	65:08N/60:45N	118:00/112:05	55	155	228	10.0	7,700	158
	2902	WP1711	N3	1951/2037	60:33N/55:35N	111:48/106:20	55	155	228	10.3	7,000	141
	2903	WP1712	N4	2042/2116	55:11N/50:17N	105:56/102:31	55	155	225	7.7	8,800	163
716 MN	2914	M169	H1	1400/1437	50:17N/54:00N	102:31/105:02	59.5	135	220	13.8	9,700	153
	2915	M170	H2	1438/1513	54:12N/57:40N	105:10/108:26	60	135	221	12.9	11,300	213
	2916	M171	H3	1514/1552	57:50N/61:22N	108:37/112:53	60	135	222	13.9	10,600	220
	2917	M172	H4	1553/1629	61:32N/64:47N	113:09/118:02	60	135	223	13.1	14,200	212
	2918	M173	H5	1631/1707	64:57N/68:05N	118:20/124:24	60.5	135	225	12.7	14,700	220
	2919	M174	H6	1708/1745	68:25N/71:00N	124:45/132:30	60.5	135	225	13.1	15,400	230
	2910	WP1905	N1	1753/1841	71:00N/66:28N	132:30/121:01	63/67	121	225	5.5	11,300	182
	2911	WP1906	N2	1843/1932	66:16N/61:24N	120:37/112:57	67/67.5	114	224	4.7	14,600	180
	2912	WP1907	N3	1934/2027	61:11N/55:19N	112:42/106:03	67.5/69	112	223	4.8	16,200	207
	2913	WP1908	N4	2029/2111	55:05N/50:17N	105:49/102:31	69/69.5	109	219	3.6	16,400	231
18 December 1959 Mission 27B												
718 LN	2934	FD354	H1	1521/1551	27:43N/30:20N	98:07	40	168	220	27.3	< 320	4
	2935	FD355	H2	1553/1625	30:31N/33:09N	98:07	40	169	218	29.6	< 390	2
	2936	FD356	H3	1628/1659	33:20N/35:57N	98:07	40	170	218	28.9	< 590	9
	2937	FD357	H4	1702/1733	36:08N/38:46N	98:07	40	171	214	29.6	< 880	14
	2938	FD358	H5	1736/1808	38:57N/41:34N	98:07	40	171	214	31.0	1,100	17
	2939	FD359	H6	1811/1839	41:45N/44:23N	98:07	40	170	213	26.6	1,300	22
	2930	236	N1	1850/1927	44:23N/40:22N	98:07	45	165	210	13.5	< 430	3
	2931	237	N2	1929/2008	40:10N/36:09N	98:07	45	166	211	13.9	< 330	< 1
	2932	238	N3	2011/2049	35:57N/31:56N	98:07	45	165	216	13.3	< 260	< 1
	2933	239	N4	2051/2129	31:44N/27:43N	98:07	45	166	213	13.6	< 430	< 2
705 LN	2921	247	N1	1448/1539	27:43N/32:37N	98:07	50	160	210	15.2	< 380	5
	2922	246	N2	1541/1630	32:50N/37:45N	98:07	50	163	211	14.8	< 470	7
	2923	245	N3	1631/1721	37:58N/42:52N	98:07	50	163	210	15.3	750	13
	2925	FD360	H1	1631/1721	37:58N/42:52N	98:07	50	163	210	33.6	940	15
	2924	244	N4	1723/1811	43:05N/48:00N	98:07	50	162	212	14.4	1,680	29
	2926	FD362	H3	1723/1811	43:05N/48:00N	98:07	50	162	212	31.6	2,400	36
	2927	FD363	H4	1818/1859	48:00N/43:05N	98:07	55.5	151	212	20.8	6,400	108
	2928	FD364	H5	1906/1942	42:02N/37:58N	98:07	55.5	151	210	18.5	2,900	57
2929	FD365	H6	1945/2025	37:45N/32:50N	98:07	55.5	151	211	20.4	1,660	78	
22 December 1959 Mission 28 A												
718 LS	2941	WE252	N1	1502/1545	27:43N/24:13N	98:07/93:51	63.5/65.7	121	208	5.4	8,700	161
	2942	WE253	N2	1547/1635	24:04N/20:26N	93:40/89:37	65.7/66.6	117	206	5.5	8,300	153
	2943	WE254	N3	1637/1720	20:16N/16:32N	89:26/85:35	66.7/67.6	115	204	4.8	8,300	143
	2945	FD372	H1	1637/1720	20:16N/16:32N	89:26/85:35	66.7/67.6	115	204	10.9	9,200	160
	2944	WE255	N4	1723/1811	16:22N/12:35N	85:24/81:43	67.3/67.9	114	208	5.0	10,300	156
	2946	FD373	H2	1723/1811	16:22N/12:35N	85:24/81:43	67.3/67.9	114	208	11.4	11,200	146
	2947	FD374	H3	1818/1905	12:35N/16:22N	81:43/85:24	67.6/68.7	112	208	10.7	9,400	169
	2948	FD375	H4	1914/1953	17:00N/20:16N	86:04/89:26	68.7/68.7	111	204	8.9	11,300	170
	2949	FD376	H5	1956/2043	20:26N/24:04N	89:37/93:40	68.7/69.7	110	206	10.3	12,100	194
	2950	FD377	H6	2045/2132	24:13N/27:43N	93:51/98:07	69.7/70	109	208	9.6	11,800	199

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Sr 90	
23 December 1959 Mission 28B													
705 LN	2951	WE260	N1	1521/1607	27:43N/33:03N	98:07	64/64.5	122	211	5.8	10,600	169	
	2952	WE261	N2	1609/1656	33:16N/36:37N	98:07	64.5/65	122	215	5.8	10,800	193	
	2953	WE262	N5	1658/1745	38:51N/44:11N	98:07	65	121	220	5.5	11,600	184	
	2955	FD384	H1	1658/1745	38:51N/44:11N	98:07	65	121	220	12.6	12,700	184	
	2954	WE263	N4	1747/1835	44:25N/49:45N	98:07	65	121	223	5.5	13,900	226	
	2956	FD386	H3	1837/1922	49:45N/44:25N	98:07	64.5/66	120	223	11.6	15,000	246	
	2957	FD387	H4	1924/2009	44:11N/38:51N	98:07	66/67	117	220	10.8	13,900	235	
	2958	FD388	H5	2011/2057	38:37N/33:17N	98:07	67/68	114	215	10.2	15,700	210	
2959	FD389	H6	2100/2139	33:03N/27:43N	98:07	68/68.5	111	211	8.4	14,500	228		
5 January 1960 Mission 29													
718 LN	2960	WE268	N1	1518/1602	27:43N/33:03N	98:07	60	135	206	7.8	3,800	73	
	2961	WE269	N2	1610/1650	34:05N/38:37N	98:07	60	133	213	6.6	6,100	98	
	2962	WE270	N3	1652/1739	38:51N/44:11N	98:07	60	136	217	7.9	8,100	125	
	2964	FD390	H1	1652/1739	38:51N/44:11N	98:07	60	136	217	17.8	7,600	156	
	2963	WE271	N4	1741/1807	44:25N/47:00N	98:07	60	138	221	4.4	9,500	158	
	2965	FD391	H2	1741/1807	44:25N/47:00N	98:07	60	138	221	9.8	9,900	180	
	2966	FD392	H3	1820/1842	47:00N/44:25N	98:07	65.2	121	221	5.8	13,300	208	
	2967	FD393	H4	1844/1927	44:11N/38:51N	98:07	65.3	122	217	11.7	13,600	218	
714 LS	2968	FD394	H5	1929/2016	38:37N/33:17N	98:07	65.5	122	213	13.0	11,400	178	
	2969	FD395	H6	2019/2103	33:03N/27:43N	98:07	65.5	122	206	12.7	8,100	176	
	2970	WE272	N1	1459/1542	27:43N/24:13N	98:07/93:51	60	135	206	7.6	1,820	26	
	2971	WE273	N2	1544/1635	24:04N/20:26N	93:40/89:37	60	135	203	9.2	1,630	28	
	2972	WE274	N3	1638/1719	20:16N/16:45N	89:26/85:50	60	136	201	7.5	2,900	68	
	2974	FD402	H1	1638/1719	20:16N/16:45N	89:26/85:50	60	136	201	17.1	4,000	64	
	2973	WE275	N4	1722/1758	16:40N/14:14N	85:42/83:15	60	135	201	6.6	3,500	64	
	2975	FD403	H2	1806/1832	14:14N/16:22N	83:15/85:24	65	120	217	7.0	13,800	216	
7 January 1960 Mission 30													
716 MN	2988	M181	H1	1401/1436	50:17N/52:56N	102:31/104:16	40	170	225	31.8	2,400	49	
	2989	M182	H2	1438/1513	53:04N/55:43N	104:21/106:28	40	170	224	31.9	2,700	46	
	2990	M183	H3	1515/1550	55:51N/58:20N	106:36/109:09	40	170	225	31.8	4,500	77	
	2991	M184	H4	1552/1627	58:28N/60:55N	109:18/112:18	40	170	225	31.8	4,400	79	
	2992	M185	H5	1629/1704	61:02N/63:28N	112:27/115:57	40	170	227	31.6	4,200	77	
	2993	M186	H6	1706/1740	63:36N/66:00N	116:08/120:00	40	170	227	30.2	4,000	84	
	2984	WP1641	N1	1745/1822	66:00N/62:23N	120:00/114:25	50	160	226	10.2	6,200	125	
	2985	WP1642	N2	1824/1905	62:11N/58:35N	114:06/109:27	50	160	225	11.3	4,700	79	
714 LN	2986	WP1643	N3	1907/1948	58:22N/54:35N	109:12/105:30	50	160	224	11.4	5,900	107	
	2987	WP1644	N4	1951/2027	54:24N/50:17N	105:20/102:31	50	160	223	10.1	4,000	68	
	2997	FD420	H1	0835/0902	27:43N/30:20N	98:07	40	170	220	25.0	< 230	3	
	2998	FD421	H2	0906/0936	30:31N/33:09N	98:07	40	170	222	27.6	1,450	29	
	2999	FD422	H3	0938/1005	33:20N/35:57N	98:07	40	170	223	24.7	1,380	21	
	3000	FD423	H4	1007/1035	36:08N/38:46N	98:07	40	170	217	26.2	1,410	30	
	3001	FD424	H5	1039/1103	38:57N/41:34N	98:07	40	170	216	22.5	2,300	38	
	3002	FD425	H6	1105/1138	41:45N/44:23N	98:07	40	170	213	30.9	2,300	49	
705 LN	2994	WE280	N1	1143/1223	44:23N/40:22N	98:07	45.5	165	215	13.9	3,300	66	
	2995	WE281	N2	1227/1310	40:10N/36:09N	98:07	45.5	165	214	14.0	2,900	58	
	2996	WE282	N3	1312/1350	35:57N/31:56N	98:07	45	165	215	13.3	1,480	29	
	3003	WE276	N1	0804/0848	27:43N/32:37N	98:07	50	162	195	14.4	< 640	9	
	3004	WE277	N2	0850/0932	32:50N/37:45N	98:07	50	161	208	12.8	3,300	69	
	3005	WE278	N3	0934/1024	37:58N/42:52N	98:07	50	161	210	15.0	3,100	67	
	3007	FD408	H1	0934/1024	37:58N/42:52N	98:07	50	161	210	33.1	4,200	83	
	3006	WE279	N4	1026/1107	43:05N/48:00N	98:07	50	160	213	12.1	3,500	64	
705 LN	3008	FD409	H2	1026/1107	43:05N/48:00N	98:07	50	160	213	26.8	4,700	--	
	3009	FD410	H3	1118/1202	48:00N/43:05N	98:07	55.5	150	214	22.0	6,400	125	
	3010	FD411	H4	1204/1248	42:52N/37:58N	98:07	55	151	211	22.7	3,600	78	
	3011	FD412	H5	1250/1334	37:45N/32:50N	98:07	55.5	152	211	22.6	2,500	49	
	3012	FD413	H6	1336/1428	32:37N/27:43N	98:07	55.5	152	208	27.3	1,930	37	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	ε _r 90
12 January 1960 Mission 31												
717 MN	3039	M193	H1	1426/1501	50:17N/53:52N	102:31/104:55	55.5	153	215	18.1	4,700	133
	3040	M194	H2	1502/1537	54:00N/57:22N	105:00/108:06	55	155	216	18.0	5,400	134
	3041	M195	H3	1539/1614	57:32N/61:36N	106:16/113:15	55	155	217	18.1	8,800	157
	3042	M196	H4	1616/1726	61:46N/65:42N	113:29/119:35	55	155	218	16.1	7,800	155
	3043	M197	H5	1759/1844	69:53N/65:27N	129:00/119:11	60.3	135	218	16.7	11,300	189
	3044	M198	H6	1846/1930	65:14N/60:30N	118:50/111:46	61	135	219	15.9	11,100	203
716 MN	3045	WP1365	N1	1355/1431	50:17N/53:48N	102:31/104:52	60/65	122	211	4.6	10,900	162
	3046	WP1366	N2	1422/1508	53:58N/57:20N	105:00/108:06	65/65.7	121	211	4.3	15,900	215
	3047	WP1367	N3	1510/1543	57:32N/60:46N	108:16/112:07	65.7/66.4	120	212	3.9	15,100	195
	3049	M187	H1	1510/1543	57:32N/60:46N	108:16/112:07	65.7/66.4	120	212	8.8	15,900	191
	3048	WP1368	N4	1545/1620	60:56N/63:56N	112:18/116:40	66.3	119	214	4.0	17,300	217
	3051	M189	H3	1545/1620	60:56N/63:56N	112:18/116:40	66.3	119	214	9.0	24,000	231
	3052	M190	H4	1734/1818	69:53N/65:25N	129:00/119:08	65.4/66.7	120	220	11.1	15,900	218
	3053	M191	H5	1820/1911	65:11N/60:47N	118:46/111:55	66.8/69	114	213	11.5	22,000	219
705 RO	3017	FD450	H1	1248/1348	18:30N	67:08	55	150	199	33.1	< 690	7
	3018	FD451	H2	1353/1453	18:30N	67:08	60	135	201	24.8	2,500	37
	3014	WE1620	N1	1507/1637	18:30N	67:08	65	121	204	11.7	5,700	113
	3015	WE1621	N2	1644/1824	18:30N	67:08	68	112	206	10.2	7,800	150
	3016	WE1622	N3	1825/2005	18:30N	67:08	70.1	105	208	8.5	11,100	189
718 RS	3019	WE1380	N1	1235/1332	15:00N/09:25N	67:00	60	136	201	10.5	1,550	31
	3020	WE1381	N2	1334/1423	09:11N/03:37N	67:00	60	136	202	9.0	1,670	23
	3021	WE1382	N3	1425/1510	03:23N/02:11S	67:00	60	137	202	8.3	1,480	27
	3023	FD444	H1	1425/1510	03:23N/02:11S	67:00	60	137	202	18.8	< 1,520	26
	3022	WE1383	N4	1512/1601	02:25S/08:00S	67:00	60	137	203	9.0	1,460	23
	3024	FD445	H2	1512/1601	02:25S/08:00S	67:00	60	137	203	20.3	< 1,270	22
	3025	FD446	H3	1612/1641	08:00S/02:25S	67:00	65	122	202	8.8	3,900	74
	3026	FD447	H4	1643/1732	02:11S/03:23N	67:00	65	122	202	14.9	5,100	98
	3027	FD448	H5	1734/1820	03:37N/09:11N	67:00	65	123	202	14.1	3,400	61
	3028	FD449	H6	1822/1910	09:25N/15:00N	67:00	65	125	203	14.9	6,500	127
714 RS	3033	FD456	H1	1206/1254	15:00N/09:25N	67:00	66.4/67.5	115	203	12.3	6,300	132
	3034	FD457	H2	1256/1345	09:11N/03:37N	67:00	67.4/67.6	112	203	11.8	6,900	129
	3029	WE1396	N1	1347/1434	03:23N/02:11N	67:00	67.7/67.9	112	202	5.0	5,700	133
	3035	FD458	H3	1447/1434	03:23N/02:11N	67:00	67.7/67.9	112	202	11.4	6,700	142
	3030	WE1397	N2	1438/1525	02:25S/08:00S	67:00	67.9/68.7	111	202	4.8	5,200	122
	3036	FD459	H4	1438/1525	02:25S/08:00S	67:00	67.9/68.7	111	202	10.8	4,800	104
	3031	WE1398	N3	1536/1622	08:00S/02:25S	67:00	68.8/69.6	109	202	4.4	6,700	117
	3037	FD460	H5	1536/1622	08:00S/02:25S	67:00	68.8/69.6	109	202	10.1	6,200	129
	3032	WE1399	N4	1625/1711	02:11S/03:23N	67:00	69.6/70.6	107	202	4.2	7,800	181
	3038	FD461	H6	1625/1711	02:11S/03:23N	67:00	69.6/70.6	107	202	9.6	8,300	165
14 January 1960 Mission 32A												
705 RS	3055	WE1272	N1	1235/1323	15:00N/09:25N	67:00	60	136	202	8.9	< 1,290	18
	3056	WE1273	N2	1326/1416	09:11N/03:37N	67:00	60	135	202	9.1	1,700	32
	3057	WE1274	N3	1418/1505	03:23N/02:11S	67:00	60	135	202	8.5	2,000	39
	3059	FD468	H1	1418/1505	03:23N/02:11S	67:00	60	135	202	19.3	2,300	37
	3058	WE1275	N4	1507/1601	02:25S/08:00S	67:00	60	135	202	9.8	1,170	17
	3061	FD470	H3	1613/1750	08:00S/02:45S	67:00	65	121	202	29.1	4,600	54
718 RS	3062	WE1188	N1	1205/1254	15:00N/09:25N	67:00	64.7/65.5	117	206	5.9	6,500	136
	3063	WE1189	N2	1256/1345	09:11N/03:37N	67:00	65.5/65.6	119	206	6.0	6,900	112
	3064	WE1190	N3	1348/1433	03:23N/02:11S	67:00	65.6/66.2	117	206	5.3	7,400	126
	3065	WE1191	N4	1436/1519	02:25S/08:00S	67:00	66.2/67.3	116	206	4.8	6,900	138
	3067	FD463	H2	1436/1519	02:25S/08:00S	67:00	66.2/67.3	116	206	11.0	6,800	114
	3068	FD464	H3	1524/1606	08:00S/02:25S	67:00	67.3/68.4	113	206	9.9	6,000	128
	3069	FD465	H4	1610/1701	02:11S/03:23N	67:00	68.4/69.2	111	206	11.4	7,700	158
	3070	FD466	H5	1703/1751	03:37N/09:11N	67:00	69.2/69.6	109	206	10.1	10,300	206
	3071	FD467	H6	1753/1844	09:25N/15:00N	67:00	69.7/70.4	108	206	10.5	9,200	194

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF		
											Total Beta	Si ⁹⁰	
15 January 1960 Mission 32R													
717 MO	3072	WP2113	N1	1412/1442	47:30N	104:00	30	176	216	16.5	≤ 420	4	
	3076	M205	H1	1412/1442	47:30N	104:00	30	176	216	37.0	≤ 310	4	
	3073	WP2114	N2	1446/1536	47:30N	104:00	40	170	216	20.8	1,640	32	
	3077	M206	H2	1446/1536	47:30N	104:00	40	170	216	47.0	1,880	30	
	3074	WP2115	N3	1542/1642	47:30N	104:00	50	160	212	17.6	4,300	78	
	3078	M207	H3	1542/1642	47:30N	104:00	50	160	212	38.9	3,400	66	
	3075	WP2116	N4	1649/1749	47:30N	104:00	57	146	211	12.6	6,500	129	
	3079	M208	H4	1649/1749	47:30N	104:00	57	146	211	28.1	5,200	126	
	3080	M209	H5	1756/1927	47:30N	104:00	64	122	205	28.2	11,100	182	
	3081	M210	H6	1930/1945	47:30N	104:00	67.8	118	204	3.8	27,000	212	
715 MO	3082	WP2149	N1	1345/1425	47:30N	104:00	45	165	213	14.1	2,700	36	
	3086	M199	H1	1345/1425	47:30N	104:00	45	165	213	31.6	3,200	52	
	3083	WP2150	N2	1429/1519	47:30N	104:00	50	160	211	14.8	3,000	52	
	3087	M200	H2	1429/1519	47:30N	104:00	50	160	211	32.7	3,800	73	
	3084	WP2151	N3	1522/1622	47:30N	104:00	55	155	211	14.7	3,600	67	
	3088	M201	H3	1522/1622	47:30N	104:00	55	155	211	32.1	5,600	81	
	3085	WP2152	N4	1627/1727	47:30N	104:00	60	133	208	10.3	4,800	104	
	3089	M202	H4	1627/1727	47:30N	104:00	60	133	208	23.3	6,600	101	
	3090	M203	H5	1729/1902	47:30N	104:00	64	122	205	28.9	12,900	190	
	3091	M204	H6	1904/2000	47:30N	104:00	67	118	204	14.7	21,000	193	
19 January 1960 Mission 33													
717 MN	3096	M211	H1	1526/1559	50:17N/53:03N	102:31/104:20	40	170	216	31.0	3,200	60	
	3097	M212	H2	1601/1634	53:14N/55:56N	104:28/106:40	40	170	215	31.1	1,930	41	
	3098	M213	H3	1636/1708	56:06N/58:49N	106:50/109:40	40	170	215	30.6	2,100	48	
	3099	M214	H4	1714/1747	58:58N/61:35N	109:52/113:15	40	170	216	31.0	2,400	54	
	3100	M215	H5	1749/1823	61:44N/64:20N	113:25/117:17	40	170	216	32.4	2,000	41	
	3101	M216	H6	1826/1904	64:28N/67:00N	117:32/122:05	40	170	216	35.7	1,630	33	
	3092	WP1693	N1	1910/1953	67:00N/63:14N	122:05/115:35	50	160	217	12.3	6,400	126	
	3093	WP1694	N2	1955/2039	63:03N/59:07N	115:20/140:03	50	160	215	12.8	6,500	108	
	3094	WP1695	N3	2041/2123	58:56N/54:53N	109:51/105:42	50	160	214	12.2	6,600	131	
	3095	WP1696	N4	2127/2210	54:42N/50:17N	105:34/102:31	50	160	215	12.5	4,400	80	
715 MS	3106	M217	H1	1437/1506	50:17N/47:28N	102:31/104:58	40	170	217	27.2	4,700	77	
	3107	M218	H2	1508/1538	47:18N/44:32N	101:55/101:27	40	170	217	28.1	3,600	80	
	3108	M219	H3	1541/1611	44:22N/41:29N	101:25/100:56	40	170	218	28.0	2,800	45	
	3109	M220	H4	1613/1643	44:17N/38:24N	100:55/100:34	40	170	214	28.9	3,100	45	
	3110	M221	H5	1645/1714	38:12N/35:26N	100:27/100:05	40	170	212	27.7	≤ 930	12	
	3111	M222	H6	1716/1745	35:15N/32:28N	100:03/99:41	40	170	211	27.8	≤ 410	5	
	3102	WP1937	N1	1754/1837	32:28N/36:43N	99:41/100:14	45	165	209	15.5	1,190	20	
	3103	WP1938	N2	1839/1924	36:54N/41:10N	100:15/100:53	45	165	213	15.9	2,300	54	
	3104	WP1939	N3	1926/2011	41:22N/45:42N	100:55/101:38	45	165	216	15.7	2,900	56	
	3105	WP1940	N4	2013/2054	45:52N/50:17N	101:40/102:31	45	165	215	14.3	2,600	42	
714 LN	3112	WE300	N1	1449/1533	27:43N/32:37N	98:07	50	160	214	12.8	1,260	22	
	3113	WE301	N2	1535/1622	32:50N/37:45N	98:07	50	160	216	13.6	2,800	54	
	3114	WE302	N3	1624/1710	37:58N/42:52N	98:07	50	160	217	13.2	3,100	58	
	3116	FD498	H1	1624/1710	37:58N/42:52N	98:07	50	160	217	29.2	2,900	66	
	3115	WE303	N4	1712/1758	43:05N/48:00N	98:07	50	160	216	13.3	5,400	92	
	3117	FD499	H2	1712/1758	43:05N/48:00N	98:07	50	160	216	29.3	5,400	112	
	3118	FD500	H3	1806/1853	48:00N/43:05N	98:07	55	150	216	23.6	7,800	173	
	3119	FD501	H4	1855/1940	42:52N/37:58N	98:07	55	150	217	22.5	6,200	117	
	3120	FD502	H5	1942/2029	37:45N/32:50N	98:07	55	150	217	23.2	3,600	65	
	3121	FD503	H6	2031/2123	32:37N/27:43N	98:07	55	150	212	26.6	1,710	27	
21 January 1960 Mission 34A													
714 LN	3146	FD510	H1	1520/1603	27:43N/32:50N	98:07	64.6/65.5	119	208	12.0	10,000	17	
	3143	WE313	N2	1605/1648	33:03N/38:08N	98:07	65.5/65.4	119	209	5.2	12,100	207	
	3144	WE314	N3	1650/1732	38:22N/43:22N	98:07	65.5/67.1	117	210	4.7	22,000	245	
	3145	WE315	N4	1734/1817	43:34N/48:40N	98:07	67.1/67.7	115	211	4.5	26,000	258	
	3147	FD511	H2	1734/1817	43:34N/48:40N	98:07	67.1/67.7	115	211	10.1	28,000	277	
	3148	FD512	H3	1825/1910	48:40N/43:34N	98:07	67.3/69.0	114	211	10.4	29,000	281	
	3149	FD513	H4	1913/1959	43:22N/38:22N	98:07	69.1/69.1	111	210	10.0	29,000	278	
	3150	FD514	H5	2001/2047	38:08N/33:03N	98:07	69.2	110	209	9.7	14,900	294	
	3142	WE312	N1	2049/2135	32:50N/27:43N	98:07	69.2/70.1	109	208	4.2	13,900	215	
	3151	FD515	H6	2049/2135	32:50N/27:43N	98:07	69.2/70.1	109	208	9.6	11,600	218	
705 LS	3152	WE320	N1	1446/1530	27:43N/24:13N	98:07/93:51	63.2/65.4	122	207	5.7	8,900	157	
	3153	WE321	N2	1532/1614	24:04N/20:26N	93:40/89:37	65.3/66.3	119	205	5.1	6,800	131	
	3154	WE322	N3	1618/1702	20:16N/16:32N	89:26/85:35	66.5/66.6	117	205	5.1	6,300	109	
	3155	WE323	N4	1704/1746	16:22N/12:35N	85:24/81:43	66.6/67	115	207	4.6	7,000	127	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	St ⁹⁰
22 January 1960 Mission 34B												
715 MN	3122	WPL1106	N1	1456/1531	50:17N/54:48N	102:31/105:09	55	155	217	8.3	6,800	143
	3123	WPL1109	N2	1532/1612	54:20N/57:55N	105:18/108:42	55	155	216	9.5	5,900	133
	3124	WPL1110	N3	1614/1650	58:09N/61:38N	108:54/113:14	55	155	215	8.6	6,900	140
	3126	M223	H1	1614/1650	58:09N/61:38N	108:54/113:14	55	155	215	18.9	8,800	154
	3125	WPL1111	N4	1652/1728	61:48N/65:02N	113:32/118:19	55	155	214	8.8	4,500	100
	3127	M224	H2	1652/1728	61:48N/65:02N	113:32/118:19	55	155	214	19.2	6,700	134
	3128	M225	H3	1844/1932	69:52N/65:26N	129:02/119:09	60	135	212	18.5	13,900	245
	3129	M226	H4	1935/2013	65:15N/60:09N	118:50/111:21	60	135	212	18.5	10,200	167
	3130	M227	H5	2015/2102	59:59N/55:34N	111:05/106:18	60	135	212*	18.1	13,800	260
717 MN	3132	WPL1100	N1	1426/1501	50:17N/54:05N	102:31/105:07	61/64.9	124	211	4.7	14,300	188
	3133	WPL1101	N2	1503/1539	54:18N/57:54N	105:15/108:40	64.9/64.9	121	211	4.5	13,900	232
	3134	WPL1102	N3	1541/1616	58:04N/61:32N	108:52/113:10	64.9/65	122	212	4.3	15,300	245
	3136	M229	H1	1541/1616	58:04N/61:32N	108:52/113:10	64.9/65	122	212	9.9	15,500	273
	3135	WPL1103	N4	1617/1652	61:44N/64:54N	113:25/118:15	65/65.6	122	214	4.3	15,500	228
	3137	M230	H2	1617/1652	61:44N/64:54N	113:25/118:15	65/65.6	122	214	9.7	17,300	237
	3138	M231	H3	1801/1850	69:50N/65:25N	129:00/119:05	65.6/66.4	121	220	12.8	14,900	254
	3139	M232	H4	1851/1941	65:14N/60:03N	118:46/111:12	66.4/68	114	215	11.4	19,200	297
	3141	M234	H6	1944/2030	59:50N/54:55N	110:55/105:44	68/69.2	109	210	9.9	17,600	269
26 January 1960 Mission 35												
718 LN	3156	WE327	N1	1612/1700	27:43N/33:03N	98:07	60	135	207	8.4	3,400	76
	3157	WE328	N2	1702/1751	33:17N/38:37N	98:07	60	135	209	8.5	5,000	99
	3158	WE329	N3	1753/1842	38:51N/44:11N	98:07	60	135	211	8.4	10,600	181
	3160	FD522	H1	1753/1842	38:51N/44:11N	98:07	60	135	211	19.0	12,000	208
	3159	WE330	N4	1844/1923	44:25N/48:40N	98:07	60	135	214	6.6	11,000	170
	3161	FD523	H2	1844/1923	44:25N/48:40N	98:07	60	135	214	14.9	11,700	198
	3162	FD524	H3	1934/2012	48:40N/44:25N	98:07	65	122	239	9.2	14,900	270
	3163	FD525	H4	2015/2058	44:11N/38:51N	98:07	65	121	235	10.5	18,700	269
	3164	FD526	H5	2100/2146	38:37N/33:17N	98:07	65	121	212	12.9	13,900	219
	3165	FD527	H6	2148/2237	33:03N/27:43N	98:07	65	121	210	13.9	9,400	168
714 LS	3166	WE323	N1	1444/1527	27:43N/24:13N	98:07/93:51	60	135	204	7.7	3,700	62
	3167	WE324	N2	1533/1617	24:04N/20:26N	93:40/89:37	60	133	202	7.8	1,760	30
	3168	WE325	N3	1623/1702	20:00N/16:32N	89:08/85:35	60	135	199	7.2	2,700	45
	3170	FD528	H1	1619/1702	20:16N/16:32N	89:26/85:35	60	135	199	18.0	2,500	55
	3169	WE326	N4	1703/1754	16:22N/12:35N	85:24/81:43	60	136	195	9.6	2,000	47
	3171	FD529	H2	1703/1754	16:22N/12:35N	85:24/81:43	60	136	195	21.6	1,960	48
	3172	FD530	H3	1814/1941	12:35N/20:06N	81:43/89:15	65	121	215	24.0	7,200	148
28 January 1960 Mission 36A												
717 MN	3176	WPL917	N1	1257/1352	50:17N/55:35N	102:31/106:25	60	135	214	9.3	14,500	190
	3177	WPL918	N2	1354/1453	55:46N/60:41N	106:31/111:58	60	135	212	10.0	13,700	189
	3178	WPL919	N3	1455/1554	60:51N/65:30N	112:12/119:17	60	135	210	10.2	15,200	199
	3179	WPL920	N4	1556/1653	65:40N/69:52N	119:34/129:00	60	135	208	9.8	10,800	167
29 January 1960 Mission 36B												
718 LN	3184	FD540	H1	0759/0829	27:43N/30:20N	98:07	40	170	218	28.0	≤ 410	3
	3185	FD541	H2	0831/0902	30:31N/33:09N	98:07	40	170	216	29.1	≤ 1,080	22
	3186	FD542	H3	0904/0934	33:20N/35:57N	98:07	40	170	213	28.5	1,470	29
	3187	FD543	H4	0936/1007	36:08N/38:46N	98:07	40	170	214	29.4	1,610	36
	3188	FD544	H5	1009/1041	38:57N/41:34N	98:07	40	170	215	30.4	1,130	22
	3189	FD545	H6	1045/1113	41:45N/44:23N	98:07	40	170	215	26.4	≤ 220	3
	3180	WE335	N1	1118/1208	44:23N/40:22N	98:07	45	165	215	17.5	2,800	54
	3181	WE336	N2	1209/1244	40:10N/36:09N	98:07	45	165	212	12.4	2,200	41
	3182	WE337	N3	1246/1327	39:57N/31:56N	98:07	45	165	209	14.8	1,560	27
	3183	WE338	N4	1329/1410	31:44N/27:43N	98:07	45	165	210	14.7	≤ 630	12
714 LN	3190	WE331	N1	0731/0817	27:43N/32:38N	98:07	49.5	160	203	14.4	≤ 880	15
	3194	FD534	H1	0731/0817	27:43N/32:38N	98:07	49.5	160	203	31.9	≤ 710	15
	3191	WE332	N2	0819/0905	32:50N/36:58N	98:07	49.5	160	204	14.3	1,230	28
	3192	WE333	N3	0907/0953	37:09N/41:57N	98:07	50	160	209	13.8	1,420	28
	3193	WE334	N4	0954/1041	42:10N/46:41N	98:07	50	160	215	13.6	2,000	46
	3195	FD535	H2	0954/1041	42:10N/46:41N	98:07	50	160	215	30.1	2,200	53
	3196	FD536	H3	1056/1138	47:31N/42:16N	98:07	55	152	216	21.4	5,200	107
	3197	FD537	H4	1146/1224	41:18N/36:40N	98:07	55	153	213	19.8	5,300	105
	3198	FD538	H5	1226/1306	36:25N/31:53N	98:07	55	152	206	21.5	3,500	77
	3199	FD539	H6	1308/1345	31:40N/27:43N	98:07	55	151	204	20.0	4,400	43

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Buja	Sr ⁹⁰
2 February 1960 Mission 37A												
718 LN	3200	WE343	N1	1716/1801	27:43N/32:50N	98:07	63.2/64	125	213	5.9	7,600	166
	3201	WE344	N2	1803/1847	33:04N/38:12N	98:07	64/64.2	125	215	5.7	9,000	187
	3202	WE345	N3	1849/1933	38:25N/43:30N	98:07	64.2/64.4	124	215	5.7	8,500	164
	3204	FD557	H1	1849/1933	38:25N/43:30N	98:07	64.2/64.4	124	215	13.0	7,700	148
	3203	WE346	N4	1935/2008	43:43N/47:40N	98:07	64.5/65	123	216	4.1	10,400	252
	3205	FD558	H2	1935/2008	43:43N/47:40N	98:07	64.5/65	123	216	9.4	9,700	189
	3206	FD559	H3	2016/2051	47:40N/43:43N	98:07	64.5/65.9	120	216	9.4	17,000	258
	3207	FD560	H4	2053/2138	43:30N/38:25N	98:07	66/66.5	118	215	11.3	8,800	163
	3208	FD561	H5	2140/2225	38:12N/33:04N	98:07	66.6/67.5	115	215	10.6	14,500	241
	3209	FD562	H6	2227/2310	32:50N/27:43N	98:07	67.8/69.1	112	213	9.4	14,200	260
705 LS	3214	FD552	H1	1647/1736	27:43N/23:30N	98:07/93:00	63.1/64.2	125	211	15.1	7,200	164
	3210	WE347	N1	1738/1814	23:20N/20:26N	92:48/89:37	64.1/64.9	122	210	4.6	7,000	165
	3211	WE348	N2	1816/1902	20:17N/16:32N	89:26/85:35	65/66	120	208	5.7	5,900	111
	3212	WE349	N3	1904/1934	16:22N/13:47N	85:24/82:50	65.9/66.2	118	207	3.5	6,500	141
	3215	FD553	H2	1904/1934	16:22N/13:47N	85:24/82:50	65.9/66.2	118	207	8.0	6,100	137
	3213	WE350	N4	1942/2016	13:47N/16:22N	82:50/85:24	66.1/66.5	118	207	4.0	6,300	148
	3217	FD555	H4	2018/2104	16:32N/20:16N	85:35/89:26	66.5	117	208	12.0	8,600	170
	3218	FD557	H5	2107/2152	20:26N/24:04N	89:37/93:40	66.4/67.6	117	210	11.1	19,300	196
	3219	FD556	H6	2155/2235	24:13N/27:43N	93:51/98:07	67.3/67.7	114	212	9.3	10,800	222
	3 February 1960 Mission 37B											
716 MO	3220	WP1341	N1	1416/1446	47:30N	104:00	30	175	218	16.2	280	4
	3224	M254	H1	1416/1446	47:30N	104:00	30	175	218	36.5	230	2
	3221	WP1342	N2	1451/1541	47:30N	104:00	40	170	218	20.7	2,300	42
	3225	M256	H3	1451/1541	47:30N	104:00	40	170	218	46.6	2,900	55
	3222	WP1343	N3	1553/1651	47:30N	104:00	50	160	218	16.6	2,600	58
	3223	WP1344	N4	1658/1758	47:30N	104:00	57.5	146	218	12.0	5,200	90
717 MO	3226	WP1201	N1	1345/1425	47:30N	104:00	45	165	218	13.8	4,800	97
	3230	M242	H1	1345/1425	47:30N	104:00	45	165	218	30.9	4,100	93
	3227	WP1202	N2	1429/1519	47:30N	104:00	50	160	218	14.3	2,000	41
	3231	M243	H2	1429/1519	47:30N	104:00	50	160	218	31.6	2,200	38
	3228	WP1203	N3	1523/1623	47:30N	104:00	55	155	217	14.3	4,700	101
	3232	M244	H3	1523/1623	47:30N	104:00	55	155	217	31.1	3,800	84
	3229	WP1204	N4	1629/1729	47:30N	104:00	60	135	218	9.9	10,700	174
	3233	M245	H4	1629/1729	47:30N	104:00	60	135	218	22.4	8,400	142
	3234	M246	H5	1732/1901	47:30N	104:00	64	123	218	25.7	10,800	166
	3235	M247	H6	1903/2033	47:30N	104:00	64.2/68.4	115	219	20.2	10,400	161
4 February 1960 Mission 38A												
718 LN	3236	WE355	N1	1518/1606	27:43N/33:03N	98:07	60	135	210	8.3	3,300	69
	3237	WE356	N2	1610/1653	33:17N/38:37N	98:07	60	135	213	7.3	4,900	114
	3238	WE357	N3	1656/1742	38:51N/44:11N	98:07	60	135	214	7.8	5,800	109
	3240	FD563	H1	1656/1742	38:51N/44:11N	98:07	60	135	214	17.6	5,400	122
	3239	WD358	N4	1744/1832	44:25N/49:45N	98:07	60	135	216	8.0	6,700	144
	3241	FD564	H2	1744/1832	44:25N/49:45N	98:07	60	135	216	18.1	6,300	136
	3242	FD565	H3	1842/1926	49:45N/44:25N	98:07	64.3/65	123	218	12.3	11,300	209
	3243	FD566	H4	1929/2013	44:11N/38:51N	98:07	65	121	217	12.0	7,900	224
	3244	FD567	H5	2014/2117	38:37N/32:07N	98:07	65/65.4	121	215	17.2	6,500	146
	705 LS	3246	WE351	N1	1447/1529	27:43N/24:13N	98:07/93:51	59.7	135	205	7.6	2,100
3247		WE352	N2	1531/1622	24:04N/20:26N	93:40/89:37	60	136	203	9.3	2,200	40
3248		WE353	N3	1623/1709	20:16N/16:32N	89:26/85:35	60	138	203	8.6	1,340	20
3250		FD569	H1	1623/1709	20:16N/16:32N	89:26/85:35	60	138	203	19.2	1,480	27
3249	WE354	N4	1711/1758	16:22N/12:35N	85:24/81:43	60	139	201	9.0	1,280	28	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Sr 90
6 February 1960 Mission 38B												
715 MO	3252	WP1225	N1	1345/1425	47:30N	104:00	45	165	217	13.9	3,600	70
	3256	M260	H1	1345/1425	47:30N	104:00	45	165	217	31.0	3,800	70
	3253	WP1226	N2	1430/1520	47:30N	104:00	50	160	217	14.4	5,100	118
	3257	M261	H2	1430/1520	47:30N	104:00	50	160	217	31.7	7,700	158
	3254	WP1227	N3	1525/1625	47:30N	104:00	55	155	217	14.3	6,700	128
	3258	M262	H3	1525/1625	47:30N	104:00	55	155	217	31.1	9,400	182
	3255	WP1228	N4	1630/1730	47:30N	104:00	60	135	218	9.9	14,100	173
	3259	M263	H4	1630/1730	47:30N	104:00	60	135	218	22.4	16,900	195
	3260	M264	H5	1735/1905	47:30N	104:00	64	123	218	26.0	15,800	212
3261	M265	H6	1910/2040	47.30N	104:00	66.5	118	218	22.2	12,600	201	
11 February 1960 Mission 40A												
705 LN	3279	WE359	N1	1515/1601	27:43N/33:03N	98:07	63.2/63.9	124	211	6.1	9,100	159
	3280	WE360	N2	1603/1649	33:17N/38:37N	98:07	63.9/63.6	123	212	6.0	12,700	195
	3281	WE361	N3	1651/1737	38:51N/44:11N	98:07	64/64.5	122	214	5.8	15,000	211
	3282	WE362	N4	1738/1825	44:25N/49:45N	98:07	64.6/64.5	122	217	5.6	16,200	212
	3283	FD581	H1	1834/1920	49:45N/44:25N	98:07	64.5/66.5	118	217	11.8	19,300	210
	3284	FD582	H2	1922/2009	44:11N/38:51N	98:07	66/66.6	117	214	11.6	17,200	255
	3285	FD583	H3	2012/2057	38:37N/33:17N	98:07	66.7/67.7	114	212	10.7	15,200	238
	3286	FD584	H4	2059/2147	33:03N/27:43N	98:07	67.5/67.5	113	211	11.1	13,100	190
	3287	WE363	N1	1444/1530	27:43N/24:13N	98:07/93:51	62.7/64.8	125	211	6.2	8,000	128
718 LS	3288	WE364	N2	1532/1616	24:04N/20:26N	93:40/89:37	64.9/65.7	120	209	5.4	7,100	111
	3289	WE365	N3	1617/1702	20:16N/16:32N	89:26/85:3	65.7/66.1	118	207	5.4	5,800	137
	3291	FD575	H1	1617/1702	20:16N/16:32N	89:26/85:35	65.7/66.1	118	207	12.2	6,800	121
	3290	WE366	N4	1705/1751	16:22N/12:35N	85:24/81:43	66.1/66.9	117	206	5.3	6,300	123
	3292	FD576	H2	1705/1751	16:22N/12:35N	85:24/81:43	66.1/66.9	117	206	12.1	5,200	125
	3293	FD577	H3	1801/1846	12:35N/16:22N	81:43/85:24	66.7/66.9	117	206	11.5	6,700	137
	3294	FD578	H4	1849/1933	16:32N/20:16N	85:35/89:26	66.9/67.2	117	207	11.2	7,400	167
	3295	FD579	H5	1936/2023	20:26N/24:04N	89:37/93:40	67.4/68.2	114	209	11.0	10,100	193
	3296	FD580	H6	2026/2107	24:13N/27:43N	93:51/98:07	68.4/68.7	112	211	9.0	13,900	220
	12 February 1960 Mission 40B											
716 MO	3262	WP1637	N1	1432/1501	47:30N	104:00	30	175	218	15.6	< 220	2
	3266	M 280	H1	1432/1501	47:30N	104:00	30	175	218	35.2	< 240	1
	3263	WP1638	N2	1505/1555	47:30N	104:00	40	170	218	20.7	2,800	57
	3264	WP1639	N3	1600/1700	47:30N	104:00	50	160	217	17.2	3,100	59
	3265	WP1640	N4	1705/1805	47:30N	104:00	57.5	146	217	12.1	7,600	145
	3267	M 283	H4	1705/1805	47:30N	104:00	57.5	146	217	26.6	9,200	183
3268	M 284	H5	1812/1942	47:30N	104:00	65	123	218	25.0	15,600	231	
715 MO	3270	WP1222	N2	1439/1518	47:30N	104:00	45	165	217	13.5	3,700	69
	3273	M 235	H1	1439/1518	47:30N	104:00	45	165	217	30.3	4,400	86
	3271	WP1223	N3	1521/1611	47:30N	104:00	50	160	217	14.4	3,100	69
	3274	M 236	H2	1521/1611	47:30N	104:00	50	160	217	31.7	4,500	93
	3272	WP1244	N4	1614/1714	47:30N	104:00	55	155	217	14.3	5,900	108
	3275	M 237	H3	1614/1714	47:30N	104:00	55	155	217	31.1	7,900	180
	3269	WP1221	N1	1717/1816	47:30N	104:00	60	135	217	9.8	11,400	175
	3276	M 238	H4	1717/1816	47:30N	104:00	60	135	217	22.1	13,000	225
	3277	M 239	H5	1819/1949	47:30N	104:00	64	123	218	26.0	14,300	249
	3278	M 240	H6	1950/2120	47:30N	104:00	64.5/69.5	113	218	20.4	18,900	257

Table 4.2 (continued)

											dpm/1000 SCF		
AC No.	HA3P No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	Total Beta	Sr 90	
16 February 1960 Mission 41													
716 MN	3316	M287	H1	1426/1459	50:17N/53:19W	102:31/104:32	45	165	222	25.0	4,700	103	
	3317	M288	H2	1501/1533	53:31N/56:24N	104:40/107:08	45	165	223	24.5	4,800	106	
	3318	M290	H3	1536/1618	56:34N/59:52N	107:16/110:58	45	165	223	31.7	5,300	118	
	3319	M291	H4	1620/1649	59:58N/62:30N	111:02/114:31	45	165	224	21.8	5,400	107	
	3320	M292	H5	1653/1724	62:40N/65:13N	114:45/118:45	45	165	224	23.3	5,800	117	
	3312	WP1517	N1	1805/1850	68:00N/64:00N	124:15/116:45	55	155	223	10.4	6,000	88	
	3313	WP1518	N2	1852/1928	63:48N/59:36N	116:27/110:39	55	155	222	8.3	6,800	118	
	3314	WP1519	N3	1929/2012	59:23N/55:03N	110:25/105:50	55	155	221	10.0	6,200	108	
	3315	WP1520	N4	2018/2054	54:49N/50:17N	105:39/102:31	55	155	220	8.4	6,200	103	
717 MN	3322	WP2201	N1	1355/1428	50:17N/53:59N	102:31/105:02	60	135	218	5.5	11,000	196	
	3323	WP2202	N2	1429/1505	54:12N/57:44N	105:11/108:30	60	135	219	6.0	10,600	200	
	3324	WP2203	N3	1506/1543	57:55N/61:20N	108:42/112:53	60	135	219	6.1	11,100	205	
	3326	M294	H1	1506/1543	57:55N/61:20N	108:42/112:53	60	135	219	13.7	11,400	236	
	3325	WP2204	N4	1544/1619	61:31N/64:45N	113:10/117:55	60.5	135	220	5.6	12,000	249	
	3327	M295	H2	1544/1619	61:31N/64:45N	113:10/117:55	60.5	135	220	12.7	13,200	202	
	3328	M296	H3	1734/1824	71:00N/66:29N	132:30/121:02	64	121	219	14.0	17,900	246	
	3329	M297	H4	1826/1917	66:18N/61:20N	120:40/112:52	65	121	218	13.8	19,600	248	
	3330	M298	H5	1919/2011	61:10N/55:53N	112:37/106:36	65	121	217	14.2	16,300	233	
	3331	M299	H6	2014/2106	55:39N/50:17N	106:24/102:31	65	121	217	14.2	14,900	216	
	718 RS	3301	FD605	H1	1130/1504	15:00N/08:00S	67:00	60	135	199	89.5	1,530	30
		3297	WE1392	N1	1512/1555	08:00S/02:25S	67:00	64.5	121	204	5.7	3,000	71
3298		WE1393	N2	1557/1645	02:11S/03:23N	67:00	63	121	204	6.2	3,700	104	
3299		WE1394	N3	1647/1739	03:37N/09:11N	67:00	65.3	121	204	6.7	4,800	106	
3300		WE1395	N4	1742/1832	10:00N/15:00N	67:00	65.3	121	205	6.3	5,600	130	
705 RS	3302	WE1108	N1	1100/1148	15:00N/09:25N	67:00	64.3/65	123	205	6.4	4,500	116	
	3303	WE1109	N2	1151/1239	09:11N/03:13N	67:00	64.7/64.7	124	204	6.5	4,200	93	
	3304	WE1110	N3	1241/1326	03:23N/02:11S	67:00	64.8/65.7	123	204	6.0	4,600	81	
	3306	FD599	H1	1241/1326	03:23N/02:11S	67:00	64.8/65.7	123	204	13.6	4,800	98	
	3305	WE1111	N4	1329/1417	02:25S/08:00S	67:00	65.8/66.1	120	204	6.1	4,200	97	
	3307	FD600	H2	1329/1417	02:25S/08:00S	67:00	65.8/66.1	120	204	13.7	5,800	97	
	3309	FD602	H4	1425/1558	08:00S/03:23N	67:00	65.4/67.6	118	204	24.7	6,500	116	
	3310	FD603	H5	1600/1647	03:37N/09:11N	67:00	67.4/68.5	114	204	11.2	9,400	194	
	3311	FD604	H6	1650/1734	09:25N/15:00N	67:00	68.5/68.9	112	205	10.0	10,000	196	
18 February 1960 Mission 42A													
717 MN	3336	M306	H1	1356/1431	50:17N/53:12N	102:31/104:28	40	170	225	31.8	5,400	115	
	3337	M307	H2	1432/1507	53:23N/56:10N	104:34/106:54	40	170	225	31.8	5,500	103	
	3338	M308	H3	1508/1543	56:19N/59:00N	107:04/109:55	40	170	225	31.8	3,900	81	
	3339	M309	H4	1546/1619	59:09N/61:45N	110:05/113:29	40	170	225	30.0	4,000	93	
	3340	M310	H5	1621/1654	61:53N/64:26N	113:40/117:27	40	170	224	30.1	4,100	99	
	3341	M311	H6	1656/1722	64:34N/67:00N	117:40/122:05	40	170	224	23.7	4,100	88	
	3332	WP1576	N1	1728/1808	67:00N/63:09N	128:05/115:30	50	160	221	11.2	5,500	114	
	3333	WP1577	N2	1809/1849	62:57N/59:00N	115:12/109:55	50	160	222	11.2	6,100	143	
	3334	WP1578	N3	1852/1931	58:48N/54:45N	109:40/105:35	50	160	222	11.0	7,400	140	
	3335	WP1579	N4	1932/2014	54:32N/50:17N	105:25/102:31	50	160	222	11.7	7,000	132	
19 February 1960 Mission 42B													
705 RS	3342	WE1092	N1	1136/1230	15:00N/09:25N	67:00	60	135	200	9.9	1,630	23	
	3346	FD606	H1	1136/1414	15:00N/02:11S	67:00	60	135	200	65.6	1,740	35	
	3343	WE1093	N2	1230/1322	09:11N/03:37N	67:00	60	135	200	9.5	1,210	31	
	3344	WE1094	N3	1322/1414	03:23N/02:11S	67:00	60	135	200	9.5	1,450	25	
	3345	WE1095	N4	1417/1504	02:25S/08:00S	67:00	60	135	200	8.6	1,070	19	
	3347	FD609	H4	1417/1504	02:25S/08:00S	67:00	60	135	200	19.5	1,170	30	
718 RS	3348	WE1168	N1	1059/1149	15:00N/09:25N	67:00	63.8/64.5	123	204	6.8	5,000	92	
	3349	WE1169	N2	1151/1240	09:11N/03:37N	67:00	64.5/65	123	204	6.5	4,600	99	
	3350	WE1170	N3	1242/1329	03:23N/02:11S	67:00	65/65.7	121	204	6.1	5,100	105	
	3352	FD612	H1	1242/1329	03:23N/02:11S	67:00	65/65.7	121	204	13.8	5,600	144	
	3351	WE1171	N4	1332/1422	02:25S/08:00S	67:00	65.9/66.9	117	204	5.9	4,300	101	
	3353	FD613	H2	1332/1422	02:25S/08:00S	67:00	65.9/66.9	117	204	13.3	5,100	125	
23 February 1960 Mission 43													
716 MO	3354	M286	H1	1406/1436	47:30N	104:00	30	175	215	36.8	850	21	
	3355	M281	H2	1441/1529	47:30N	104:00	40	170	226	43.4	4,300	81	
	3356	M282	H3	1535/1634	47:30N	104:00	50	160	221	36.8	5,400	99	
	3357	M285	H6	1918/2048	47:30N	104:00	69.2	113	219	18.6	25,000	322	
717 MO	3358	WP2197	N1	1342/1420	47:30N	104:00	45	165	223	12.8	3,500	69	
	3362	M312	H1	1342/1420	47:30N	104:00	45	165	223	28.7	3,500	58	
	3359	WP2198	N2	1423/1513	47:30N	104:00	50	160	221	14.1	4,500	87	
	3363	M313	H2	1423/1513	47:30N	104:00	50	160	221	31.2	4,800	111	
	3360	WP2199	N3	1516/1617	47:30N	104:00	55	155	220	14.3	6,100	117	
	3364	M314	H3	1516/1617	47:30N	104:00	55	155	220	31.2	7,000	129	
	3361	WP2200	N4	1621/1721	47:30N	104:00	60	135	220	9.8	12,000	201	
	3365	M315	H4	1621/1721	47:30N	104:00	60	135	220	22.2	15,800	223	
	3366	M316	H5	1725/1855	47:30N	104:00	64	123	220	25.8	18,400	248	
	3367	M317	H6	1900/2030	47:30N	104:00	66.3/70.5	109	219	17.7	15,600	217	

Table 4.2 (continued)

AC No.	HASF No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	cpm/1000 SCF	
											Total Beta	Sr 90
25 February 1960 Mission 44												
716 MN	3372	M331	H1	1416/1449	50:17N/53:31N	102:31/104:41	45	165	223	24.9	6,500	151
	3373	M332	H2	1452/1527	53:40N/56:47N	104:46/107:30	45	165	223	26.4	7,200	165
	3374	M333	H3	1529/1603	56:56N/59:50N	107:40/110:55	45	165	225	25.4	6,900	167
	3375	M334	H4	1605/1640	60:00N/62:38N	111:06/114:45	45	165	224	26.3	6,900	151
	3376	M335	H5	1642/1717	62:47N/65:25N	114:56/119:05	45	165	223	26.4	3,900	94
	3377	M336	H6	1719/1755	65:34N/68:00N	119:21/124:15	45	165	222	27.3	4,000	90
	3368	WP1949	N1	1801/1835	68:00N/64:00N	124:15/116:46	55	155	222	7.9	7,500	133
	3369	WP1950	N2	1837/1917	63:50N/59:38N	116:29/110:40	55	155	224	9.2	13,600	186
	3370	WP1951	N3	1920/2003	59:25N/55:02N	110:25/105:50	55	155	226	9.7	9,700	166
	3371	WP1952	N4	2005/2048	54:49N/50:17N	105:40/102:31	55	155	223	9.9	7,400	130
717 MN	3378	WP1953	N1	1353/1428	50:17N/54:07N	102:31/105:07	59.5	135	222	5.7	12,300	221
	3379	WP1954	N2	1430/1505	54:18N/57:51N	105:15/108:36	60	135	223	5.6	11,000	218
	3380	WP1955	N3	1507/1543	58:02N/61:23N	108:48/112:58	60	135	224	5.8	13,600	226
	3381	WP1956	N4	1544/1620	61:34N/64:47N	113:13/118:03	60	135	224	5.7	22,000	236
705 LN	3382	WE1080	N1	1519/1558	27:42N/32:28N	98:07	60	133	211	6.5	7,400	110
	3383	WE1081	N2	1559/1640	32:42N/37:28N	98:07	60	135	213	6.9	11,400	170
	3384	WE1082	N3	1643/1723	37:42N/42:21N	98:07	60	135	216	6.7	11,900	166
	3386	FD630	H1	1643/1723	37:42N/42:21N	98:07	60	135	216	15.1	14,200	189
	3385	WE1083	N4	1724/1804	42:35N/47:25N	98:07	60	135	219	6.6	13,100	184
	3387	FD631	H2	1724/1804	42:35N/47:25N	98:07	60	135	219	14.8	13,500	229
	3388	FD632	H3	1818/1856	47:25N/42:42N	98:07	65	120	218	10.2	17,700	252
	3389	FD633	H4	1900/1938	42:28N/37:42N	98:07	65	121	217	10.3	19,500	208
	3390	FD634	H5	1945/2020	37:28N/32:48N	98:07	65	121	215	9.7	15,000	235
	3391	FD635	H6	2023/2105	32:35N/27:42N	98:07	65	121	213	11.7	10,500	205
718 LS	3392	WE1088	N1	1457/1537	27:42N/24:25N	98:07/94:04	60	135	205	7.1	4,700	65
	3393	WE1089	N2	1539/1620	24:15N/20:48N	93:52/90:00	60	135	198	7.6	1,360	26
	3394	WE1090	N3	1623/1707	20:38N/17:20N	89:50/86:20	60	135	194	8.3	960	13
	3396	FD636	H1	1623/1707	20:38N/17:20N	89:50/86:20	60	135	194	18.9	900	15
	3395	WE1091	N4	1709/1754	17:10N/13:42N	86:12/82:47	60	135	196	8.5	820	12
	3397	FD637	H2	1709/1754	17:10N/13:42N	86:12/82:47	60	135	196	19.2	750	13
	3398	FD638	H3	1802/1847	13:42N/17:16N	82:47/86:17	65	121	204	13.3	3,900	94
	3399	FD639	H4	1849/1925	17:22N/20:48N	86:25/90:00	65.5	121	200	10.7	4,000	95
	3400	FD640	H5	1927/2016	20:58N/24:20N	90:10/93:56	65.5	121	202	14.4	8,100	156
	3401	FD641	H6	2018/2104	24:28N/27:42N	94:10/98:07	65.5	121	208	13.0	9,900	177
1 March 1960 Mission 45												
717 MN	3406	M324	H1	1356/1427	50:17N/53:07N	102:31/104:22	40	170	221	29.1	3,800	109
	3407	M326	H2	1428/1503	53:16N/56:01N	104:29/106:44	40	170	220	32.4	4,600	133
	3408	M327	H3	1504/1540	56:10N/59:04N	106:53/110:00	40	170	220	33.3	6,000	132
	3409	M328	H4	1541/1614	59:13N/61:51N	110:16/113:35	40	170	219	30.7	6,000	116
	3410	M329	H5	1616/1651	62:00N/64:32N	113:47/117:37	40	170	218	33.1	3,400	72
	3411	M330	H6	1652/1729	64:41N/67:00N	117:53/122:05	40	170	218	34.5	4,000	77
	3402	WE1560	N1	1740/1820	67:00N/63:09N	122:05/115:29	50	160	219	11.4	7,200	128
	3403	WE1561	N2	1820/1904	62:58N/59:00N	115:12/109:55	50	160	221	12.2	4,100	75
	3404	WE1562	N3	1905/1944	58:49N/54:54N	109:42/105:43	50	160	221	11.0	7,600	143
	3405	WE1563	N4	1945/2028	54:41N/50:17N	105:33/102:31	50	160	221	12.1	5,700	123
3 March 1960 Mission 46A												
717 MN	3412	WE1572	N1	1424/1517	50:17N/55:54N	102:31/106:37	55	155	220	12.4	10,000	178
	3413	WE1573	N2	1519/1615	56:05N/61:15N	106:48/112:46	55	155	220	13.1	8,800	163
	3414	WE1574	N3	1617/1711	61:26N/66:26N	113:02/120:58	55	155	219	12.7	8,400	149
	3416	M344	H1	1617/1711	61:26N/66:26N	113:02/120:58	55	155	219	27.7	6,100	105
	3415	WE1575	N4	1713/1810	66:36N/71:00N	121:15/132:30	55	155	218	13.6	7,400	142
	3417	M345	H2	1713/1810	66:36N/71:00N	121:15/132:30	55	155	218	29.4	8,000	144
4 March 1960 Mission 46B												
718 LN	3418	WE1116	N1	1516/1608	27:43N/33:03N	98:07	63.2/64.4	128	211	7.2	10,100	186
	3419	WE1117	N2	1609/1652	33:17N/38:37N	98:07	64.6/64.4	124	214	5.6	10,800	186
	3420	WE1118	N3	1633/1742	38:51N/44:11N	98:07	64.4	124	217	6.2	12,100	213
	3422	FD660	H1	1653/1742	38:51N/44:11N	98:07	64.4	124	217	14.1	11,700	196
	3421	WE1119	N4	1743/1827	44:25N/49:45N	98:07	64.5/65	124	220	5.4	14,000	229
	3423	FD661	H2	1743/1827	44:25N/49:45N	98:07	64.5/65	124	220	12.3	13,100	212
	3424	FD662	H3	1835/1905	49:45N/46:10N	98:07	64.8/61.7	124	221	8.2	15,000	208
	3425	FD663	H4	1932/2017	44:11N/38:51N	98:07	61.7/59.4	125	217	14.6	11,300	194
705 LS	3426	WE1120	N1	1445/1530	27:43N/24:13N	98:07/93:51	61.5/64.5	126	210	6.2	8,500	146
	3427	WE1121	N2	1532/1616	24:04N/20:26N	93:40/89:37	64.5/64.4	123	207	5.8	5,900	102
	3428	WE1122	N3	1618/1701	20:16N/16:32N	89:26/85:35	65.2	121	206	5.4	4,200	101
	3430	FD654	H1	1618/1701	20:16N/16:32N	89:26/85:35	65.2	121	206	12.4	5,700	110
	3429	WE1123	N4	1703/1749	16:22N/12:35N	85:24/81:43	65.2/65.5	121	208	5.8	6,400	107
	3431	FD655	H2	1703/1749	16:22N/12:35N	85:24/81:43	65.2/65.5	121	208	13.2	6,300	107
	3432	FD656	H3	1752/1838	12:35N/16:22N	81:43/85:24	65.5/66	119	208	12.1	5,900	144
	3433	FD657	H4	1840/1926	16:32N/20:16N	85:35/89:26	66/66.5	117	206	12.1	6,800	145
	3434	FD658	H5	1928/2014	20:26N/24:04N	89:37/93:40	66.5/67.5	115	207	11.5	6,200	145

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	90 Sr
10 March 1960 Mission 48A												
705 LN	3439	FD 666	H1	1713/1750	27:43N/30:25N	98:07	39.5	170	212	35.9	400	---
	3440	FD 667	H2	1752/1821	30:37N/33:20N	98:07	39.5	170	211	28.3	≤ 510	1
	3441	FD 668	H3	1823/1856	33:33N/36:00N	98:07	39.5	170	212	32.0	≤ 270	< 1
	3442	FD 669	H4	1858/1930	36:13N/38:46N	98:07	39.5	170	213	30.9	1,570	40
	3443	FD 670	H5	1932/2004	38:57N/41:35N	98:07	39.5	170	214	30.8	2,500	59
	3444	FD 671	H6	2007/2028	41:45N/44:23N	98:07	39.5	170	215	20.1	3,000	73
	3435	WE1400	N1	2040/2126	44:23N/40:22N	98:07	45	165	215	16.1	3,000	65
	3436	WE1401	N2	2127/2202	40:10N/36:09N	98:07	45	165	214	12.3	1,180	39
	3437	WE1402	N3	2202/2243	35:57N/31:56N	98:07	45	165	211	14.5	≤ 400	4
	3438	WE1403	N4	2248/2311	32:44N/27:43N	98:07	44.5	165	212	8.2	≤ 420	< 4
718 LN	3445	WE1060	N1	1743/1833	27:03N/32:37N	98:07	50	160	205	15.3	530	10
	3446	WE1061	N2	1835/1924	32:50N/37:28N	98:07	50	160	209	14.7	2,000	43
	3447	WE1062	N3	1926/2014	37:41N/42:30N	98:07	50	160	213	14.0	3,900	81
	3449	FD 672	H1	1926/2014	37:41N/42:30N	98:07	50	160	213	31.0	4,000	82
	3448	WE1063	N4	2015/2104	42:43N/47:50N	98:07	50	160	216	14.1	5,400	120
	3450	FD 673	H2	2015/2104	42:43N/47:50N	98:07	50	160	216	31.2	5,700	120
	3451	FD 674	H3	2112/2153	47:50N/42:55N	98:07	54.5	150	217	20.8	6,700	136
	3452	FD 675	H4	2155/2235	42:42N/37:58N	98:07	55	150	213	20.4	6,600	123
	3453	FD 676	H5	2237/2316	37:45N/32:50N	98:07	55	150	208	19.9	3,600	73
	3454	FD 677	H6	2348/0017	32:37N/27:43N	98:07	55	150	203	31.9	1,970	47
11 March 1960 Mission 48B												
707 MN	3455	M360	H1	1358/1514	50:17N/56:16N	102:31/106:58	40	170	219	70.7	3,700	74
	3456	M361	H2	1516/1630	56:24N/61:54N	107:09/113:39	40	170	217	69.8	3,800	84
	3457	M363	H3	1632/1744	62:02N/67:00N	113:51/122:06	40	170	214	68.2	3,800	86
	3458	M364	H4	1754/1847	67:00N/61:50N	122:06/113:35	50	160	218	33.5	8,500	160
	3459	M365	H5	1849/1943	61:37N/56:14N	113:18/106:56	50	160	217	34.2	7,600	135
	3460	M366	H6	1945/2041	56:00N/50:17N	106:44/102:31	50	160	218	35.4	6,600	127
22 March 1960 Mission 51												
707 MN	3461	M385	H1	1400/1522	50:17N/56:20N	102:31/107:03	40	170	211	79.1	2,500	50
	3462	M386	H2	1524/1637	56:28N/61:52N	107:12/113:38	40	170	213	69.8	3,300	73
	3463	M387	H3	1638/1749	62:00N/67:00N	113:50/122:08	40	170	211	68.1	3,300	68
	3464	M388	H4	1754/1845	67:00N/61:50N	122:08/113:35	50	160	215	32.6	6,700	138
	3465	M389	H5	1846/1938	61:38N/56:13N	113:18/106:55	50	160	215	33.3	5,300	117
	3466	M390	H6	1939/2038	56:00N/50:17N	106:45/102:31	50	160	212	38.3	2,700	53
718 LN	3473	WPL1028	N1	1445/1535	27:43N/32:40N	98:07	50	160	209	15.0	≤ 540	7
	3474	WPL1029	N2	1537/1627	32:50N/37:45N	98:07	50	160	207	18.1	≤ 380	6
	3475	WPL1030	N3	1629/1720	37:58N/42:52N	98:07	50	160	210	15.2	≤ 230	1
	3477	FD 708	H1	1629/1720	37:58N/42:52N	98:07	50	160	210	33.5	680	17
	3476	WPL1031	N4	1721/1809	43:05N/48:00N	98:07	50	160	216	13.9	1,410	28
	3478	FD 709	H2	1721/1809	43:05N/48:00N	98:07	50	160	216	30.6	680	16
	3479	FD 710	H3	1816/1856	48:00N/43:05N	98:07	55	150	216	20.1	3,300	63
	3480	FD 711	H4	1858/1938	42:52N/37:58N	98:07	55	150	210	20.7	2,200	61
	3481	FD 712	H5	1940/2020	37:45N/32:50N	98:07	55	150	207	21.1	1,620	49
	3482	FD 713	H6	2022/2109	32:40N/27:43N	98:07	55	150	209	24.5	1,510	42
24 March 1960 Mission 52												
707 MN	3467	M397	H1	1357/1513	50:17N/57:50N	102:31/108:36	61.2/64.1	129	221	23.3	12,100	172
	3468	M398	H2	1515/1632	58:00N/64:48N	108:47/118:06	64.1/64.8	121	221	21.5	11,700	185
	3469	M399	H3	1634/1704	64:48N/61:51N	118:06/113:37	64.8/65.5	120	222	7.9	14,500	224
	3470	M400	H4	1706/1738	61:38N/58:20N	113:20/109:11	65.3/66	118	224	7.7	16,600	195
	3471	M401	H5	1740/1810	58:08N/54:50N	108:56/105:40	66/66.9	116	222	7.1	13,700	205
	3472	M402	H6	1815/1853	54:38N/50:17N	105:30/102:31	66.9/68	114	219	8.5	15,700	255
718 LN	3483	WPL933	N1	1514/1621	27:43N/35:04N	98:07	60.7/64.2	127	213	9.4	8,600	151
	3484	WPL934	N2	1622/1651	35:11N/38:37N	98:07	61.2	123	214	3.8	10,600	180
	3487	FD 720	H1	1652/1737	38:51N/44:11N	98:07	64.2/64.6	122	215	13.0	11,900	221
	3486	WPL936	N4	1738/1827	44:25N/49:45N	98:07	64.6/65.3	120	216	5.9	12,800	192
	3488	FD 721	H2	1738/1827	44:25N/49:45N	98:07	64.6/65.3	120	216	13.5	15,100	249
	3489	FD 722	H3	1833/1918	49:45N/44:25N	98:07	65.3/66.4	117	216	11.2	16,200	212
	3490	FD 723	H4	1920/2005	44:11N/38:51N	98:07	66.4/67.4	115	215	10.7	12,600	248
	3491	FD 724	H5	2006/2055	38:37N/33:17N	98:07	67.4/68.1	113	214	11.4	14,600	242
	3492	FD 725	H6	2057/2142	33:03N/27:43N	98:07	68.1/69.1	108	213	9.4	13,300	206
	705 LS	3493	WE1592	N1	1444/1748	27:43N/12:35N	98:07/81:43	63.5/66.4	118	211	21.6	3,400
3497		FD 714	H1	1619/1703	20:16N/16:32N	89:26/85:35	65.4/65.8	118	210	11.8	5,100	109
3494		WE1593	N2	1753/1839	12:35N/16:22N	81:43/85:24	66.4/66.9	117	211	5.1	10,200	242
3495		WE1594	N3	1841/1928	16:32N/20:46N	85:35/89:26	66.6/67.3	114	210	5.0	6,700	141
3496	WE1595	N4	1930/2104	20:26N/27:43N	89:37/98:07	67.4/67.8	112	211	3.3	10,600	187	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	dpm/1000 SCF	
											Total Beta	Str ⁹⁰
29 March 1960 Mission 53												
714 MS	3498	WP2405	N1	1500/1746	50:17N/38:04N	102:31/100:34	40	170	212	57.9	2,400	48
	3502	FD217	H1	1500/1820	50:17N/32:29N	102:31/100:50	40	170	213	189.9	---	---
	3503	FD218	H2	1828/2129	32:29N/50:17N	100:50/102:31	45	165	213	142.9	---	---
	3504	WP2408	N4	1928/2129	38:17N/50:17N	100:36/102:31	45	165	212	43.0	3,700	62
705 LN	3504	WE1604	N1	1508/1554	27:43N/33:03N	98:07	60	135	203	8.3	4,900	86
	3505	WE1605	N2	1556/1641	33:17N/38:37N	98:07	60	135	205	8.0	6,300	107
	3506	WE1606	N3	1643/1730	38:51N/44:11N	98:07	60	135	207	8.3	7,000	132
	3508	FD726	H1	1643/1730	38:51N/44:11N	98:07	60	135	207	18.7	7,800	136
	3507	WE1607	N4	1732/1819	44:25N/49:45N	98:07	60	135	209	8.2	9,600	142
	3509	FD727	H2	1732/1819	44:25N/49:45N	98:07	60	135	209	18.5	10,000	145
	3510	FD728	H3	1825/1910	49:45N/44:25N	98:07	65	121	216	12.3	11,400	218
	3511	FD729	H4	1912/1956	44:11N/38:51N	98:07	65	121	210	12.5	10,700	203
	3512	FD730	H5	2000/2043	38:37N/33:17N	98:07	65	121	208	12.4	9,900	184
	3513	FD731	H6	2046/2128	33:03N/27:43N	98:07	65	121	202	12.6	7,700	158
718 LS	3514	WPL1132	N1	1445/1528	27:43N/24:13N	98:07/93:51	60	135	205	7.6	1,660	30
	3518	FD732	H1	1445/1528	27:43N/24:13N	98:07/93:51	60	135	201	17.7	1,610	31
	3515	WPL1133	N2	1529/1612	24:04N/20:26N	93:40/89:37	60	135	202	7.8	1,470	24
	3516	WPL1134	N3	1614/1659	20:16N/16:32N	89:26/85:35	60	135	201	8.2	1,400	35
	3517	WPL1135	N4	1703/1755	16:22N/12:35N	85:24/81:43	60	135	202	9.1	2,300	49
	3519	FD734	H3	1757/1845	12:35N/16:22N	81:43/85:24	65	121	206	14.0	2,800	63
	3520	FD735	H4	1847/1933	16:32N/20:16N	85:35/89:26	65	121	205	13.5	3,400	84
	3521	FD736	H5	1935/2020	20:26N/24:04N	89:37/93:40	65	121	206	13.1	4,600	94
31 March 1960 Mission 54												
707 LN	3523	FD744	H1	1515/1620	29:43N/34:18N	98:07	50	160	216	41.4	1,450	33
	3524	FD745	H2	1622/1724	34:32N/41:20N	98:07	50	160	217	39.3	2,300	51
	3525	FD746	H3	1729/1827	41:34N/48:00N	98:07	50	160	217	37.1	3,900	73
	3526	FD747	H4	1836/1932	48:00N/41:34N	98:07	55	150	217	28.2	3,800	82
	3527	FD748	H5	1935/2140	41:20N/34:32N	98:07	55	150	217	62.4	3,800	67
5 April 1960 Mission 55												
714 MN	3529	M01	N1	1442/1535	50:20N/55:30N	102:30/106:20	55	155	243	10.9	9,200	158
	3530	M02	N2	1539/1635	55:45N/60:50N	106:30/112:15	55	155	238	11.9	5,300	101
	3531	M03	N3	1636/1723	61:00N/66:10N	112:25/120:30	55	155	228	10.5	8,400	155
	3533	M419	H1	1636/1723	61:00N/66:10N	112:25/120:30	55	155	228	23.1	9,800	192
	3532	M04	N4	1726/1825	66:20N/71:00N	120:50/132:20	55	155	233	12.9	9,200	168
	3534	M420	H2	1726/1825	66:20N/71:00N	120:50/132:20	55	155	233	28.2	10,500	188
	3535	M421	H3	1831/1912	71:00N/66:42N	132:20/121:35	60	135	247	12.9	14,600	256
	3536	M422	H4	1923/2015	66:00N/61:45N	120:30/113:20	60	135	243	16.8	13,400	261
	3537	M423	H5	2017/2115	61:25N/56:15N	113:00/107:00	60	135	243	18.7	13,300	223
	3538	M424	H6	2120/2207	56:00N/50:20N	106:45/102:30	60	135	248	14.7	13,400	243
717 MN	3539	M05	N1	1359/1453	50:20N/55:30N	102:30/106:25	57.7/63	132	251	6.7	12,600	175
	3540	M06	N2	1456/1553	56:00N/61:00N	106:40/112:40	63/64.1	127	253	6.2	13,200	200
	3541	M07	N3	1554/1647	61:20N/66:20N	112:50/120:50	64.1/64.5	124	251	5.5	12,500	213
	3542	M08	N4	1650/1741	66:30N/71:00N	121:25/132:25	64.5/65.6	124	248	5.2	11,800	194
705 RS	3543	WPL1116	N1	1130/1219	15:00N/09:25N	67:00	60	135	204	8.8	1,830	36
	3544	WPL1117	N2	1221/1310	09:11N/03:37N	67:00	60	135	204	8.9	1,030	22
	3545	WPL1118	N3	1312/1400	03:23N/02:11S	67:00	60	135	205	8.6	940	20
	3547	FD754	H1	1312/1400	03:23N/02:11S	67:00	60	135	205	19.6	1,020	27
	3546	WPL1119	N4	1402/1450	02:25S/08:00S	67:00	60	135	206	8.5	810	19
	3548	FD755	H2	1402/1450	02:25S/08:00S	67:00	60	135	206	19.2	890	30
	3549	FD756	H3	1458/1547	08:00S/02:25S	67:00	65	121	209	14.0	3,100	78
	3550	FD757	H4	1549/1635	02:11S/03:23N	67:00	65	121	209	13.2	3,900	81
	3551	FD758	H5	1638/1728	03:37N/09:11N	67:00	65	121	208	14.4	4,000	106
	3552	FD759	H6	1730/1818	09:25N/15:00N	67:00	65	121	207	13.9	5,400	96
718 RS	3553	WPL1124	N1	1100/1150	15:00N/09:25N	67:00	64.1/64.7	122	208	6.5	5,400	101
	3554	WPL1125	N2	1152/1241	09:11N/03:37N	67:00	64.7/65.8	120	208	6.1	3,200	71
	3555	WPL1126	N3	1243/1330	03:23N/02:11S	67:00	65.8/66.3	118	209	5.5	3,600	80
	3557	FD760	H1	1243/1330	03:23N/02:11S	67:00	65.8/66.3	118	209	12.4	5,300	101
	3556	WPL1127	N4	1332/1424	02:25S/08:00S	67:00	66.3/67.1	115	211	5.5	4,000	90
	3558	FD761	H2	1332/1424	02:25S/08:00S	67:00	66.3/67.1	115	211	12.8	4,500	87
	3559	FD762	H3	1428/1517	08:00S/02:25S	67:00	67.2/67.5	114	211	11.6	3,900	112
	3560	FD763	H4	1519/1608	02:11S/03:23N	67:00	67.5/67.9	114	211	11.6	5,200	122
3561	FD764	H5	1610/1658	03:37N/09:11N	67:00	67.9/68.7	112	211	10.6	6,200	145	
3562	FD765	H6	1701/1742	09:25N/15:00N	67:00	68.8/68.6	110	212	8.7	8,200	162	

Table 4.2 (continued)

												dprn/1000 SCF	
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	Total Beta	Sr ⁹⁰	
7 April 1960 Mission 54													
714 MN	3585	M425	H1	1430/1504	50:20N/53:15N	102:30/104:25	45.5	165	220	25.6	3,700	66	
	3586	M426	H2	1506/1543	53:30N/56:16N	104:40/107:00	45	165	222	28.1	3,200	72	
	3587	M427	H3	1545/1621	56:22N/59:10N	107:10/110:05	45	165	215	28.1	2,700	47	
	3588	M428	H4	1623/1700	59:20N/62:14N	110:20/114:10	45	165	215	28.9	1,380	28	
	3589	M429	H5	1702/1740	62:30N/65:10N	114:30/118:45	45	165	228	28.0	1,320	27	
	3590	M430	H6	1743/1821	65:20N/68:00N	119:10/124:15	45	165	228	28.0	2,100	41	
	3581	M13	N1	1829/1907	68:00N/64:12N	124:20/117:10	55	155	230	8.4	8,800	160	
	3582	M14	N2	1909/1947	64:02N/59:55N	117:05/111:00	55	155	228	8.5	8,300	149	
	3583	M15	N3	1950/2032	59:42N/55:06N	110:05/105:50	55	155	225	9.6	8,300	156	
	3584	M16	N4	2034/2111	54:50N/50:16N	105:40/102:30	55	155	221	8.6	8,900	149	
715 MN	3591	M09	N1	1356/1541	50:20N/60:32N	102:30/111:45	60	135	225	16.7	10,300	175	
	3595	M431	H1	1356/1729	50:20N/69:52N	102:30/129:00	60	135	225	76.5	--	--	
	3592	M10	N2	1541/1729	60:42N/69:52N	112:10/129:00	60	135	230	16.6	11,200	175	
	3593	M11	N3	1742/1913	69:30N/61:10N	128:00/112:35	65	121	230	10.1	11,100	170	
	3596	M432	H2	1742/2053	69:30N/50:20N	128:00/102:30	65	121	227	49.2	--	--	
3594	M12	N4	1915/2053	60:50N/50:20N	112:15/102:30	65	121	227	11.1	10,900	162		
705 RS	3563	WE1656	N1	1130/1219	15:00N/09:25N	67:00	60	134	203	8.7	2,600	57	
	3564	WE1657	N2	1221/1311	09:11N/03:37N	67:00	60	135	204	9.0	1,280	29	
	3565	WE1658	N3	1312/1403	03:23N/02:11S	67:00	60	134	204	9.1	890	20	
	3566	WE1659	N4	1403/1428	02:25S/05:15S	67:00	60	135	205	4.3	800	20	
	3568	FD768	H3	1436/1510	05:15S/00:28S	67:00	65	124	209	9.9	2,900	61	
	3569	FD769	H4	1512/1557	00:12S/05:20N	67:00	65	124	208	13.6	2,900	83	
	3570	FD770	H5	1600/1642	05:34N/10:44N	67:00	65	124	208	12.6	3,400	73	
	3571	FD771	H6	1644/1732	10:51N/16:14N	67:00	65	124	207	14.4	5,000	102	
718 RS	3572	WE1712	N1	1101/1150	15:00N/09:25N	67:00	64/64.8	122	207	6.4	4,500	90	
	3573	WE1713	N2	1153/1241	09:11N/03:37N	67:00	64.8/65.5	121	207	6.1	3,200	67	
	3574	WE1714	N3	1243/1331	03:23N/02:11S	67:00	65.5/66	119	208	5.8	3,200	72	
	3575	WE1715	N4	1333/1423	02:25S/08:00S	67:00	66/66.5	118	209	5.8	4,200	85	
	3577	FD774	H3	1426/1517	08:00S/02:25S	67:00	66.5/67.1	116	209	12.8	4,400	95	
	3578	FD775	H4	1518/1607	02:11S/03:23N	67:00	67.1/67.7	115	208	12.1	4,500	113	
	3579	FD776	H5	1610/1657	03:37N/09:11N	67:00	67.7/68.3	113	207	10.9	5,000	113	
	3580	FD777	H6	1659/1746	09:25N/15:00N	67:00	68.3/69.7	110	207	10.2	7,800	164	
12 April 1960 Mission 57													
717 MN	3605	M443	H1	1356/1433	50:25N/53:20N	102:30/104:30	40.2/38.6	170	224	33.8	2,600	58	
	3606	M444	H2	1435/1511	53:30N/56:06N	104:45/106:50	38.2/39.7	170	225	32.7	3,200	62	
	3607	M445	H3	1513/1545	56:20N/59:00N	107:00/109:55	40/39.6	170	226	28.5	3,200	68	
	3608	M446	H4	1547/1621	59:10N/61:40N	110:05/113:35	39.6/39.5	170	226	31.1	3,000	72	
	3609	M447	H5	1623/1659	61:50N/64:30N	113:45/117:40	39.6/39.9	170	228	32.6	3,100	57	
	3610	M448	H6	1701/1734	64:50N/67:00N	117:55/122:10	39.9/39.4	170	230	29.7	3,100	48	
	3601	M17	N1	1740/1815	67:00N/63:10N	122:10/115:35	40/41.6	170	229	13.8	2,900	50	
	3602	M18	N2	1817/1902	62:55N/59:00N	119:15/109:55	41.6/41.2	170	227	17.6	2,200	40	
	3603	M19	N3	1906/1947	58:50N/54:50N	109:45/105:35	41.5/40.6	170	224	15.9	2,500	51	
	3604	M20	N4	1950/2030	54:35N/50:25N	109:25/102:30	40.9/39.1	170	222	16.2	1,350	30	
715 MS	3615	M437	H1	1433/1504	50:25N/47:30N	102:30/102:00	40	170	218	28.9	2,600	66	
	3616	M438	H2	1506/1539	47:20N/44:40N	102:06/101:30	40	170	218	30.8	1,670	40	
	3617	M439	H3	1541/1611	44:30N/41:20N	101:25/100:55	40	172	210	29.4	580	14	
	3618	M440	H4	1613/1702	41:10N/38:20N	100:50/100:30	40.5	174	211	47.7	660	14	
	3619	M441	H5	1704/1736	38:10N/35:20N	100:25/100:05	40.5	172	211	30.6	1,490	27	
	3620	M442	H6	1738/1811	35:10N/32:30N	100:00/99:40	40.5	174	214	31.7	1,350	34	
	3611	M21	N1	1816/1855	32:20N/36:55N	99:40/100:15	50	165	209	12.2	2,900	72	
	3612	M22	N2	1857/1941	37:05N/41:20N	100:20/100:50	50	166	210	13.8	2,300	56	
	3613	M23	N3	1943/2030	41:30N/45:45N	100:55/101:45	50	164	212	14.3	1,930	56	
	3614	M24	N4	2032/2112	45:55N/50:25N	101:45/102:30	50	165	218	12.0	2,800	73	
705 LN	3621	WPL1112	N1	1443/1529	27:43N/32:37N	98:07	50	160	208	15.8	330	8	
	3622	WPL1113	N2	1531/1618	32:50N/37:28N	98:07	50	160	210	14.0	580	9	
	3623	WPL1114	N3	1620/1707	37:41N/42:30N	98:07	50	160	214	13.6	840	15	
	3625	FD782	H1	1620/1707	37:41N/42:30N	98:07	50	160	214	30.2	940	20	
	3624	WPL1115	N4	1709/1755	42:43N/47:50N	98:07	50	160	216	13.3	1,560	33	
	3626	FD783	H2	1709/1755	42:43N/47:50N	98:07	50	160	216	29.3	1,850	34	
	3627	FD784	H3	1800/1843	47:50N/42:55N	98:07	55	150	216	21.6	4,600	122	
	3628	FD785	H4	1845/1927	42:42N/37:58N	98:07	55	150	214	21.3	4,200	77	
	3629	FD786	H5	1927/2011	37:45N/32:50N	98:07	55	150	210	21.8	3,000	63	
	3630	FD787	H6	2013/2058	32:37N/27:43N	98:07	55	150	208	23.6	1,090	40	

Table 4.2 (continued)

												dprn/1000 SCF	
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°V)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	Total Beta	Sr 90	
14 April 1960 Mission 58													
718 LN	3631	WPL1120	N1	1517/1603	27:43N/33:03N	98:07	63	124	213	6.1	9,500	175	
	3632	WPL1121	N2	1605/1651	33:17N/38:37N	98:07	63.5/64.5	123	214	6.0	10,400	202	
	3633	WPL1122	N3	1653/1739	38:51N/44:11N	98:07	64.5/65	122	216	5.7	12,200	191	
	3635	FD806	H1	1653/1739	38:51N/44:11N	98:07	64.5/65	120	219	5.3	12,500	206	
	3634	WPL1123	N4	1741/1826	44:25N/49:45N	98:07	65	120	219	12.0	12,800	226	
	3636	FD807	H2	1741/1826	44:25N/49:45N	98:07	65/66	117	219	11.6	14,300	245	
	3637	FD808	H3	1830/1916	49:45N/44:25N	98:07	66/67	115	216	11.1	11,100	213	
	3638	FD809	H4	1918/2004	44:11N/38:51N	98:07	67/67.5	113	214	10.5	12,400	209	
	3639	FD810	H5	2006/2052	38:37N/33:17N	98:07	67.5/68.5	111	213	10.1	13,600	191	
	3640	FD811	H6	2054/2140	33:03N/27:43N	98:07	67.5/68.5	111	213	10.1	13,600	191	
705 LS	3641	WPL1116	N1	1452/1532	27:43N/24:13N	98:07/93:51	62.4/64.4	122	210	5.3	5,200	151	
	3642	WPL1117	N2	1532/1617	24:04N/20:26N	93:40/89:37	64.4/65.4	120	209	5.6	6,100	161	
	3643	WPL1118	N3	1618/1711	20:16N/16:32N	89:26/85:35	65.4/66	118	208	6.2	6,500	136	
	3645	FD800	H1	1618/1711	20:16N/16:32N	89:26/85:35	65.4/66	118	208	14.3	6,600	131	
	3644	WPL1119	N4	1711/1754	16:22N/12:35N	85:24/81:43	66/66.8	118	208	5.0	4,600	112	
	3646	FD801	H2	1712/1754	16:22N/12:35N	85:24/81:43	66.6/68	118	208	11.0	5,900	108	
	3647	FD802	H3	1815/1849	12:35N/16:22N	81:43/85:24	66.8/67.1	117	208	8.6	6,000	147	
	3648	FD803	H4	1852/1934	16:32N/20:16N	85:35/89:26	67.2/67.5	116	208	10.3	8,100	167	
	3649	FD804	H5	1935/2023	20:26N/24:04N	89:37/93:40	67.5/68.7	114	209	11.1	9,700	191	
	3650	FD805	H6	2024/2100	24:13N/27:43N	93:51/98:07	68/68.5	112	210	8.1	10,600	217	
19 April 1960 Mission 59A													
714 LN	3651	WE1128	N1	1520/1607	27:43N/33:03N	98:07	60	135	210	8.1	2,700	42	
	3652	WE1129	N2	1609/1656	33:17N/38:37N	98:07	60	135	214	8.0	6,200	104	
	3653	WE1130	N3	1658/1744	38:51N/44:11N	98:07	60	135	217	7.6	9,900	160	
	3654	WE1131	N4	1746/1833	44:25N/49:45N	98:07	60	135	219	7.7	10,600	175	
	3655	FD813	H2	1746/1833	44:25N/49:45N	98:07	60	135	219	17.4	12,100	216	
	3656	FD814	H3	1841/1927	49:45N/44:25N	98:07	65	121	220	12.3	12,000	230	
	3657	FD815	H4	1928/2014	44:11N/38:51N	98:07	65	121	219	12.4	11,100	194	
	3658	FD816	H5	2016/2102	38:37N/33:17N	98:07	65	121	215	12.7	12,600	214	
	3659	FD817	H6	2104/2145	33:03N/27:43N	98:07	65	121	213	11.4	8,500	170	
	3660	WE1124	N1	1447/1532	27:43N/24:13N	98:07/93:51	60	135	206	7.9	2,900	59	
705 LS	3661	WE1125	N2	1534/1619	24:04N/20:26N	93:40/89:37	60	135	205	8.0	2,500	47	
	3662	WE1126	N3	1621/1706	20:16N/16:32N	89:26/85:35	60	135	203	8.1	2,600	59	
	3663	WE1127	N4	1708/1756	16:22N/12:35N	85:24/81:43	60	135	202	8.7	3,000	55	
20 April 1960 Mission 59B													
715 MN	3664	M455	H1	1426/1502	50:20N/53:30N	102:30/104:40	45	165	219	28.0	3,100	70	
	3665	M456	H2	1505/1543	53:45N/56:50N	104:50/107:30	45	165	220	29.0	3,000	79	
	3666	M457	H3	1545/1618	57:00N/59:50N	107:45/110:50	45	165	221	25.1	3,300	76	
	3667	M458	H4	1621/1658	59:55N/62:40N	111:10/114:50	45	165	222	28.1	3,400	72	
	3668	M459	H5	1700/1735	62:50N/65:20N	115:00/119:10	45	165	223	26.4	3,500	82	
	3669	M460	H6	1737/1811	65:30N/68:00N	119:20/124:20	45	165	225	25.4	3,500	88	
717 MN	3670	M34	N1	1355/1449	50:18N/55:56N	102:30/106:40	60	136	219	9.0	10,000	159	
	3671	M35	N2	1451/1542	56:08N/61:20N	106:50/113:00	60	136	224	8.2	7,500	141	
	3672	M36	N3	1544/1637	61:36N/66:20N	113:20/121:00	60	137	227	8.5	9,300	160	
	3674	M449	H1	1644/1637	61:36N/66:20N	113:20/121:00	60	137	227	19.1	13,000	175	
	3673	M37	N4	1638/1725	66:30N/71:00N	121:30/132:30	60	136	230	7.3	9,000	165	
	3675	M450	H2	1638/1725	66:30N/71:00N	121:30/132:30	60	136	230	16.5	10,400	--	
	3676	M451	H3	1735/1823	71:00N/66:40N	132:30/121:20	61.7/64	123	231	13.3	13,700	258	
	3677	M452	H4	1826/1916	66:30N/61:35N	121:00/113:20	64.2/65	122	228	13.0	10,700	193	
	3678	M453	H5	1918/2012	61:20N/56:10N	113:00/106:55	65/65.3	123	223	14.6	9,800	164	
	3679	M454	H6	2014/2106	56:00N/50:18N	106:45/102:30	65.5/65	121	220	13.8	9,500	170	
21 April 1960 Mission 60													
705 LN	3684	FD818	H1	1518/1548	27:43N/30:20N	98:07	40	170	210	28.9	390	8	
	3685	FD819	H2	1550/1620	30:31N/33:09N	98:07	40	170	211	28.8	400	4	
	3686	FD820	H3	1622/1652	33:20N/35:57N	98:07	40	170	212	28.6	300	3	
	3687	FD821	H4	1654/1724	36:08N/38:46N	98:07	40	170	219	27.9	200	< 2	
	3688	FD822	H5	1726/1755	38:57N/41:34N	98:07	40	170	219	27.0	420	9	
	3689	FD823	H6	1757/1829	41:45N/44:23N	98:07	40	170	219	29.8	570	12	
	3680	WE1136	N1	1831/1910	44:23N/40:22N	98:07	45	165	218	13.5	850	20	
	3681	WE1137	N2	1912/1952	40:10N/36:09N	98:07	45	165	217	13.9	910	21	
	3682	WE1138	N3	1954/2037	35:57N/31:56N	98:07	45	165	211	15.3	1,130	23	
	3683	WE1139	N4	2039/2122	31:44N/27:43N	98:07	45	165	200	16.2	360	6	
714 LN	3690	WE1140	N1	1447/1534	27:43N/32:37N	98:07	50	160	203	14.5	1,510	33	
	3691	WE1141	N2	1535/1623	32:50N/37:45N	98:07	50	160	213	14.0	3,200	65	
	3692	WE1142	N3	1623/1651	37:58N/40:52N	98:07	50	160	216	8.1	3,700	88	
	3694	FD824	H1	1623/1651	37:58N/40:52N	98:07	50	160	216	17.8	4,000	74	
	3693	WE1143	N4	1652/1752	41:05N/47:17N	98:07	50	160	217	17.2	3,700	74	
	3695	FD825	H2	1652/1752	41:05N/47:17N	98:07	50	160	217	38.0	3,400	76	
	3696	FD826	H3	1758/1842	48:00N/43:05N	98:07	55	155	219	22.9	3,700	86	
	3697	FD827	H4	1843/1927	42:52N/37:58N	98:07	55	155	215	23.1	3,200	61	
	3698	FD828	H5	1929/2015	37:45N/32:50N	98:07	55	155	216	24.0	3,100	76	
	3699	FD829	H6	2016/2049	32:37N/27:43N	98:07	55	155	214	17.4	980	25	

Table 4.2 (continued)

											dpm/1000 SCF		
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	10 ³ SCF	Total Beta	90 Sr	
26 April 1960 Mission 61A													
715 LN	3704	FD842	H1	1513/1559	27:43N/33:03N	98:07	62/64.3	123	214	13.9	6,400	142	
	3701	WE1149	N2	1601/1647	33:17N/38:37N	98:07	64.5/65.5	120	215	5.5	8,200	173	
	3702	WE1150	N3	1648/1733	38:51N/44:11N	98:07	65.5/66.3	119	218	5.1	8,600	170	
	3705	FD843	H2	1735/1820	44:25N/49:45N	98:07	66.3/66.8	118	220	10.8	13,900	229	
	3706	FD844	H3	1825/1910	49:45N/44:25N	98:07	66.6/67.3	116	220	10.4	12,800	209	
	3707	FD845	H4	1912/1959	44:11N/38:51N	98:07	67.3/67.7	114	218	10.5	12,700	191	
	3708	FD846	H5	2001/2048	38:37N/33:17N	98:07	67.7/68.8	112	215	10.2	11,700	198	
	3709	FD847	H6	2050/2139	33:03N/27:43N	98:07	68.7/69.5	110	214	10.2	12,200	191	
714 LS	3710	WE1144	N1	1445/1531	27:43N/24:13N	98:07/93:51	62.7/64.1	123	211	6.0	6,900	141	
	3711	WE1145	N2	1536/1619	24:04N/20:26N	93:40/89:37	64.5/65.4	122	210	5.4	9,300	156	
	3712	WE1146	N3	1621/1707	20:16N/16:32N	89:26/85:35	65.5/66	119	208	5.5	9,400	173	
	3714	FD836	H1	1621/1707	20:16N/16:32N	89:26/85:35	65.5/66	119	208	12.5	9,800	201	
	3715	FD838	H3	1709/1846	16:22N	85:24	66.1/67.7	115	206	24.3	9,300	189	
	3716	FD839	H4	1848/1933	16:32N/20:16N	85:35/89:26	67.7/67.8	113	208	10.6	12,300	232	
	3717	FD840	H5	1935/2020	20:25N/24:04N	89:37/93:40	67.8/68.9	112	210	10.1	11,600	176	
	3718	FD841	H6	2022/2102	24:13N/27:43N	93:51/98:07	68.8	111	211	8.6	10,300	--	
27 April 1960 Mission 61B													
718 MN	3737	M46	N1	1425/1517	50:20N/55:56N	102:30/106:40	55	155	221	12.2	5,300	48	
	3738	M47	N2	1524/1621	56:06N/61:20N	106:50/113:00	55	155	221	13.3	4,900	49	
	3739	M48	N3	1621/1709	61:30N/66:30N	113:20/121:10	55.5	155	221	10.9	5,500	100	
	3741	M467	H1	1621/1709	61:30N/66:30N	113:20/121:10	55.5	155	221	23.8	--	--	
	3742	M468	H2	1713/1802	66:40N/71:00N	121:30/132:30	55.5	155	222	24.4	6,300	114	
	3743	M369	H3	1806/1858	71:00N/66:20N	132:30/120:50	60	135	223	18.9	9,200	187	
	3744	M470	H4	1900/1954	66:10N/61:10N	120:30/112:50	60	135	214	20.6	8,700	180	
	3745	M471	H5	1956/2039	61:00N/56:10N	112:30/106:50	60	135	222	15.7	11,600	203	
717 MN	3746	M472	H6	2041/2143	56:00N/50:20N	106:40/102:30	60.5	135	220	22.6	9,800	203	
	3733	M50	N1	1358/1451	59:20N/55:40N	102:30/106:40	53.3/62.8	138	220	8.8	7,500	144	
	3734	M51	N2	1453/1548	56:08N/61:20N	106:50/113:00	62.8/63.9	126	223	7.2	10,400	118	
	3735	M52	N3	1550/1644	61:30N/66:30N	113:20/121:20	64/65	124	224	6.5	9,600	148	
3736	M53	N4	1646/1740	66:40N/71:00N	121:30/132:30	65.1/65.6	121	224	6.1	10,700	164		
28 April 1960 Mission 62A													
716 LN	3719	WE1160	N1	1519/1556	27:43N/32:36N	98:07	60	137	219	6.2	3,900	76	
	3720	WE1161	N2	1557/1636	32:47N/37:42N	98:07	60	136	218	6.5	5,100	103	
	3721	WE1162	N3	1640/1720	37:53N/42:42N	98:07	60	136	219	6.7	7,300	124	
	3723	FD867	H1	1640/1740	37:53N/45:11N	98:07	60	136	219	22.4	7,900	--	
	3722	WE1163	N4	1723/1801	42:53N/47:40N	98:07	60	136	220	6.3	7,700	142	
714 LS	3724	WE1156	N1	1443/1526	27:43N/24:24N	98:07/94:05	60	135	210	7.4	2,900	51	
	3725	WE1157	N2	1528/1612	24:14N/20:45N	93:53/89:57	60	135	209	7.7	1,040	23	
	3726	WE1158	N3	1613/1656	20:34N/17:05N	89:45/86:05	60	135	207	7.6	1,060	23	
	3728	FD861	H1	1613/1656	20:34N/17:05N	89:45/86:05	60	135	207	17.1	1,170	27	
	3729	FD862	H2	1658/1741	16:53N/13:22N	85:55/82:30	60	135	206	17.2	1,160	22	
	3730	FD864	H4	1745/1911	13:22N/20:40N	82:30/89:52	65	121	211	24.3	8,300	196	
	3731	FD865	H5	1912/1953	20:50N/24:20N	90:02/93:58	65	121	214	11.4	9,100	201	
	3732	FD866	H6	1955/2035	24:30N/27:43N	94:10/98:07	65	121	215	11.0	9,300	203	
30 April 1960 Mission 62B													
718 MN	3754	M473	H1	1426/1502	50:20N/54:10N	102:30/105:10	45	165	226	27.2	5,900	103	
	3756	M475	H3	1640/1720	48:20N/46:40N	103:30/103:30	45	165	223	30.2	3,500	67	
	3757	M476	H4	1729/1818	48:10N/47:40N	102:45/103:30	50	160	222	30.4	6,700	113	
	3753	M59	N2	1945/2115	48:30N/48:20N	102:40/104:00	64	124	222	11.2	11,800	186	
717 MN	3747	M479	H1	1406/1510	50:20N/56:00N	102:30/106:40	59.5	138	221	24.4	13,900	139	
	3748	M480	H2	1512/1629	56:05N/65:50N	106:50/119:50	60	138	218	29.5	21,000	181	
	3749	M481	H3	1643/1751	65:50N/58:40N	119:50/109:40	65	124	217	19.2	20,000	201	
	3750	M482	H4	1754/1910	58:30N/50:20N	109:20/102:30	65	124	221	21.0	14,300	178	
	3751	M483	H5	1931/2032	48:21N	102:45	60	135	222	22.3	9,200	183	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (*W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (*K)	dpm/1000 SCF		
										10 ⁵ SCF	Total Beta	St ⁹⁰
3 May 1960 Mission 63												
717 MN	3762	M491	H1	1357/1432	50:20N/53:00N	102:10/104:20	40	170	217	32.8	2,500	71
	3763	M492	H2	1434/1506	53:10N/55:50N	104:25/106:40	40	170	221	29.5	2,300	62
	3764	M493	H3	1508/1543	56:04N/58:40N	106:50/109:30	40	170	221	32.3	3,100	76
	3765	M494	H4	1545/1616	58:50N/61:20N	109:45/112:50	40	170	224	28.3	2,300	73
	3766	M495	H5	1618/1654	61:25N/64:20N	113:00/117:20	40	170	224	32.9	2,100	56
	3767	M496	H6	1656/1730	64:30N/67:20N	117:30/122:10	40	170	221	31.4	1,730	37
	3758	M66	N1	1737/1819	67:00N/63:20N	122:10/115:50	49.5	160	222	11.9	3,900	73
	3759	M67	N2	1821/1905	63:10N/59:20N	115:30/110:20	49.5	160	223	12.5	6,200	103
	3760	M68	N3	1907/1951	59:10N/54:55N	110:10/105:45	50	160	223	12.3	7,800	158
	3761	M69	N4	1953/2040	54:45N/50:20N	105:35/102:30	50	160	222	13.1	6,500	111
718 MS	3772	M485	H1	1435/1504	50:20N/47:30N	102:30/102:00	39.5	170	217	27.6	2,800	70
	3773	M486	H2	1506/1603	47:20N/44:30N	101:55/101:30	40	170	216	53.6	2,700	60
	3774	M487	H3	1604/1616	44:20N/41:20N	101:20/100:50	40	170	215	11.3	3,000	66
	3775	M488	H4	1617/1647	41:10N/38:20N	100:50/100:30	40	170	215	28.3	2,400	60
	3776	M489	H5	1649/1719	38:10N/35:30N	100:25/100:05	40	170	215	28.3	1,810	35
	3777	M490	H6	1724/1755	35:20N/32:30N	100:00/99:40	40.5	170	214	28.9	2,400	50
	3768	M62	N1	1758/1844	32:30N/36:40N	99:40/100:10	45	162	218	15.9	1,810	41
	3769	M63	N2	1845/1930	36:50N/41:10N	100:15/100:50	45	165	217	15.6	1,990	37
	3770	M64	N3	1931/2017	41:20N/45:45N	100:55/101:40	44.5	165	215	16.2	2,300	54
		3771	M65	N4	2018/2102	45:55N/50:20N	101:45/102:30	44	165	214	15.8	2,500
5 May 1960 Mission 64A												
715/RS	3778	WE1704	N1	1305/1355	15:00N/09:25N	67:00	60	135	198	9.3	2,500	55
714 RS	3780	WE1696	N1	1236/1325	15:00N/09:25N	67:00	64.2/65.1	122	214	6.2	7,300	143
	3781	WE1697	N2	1326/1415	09:11N/03:37N	67:00	65.2/66.2	120	214	5.9	5,300	125
	3784	FD885	H1	1417/1505	03:23N/02:11N	67:00	66.2/66.9	117	213	12.1	3,600	87
	3785	FD886	H2	1507/1554	02:25S/08:00S	67:00	66.9/67.9	115	213	11.0	4,200	82
	3786	FD887	H3	1558/1647	08:00S/02:25S	67:00	67.4/68.6	112	212	10.8	4,200	97
	3787	FD888	H4	1650/1737	02:11S/03:23N	67:00	68.6/69.4	110	213	9.9	5,200	100
	3788	FD889	H5	1739/1827	03:37N/09:11N	67:00	69.5/70.3	108	214	9.5	6,900	147
	3789	FD890	H6	1830/1926	09:25N/15:00N	67:00	70.2/71	106	214	10.3	8,000	178
6 May 1960 Mission 64B												
717 MO	3790	M497	H1	1348/1418	48:21N/47:40N	102:45/105:15	30	175	219	36.2	790	24
	3791	M498	H2	1427/1517	46:45N/48:21N	105:15/105:00	40	170	220	46.2	1,970	49
718 MO	3796	M503	H1	1416/1456	48:21N/46:45N	102:45/103:33	45	165	218	30.9	2,100	50
	3792	WP1261	N1	1501/1602	46:45N	102:45	50	160	218	16.9	2,200	52
	3797	M504	H2	1501/1552	46:45N	102:45/104:30	50	160	218	32.2	2,900	69
	3798	M505	H3	1609/1708	47:15N	102:45	55	155	218	30.4	7,200	111
	3793	WP1262	N2	1708/1808	47:15N/46:45N	102:45	57	146	218	12.2	6,800	115
	3799	M506	H4	1812/1910	47:12N	102:45	60	135	218	21.6	11,000	174
	3794	WP1263	N3	1913/2043	47:26N/47:34N	102:45/105:21	64	124	218	11.5	9,900	197
	3800	M507	H5	1913/2043	47:26N/47:34N	102:45/105:21	64	124	218	26.3	10,300	208
	3795	WP1264	N4	2048/2218	47:06N/47:55N	105:21/102:45	66.5/68.5	114	218	8.9	10,700	218
	3801	M508	H6	2048/2218	47:06N/47:55N	105:21/102:45	66.5/68.5	114	218	20.1	11,000	222
9 May 1960 Mission 64C												
715 RS	3802	WE1708	N1	1305/1351	15:00N/09:25N	67:00	60	138	202	8.6	2,400	56
	3804	WE1710	N3	1356/1447	09:11N/03:37N	67:00	60	138	202	9.6	1,320	25
	3805	WE1711	N4	1452/1537	02:23N/02:11S	67:00	60	138	201	8.4	550	8
	3806	FD897	H1	1452/1537	02:23N/02:11S	67:00	60	138	201	18.8	< 760	16
	3803	WE1709	N2	1541/1627	02:25S/08:00S	67:00	60	138	202	8.6	660	18
	3807	FD898	H2	1541/1627	02:25S/08:00S	67:00	60	138	202	19.4	1,180	24
	3808	FD899	H3	1632/1718	08:00S/02:25S	67:00	65	124	205	14.0	2,700	56
	3809	FD900	H4	1723/1803	02:11S/03:23N	67:00	65	124	206	12.2	3,000	94
	3810	FD901	H5	1808/1855	03:37N/09:11N	67:00	65	124	206	14.2	5,600	131
	714 RS	3812	WE1716	N1	1236/1325	15:00N/09:25N	67:00	64.2/65.4	120	206	6.1	5,800
3813		WE1717	N2	1327/1416	09:11N/03:37N	67:00	65.4/66.6	118	206	5.7	6,000	123
3814		WE1718	N3	1418/1506	03:23N/02:11S	67:00	66.6/67.4	115	205	5.3	4,500	103
3816		FD891	H1	1418/1506	03:23N/02:11S	67:00	66.6/67.4	115	205	12.2	4,200	99
3815		WE1719	N4	1508/1555	02:25S/06:41S	67:00	67.4/68.4	113	205	4.8	2,200	24
3817		FD892	H2	1508/1555	02:25S/06:41S	67:00	67.4/68.4	113	205	11.0	3,100	83
3818		FD893	H3	1557/1635	06:41S/02:25S	67:00	68.4/69.1	111	209	8.4	3,400	99
3819		FD894	H4	1637/1725	02:11S/03:23N	67:00	69.1/69.5	109	209	10.0	6,500	131
3820		FD895	H5	1728/1816	03:37N/09:11N	67:00	69.5/70.3	108	209	9.8	6,100	156
	3821	FD896	H6	1818/1906	09:25N/15:00N	67:00	70.3/71	105	209	9.1	9,700	205

Table 4, 2 (continued)

AC No.	HASP No.	Air Force	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	dpm/1000 SCF		
										10 ³ SCF	Total Beta	Str ⁹⁰
10 May 1960 Elison Missions 67, 68, 69												
951	3822	1	H1	1952/2052	65:28N/70:00N	148:27/157:00	50	160	227	36.3	6,200	111
A NW	3823	3	H3	0255/0320	68:13N/66:16N	152:49/149:30	50	160	227	15.2	5,300	111
952	3824	1	H1	1916/2004	65:36N/70:00N	148:39/157:00	50/60	135	227	17.1	11,000	182
A NW	3825	3	H3	0236/0325	70:00N/65:00N	156:20/148:00	60/64/50	135	227	17.4	8,700	182
953	3826	1	H1	1847/1935	66:00N/70:00N	149:00/157:00	50/63.5	124	227	13.6	11,700	200
A NW	3827	3	H3	2215/2255	71:00N/67:00N	157:00/151:00	65/50	121	227	10.3	15,000	200
11 May 1960 Elison Mission 69A												
953	3828	1	H1	1846/1930	67:00N/70:00N	151:00/157:00	50/63.3	125	227	12.6	11,400	226
A NW	3829	3	H3	0040/0112	70:00N/66:00N	156:00/149:00	66.2/50	118	227	7.6	16,200	226
13 May 1960 Elison Missions 70, 71, 72												
952	3830	1	H1	1946/2039	65:30N/70:00N	148:30/157:00	50/55	150	227	31.9	5,500	99
A NW	3831	3	H3	0301/0335	70:00N/67:00N	156:21/150:42	50	160	227	20.6	4,700	99
951	3832	1	H1	1925/2000	66:00N/70:00N	149:15/157:00	50/60	135	227	12.4	12,100	212
A NW	3833	3	H3	0150/0230	70:00N/66:00N	156:21/149:10	60/50	135	227	14.2	12,000	212
953	3834	1	H1	1845/1930	66:00N/70:00N	149:15/157:00	50/63	127	227	13.3	13,100	192
A NW	3835	3	H3	0045/0130	70:00N/65:53N	156:21/149:00	65/50	121	227	11.6	17,300	192
14 May 1960 Elison Mission 71A - 72A												
951	3836	1	H1	0016/0102	66:00N/70:00N	149:15/157:00	50/60	135	226	16.4	12,800	216
A NW	3837	3	H3	0514/0605	70:00N/65:47N	156:21/148:50	64/65/50	121	229	13.0	11,000	216
17 May 1960 Elison Missions 73, 74, 75												
951	3838	1	H1	1946/2038	66:00N/70:00N	149:15/157:00	50	160	226	31.6	3,200	62
A NW	3839	3	H3	0125/0215	70:00N/66:00N	156:21/149:10	50	160	226	30.4	3,200	62
952	3840	1	H1	2217/2302	66:00N/70:00N	149:15/157:00	50/60	135	228	15.9	14,500	182
A NW	3841	3	H3	0539/0625	70:00N/66:00N	156:21/149:10	60/50	135	228	16.3	12,300	182
953	3842	1	H1	1845/1933	66:00N/70:00N	149:15/157:00	50/61.5	130	229	15.4	16,700	234
A NW	3843	3	H3	0219/0304	70:00N/66:00N	156:21/149:10	64/50	123	229	12.2	14,900	234
20 May 1960 Elison Missions 76, 77, 78												
952	3878	1	H1	1945/2037	66:00N/70:00N	149:15/157:00	50	160	227	31.5	3,800	77
A NW	3879	3	H3	0157/0244	70:00N/66:00N	156:21/149:10	50	160	227	28.4	4,700	77
951	3876	1	H1	1915/2002	66:00N/70:00N	149:15/157:00	50/60	135	227	16.7	10,900	191
A NW	3877	3	H3	0209/0255	70:00N/66:00N	156:21/149:10	60/50	135	227	16.3	12,400	191
953	3880	1	H1	1845/1933	66:00N/70:00N	149:15/157:00	50/62	129	229	15.0	12,800	222
A NW	3881	3	H3	0216/0302	70:00N/66:00N	156:21/149:10	64/50	123	229	12.5	11,600	222
24 May 1960 Elison Missions 79, 80, 81												
951	3904	1	H1	1951/2036	66:00N/70:00N	149:15/157:00	50	160	225	27.5	6,600	120
A NW	3905	3	H3	0158/0243	69:50N/66:00N	156:00/149:10	50	160	225	27.5	8,000	120
952	3906	1	H1	2015/2058	66:00N/70:00N	149:15/157:00	50/60	135	226	15.4	11,500	231
A NW	3907	3	H3	0350/0437	70:00N/66:00N	156:21/149:10	60/50	135	226	16.8	14,100	231
953	3908	1	H1	1850/1932	66:00N/70:00N	149:15/157:00	50/63	127	226	12.4	24,000	185
A NW	3909	3	H3	0210/0250	70:00N/66:00N	156:21/149:10	65.5/50	121	226	10.1	1,690	185

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude ("W)	Altitude (1000 ft.)	IAS (Kt)	Temp. ("K)	dpm/1000 SCF			
										10 ³ SCF	Total Beta	Sr ⁹⁰	
<u>20 May 1960 Ramey Mission 1</u>													
RS	3844	2	H1	1526/1717	10:00N/18:00N	56:00/66:00	68.5/60	112	208	11.6	9,500	155	
<u>21 May 1960 Ramey Mission 2</u>													
RS	3845	2	H1	1540/1724	10:00N/18:00N	56:00/66:00	60/50	135	210	40.6	1,120	24	
<u>22 May 1960 Ramey Mission 3</u>													
RS	3846	2	H1	1514/1727	10:00N/18:00N	56:00/66:00	50	160	199	92.6	280	7	
<u>23 May 1960 Ramey Mission 4</u>													
RS	3873	2	H1	1545/1730	10:00N/18:00N	56:00/65:00	66/50	118	213	27.0	3,100	74	
<u>24 May 1960 Ramey Mission 5</u>													
RS	3884	1	H1	1522/1718	10:00N/18:00N	56:00/66:00	62/50	129	205	41.7	1,850	36	
<u>25 May 1960 Ramey Missions 7, 8</u>													
RS	3887	2	H1	1552/1732	10:00N/17:00N	56:00/65:00	50	160	204	67.8	1,010	18	
RS	3886	2	H1	1547/1734	10:00N/18:00N	56:00/66:00	66/50	118	210	28.0	3,100	84	
<u>26 May 1960 Ramey Mission 9</u>													
RS	3888	2	H1	1525/1719	10:00N/19:00N	56:00/67:00	62/50	129	203	41.5	≤ 69	--	
<u>27 May 1960 Ramey Missions 10, 11</u>													
RS	3890	2	H1	1645/1749	12:00N/17:00N	61:00/66:00	66.6/50	118	210	16.3	1,750	33	
RS	3889	2	H1	1707/1814	12:00N/17:00N	61:00/66:00	60/50	135	205	27.0	2,000	43	
<u>29 May 1960 Ramey Missions 14, 15</u>													
RS	3926	2	H1	1353/1424	12:00N/18:00N	62:00/67:00	65.2/50	121	211	8.7	4,900	92	
RS	3927	2	H1	1247/1350	12:00N/18:00N	62:00/66:00	60/50	135	203	25.7	1,890	32	

Table 4.2 (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	dpm/1000 SCF		
										10 ³ SCF	Total Beta	90 Sr
<u>20 May 1960 Laughlin Missions 62, 63</u>												
696 LO	3847	62-2	H2	2058/2120	31:43N/29:27N	103:14/100:55	60	135	213	8.4	3,700	--
680 LO	3848	63-2	H2	2047/2110	31:43N/29:27N	103:14/100:55	65.4/50	120	213	6.3	6,400	--
<u>24 May 1960 Laughlin Missions 65, 66</u>												
696 LO	3874	65-2	H2	1644/2326	31:43N/29:27N	103:14/100:55	60	135	213	153.8	350	--
680 LO	3875	66-2	H2	2345/2400	31:43N/29:27N	103:14/100:55	69.2/69.5	110	213	3.1	11,000	--
<u>26 May 1960 Laughlin Mission 67</u>												
696 LO	3891	67-2	H3	2249/2330	31:43N/29:27N	103:14/100:55	60	135	213	15.6	4,800	102
<u>2 June 1960 Laughlin Mission 73</u>												
696 LO	3942	73-2	H2	1717/1810	33:27N/29:27N	105:08/100:55	60	135	211	20.6	3,700	70

Table 4.2 (continued)

Table 2.2 (continued)											dpm/1000 SCF	
AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	10 ³ SCF	Total Beta	St. 90
12 May 1960 Mission 64R												
716	3849	WE1664	N1	1054/1236	16:25N/05:08N	66:50/65:42	64.5/66	121	211	11.9	4,700	111
RE	3853	FD1000	H1	1059/1236	16:25N/05:08N	66:50/65:42	64.5/66	121	211	27.1	5,800	119
	3850	WE1665	N2	1238/1415	04:54N/06:23S	65:39/64:14	66/68	116	211	10.5	3,800	95
	3854	FD1001	H2	1238/1415	04:54N/06:23S	65:39/64:14	66/68	116	211	23.8	4,000	108
	3851	WE1666	N3	1417/1600	06:37S/18:36S	64:12/63:10	68/69	112	211	10.1	3,100	90
	3855	FD1002	H3	1417/1600	06:37S/18:36S	64:12/63:10	68/69	112	211	23.0	3,700	104
	3852	WE1667	N4	1602/1739	18:50S/30:10S	63:09/59:47	69	109	217	8.7	4,100	99
	3856	FL1003	H4	1602/1739	18:50S/30:10S	63:09/59:47	69	109	217	19.5	1,320	58
714												
RE	3865	WE1660	N1	1119/1306	16:25N/04:50N	66:50/65:40	63/65	122	208	14.0	5,200	126
	3869	FD904	H1	1119/1306	16:25N/04:50N	66:50/65:40	63/65	122	208	32.0	6,200	133
	3866	WE1661	N2	1308/1440	04:36N/06:00S	65:37/64:15	66/67	118	210	10.6	3,000	95
	3870	FD905	H2	1308/1440	04:36N/06:00S	65:37/64:15	66/67	118	210	23.8	3,400	108
	3867	WE1662	N3	1442/1621	06:14S/17:44S	64:13/63:15	67	116	211	10.7	3,600	98
	3871	FD906	H3	1442/1621	06:14S/17:44S	64:13/63:15	67	116	211	24.3	3,800	119
	3871	WE1663	N4	1623/1802	17:58S/29:20S	63:13/59:47	67	116	211	10.7	4,700	137
	3868	WE1663	N4	1623/1802	17:58S/29:20S	63:13/59:47	67	116*	211	24.3	5,600	136
3872	FD907	H4	1623/1802	17:58S/29:20S	63:13/59:47	67						
19 May 1960 Ezeiza Missions 67, 68, 69												
714	3900	WE1332	N1	1200/1239	36:40S/39:50S	59:45/62:10	50	160	219	11.1	1,350	46
ES	3902	WE1334	N3	1748/1817	39:50S/36:45S	62:25/59:50	50	160	219	8.2	2,100	46
	3903	FD69-2	H1	1748/1817	39:50S/36:45S	62:25/59:50	50	160	219	18.2	2,000	46
715	3896	WE1320	N1	1136/1218	36:10S/39:50S	59:25/62:10	60	135	219	6.9	3,300	117
ES	3898	WE1322	N3	1814/1834	39:45S/36:50S	62:35/59:50	60	135	219	3.3	5,300	117
	3899	FD68-2	H1	1814/1834	39:45S/36:50S	62:35/59:50	60	135	219	7.4	6,500	117
716	3894	WE1302	N3	1517/1551	39:45S/36:50S	62:35/59:50	65	121	219	4.0	6,600	165
ES	3895	FD67-2	H1	1517/1551	39:45S/36:50S	62:35/59:50	65	121	219	9.2	8,400	165
23 May 1960 Ezeiza Missions 70, 71												
716	3913	WE1349	N2	1226/1755	40:00S	62:15	60	135	214	55.7	3,100	74
ES												
715	3911	WE1557	N2	1159/1750	40:00S	62:18/62:15	64.7/66.7	120	214	41.7	7,100	174
ES												
26 May 1960 Ezeiza Missions 73, 74												
714	3916	WE1140	N1	1147/1216	36:40S/39:50S	59:45/62:10	60	135	213	4.9	4,200	85
ES	3918	WE1142	N3	1843/1912	40:00S/36:45S	62:20/59:50	60	135	213	4.9	3,500	85
	3919	FD73-2	H1	1843/1912	40:00S/36:45S	62:20/59:50	60	135	213	11.1	3,600	85
715	3920	WE1204	N1	1155/1249	36:40S/39:50S	59:45/62:10	50	160	234	14.3	400	10
ES	3921	WE1205	N2	1250/1348	40:00S	62:20	50	160	234	15.3	1,350	32
	3924	FD74-1	H1	1250/1348	40:00S	62:20	50	160	234	33.9	1,600	38
	3923	WE1207	N4	1935/2000	39:50S/36:45S	62:10/59:50	65	121	234	2.7	6,000	117
	3925	FD74-3	H2	1935/2000	39:50S/36:45S	62:10/59:50	65	121	234	6.2	6,500	128
31 May 1960 Ezeiza Missions 75, 76, 77												
716	3938	WE1137	N2	1242/1811	40:00S	62:15	50	160	217	94.5	134	4
ES												
715	3934	WE1005	N2	1225/1755	40:00S	62:15	60	135	217	54.9	2,300	57
ES												
714	3930	WE1353	N2	1209/1755	40:00S	62:15	64/65	123	217	43.4	7,100	171
ES												
2 June 1960 Ezeiza Missions 78, 79, 80												
716	3947	WE5	N1	1156/1234	36:18S/39:50S	59:25/62:10	50	160	213	11.1	730	26
ES	3949	WE7	N3	1809/1836	39:45S/36:50S	62:35/59:55	50	160	213	7.9	1,460	26
714	3950	WE9	N1	1149/1216	36:10S/39:50S	59:20/62:10	60	135	213	4.6	3,800	47
ES	3952	WE12	N3	1855/1920	39:45S/36:50S	62:35/59:55	66	118	213	2.8	7,300	129
715	3943	WE1	N1	1120/1140	36:15S/39:50S	59:25/62:10	63.5/65.5	123	213	2.5	2,300	129
ES	3945	WE3	N3	1750/1816	39:45S/36:50S	62:35/59:55	60	135	213	4.4	1,050	47
	3946	FD78-2	H1	1750/1816	39:45S/36:50S	62:35/59:55	60	135	213	9.9	2,000	47

Table 4.2 (continued)

Table 4.2. (continued)

AC No.	HASP No.	Air Force No.	Filter	Time (Z)	Latitude	Longitude (°W)	Altitude (1000 ft.)	IAS (Kt)	Temp. (°K)	dprn/1000 SCF		
										10 ³ SCF	Total Beta	Gr ⁹⁰
6 June 1960 Ezeiza Mission 99												
716	3953	WE13	N1	1237/1419	42:30 S/50:15 S	64:00	65.6/66.3	118	213	11.5	7,700	164
ES	3954	WE14	N2	1421/1531	50:29 S/58:00 S	64:00	66.3/67.6	116	215	7.4	7,000	180
	3955	WE15	N3	1536/1645	58:00 S/50:15 S	64:00	67.6/68.2	113	215	6.8	8,300	202
	3956	WE16	N4	1647/1817	50:00 S/42:30 S	64:00	68.2/70	110	213	8.1	10,500	227
8 June 1960 Ezeiza Missions 91, 92												
715	3974	WE21	N1	1148/1322	31:25 S/22:12 S	58:15/61:53	64.5/65.5	121	213	11.5	4,900	121
ER	3978	FD91-1	H1	1148/1322	31:25 S/22:12 S	58:15/61:53	64.5/65.5	121	213	26.1	5,500	134
	3975	WE22	N2	1324/1458	21:53 S/11:23 S	61:57/63:40	65.5/67	117	211	10.5	3,400	90
	3979	FD91-2	H2	1324/1458	21:53 S/11:23 S	61:57/63:40	65.5/67	117	211	23.9	4,700	122
	3976	WE23	N3	1500/1644	11:08 S/01:06 N	63:42/65:12	67/68	115	211	10.8	3,500	93
	3980	FD91-3	H3	1500/1644	11:08 S/01:06 N	63:42/65:12	67/68	115	211	24.6	3,900	90
	3977	WE24	N4	1645/1811	01:14 N/11:17 N	65:13/66:10	68/69.5	111	208	8.2	4,100	96
	3981	FD91-4	H4	1645/1811	01:14 N/11:17 N	65:13/66:10	68/69.5	111	208	18.8	4,700	127
	3982	WE25	N1	1203/1337	31:25 S/21:37 S	58:15/62:05	63.5/65.4	122	213	11.9	5,000	137
	3986	FD92-1	H1	1203/1337	31:25 S/21:37 S	58:15/62:05	63.5/65.4	122	213	27.1	6,300	159
	3983	WE26	N2	1339/1513	21:23 S/10:34 S	62:07/63:43	65.4/66	120	211	11.3	3,600	97
3987	FD92-2	H2	1339/1513	21:23 S/10:34 S	62:07/63:43	65.4/66	120	211	25.7	4,200	103	
3984	WE27	N3	1515/1649	10:21 S/00:42 N	63:45/65:07	66.5/68.5	115	211	9.8	3,400	97	
3988	FD92-3	H3	1515/1649	10:21 S/00:42 N	63:45/65:07	66.5/68.5	115	211	22.2	5,100	107	
3985	WE28	N4	1651/1812	00:55 N/10:48 N	65:08/66:06	68.5/69.7	110	208	7.7	4,400	106	
3989	FD92-4	H4	1651/1812	00:55 N/10:48 N	65:08/66:06	68.5/69.7	110	208	17.5	4,900	125	
10 June 1960 Missions 93, 94, 95												
714	3960	WE33	N1	1120/1620	19:35 N/29:20 N	68:30/100:47	55	150	208	70.9	1,350	28
RL												
715	3962	WE29	N1	1142/1642	19:50 N/29:20 N	68:46/100:47	60	135	207	52.7	4,100	91
RL												
716	3964	WE31	N1	1215/1715	20:40 N/29:20 N	70:10/100:47	65	121	214	36.4	8,200	154
RL												

RADIOCHEMICAL DATA FROM ROUTINE ANALYSES

The planning of the routine analysis of HASP filter samples has been described earlier in this chapter. Some of the data from these analyses are presented in Table 4.3. Included are some flight data to locate the region in which each sample was collected, the total beta, strontium-90 and tungsten-185 activities of the samples, the ratios $\text{Sr}^{89}/\text{Sr}^{90}$, $\text{Ce}^{144}/\text{Sr}^{90}$ and $\text{Ba}^{140}/\text{Sr}^{89}$ in the debris, and the apparent half-life of the total beta activity. A flight cross section or other flight diagram is included for each mission or group of missions. A description of the construction of these diagrams and an explanation of the information contained in them have been given earlier in this chapter.

Table 4.3 is arranged in the same manner as Table 4.2, and the explanations given above of the designation and order of presentation of the various missions and samples in that table are equally applicable to Table 4.3. Again, the significance of the aircraft numbers and of the notations of sampling region given in the first column of the table was outlined in the discussion of Table 4.2.

The mean latitude, in degrees north or south, and the mean altitude, in units of one thousand feet, at which each sample was collected are given in the third and fourth column of the table.

The fifth column contains the total beta activities of the samples. These were determined by cutting a small disk from each filter and measuring its beta activity during a series of five or ten minute counts. The change in activity during this series gave the apparent half-life of the activity. Because the apparent half-lives changed with age, it was difficult to extrapolate the activities back to collection date, and the data given are for the tenth day after collection. No counting error is given for the beta activities since the measurement was not especially

precise and since the counting efficiency could not be accurately determined. An assumed efficiency of 20 percent, based on data for some standard samples of mixed fission products, was applied in converting the counting rates into disintegrations per minute. The activities have been rounded off to two significant figures, or to three where the first digit is a one.

The strontium-90 activities of the samples are given in the sixth column of the table. Like the beta activities in the preceeding column and the tungsten-185 activities, they are expressed in disintegrations per minute per one thousand standard cubic feet of air. The activities have been rounded off to the nearest integer except when they were below 2 dpm/1000 SCF, and then they have been rounded off to the nearest tenth. The activities given are those for the collection date, though, because of the long half-life of strontium-90, corrections for decay were seldom required in extrapolating from counting date to collection date. A number of strontium-90 analyses, as well as analyses for other nuclides, were performed in duplicate. The samples which had duplicate measurements made on them are listed in Table 4.15 or 4.16, later in this chapter. Those which were analyzed in composites rather than individually are listed in Table 4.14. Table 4.14 also contains strontium-90 activities of some sample composites which were measured for this nuclide (and for strontium-89). The individual samples of these composites were also analyzed for strontium-90, and these data appear in Table 4.3.

For samples collected on or after 9 May 1958, tungsten-185 activities, in dpm/1000 SCF, are given in the seventh column of the table. This column is omitted from the table for earlier samples. The tungsten-185 activities have been corrected for decay to 15 August 1958.

The strontium-89/strontium-90 ratio is given next in the table for all samples collected after 21 February 1958. For most missions the cerium-144/

strontium-90 and barium-140/ strontium-89 ratios are given in the next two columns. These ratios have generally been rounded off to two significant figures, but they are not carried out beyond a tenth. All three of the ratios are useful for determining the apparent age of debris. All are corrected to collection date.

The final column in the table, for missions before 17 April 1959, is the apparent half-life, in days, of the total beta activity on the tenth day after collection of the sample. This apparent half-life is a function of the half-lives and activities of beta emitters in the sample, and thus depends upon the age of the youngest major fraction of the debris. The apparent half-life increases with time and has been followed only to a value of 100 days in HASP samples. By that time the debris was more than five months old and this method of age determination was no longer precise, especially in mixed debris from more than one source. The determination of these half-lives was often somewhat subjective, and an error of at least ± 10 percent in these values is not unlikely in older debris. Larger errors may be expected for younger debris in which the apparent half-life was changing rather rapidly.

Table 4.3 and Figures 4.1 through 4.264 (Pages 100 through 627) are reproduced in Volume 2B

ACTIVITIES OF SHORT-LIVED FISSION PRODUCTS

A number of short-lived fission products were included among the nuclides measured in the routine analyses of HASP samples. Thus zirconium-95 (half-life = 65 days) was analyzed in the first samples collected. Measurements of this nuclide were supplemented and then replaced, for later samples, by measurements of strontium-89 (half-life = 51 days). Analytical data for these two nuclides are given in Table 4.4. The samples are arranged according to collection date. The ratios of strontium-89 and of zirconium-95 to strontium-90, which are useful for estimating the age of debris, are included in the table. All activities and activity ratios are corrected for decay to collection date. With a few exceptions, only zirconium-95 was analyzed in samples collected on or before 21 Feb 1958, but many samples collected on or after 26 Feb 1958 were analyzed for both nuclides. Because of the method of analysis of zirconium-95 (gamma spectroscopy of disks of filter paper) precise measurements of the low concentrations still present in the debris collected after the middle of 1959 could not be obtained. The samples which were analyzed after this time but failed to reveal measurable activities are listed at the end of the table.

In order to detect the presence of debris only a few weeks old, analyses of a fission product with a shorter half-life were desired, and barium-140 (12.8 days) was chosen. Activities of this nuclide, corrected to collection date, are presented in Table 4.5. The ratio of barium-140 to strontium-89 is given in the table since this ratio is the most sensitive to the presence of young debris available in the HASP data. Because of its short half-life, barium-140 could not be detected in the samples analyzed for it after the beginning of 1959, but such samples are listed at the end of the table.

Late in the program a number of samples were analyzed for yttrium-91

(58 days), which was viewed as a possible replacement for strontium-89 and zirconium-95 in the routine analyses. The activities of this nuclide (on collection date), together with the ratio of yttrium-91 to strontium-90 in the samples, are given in Table 4.6.

Analyses of cerium-144 gave data which are useful both for assessing the fractionation of debris and for determining the apparent age of older debris which no longer contained high concentrations of strontium-89 or zirconium-95. This measurement was made part of the schedule of routine analyses during December 1959. The results of the cerium-144 measurements, including the concentrations of this nuclide in air and the ratio of cerium-144 to strontium-90 in the debris, are given in Table 4.7. Activities are expressed in dpm/1000 SCF on collection date.

Table 4.4 Strontium-89 and Zirconium-95 Analyses

Date	Sample No.	dpm Zr ⁹⁵ 1000SCF	Zr ⁹⁵ Sr ⁹⁰	Date	Sample No.	dpm Zr ⁹⁵ 1000SCF	Zr ⁹⁵ Sr ⁹⁰
22Aug57	4	688 ± 41	13.0	8Nov57	41	1420 ± 140	8.9
	5	624 ± 34	5.0		42	1490 ± 150	9.4
	6	846 ± 48	4.9		43	8030 ± 310	27.5
29Aug57	7	529 ± 42	8.1		44	481 ± 76	3.1
	8	543 ± 27	8.7		45	824 ± 82	3.3
	9	< 334	< 7.8		46	955 ± 57	3.7
	10	459 ± 29	7.5		47	1060 ± 60	11.7
17Sep57	11	1030 ± 50	11.8	12Nov57	48	1640 ± 70	14.8
	12	383 ± 26	4.0		49	1310 ± 130	7.7
	13	420 ± 20	3.9		50	4870 ± 190	31.5
	14	1390 ± 60	7.7		51	4400 ± 170	21.2
4Oct57	15	< 184	< 25.9		52	181 ± 54	1.8
	16	1870 ± 190	18.2		53	< 267	< 2.3
	17	364 ± 30	2.2		54	< 318	< 1.5
	18	291 ± 29	1.5		55	7360 ± 740	21.6
16Oct57	19	885 ± 41	11.1		56	11100 ± 1200	34.0
	20	1190 ± 50	12.1		57	7270 ± 730	24.4
	21	443 ± 44	8.4		58	3020 ± 300	14.6
	22	451 ± 35	10.1		59	2710 ± 270	22.4
5Nov57	23	64000 ± 6400	77.6		60	< 233	< 1.1
	24	5110 ± 200	24.2		61	785 ± 79	3.5
	25	< 236	< 1.9		62	2980 ± 120	13.5
	26	154 ± 31	1.7	20Nov57	68	690 ± 39	5.0
	27	1870 ± 190	8.0		69	233 ± 57	2.0
	28	1400 ± 140	5.9		70	264 ± 41	2.1
	29	7390 ± 740	34.3		71	184 ± 13	1.4
	30	1590 ± 90	9.7		72	< 152	< 1.1
	31	578 ± 58	2.8		73	< 193	< 1.8
	32	408 ± 60	1.8		74	550 ± 55	3.9
	35	< 423	< 2.9		75	< 303	< 1.7
8Nov57	36	1470 ± 60	11.6		76	1140 ± 70	3.6
	37	2160 ± 90	12.5		77	749 ± 50	1.8
	38	1380 ± 60	8.3		78	591 ± 59	1.6
	39	1160 ± 120	6.8		79	< 447	< 1.5
	40	635 ± 51	2.2	22Nov57	80	5690 ± 570	22.1
					81	7390 ± 740	28.9
					82	5910 ± 590	23.4
					83	5620 ± 560	24.3

Table 4.4 (continued)

Date	Sample No.	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr 90	Date	Sample No.	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr 90
22Nov57	84	2690 + 270	19.7	14Dec57	125	4540 + 450	27.0
	85	7000 ± 700	27.1		126	5930 ± 590	23.0
	86	852 ± 85	9.6		127	6280 ± 630	34.2
	87	1120 ± 110	17.6		128	2530 ± 250	13.2
	88	10100 ± 100	32.8		137	788 ± 790	22.0
	89	62900 ± 630	64.1		138	1040 ± 100	21.0
	90	181000 ± 18000	77.8		139	2200 ± 220	25.3
	91	83900 ± 840	85.8		140	3480 ± 350	21.1
	92	2390 ± 240	9.1		142	424 ± 21	26.7
	93	3080 ± 310	13.7		143	302 ± 18	30.6
	94	5820 ± 580	20.5		144	< 40.8	≤ 26.7
	95	3990 ± 400	16.8				
26Nov57	96	2420 + 240	30.7	17Dec57	129	6030 + 600	22.8
	97	4940 ± 490	25.0		133	3270 ± 330	23.8
	98	4490 ± 450	21.7		134	3420 ± 340	33.5
	99	3290 ± 330	15.3		135	4940 ± 490	31.9
	100	2690 ± 270	15.7		136	2660 ± 270	25.8
	101	4900 ± 490	18.9		145	< 120	< 34.0
	102	3370 ± 340	25.5		146	2700 ± 270	39.6
	103	1230 ± 120	27.0		147	3710 ± 370	30.4
	104	3550 ± 360	44.1		148	1760 ± 180	8.7
	105	3760 ± 380	46.6	10Jan58	149	2330 + 230	12.9
	106	1630 ± 160	27.0		150	3850 ± 390	16.8
	107	971 ± 97	11.3		151	2940 ± 290	20.9
	108	2220 ± 220	27.5		152	1950 ± 200	11.8
3Dec57	110	1740 + 170	8.3		153	1310 ± 130	11.5
	111	1330 ± 130	8.0		154	874 ± 87	13.6
	112	2600 ± 260	15.8		155	< 131	--
	113	8780 ± 880	36.4		156	353 ± 35	9.5
	114	897 ± 900	50.1		157	45.2	12.7
	117	324 ± 320	16.4		158	25.7	25.9
	118	593 ± 590	20.9		159	18.6	18.8
	119	796 ± 800	25.4		160	249 ± 25	22.8
	120	746 ± 34	20.5	14Jan58	161	1900 + 190	23.6
14Dec57	121	5560 + 560	27.8		162	1840 ± 180	12.3
	122	4890 ± 490	30.5		163	927 ± 48	3.7
	123	1800 ± 180	28.1		164	3150 ± 130	10.0
	124	781 ± 780	25.7	21Jan58	165	1850 ± 190	19.3

Table 4.4 (continued)

Date	Sample No.	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰	Date	Sample No.	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
21Jan58	166	< 165	--	4Feb58	197	1530 + 150	9.5
	167	< 142	< 23.9		198	1770 ± 180	9.8
	168	< 53.8	--		199	785 ± 790	6.1
	169	3080 ± 310	16.5		200	2790 ± 280	13.0
	170	2530 ± 250	14.9		217	428 ± 430	18.2
	171	4050 ± 410	18.1		218	< 27.7	--
	172	3440 ± 340	21.2		219	< 15.7	< 87.7
	173	< 80.8	< 63.6		220	< 19.5	< 84.9
	174	< 30.2	< 24.3		221	3610 ± 360	16.6
	175	20.3 ± 8.7	18.1		222	5440 ± 540	22.7
	176	20.3 ± 8.7	18.1		223	7550 ± 760	23.7
24Jan58	177	3210 ± 120	19.4	7Feb58	224	7580 ± 760	17.9
	178	2880 ± 290	20.0		201	2700 ± 270	15.4
	179	4780 ± 180	19.0		202	1050 ± 110	17.3
	180	8120 ± 300	21.9		203	405 ± 41	17.1
	181	3750 ± 140	18.4		204	212 ± 21	> 12.4
	182	230 ± 16	16.2		205	2650 ± 270	11.9
	183	< 40.7	< 3.9		206	2570 ± 260	11.2
	184	302 ± 30	60.0		207	2330 ± 230	15.1
	185	< 117	--		208	1790 ± 180	12.5
	186	< 53.3	< 21.6		225	4240 ± 420	18.7
	187	24.6 ± 9.1	34.5		226	21100 ± 2100	30.1
	188	24.6 ± 9.1	34.5		227	25400 ± 2500	22.6
31Jan58	189	1920 ± 190	14.6	21Feb58	228	27200 ± 2700	25.7
	190	1540 ± 60	11.3		229	252 ± 25	13.8
	191	2080 ± 210	12.2		230	18.5 ± 2	> 104
	192	2540 ± 250	13.4		231	10.2 ± 1	> 39.7
	193	2200 ± 220	11.2		232	23.5 ± 2	> 179
	194	528 ± 25	12.9		233	939 ± 94	4.8
	195	103 ± 100	> 22.7		234	1130 ± 110	6.4
	196	< 46.2	--		235	556 ± 56	6.9
	209	< 191	--		236	76.2 ± 8	14.6
	210	< 195	--		237	870 ± 87	4.5
	211	< 61.0	--		238	1700 ± 170	7.6
	212	< 5.64	--		239	339 ± 34	7.1
216	213	< 57.4	--		240	502 ± 50	11.2
	214	< 5.70	--		263	953 ± 95	6.3
	215	134	--		264	68.0 ± 7	1.1
	216	753 ± 75	27.5		266	2430 ± 240	10.2

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
5Nov57	23	47100 ± 4700	57.2	64000 ± 6400	77.6
21Feb58	266	4470 ± 530	18.7	2430 ± 240	10.2
26Feb58	241			904 ± 90	6.2
	242			420 ± 42	4.9
	243			205 ± 21	3.9
	244			89.1 ± 9	3.0
	245			1380 ± 140	10.4
	246			830 ± 83	9.4
	247	597 ± 60	23.3	245 ± 25	9.6
	248			18.0 ± 2	15.9
	267			> 1090	8.5
	268	1660 ± 120	11.4	1040 ± 100	7.1
	269			670 ± 67	8.7
	270			537 ± 54	5.3
	274			876 ± 88	9.6
	249			1170 ± 120	8.7
	250			1620 ± 160	9.4
	251			669 ± 67	12.4
	252	402 ± 40	8.1	1120 ± 210	22.6
1Mar58	253			509 ± 51	6.5
	254			151 ± 15	5.8
	255			29.5 ± 3	6.3
	256			6.24 ± 1	17.3
	257			1250 ± 130	5.8
	258	≤ 381	≤ 5.3	479 ± 48	6.6
	259			835 ± 84	7.8
	260			1360 ± 140	6.1
	335	1240 ± 88	7.7	783 ± 77	4.8
	336	398 ± 40	4.0	348 ± 66	3.5
	337			325 ± 220	5.6
	338	649 ± 65	6.4	198 ± 82	2.0
5Mar58	275			942 ± 94	5.8
	276			775 ± 78	5.3
	277			126 ± 13	5.4
	278			50.8 ± 5	8.2
	279			868 ± 87	5.8
	280			1080 ± 110	7.3

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
5Mar58	281			1260 ± 130	6.9
	282			1140 ± 110	5.4
	343	3840 ± 380	17.3	1470 ± 65	6.6
	344	5070 ± 510	20.1	3220 ± 270	12.8
	345			4110 ± 480	14.6
	346			2350 ± 230	5.8
6Mar58	283	426 ± 43	3.1	2770 ± 180	20.1
	284	895 ± 90	7.3	2640 ± 170	21.5
	285	301 ± 30	2.4	1600 ± 470	12.5
	286	750 ± 75	6.5	3080 ± 270	26.7
	287			2470 ± 430	15.1
	288	299 ± 30	1.9	1820 ± 480	11.7
	289	391 ± 39	2.8	2270 ± 440	16.3
	290	528 ± 53	3.5	2530 ± 260	16.8
11Mar58	201			858 ± 86	6.4
	292			717 ± 72	6.1
	293			436 ± 44	11.8
	294			129 ± 13	6.4
	295			1080 ± 110	8.6
	296			925 ± 93	8.1
	297			1020 ± 100	7.4
	298			1180 ± 120	9.9
	311	675 ± 68	5.7		
	312	1020 ± 100	5.6		
	313			1500 ± 170	5.5
	314			812 ± 76	3.5
18Mar58	299	23700 ± 2800	63.4	16200 ± 240	43.2
	300			1100 ± 110	12.4
	301			570 ± 57	14.2
	302			37.4 ± 4	15.0
	303			772 ± 77	6.1
	304			883 ± 88	9.9
	305			671 ± 67	10.1
	306			1250 ± 20	71.8
	315			3900 ± 160	18.0
	316	1610 ± 110	8.8	1900 ± 150	10.4
	317	1470 ± 150	8.4	1700 ± 110	9.8
	318			1030 ± 180	5.0

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
18Mar58	319			993 ± 120	12.3
	320			433 ± 90	3.6
	321			1090 ± 450	8.1
	322			1430 ± 120	8.7
19Mar58	323			1190 ± 130	8.7
	324	778 ± 54	8.2	1010 ± 80	10.7
	325			2170 ± 440	19.4
	326	719 ± 158	8.2	695 ± 76	7.9
25Mar58	327	16100 ± 1200	76.0	11600 ± 240	54.9
	328	39000 ± 2000	96.2	31000 ± 2600	76.8
	329	78800 ± 9500	91.1	69500 ± 5300	80.4
	330	19600 ± 3900	68.7	15000 ± 1170	52.7
	355	15500 ± 1800	67.7	9610 ± 90	41.9
	356	34500 ± 2000	86.6	33300 ± 1500	83.5
	357	62500 ± 9100	89.4	60600 ± 1600	86.7
	358	15800 ± 900	49.2	14500 ± 300	45.2
	348	1670 ± 390	9.4	1390 ± 170	7.8
	349	1930 ± 190	10.1		
	350	2110 ± 220	9.8	2140 ± 220	9.9
	351	1220 ± 110	8.6	1570 ± 280	11.0
	352	1220 ± 110	6.0	2000 ± 200	9.8
	353	3520 ± 180	17.7	3300 ± 200	16.6
	354	2310 ± 190	10.7	2250 ± 480	10.4
28Mar 58	359	19700 ± 1400	75.4	9420 ± 410	36.0
	360	38000 ± 3000	83.2	34800 ± 2200	76.1
	361	19600 ± 1400	65.3	7610 ± 260	25.3
	363	1790 ± 130	62.8	2540 ± 210	89.4
	364	4560 ± 460	57.0	2960 ± 120	37.0
	365	730 ± 73	7.9	361 ± 73	3.9
	366	699 ± 70	8.4	1210 ± 150	14.6
	367	919 ± 92	8.8	883 ± 78	8.5
	368	1760 ± 180	11.0	1740 ± 84	10.9
	369	1630 ± 160	10.4	1670 ± 150	10.7
	370			3060 ± 80	12.4
	371	< 8.26	< 4.1		
	372	< 8.26	< 4.1		
	373	< 61.7	< 20.6		
	374	< 61.7	< 20.6		

Table 4.4 (continued)

Date	Sample No.	$\frac{\text{dpm Sr}^{89}}{1000 \text{ SCF}}$	$\frac{\text{Sr}^{89}}{\text{Sr}^{90}}$	$\frac{\text{dpm Zr}^{95}}{1000 \text{ SCF}}$	$\frac{\text{Zr}^{95}}{\text{Sr}^{90}}$
1Apr58	375			3800 $\pm$ 80	14.5
	376	1830 $\pm$ 180	25.9	546 $\pm$ 67	7.7
	377	890 $\pm$ 89	15.3	662 $\pm$ 60	11.4
	378	6080 $\pm$ 610	35.1	2490 $\pm$ 60	14.4
	379	9440 $\pm$ 940	43.2	4090 $\pm$ 150	18.7
	380	12200 $\pm$ 1200	44.5	3670 $\pm$ 150	13.4
	381	9170 $\pm$ 920	37.9		
	382	9910 $\pm$ 990	59.0	1690 $\pm$ 69	10.1
	383	3840 $\pm$ 380	28.3	2310 $\pm$ 95	17.0
	384			4310 $\pm$ 170	17.2
	385	14000 $\pm$ 140	62.5	4710 $\pm$ 130	21.0
	386	4140 $\pm$ 410	29.5	1530 $\pm$ 87	10.9
	387	1070 $\pm$ 110	9.9	570 $\pm$ 85	5.3
	388			2460 $\pm$ 98	17.9
	389			1460 $\pm$ 71	8.3
	390	1360 $\pm$ 140	13.7	1650 $\pm$ 89	16.6
4Apr58	391	8560 $\pm$ 860	37.1		
	392	16000 $\pm$ 1600	64.8	3400 $\pm$ 250	13.8
	393	11800 $\pm$ 1200	57.0	6980 $\pm$ 860	33.7
	394	1820 $\pm$ 180	42.2		
	395	6670 $\pm$ 670	38.4	3070 $\pm$ 92	17.7
	396	5910 $\pm$ 590	26.9	1820 $\pm$ 140	8.3
	397	909 $\pm$ 91	11.8	2910 $\pm$ 160	37.7
	398			156 $\pm$ 102	29.6
	399	969 $\pm$ 97	5.9	1440 $\pm$ 310	8.8
	400	926 $\pm$ 93	6.3	1680 $\pm$ 120	11.4
	401	879 $\pm$ 88	7.5	2590 $\pm$ 180	22.0
	402	3110 $\pm$ 310	18.6	1320 $\pm$ 150	7.9
	403	9700 $\pm$ 970	77.6	5730 $\pm$ 97	45.9
	404	40200 $\pm$ 4000	88.0	22000 $\pm$ 260	48.1
	405	9510 $\pm$ 950	47.1	7020 $\pm$ 230	34.8
	406	16500 $\pm$ 1700	65.0	13800 $\pm$ 350	54.4
8Apr58	407	4460 $\pm$ 450	39.6	2510 $\pm$ 130	22.3
	408	14100 $\pm$ 1400	77.2	8660 $\pm$ 190	47.4
	409	7660 $\pm$ 770	43.4		
	410	32900 $\pm$ 3300	42.7		
	411	1070 $\pm$ 110	8.5		
	412	753 $\pm$ 75	5.5	2310 $\pm$ 150	16.8
	413	1110 $\pm$ 110	9.3	2260 $\pm$ 190	18.9

Table 4.4 (continued)

Date	Sample No.	$\frac{\text{dpm Sr}^{89}}{1000 \text{ SCF}}$	$\frac{\text{Sr}^{89}}{\text{Sr}^{90}}$	$\frac{\text{dpm Zr}^{95}}{1000 \text{ SCF}}$	$\frac{\text{Zr}^{95}}{\text{Sr}^{90}}$
8Apr58	414	1180 $\pm$ 120	6.7	5350 $\pm$ 140	30.3
	415			209 $\pm$ 43	$\leq$ 49.9
	419	5200 $\pm$ 520	42.7		
	420	3420 $\pm$ 340	42.8		
	421	1470 $\pm$ 150	39.2		
	422	383 $\pm$ 38	47.6		
15Apr58	423	1110 $\pm$ 110	41.6		
	424	4360 $\pm$ 440	37.7		
	425	2770 $\pm$ 280	13.5		
	428	6160 $\pm$ 620	36.2		
	429	9630 $\pm$ 960	44.5		
	430	8170 $\pm$ 820	36.0		
	431	1060 $\pm$ 110	9.9		
	432	1140 $\pm$ 110	5.2		
	433	1860 $\pm$ 190	9.3		
	434	1340 $\pm$ 130	8.4		
25Apr58	443	3920 $\pm$ 390	38.2		
	444	2510 $\pm$ 250	37.3		
	445	454 $\pm$ 45	29.8		
	446	441 $\pm$ 44	30.5		
	447	4680 $\pm$ 470	37.9		
	448	4830 $\pm$ 480	40.4		
	450	1100 $\pm$ 110	10.1		
	451	239 $\pm$ 24	36.0		
	452	48.7 $\pm$ 5	19.0		
	453	142 $\pm$ 14	5.7		
	454	4990 $\pm$ 500	40.9		
	455	2510 $\pm$ 250	28.9		
	456	502 $\pm$ 50	5.0		
	457	446 $\pm$ 45	3.8		
	458	2450 $\pm$ 250	18.3		
2May58	459	5290 $\pm$ 530	30.0		
	460	5120 $\pm$ 510	29.1		
	461	6060 $\pm$ 610	27.5		
	462	7480 $\pm$ 750	32.4		
	463	6920 $\pm$ 690	38.1		
	464	4620 $\pm$ 460	31.4		
	465	4960 $\pm$ 500	35.1		

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
2May58	466	2330 ± 230	24.7		
	467	2000 ± 200	16.8		
	469	370 ± 37	4.0		
	470	1440 ± 140	9.5		
	471	173 ± 17	54.4		
	473	222 ± 22	11.5		
	474	3950 ± 400	35.9		
6May58	475	14700 ± 1500	53.6		
	478	5080 ± 510	40.3		
	479	6520 ± 650	50.5		
	480	4060 ± 410	63.3		
	481	1240 ± 120	29.2		
	482	461 ± 46	25.4		
	483	3280 ± 330	22.1		
	484	3180 ± 320	18.6		
	485	2030 ± 200	17.4		
	486	856 ± 86	5.9		
	487	141 ± 14	32.6		
	488	207 ± 21	143		
	489	354 ± 35	17.4		
	490	1730 ± 170	28.7		
9May58	491	4830 ± 480	27.0		
	492	1980 ± 200	16.2		
	493	1060 ± 110	8.0		
	494	503 ± 50	5.1		
	495	1920 ± 190	29.0		
	496	5430 ± 540	35.6		
	497	6160 ± 620	37.0		
	498	6660 ± 670	39.4		
	499	4880 ± 490	36.7		
	500	3410 ± 340	28.1		
	501	6710 ± 670	33.0		
	502	1870 ± 190	29.7		
	503	2340 ± 230	29.5		
	504	1610 ± 160	22.3		
	505	577 ± 58	16.9		
24May58	507	4200 ± 420	24.9		
	508	7180 ± 720	33.2		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
24 May 58	509	6010 ± 600	28.5		
	510	6040 ± 600	28.6		
	511	7550 ± 760	34.2		
	512	5680 ± 570	43.9		
	513	5660 ± 570	52.2		
	519	3740 ± 370	202		
	520	3290 ± 330	266		
	521	601 ± 60	21.0		
	522	3610 ± 360	23.1		
29 May 58	523	4320 ± 430	40.3		
	524	3260 ± 330	144		
	525	3790 ± 380	23.7		
3 Jun 58	526	119 ± 12	73.1		
	527	2690 ± 270	56.7		
	528	5010 ± 500	28.8		
	529	2550 ± 260	12.1		
6 Jun 58	530	131 ± 13	25.9		
	531	4330 ± 430	56.4		
	532	3010 ± 300	26.3		
	533	3330 ± 330	20.9		
10 Jun 58	534	31.7 ± 3	44.2	45.4 ± 23	63.4
	535	4470 ± 450	59.4	2030 ± 170	27.0
	536	4730 ± 470	36.0	4110 ± 210	31.3
	537	2230 ± 220	19.2	1530 ± 20	13.2
13 Jun 58	538	514 ± 51	32.4	218 ± 2	13.8
	539	4900 ± 490	26.6	3390 ± 7	18.4
	540	3060 ± 310	26.5	2290 ± 14	19.8
	541	3850 ± 390	22.6	1900 ± 11	11.1
17 Jun 58	542	143 ± 14	85.4	92.1 ± 4.8	55.2
	543	1450 ± 150	42.3	812 ± 2	23.7
	544	4060 ± 410	72.7	1770 ± 30	31.6
	545	3190 ± 320	37.4	1990 ± 8	23.3
	546	2190 ± 220	22.4	3980 ± 40	40.8
	547	3710 ± 370	25.0	4820 ± 43	32.4
	548	6280 ± 630	36.3	5840 ± 53	33.8

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
17Jun58	549	4030 ± 400	21.6	7140 ± 64	38.4
20Jun58	550	500 ± 50	26.9	624 ± 14	33.5
	551	1830 ± 180	50.1	1690 ± 22	46.3
	552	3390 ± 340	26.8	4280 ± 38	33.8
	553	2290 ± 230	22.9	3670 ± 44	36.6
	554	7550 ± 760	53.0		
	555	4130 ± 410	22.7	8100 ± 550	44.5
	556	2950 ± 300	17.2	4230 ± 51	24.6
	557	2080 ± 210	13.2	2900 ± 46	18.4
24Jun58	558	2810 ± 280	26.4	4600 ± 69	43.3
	559	4270 ± 430	25.7	6150 ± 92	37.0
	560	4110 ± 410	19.8	5550 ± 100	26.8
	561	4010 ± 400	17.5	6520 ± 98	28.4
	562	3210 ± 320	42.9	4120 ± 120	55.0
	563	10600 ± 1100	88.1	6530 ± 72	54.6
	564	6240 ± 620	66.7	4520 ± 68	48.3
	565	4190 ± 420	59.5	4220 ± 68	60.0
28Jun58	566	2540 ± 250	33.4	3360 ± 60	44.3
	567	4200 ± 420	24.2	4610 ± 69	26.6
	568	3530 ± 350	25.2	4560 ± 55	32.5
	569	3470 ± 350	22.4	4890 ± 64	31.6
	570	5540 ± 550	60.6	4710 ± 56	51.4
	571	7490 ± 750	65.7	7080 ± 78	62.2
	572			6040 ± 73	74.1
	573	5150 ± 520	46.9	7810 ± 63	71.2
1Jul58	574	67.7 ± 7	36.9	232 ± 11	126
	575	102 ± 10	34.4		
	576	556 ± 56	23.7	1010 ± 20	42.9
	577	1130 ± 110	14.2	3550 ± 39	44.3
	578	3930 ± 390	18.8	5490 ± 44	26.3
	579	2770 ± 280	17.1		
	580	5730 ± 570	25.3	42800 ± 300	188
	581	4980 ± 500	21.5	30700 ± 250	132
4Jul58	582	2860 ± 290	28.7	4100 ± 70	41.2
	583	1670 ± 170	19.1	3180 ± 45	36.3
	584			3830 ± 61	28.8

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
4Jul58	585	2940 + 290	18.7	4800 + 62	30.6
	586	3860 ± 390	40.1	3430 ± 86	35.6
	587	3130 ± 310	42.6	4380 ± 79	59.6
	588	4490 ± 450	66.4		
	589	5070 ± 510	60.7		
8Jul58	590	1660 + 170	52.6	1970 + 33	62.5
	591	1720 ± 170	80.0	776 ± 4	36.1
	592	52000 ± 5200	104	35700 ± 250	71.5
	593	13900 ± 1400	81.4	12100 ± 73	70.8
	594	3130 ± 310	21.1	6980 ± 2140	47.0
	595			5990 ± 54	32.2
	596	3520 + 350	17.7	5160 ± 67	26.0
	597	2040 ± 200	13.1	2720 ± 44	17.5
12Sep58	598	45000 + 4500	62.7	8310 ± 830	11.6
	599	33200 ± 3300	55.5		
	600	24000 ± 2400	55.0		
	601	9030 ± 900	33.0		
	602	14500 ± 1450	33.9		
	603	4700 ± 470	20.6		
	604	1430 ± 140	9.0		
	605	34500 ± 3450	72.3	5410 ± 540	11.3
16Sep 58	610	10900 + 1100	42.6		
	611	21000 ± 2100	50.0		
	612	20600 ± 2100	47.9		
	613	23700 ± 2400	49.4	6130 ± 610	12.8
19Sep58	615	13900 + 1400	48.5	6770 + 680	23.6
	618	5960 ± 600	20.5	1420 ± 140	4.9
	621	314 ± 31	3.7		
23Sep58	622	235 + 24	33.3		
	623	387 ± 39	40.0	348 ± 350	36.0
	624	463 ± 46	27.1		
	626	1530 ± 160	11.7		
	627	7340 ± 730	57.1		
	628	20500 ± 2100	53.7		
	629	14200 ± 1400	67.4		
	630	6250 ± 630	43.7		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
23Sep58	632	15500 ± 1550	59.2	9070 ± 910	34.7
30Sep58	633	6830 ± 680	56.5	3710 ± 370	30.7
	634	688 ± 69	10.3		
	635	622 ± 62	8.7		
	636	1010 ± 100	12.8		
	637	851 ± 85	11.4		
	639	544 ± 54	5.5		
	640	1200 ± 120	15.3	1010 ± 100	12.9
3Oct58	642	3830 ± 380	39.0	2850 ± 290	29.1
	643	1650 ± 170	26.1		
	644	1010 ± 100	13.8		
	645	269 ± 27	3.9	459 ± 46	6.7
	646	372 ± 37	5.6		
	647	148 ± 15	1.9		
	648	311 ± 31	3.6		
	649	2470 ± 250	16.1		
	650	3730 ± 370	25.9		
	651	9220 ± 920	37.7		
	652	14100 ± 1400	40.9	11600 ± 1200	33.7
	653	31500 ± 3150	98.7		
	654			137000 ± 13700	106
	655	21100 ± 2100	49.6		
	656	17000 ± 1700	46.0		
7Oct58	657			804 ± 80	8.9
	658	842 ± 84	4.2	5600 ± 560	28.0
	659	513 ± 51	7.9		
	660	554 ± 55	8.6		
	661	314 ± 31	4.9	524 ± 52	8.2
	662	1180 ± 120	24.2		
	663	2760 ± 280	17.9		
	664	2640 ± 260	22.2		
	665	2200 ± 220	19.4		
	666	7870 ± 790	39.4		
	667	113000 ± 11300	62.1	188000 ± 18800	103
	668			96900 ± 9700	96.9
	669	7830 ± 780	34.8		
10Oct58	671	1170 ± 120	7.6		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
10Oct58	672	884 ± 88	6.7		
	673	3720 ± 370	19.7		
	674	84700 ± 8500	62.8	136000 ± 14000	101
	675	101000 ± 10000	94.4	116000 ± 12000	109
	676	55500 ± 5550	58.5		
	678	367 ± 37	3.9	554 ± 55	5.9
	679	290 ± 29	3.9		
	681	346 ± 35	10.7		
14Oct58	682	1420 ± 140	13.7	1660 ± 170	16.1
	683	268 ± 27	17.9		
	688	39700 ± 4000	46.0	40400 ± 4000	46.9
	689	46500 ± 4650	51.7	63000 ± 6300	70.1
	690	67200 ± 6700	52.8	75900 ± 7600	59.6
17Oct58	692	1290 ± 130	7.1		
	693	6060 ± 610	32.4		
	694	25400 ± 2500	43.9		
	695	15200 ± 1500	32.1	31300 ± 3100	66.3
	696	56800 ± 5700	51.6	71900 ± 7200	65.3
	697	58200 ± 5800	51.8	74100 ± 7400	66.0
	698	13300 ± 1300	27.2		
	699	14100 ± 1400	24.8		
	701	774 ± 77	10.1	822 ± 82	10.8
	702	16000 ± 1600	73.4	23400 ± 2300	107
	705	< 14.0	< 0.3		
	707	187 ± 19	5.2		
19Oct58	709	1170 ± 120	27.2		
	710	1270 ± 130	15.5		
	711	1690 ± 170	21.9		
	712	1620 ± 160	24.5		
	713	1680 ± 170	21.4		
	715	1450 ± 145	7.6		
	716	21700 ± 2200	23.4	23800 ± 2400	25.6
	717	20500 ± 2050	52.2	19400 ± 1900	49.3
	718	1160 ± 120	6.7		
	719	27400 ± 2700	47.5	34200 ± 3400	59.3
21Oct58	720	1050 ± 110	17.2		
	721	634 ± 63	8.1	482 ± 48	6.2

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
21 Oct 58	722	1740 ± 170	26.4		
	723	736 ± 74	5.7		
	724	332 ± 33	3.2		
	725	1350 ± 140	15.7		
22 Oct 58	726	5860 ± 590	26.2	4790 ± 480	21.4
	727	309 ± 31	2.5		
	728	43.6 ± 4	0.9		
	730	161 ± 16	4.8		
	732	50500 ± 5050	48.9	61600 ± 6200	59.7
	733	3630 ± 360	19.4		
23 Oct 58	739			50100 ± 5000	30.6
	740	687 ± 69	5.4		
	742	1240 ± 120	16.3		
25 Oct 58	734	269 ± 27	3.9		
	735	188 ± 19	2.5	≤ 2210	≤ 30.0
	737	214 ± 21	3.9		
29 Oct 58	743	381 ± 38	5.7		
	744	1410 ± 140	17.9		
	745	1420 ± 140	20.6		
	746	2620 ± 260	21.6	3080 ± 310	25.3
	747			1450 ± 150	15.0
	748	719 ± 72	9.4		
	749	899 ± 90	6.4		
29 Oct 58	751	119000 ± 12000	65.0		64.0
	752	9590 ± 960	23.4		
	753	11500 ± 1150	42.3		
	755	17900 ± 1800	75.7	30500 ± 3100	129
	756	1840 ± 180	14.4		
	757	6360 ± 640	29.4		
	759	2100 ± 210	17.7		
	760	9360 ± 940	39.0	14700 ± 1500	61.3
	761	756 ± 760	26.6		
3 Nov 58	763	453 ± 45	4.8		
	765	3260 ± 330	19.2	1240 ± 120	7.3
	766	936 ± 94	10.2		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
3 Nov 58	767	343 + 34	4.1		
	768	1060 ± 110	17.9	1690 ± 170	28.5
	769	798 ± 80	5.5		
	770	11500 ± 1150	32.8	16800 ± 1700	47.9
	771	17500 ± 1750	41.1		
	772	13100 ± 1300	33.2		
	773	14200 ± 1400	38.4	20000 ± 2000	54.2
	774	14000 ± 1400	34.6		
	775	14600 ± 1460	37.6		
	776	8870 ± 890	39.1		
7 Nov 58	777	27300 ± 2700	61.3	27700 ± 2800	62.3
	778	15500 ± 1550	50.3		
	779	20200 ± 2000	47.7		
	780	8960 ± 900	34.9		
	781	1360 ± 140	24.7		
	782	1060 ± 110	18.7		
	783	6620 ± 660	33.6	2500 ± 250	12.7
	784	2990 ± 300	13.3	13500 ± 1350	60.1
	785	660 ± 66	7.5		
	786	323 ± 32	4.2		
	787	361 ± 36	6.8		
	788	168 ± 17	2.3		
15 Nov 58	789	418 ± 42	5.0		
	790	4740 ± 470	35.5		
	791	13100 ± 1300	41.7	12000 ± 1200	38.2
	792	9320 ± 930	35.9	12000 ± 1200	46.4
	793	130 ± 13	2.5		
	795	164 ± 16	3.8		
	797	13300 ± 1300	43.8		
	798	33400 ± 3300	50.3	39300 ± 3900	59.4
16 Nov 58	801	1550 ± 160	35.9		
	802	2020 ± 200	41.7	2480 ± 250	51.3
	803	1630 ± 160	32.2		
	804	677 ± 68	24.2		
18 Nov 58	805	3100 ± 310	37.1		
	806	20500 ± 2100	43.9	27300 ± 2700	58.6
	807	7660 ± 770	27.3		

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
18Nov58	808	11600 ± 1160	44.4	11300 ± 1100	43.5
	810	305 ± 31	6.1		
	811	489 ± 49	10.7		
	812	843 ± 84	7.5		
	813	139 ± 14	2.8		
	814	124 ± 12	2.5		
	815	405 ± 41	7.8		
	816				
	817	466 ± 47	3.2		16.1
	818	1350 ± 140	13.7		21.7
20Nov58	819	5640 ± 560	23.1	4090 ± 410	16.7
	820	1370 ± 140	10.8		
	821	1120 ± 110	10.8		
21Nov58	823	518 ± 52	17.2	3460 ± 350	33.5
	824	2550 ± 260	24.7		
	825	2340 ± 230	29.0		
	826	3540 ± 350	28.4		
	827	367 ± 37	5.9		
	828	536 ± 54	7.4		
	829	436 ± 44	9.0		
	830	260 ± 26	3.9		
22Nov58	831	5640 ± 560	24.3	8060 ± 810	34.7
	832	4920 ± 490	23.0		
	833	4640 ± 460	29.0		
	835	5930 ± 590	27.5		
	836	6340 ± 630	24.9		
	837				
	838	5430 ± 540	29.0		45.4
25Nov58	839	327 ± 330	14.1	7730 ± 770	46.4
	840	599 ± 60	17.0		
	841				
	842	10.0 ± 1	5.1		
	843	67.5 ± 7	11.4		
	845				
	846	6820 ± 680	27.9		
	847	7170 ± 720	29.9		
	848	5750 ± 580	28.4		107 19.8

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
25Nov58	851	10300 ± 1000	35.8	10800 ± 1100	37.7
	852	7630 ± 760	36.7		
28Nov58	853	1960 ± 200	25.4	8350 ± 840	50.9
	854	2640 ± 260	23.5		
	855				
	856	5440 ± 540	27.1		
	857	852 ± 85	12.9	960 ± 96	16.4
	858	793 ± 79	13.6		
	859	1050 ± 110	16.9		
	860	1000 ± 100	18.6	2390 ± 240	31.0
	861	1890 ± 190	24.5		
	862	307 ± 31	5.4		
	863	248 ± 25	3.4		
	864	154 ± 15	2.2		
3Dec58	865	2990 ± 300	18.0	8470 ± 850	24.9
	866	7410 ± 740	21.8		
	867	4250 ± 430	24.2		
	868	2320 ± 230	27.1		
	869	1520 ± 150	20.4	4000 ± 400	36.8
	870	2800 ± 280	26.9		
	871	2640 ± 260	24.4		
	872	3380 ± 340	31.8		
	877	314 ± 31	52.5	333 ± 33	13.0
	878	238 ± 24	9.3		
	879	< 169		721 ± 72	11.9
	880	427 ± 43	14.9		
	881	698 ± 70	11.5		
	882	1120 ± 110	17.4		
5Dec58	873	1590 ± 160	17.3	5390 ± 540	51.0
	874	2260 ± 230	22.2		
	875	3230 ± 320	25.4		
	876	3740 ± 370	35.4		
	883	716 ± 72	7.4	< 2140	< 24.8
	884	236 ± 24	3.9		
	886	65.8 ± 7	0.8		
9Dec58	887	1280 ± 130	30.8	2090 ± 210	50.4
	888	1720 ± 170	39.0	2550 ± 260	57.7
	889	< 40.4			
	890	< 327			
	891	< 23.5			
	892	< 37.3			
	893	< 71.6			
	894	80.2 ± 8	20.2		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
9Dec58	911	507 ± 51	14.7	813 ± 15	23.5
	912	264 ± 26	19.3		
	913	219 ± 22	34.7		
	914	< 113			
	915	452 ± 45	17.8		
	916	319 ± 32	8.8		
	917	583 ± 58	12.6	963 ± 96	20.7
	918	203 ± 20	6.1		
12Dec58	895	775 ± 78	11.6		
	896	764 ± 76	14.1		
	897	710 ± 71	15.8		
	898	523 ± 52	8.9		
	899	346 ± 35	8.1	≤ 1930	≤ 45.0
	900	101 ± 10	2.1		
	901	210 ± 21	2.8		
	902	135 ± 14	1.3	≤ 2580	≤ 24.5
	903	5990 ± 600	18.1		
	904			12600 ± 150	48.9
	905	3670 ± 370	21.7		
	907	3380 ± 340	21.6		
	908	3900 ± 390	21.2		
	909	5890 ± 590	29.0		
	910	6720 ± 670	32.6	8810 ± 88	42.7
16Dec58	919	439 ± 44	15.3	1060 ± 13	36.9
	920	339 ± 34	16.8		
	922	79.4 ± 8	12.2		
	924	471 ± 47	8.8		
	925	732 ± 73	11.7		
	926	387 ± 39	6.5		
	927	10400 ± 1000	37.2	< 1510	≤ 25.1
	928	1290 ± 130	31.3	10200 ± 110	36.5
	929	437 ± 44	26.8	2340 ± 23	56.8
	930	339 ± 34	36.3		
	931	300 ± 30	24.1		
	932	167 ± 17	18.9		
	933	300 ± 30	30.4		
19Dec58	935	6980 ± 700	21.7		
	936	13100 ± 1300	25.5	10100 ± 120	19.6
	937	4200 ± 420	17.3		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
19Dec58	938	8320 ± 830	23.3		
	939	7800 ± 780	23.8		
	941	14800 ± 1500	21.4	10600 ± 140	15.4
	942	11900 ± 1200	23.3		
	943	459 ± 46	8.2		
	944	299 ± 30	4.9		
	945	516 ± 52	11.3		
	946	712 ± 71	10.4	< 2250	< 33.0
	947	246 ± 25	4.7	≤ 2670	≤ 51.6
	948	117 ± 12	2.4		
	949	105 ± 11	2.1		
23Dec58	952	9600 ± 960	30.4	11900 ± 140	37.8
	953	8210 ± 820	33.1		
	954	6280 ± 630	32.2		
	956	22.2 ± 2	6.3		
	957	9.81 ± 1	4.2		
	958	214 ± 21	13.5		
	959	303 ± 30	14.8	717 ± 11	35.0
	960	565 ± 57	15.7	968 ± 15	26.9
12Sep58	961	67.9 ± 7	0.9		
17Sep58	962	1090 ± 110	8.6	1250 ± 130	9.9
19Sep58	963	296 ± 30	1.7	≤ 2600	≤ 14.8
27Sep58	964	1140 ± 110	6.1	394 ± 7	2.1
	966	144 ± 14	2.1		
6Jan59	969	421 ± 42	10.6	657 ± 12	16.6
	970	79.1 ± 8	7.2		
	971	142 ± 14	13.6		
	972	433 ± 43	11.5		
	973	281 ± 28	10.6		
	974	414 ± 41	9.1		
	975	540 ± 54	11.8		
	976	507 ± 51	10.2	1030 ± 100	20.6
	977	5570 ± 560	26.4	7880 ± 790	37.3
	978	983 ± 98	25.9	2210 ± 220	58.4
	979	220 ± 22	25.4		
	980	< 3.39			
	981	41.5 ± 4	9.8		
	984	≤ 46.1			

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
9Jan59	986			≤ 1490	≤ 28.0
	987	398 ± 40	7.2		
	989			≤ 1680	≤ 18.6
	990	229 ± 23	3.1		
	991	134 ± 13	2.0		
	992			≤ 2230	≤ 26.1
	994	2310 ± 230	14.7		
	995	4230 ± 420	22.2	7130 ± 710	37.5
	996	1950 ± 200	12.5		
13Jan59	997	1570 ± 160	10.7		
	1000	941 ± 94	6.3	4220 ± 55	28.1
	1001	14.2 ± 1	6.8		
	1002	98.7 ± 10	6.0	211 ± 3	12.9
	1004	78.6 ± 8	5.8		
	1005	258 ± 26	7.2	586 ± 8	16.3
	1006	426 ± 43	11.7		
16Jan59	1007	2280 ± 230	18.0	≤ 2300	≤ 18.1
	1008	1520 ± 150	9.8		
	1009	4020 ± 400	14.2		
	1011	6590 ± 660	17.1		
	1012	4230 ± 420	13.7		
	1013	4510 ± 450	14.0	8720 ± 120	27.0
	1014	3990 ± 400	12.7		
	1015	284 ± 28	4.7		
	1016	369 ± 37	6.3		
	1017	1100 ± 110	17.0		
	1020			≤ 2610	≤ 26.0
	1022	233 ± 23	7.8	548 ± 9	18.3
19Jan59	1023	3850 ± 390	13.4	4310 ± 69	15.0
	1024	3390 ± 340	11.7		
	1025	2500 ± 250	10.2		
	1026	3740 ± 370	26.8	≤ 2550	≤ 18.3
22Jan59	1027	131 ± 13	10.8		
	1031	211 ± 21	7.9	≤ 986	≤ 37.0
	1032	375 ± 38	12.7		
	1033	251 ± 25	9.4		
	1034	233 ± 23	5.4	≤ 1060	≤ 24.7

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
25Jan59	1035			4720 ± 76	17.8
	1036	2870 ± 290	11.8		
	1037	3120 ± 310	13.4		
28Jan59	1039	184 ± 18	12.1		
	1040	157 ± 16	16.3		
	1041	663 ± 66	23.2		
	1042	2100 ± 210	17.4	3380 ± 54	28.0
	1043	367 ± 37	21.2		
	1044	1390 ± 140	24.2	1620 ± 16	28.2
	1047	205 ± 21	11.7		
	1048	139 ± 14	11.6		
	1049	92.8 ± 9	15.6		
	1050	92.3 ± 9	14.4		
	1051	256 ± 26	9.1		
	1052	243 ± 24	5.2	< 1320	< 28.2
	1053	188 ± 19	3.2	< 1370	< 23.3
	1054	52.5 ± 5	0.8		
3Feb59	1055	21.1 ± 2	7.4		
	1056	21.1 ± 2	7.4		
	1057	21.1 ± 2	7.4		
	1058	21.1 ± 2	7.4		
	1059	84.7 ± 8	8.3		
	1060	156 ± 16	6.0	< 985	< 38.1
	1061	239 ± 24	4.8		
	1062	217 ± 22	4.6	< 1020	< 21.6
	1063	< 33.0	< 13.1		
	1064	< 33.0	< 13.1		
	1065	< 33.0	< 13.1		
6Feb59	1071	1680 ± 170	16.1		
	1072	1780 ± 180	17.5		
	1073	2080 ± 210	14.4		
	1074	2320 ± 230	14.5	3280 ± 49	20.6
	1075	1420 ± 140	10.7		
	1076	1000 ± 100	14.2		
	1077	595 ± 60	10.0		
	1078	511 ± 51	11.3	1230 ± 55	27.1
	1080	287 ± 29	5.9		
	1081	288 ± 29	9.4		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
6Feb59	1082	338 + 34	8.9	≤ 1490	≤ 39.2
	1083	205 ± 21	5.0		
	1086	259 ± 26	4.3	≤ 1720	≤ 28.3
10Feb59	1087	143 + 14	7.5	≤ 1220	≤ 52.0
	1088	99.9 ± 10	8.6		
	1089	89.8 ± 9	15.3		
	1090	66.0 ± 7	10.5		
	1091	198 ± 20	8.5		
	1092	282 ± 28	7.0	≤ 1220	≤ 29.1
	1093	210 ± 21	4.9		
	1094	210 ± 21	5.0		
	1095	< 69.4			
	1096	175 + 18	22.6		
	1097	86.4 ± 9	16.8	≤ 954	≤ 186
	1098	59.7 ± 6	11.3		
14Feb59	1099	188 + 19	3.4	≤ 2060	≤ 33.7
	1100	246 ± 25	4.0		
	1101	543 ± 54	6.7		
	1102	529 ± 53	5.8	≤ 2060	≤ 22.8
	1106	81.2 ± 8	1.7		
	1108	2180 ± 220	11.0		
	1109	1600 ± 160	9.0	2160 + 28 4520 ± 36	10.9 16.2
	1110	1580 ± 160	8.0		
	1111	3310 ± 330	11.8		
	1112	2850 ± 290	11.7		
	1113	1960 ± 220	11.8		
	1114	2390 ± 240	12.4		
17Feb59	1115	93.0 ± 9	7.7	≤ 874	≤ 84.8
	1116	102 ± 10	9.9		
	1117	112 ± 11	11.5		
	1118	110 ± 11	8.5	≤ 1030	≤ 123
	1121	115 ± 12	13.6		
	1122	120 ± 12	9.6		
20Feb59	1125	1900 + 190	7.9	2210 + 33 3520 ± 42	12.6 12.1
	1126	1680 ± 170	7.7		
	1128	1110 ± 110	6.3		
	1129	2300 ± 230	7.9		

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
20Feb59	1130	2180 ± 220	11.6		
	1131	2080 ± 210	11.4		
	1132	1480 ± 150	9.3		
	1133	134 ± 13	2.6		
	1134	188 ± 19	3.7		
	1135	466 ± 47	6.5	≤ 2110	≤ 29.3
	1136	988 ± 99	8.9		
	1137	88.7 ± 9	4.9		
	1138	143 ± 14	5.3		
	1139	154 ± 15	5.3	≤ 924	≤ 31.7
	1140	166 ± 17	6.9		
24Feb59	1141	157 ± 16	3.3		
	1142	58.5 ± 6	1.0		
	1143	303 ± 30	5.2	< 2320	≤ 39.7
	1144	1410 ± 140	8.0	2020 ± 230	11.4
	1147	234 ± 23	4.9		
	1148	219 ± 22	3.3		
	1149	2130 ± 210	9.1		
	1150	2230 ± 220	9.6		
	1151	1790 ± 180	7.4		
	1152	2050 ± 210	6.8	4350 ± 57	14.4
	1153	2130 ± 210	9.0	4750 ± 67	20.1
	1156	2380 ± 240	9.6		
28Feb59	1157			≤ 1170	≤ 94.2
	1161	98.8 ± 10	10.6		
	1162	226 ± 23	13.6	≤ 1130	≤ 67.7
	1163	40.2 ± 4	10.5		
	1164	24.2 ± 2	4.2		
	1165	109 ± 11	8.9	≤ 1050	≤ 86.5
	1167	160 ± 16	3.1		
	1169	139 ± 14	2.2		
	1170	62.3 ± 6	1.1	≤ 1190	≤ 20.1
3Mar59	1171	24.1 ± 2	0.4		
	1172	234 ± 23	4.5		
	1173	293 ± 29	3.7	≤ 1800	≤ 22.4
	1174	503 ± 50	4.8	≤ 2330	≤ 22.1
	1175	9.45 ± 9	4.1		
	1176	37.2 ± 4	3.4		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
3Mar59	1179	2080 + 210	7.9		
	1180	1940 ± 190	6.9		
	1181	2110 ± 210	8.4		
	1182	1180 ± 120	5.2	2540 + 31	11.2
	1183			3500 ± 53	12.4
	1186	1110 ± 110	8.9		
6Mar59	1188	1400 + 140	7.0		
	1189	1630 ± 160	7.4		
	1190	1630 ± 160	6.9	3040 ± 46	12.8
	1191	1030 ± 100	11.2		
	1192	2100 ± 210	10.1	2500 ± 35	12.0
	1193	752 ± 75	3.8		
	1196	139 ± 14	2.1		
	1197	294 ± 29	4.9		
	1198	784 ± 78	5.5	< 3030	< 21.2
	1202	139 ± 14	3.6	< 1020	< 26.5
				< 1520	< 27.9
				< 1270	< 22.3
10Mar59	1204				
	1206	155 + 16	4.4		
	1207	102 ± 10	3.4		
	1208	165 ± 17	2.9		
	1209	130 ± 13	2.4		
	1210	119 ± 12	2.1		
	1211	1090 ± 110	7.4		
	1212	950 ± 95	8.2		
	1213	1110 ± 110	8.4		
	1214	1230 ± 120	7.5	2000 + 34	12.1
	1215	777 ± 78	7.9	1980 ± 30	20.0
	1216	399 ± 40	5.0		
	1217	274 ± 27	5.4		
	1218	185 ± 19	8.1		
13Mar59	1219	108 ± 11	5.8	< 1040	< 56.0
	1222	4.15 ± 0.4	1.1		
	1223	49.3 ± 5	0.8		
	1224	40.6 ± 4	0.6		
	1225	192 ± 19	2.5	< 2230	< 29.1
	1227	237 ± 24	11.0		

Table 4.4 (continued)

Date	Sample No.	$\frac{\text{dpm Sr}^{89}}{1000 \text{ SCF}}$	$\frac{\text{Sr}^{89}}{\text{Sr}^{90}}$	$\frac{\text{dpm Zr}^{95}}{1000 \text{ SCF}}$	$\frac{\text{Zr}^{95}}{\text{Sr}^{90}}$
13Mar59	1228	409 $\pm$ 41	10.3		
	1229	492 $\pm$ 49	8.0		
	1230	840 $\pm$ 84	8.3	2230 $\pm$ 27	22.0
	1231	104 $\pm$ 10	5.7		
	1232	183 $\pm$ 18	19.2	$\leq$ 1094	$\leq$ 115
	1233	47.3 $\pm$ 5	8.9		
17Mar59	1235	98.8 $\pm$ 10	1.7		
	1236	245 $\pm$ 25	3.8		
	1237	274 $\pm$ 27	3.1	$\leq$ 1860	$\leq$ 21.3
	1238	353 $\pm$ 35	3.6		
	1239	49.2 $\pm$ 5	4.4	$\leq$ 640	$\leq$ 56.9
	1240	39.8 $\pm$ 4	3.0		
	1241	9.62 $\pm$ 1	1.2		
	1243	1300 $\pm$ 130	7.0		
	1244	1420 $\pm$ 140	7.3		
	1245	1300 $\pm$ 130	6.3	3100 $\pm$ 37	15.0
	1247	1230 $\pm$ 120	5.5	2200 $\pm$ 42	9.9
	1248	1190 $\pm$ 120	5.8		
	1249	1130 $\pm$ 110	6.9		
	1250	612 $\pm$ 61	5.8		
20Mar59	1252	915 $\pm$ 92	3.4		
	1253	1010 $\pm$ 100	5.1	2420 $\pm$ 34	12.2
	1254	1080 $\pm$ 110	4.9		
	1255	1370 $\pm$ 140	6.7	2590 $\pm$ 34	12.7
	1256	1060 $\pm$ 110	6.6		
	1257	850 $\pm$ 85	6.4		
	1258	734 $\pm$ 73	5.2		
	1259	147 $\pm$ 15	2.8		
	1260	192 $\pm$ 19	3.9		
	1261	529 $\pm$ 53	5.5		
	1262			$\leq$ 2703	$\leq$ 14.2
	1264	31.8 $\pm$ 3	6.5	$\leq$ 895	$\leq$ 39.7
	1266				
24Mar59	1267	92.2 $\pm$ 9	9.9		
	1268	219 $\pm$ 22	10.5		
	1269	496 $\pm$ 50	8.1	2010 $\pm$ 32	33.0
	1270	796 $\pm$ 80	7.4	1200 $\pm$ 22	11.0
	1271	79.2 $\pm$ 8	9.9		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
24Mar59	1273	48.1 ± 5	9.4		
	1274	80.5 ± 8	10.4		
	1283	45.8 ± 5	4.3		
	1284	33.9 ± 3	7.6		
	1285	20.3 ± 2	6.6		
	1287	113 ± 11	4.6	≤ 1150	≤ 47.0
	1288	125 ± 13	3.4		
	1289	104 ± 10	2.3	≤ 1470	≤ 32.2
	1290	113 ± 11	2.3		
27Mar59	1275	1230 ± 120	6.1		
	1276	1130 ± 110	5.5	2990 ± 54	14.5
	1277	1120 ± 110	5.9		
	1278	1520 ± 150	5.2		
	1279	1350 ± 140	5.8	3300 ± 56	14.1
	1280	1420 ± 140	6.4		
	1281	892 ± 89	5.6		
	1282	718 ± 72	4.6		
	1291	122 ± 12	2.0		
	1292	224 ± 22	3.4		
	1293	116 ± 12	2.0		
	1294	362 ± 36	4.9	≤ 1910	≤ 25.9
	1296	47.8 ± 5	0.8		
	1298			≤ 2510	≤ 39.6
1Apr59	1301	980 ± 98	6.0		
	1302	1100 ± 110	5.1		
	1303	1060 ± 110	5.2		
	1304	1530 ± 150	6.8		
	1305	1900 ± 190	6.3	2540 ± 41	8.4
	1306	2690 ± 270	6.6	3460 ± 55	8.4
3Apr59	1307	430 ± 43	6.1		
	1308	838 ± 84	7.2		
	1309	807 ± 81	6.6		
	1310	988 ± 99	6.4	1990 ± 36	12.9
	1311	375 ± 38	5.7	1100 ± 16	16.5
	1312	405 ± 41	7.2		
	1313	265 ± 27	6.4		
	1314	147 ± 15	3.3		
	1317	53.2 ± 5	2.4	≤ 1050	≤ 46.4
	1318	67.5 ± 7	2.4		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
7Apr59	1321	98.3 ± 10	1.7	≤ 1180	≤ 20.1
	1322	129 ± 13	2.7		
	1323	62.9 ± 6	1.9		
	1324	67.2 ± 7	10.1		
	1326	39.9 ± 4	5.4	895 ± 16 983 ± 15 1380 ± 18	20.1 8.9 6.6
	1327	158 ± 16	6.8		
	1328	315 ± 32	7.1		
	1329	604 ± 60	5.5		
	1330	1129 ± 110	5.4		
	1331	56.3 ± 6	7.0		
	1332	12.8 ± 1	2.0		
	1333	20.5 ± 2	8.8		
	1334	16.4 ± 2	9.2		
10Apr59	1335	1130 ± 110	6.2	1630 ± 28 1740 ± 30	7.4 9.6
	1336	874 ± 87	5.0		
	1337	1320 ± 130	6.0		
	1338	1030 ± 100	4.6		
	1339	881 ± 88	4.8	≤ 1820	≤ 35.6
	1340	1090 ± 110	7.0		
	1341	819 ± 82	5.2		
	1342	91.7 ± 9	1.8		
	1343	98.9 ± 10	1.9		
	1344	39.3 ± 4	0.7		
14Apr59	1354	1640 ± 160	12.2	3300 ± 33	24.6
	1355	1470 ± 150	11.4	2460 ± 27	19.2
	1356	1740 ± 170	10.6	3550 ± 35	21.6
	1357	1950 ± 200	11.3	3870 ± 35	22.4
	1358	1620 ± 160	10.8	3880 ± 47	25.7
	1359	3610 ± 360	11.7	5170 ± 46	16.7
	1360	4140 ± 410	10.8	6610 ± 46	17.3
	1361	2490 ± 250	8.7	4370 ± 17	15.2
	1362			4290 ± 43	20.1
	1363	2090 ± 210	9.7	3520 ± 35	16.3
	1364	2080 ± 210	8.9	2920 ± 35	12.5
	1365	989 ± 99	7.7	1680 ± 15	13.0
	1366	1330 ± 130	9.7	2020 ± 12	14.7
	1367	2320 ± 230	8.3	3710 ± 26	13.3

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
17Apr59	1346	78.9 ± 8	5.8		
	1347	229 ± 23	5.6		
	1348	468 ± 47	4.5	801 ± 15	7.7
	1349	715 ± 72	5.6	1310 ± 27	10.3
	1350	23.5 ± 2	2.4		
	1368	18.1 ± 2	1.4		
	1369	107 ± 11	6.7	136 ± 1	8.6
	1370	32.3 ± 3	1.4		
	1371	14.2 ± 1	3.6		
	1372	7.94 ± 1	1.3	53.1 ± 0.9	8.4
	1373	14.2 ± 2	3.6		
19Apr59	1374	614 ± 61	4.2	934 ± 14	6.3
	1375	697 ± 70	4.3		
	1376	748 ± 75	5.0		
	1377	648 ± 65	4.0	1190 ± 19	7.2
	1378	938 ± 94	5.3		
	1379	894 ± 89	3.8		
	1380	755 ± 76	3.2		
21Apr59	1382	345 ± 35	3.6		
	1384	470 ± 47	4.9	1190 ± 19	12.5
	1385	348 ± 35	3.2	1190 ± 17	11.0
	1386	1360 ± 140	5.1		
	1388	1260 ± 130	4.7		
	1389	1190 ± 120	5.4		
22-29Apr59	1663	424 ± 42	2.2	1060 ± 15	5.4
	1664	411 ± 41	1.6	1460 ± 18	5.7
	1665			498 ± 5	9.5
	1666	348 ± 35	1.6	1270 ± 20	5.8
	1667	527 ± 53	3.6	1290 ± 13	8.8
	1668	405 ± 41	2.3	1080 ± 17	6.0
24Apr59	1390			≤ 1920	≤ 26.7
	1391	288 ± 29	4.1		
	1392	33.8 ± 3	0.6		
	1393	52.4 ± 5	0.8		
26Apr59	1394	797 ± 80	3.5	1040 ± 23	4.6
	1395	691 ± 69	3.8		
	1396	738 ± 74	4.1		
	1397	627 ± 63	3.8		
	1398	715 ± 72	3.6	998 ± 18	5.0
	1399	849 ± 85	3.9		
	1400	736 ± 74	2.4		
	1401	708 ± 71	3.6		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
28Apr59	1402	543 $\pm$ 54	3.5	1090 $\pm$ 20	7.0
	1404	547 $\pm$ 55	3.5	1080 $\pm$ 35	7.0
	1405	504 $\pm$ 50	3.4	1170 $\pm$ 22	8.0
	1406	355 $\pm$ 36	4.3		
	1407	215 $\pm$ 22	3.9		
	1408	168 $\pm$ 17	5.1		
	1409	107 $\pm$ 11	4.1		
	1410	67.0 $\pm$ 7	1.3		
	1411	105 $\pm$ 11	2.7		
	1412	25.8 $\pm$ 3	1.5		
	1413	20.5 $\pm$ 2	1.0		
1May59	1414	87.0 $\pm$ 9	4.7		
	1415	92.7 $\pm$ 9	5.9		
	1416	185 $\pm$ 19	4.1		
	1417	498 $\pm$ 50	4.2	726 $\pm$ 15	6.1
	1418	18.4 $\pm$ 2	2.7		
	1419	25.1 $\pm$ 3	4.0		
	1420	29.1 $\pm$ 3	2.1		
	1421	27.5 $\pm$ 3	1.5		
5May59	1422	124 $\pm$ 12	1.7		
	1423	154 $\pm$ 15	2.0		
	1424	207 $\pm$ 21	2.8		
	1425	533 $\pm$ 53	3.5	$\leq$ 2600	$\leq$ 16.9
	1426	78.2 $\pm$ 8	2.7		
	1427	389 $\pm$ 39	2.5		
	1428	470 $\pm$ 47	2.7		
	1429	980 $\pm$ 98	4.4		
	1430	1360 $\pm$ 140	4.6	1500 $\pm$ 26	5.1
8May59	1431	273 $\pm$ 27	4.9		
	1432	278 $\pm$ 28	3.9		
	1433	543 $\pm$ 54	3.9		
	1434	475 $\pm$ 48	3.0		
	1435	261 $\pm$ 26	4.0		
	1436	252 $\pm$ 25	3.9		
	1437	168 $\pm$ 17	4.2		
	1438	213 $\pm$ 21	6.5		
	1439	57.1 $\pm$ 6	0.9		
	1440	76.5 $\pm$ 8	1.2		
	1441	51.4 $\pm$ 5	0.8		
	1442	78.0 $\pm$ 8	1.2		

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
12 May 59	1443	58.7 ± 6	1.6		
	1444	6.19 ± 1	0.5		
	1445	9.33 ± 1	2.8		
	1449	34.4 ± 3	0.5		
	1450	65.0 ± 7	3.2		
	1451	54.1 ± 5	4.1		
	1452	20.8 ± 2	6.4		
	1453	20.8 ± 2	6.4		
	1454	20.8 ± 2	6.4		
	1455	20.8 ± 2	6.4		
15 May 59	1456	29.6 ± 3	1.9		
	1457	28.7 ± 3	1.3		
	1459	83.5 ± 8	2.1		
17 May 59	1460	58.8 ± 6	2.7		
	1461	236 ± 24	4.2		
	1462	572 ± 57	4.4	893 ± 19	6.8
	1463	404 ± 40	2.5		
	1465	345 ± 35	3.0		
	1466	468 ± 47	3.4	745 ± 20	5.5
	1467	515 ± 52	3.0		
	1468	620 ± 62	3.6		
	1469	710 ± 71	3.5	898 ± 19	4.5
	1470	751 ± 75	3.9		
	1471	692 ± 69	2.9		
20 May 59	1472	595 ± 60	5.5	1060 ± 110	9.8
	1463	515 ± 52	4.7	775 ± 78	7.1
	1474	311 ± 31	4.1		
	1475	179 ± 18	3.2		
	1476	523 ± 52	4.1		
	1477	415 ± 42	3.0		
	1478	423 ± 42	3.0		
	1479	301 ± 30	2.9		
	1480	110 ± 11	1.6		
	1481	70.6 ± 7	0.7		
	1482	259 ± 26	2.5		
	1483	407 ± 41	3.3		
	1484	40.0 ± 4	1.6		
	1485	16.2 ± 2	1.1		

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
20May59	1486	28.1 ± 3	1.4		
	1487	22.8 ± 2	1.2		
22May59	1488	36.1 ± 4	0.6		
	1489	61.1 ± 6	0.9		
	1490	72.1 ± 7	1.2		
	1491	121 ± 12	1.8		
24May59	1492	582 ± 48	4.2		
	1493	661 ± 66	5.7		
	1494	464 ± 46	3.4		
	1495	480 ± 48	4.1	≤ 2070	≤ 17.6
	1496	505 ± 51	2.4		
	1497	606 ± 61	2.7		
	1498	748 ± 75	3.2		
	1499			≤ 2850	≤ 10.6
26May59	1500	207 ± 21	2.0		
	1501	363 ± 36	2.5	≤ 1950	≤ 13.4
	1502	373 ± 37	2.4	≤ 1500	≤ 9.6
	1503	347 ± 35	3.1		
	1504	91.5 ± 9	1.9		
	1505	95.6 ± 10	2.2		
	1506	118 ± 12	3.0		
	1507	88.1 ± 9	4.8		
	1509	82.9 ± 8	2.1		
	1510	50.4 ± 5	1.4		
	1511	40.3 ± 4	1.7		
	1512	13.1 ± 1	1.6		
	1515	34.5 ± 3	0.6		
29May59	1519	34.7 ± 3	0.8		
2Jun59	1520	592 ± 59	2.8		
	1521	430 ± 43	2.1		
	1522	421 ± 42	2.2		
	1523	495 ± 50	2.5		
	1524	395 ± 40	2.2	≤ 2840	≤ 15.9
	1525	495 ± 50	2.6		
	1526	454 ± 45	2.0		
	1527			≤ 3360	≤ 10.9

Table 4.4 (continued)

Date	Sample No.	$\frac{\text{dpm Sr}^{89}}{1000 \text{ SCF}}$	$\frac{\text{Sr}^{89}}{\text{Sr}^{90}}$	$\frac{\text{dpm Zr}^{95}}{1000 \text{ SCF}}$	$\frac{\text{Zr}^{95}}{\text{Sr}^{90}}$
2Jun59	1528	305 $\pm$ 31	2.1		
	1530			≤ 2260	≤ 20.0
	1531	253 $\pm$ 25	3.8		
	1532	920 $\pm$ 92	3.4		
	1533	960 $\pm$ 96	2.9	≤ 3720	≤ 11.2
	1536	108 $\pm$ 11	1.3		
	1538	138 $\pm$ 14	2.1		
	1541			$\leq 40^1$	≤ 7.0
5Jun59	1546	325 $\pm$ 33	4.5		
	1547	238 $\pm$ 24	2.8		
	1548	357 $\pm$ 36	3.3	≤ 1570	≤ 14.4
	1549	278 $\pm$ 28	2.4	≤ 1780	≤ 15.5
	1550	90.3 $\pm$ 9	1.7		
	1551	70.7 $\pm$ 7	1.9		
	1552	71.0 $\pm$ 7	2.3		
	1553	159 $\pm$ 16	2.3		
	1554	50.7 $\pm$ 5	1.5		
9Jun59	1561	20.7 $\pm$ 2	3.8		
	1562	20.7 $\pm$ 2	3.8		
	1563	35.1 $\pm$ 4	2.3		
	1564	45.3 $\pm$ 5	2.1		
	1565	153 $\pm$ 15	3.0		
	1566	78.7 $\pm$ 8	2.8		
	1567	140 $\pm$ 14	2.6		
	1568	167 $\pm$ 17	3.1	≤ 805	≤ 14.7
	1569	188 $\pm$ 19	2.9		
	1570	91.5 $\pm$ 9	3.6		
12Jun59	1573	312 $\pm$ 31	1.9	≤ 2440	≤ 15.2
	1574	433 $\pm$ 43	2.8		
	1575	412 $\pm$ 41	2.3		
	1576	383 $\pm$ 38	1.8	≤ 2680	≤ 12.4
	1577	282 $\pm$ 28	1.7		
	1578	281 $\pm$ 28	1.9		
	1580	244 $\pm$ 24	1.2		
	1581	407 $\pm$ 41	2.0		
	1582	425 $\pm$ 43	1.8	≤ 3030	≤ 12.8
	1583	314 $\pm$ 31	1.7	≤ 3030	≤ 16.3
	1584	421 $\pm$ 42	1.7		

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	dpm Zr ⁹⁵ 1000 SCF	Zr ⁹⁵ Sr ⁹⁰
12Jun59	1585	277 + 28	1.9		
	1586	218 ± 22	1.6		
14Jun59	1591	155 + 16	2.2		
	1592	135 ± 14	1.9		
	1594	261 ± 26	1.9	≤ 1360	≤ 10.0
	1599	215 ± 22	1.5		
	1600	312 ± 31	1.9		
	1601	364 ± 36	2.5		
	1602	292 ± 29	2.3	< 1830	< 12.4
	1603	246 ± 25	1.8	≤ 1930	≤ 15.1
	1604	228 ± 23	1.5		
	1605	313 ± 31	1.6		
	1606	330 ± 33	2.3	< 2070	< 10.8
	1607	295 ± 30	1.7	≤ 2190	≤ 15.0
	1608	300 ± 30	1.6		
	1609	1180 ± 120	7.3	≤ 2780	≤ 17.3
	1610	545 ± 55	2.2		
	1611	380 ± 38	1.8		
	1612	437 ± 44	2.1		
	1613	739 ± 74	3.7	≤ 3090	≤ 15.5
16Jun59	1615	237 + 24	1.9		
	1616	182 ± 18	1.0		
	1617	218 ± 22	2.1		
	1618	258 ± 26	2.4		
	1619	209 ± 21	1.8	≤ 990	≤ 9.1
	1620	343 ± 34	2.4		
	1621	170 ± 17	0.9	620 ± 10	4.4
	1622	351 ± 35	2.3	793 ± 13	4.1
	1623	335 ± 34	2.1		
	1625	200 ± 20	1.1		
	1626	307 ± 31	1.7		
	1627	357 ± 36	1.6		
	1628	473 ± 47	2.2	≤ 1760	≤ 8.4
	1629	426 ± 43	1.7		
	1630	321 ± 32	1.3		
	1631	262 ± 26	1.1	< 1980	< 8.2
	1632	293 ± 29	1.0	≤ 4360	≤ 18.3
	1633	387 ± 39	1.5		
	1634	339 ± 34	1.2		

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
16Jun59	1656	201 + 20	1.2		
	1657	425 + 43	3.2		
	1661	86.5 + 9	1.7		
19Jun59	1639	111 + 11	1.1		
	1640	230 + 23	2.1	639 ± 8	5.8
	1642	208 + 21	2.0		
	1643	225 + 23	2.1	786 ± 10	7.3
	1644	142 + 14	1.3		
	1645			≤ 2560	≤ 10.9
	1646	153 + 15	0.6		
	1647	397 + 40	1.7		
	1648	463 + 46	1.9		
	1649	208 + 21	0.8		
	1650	325 + 33	1.3	≤ 2450	≤ 9.4
	1651	68.2 + 7	0.7		
	1652	273 + 27	1.5		
	1653	520 + 52	1.8		
	1654	553 + 55	1.5	1280 ± 15	3.5
21Jun59	1673	211 + 21	1.1	≤ 1970	≤ 10.6
	1674	149 + 15	1.0		
	1675	12.0 + 1	0.1		
	1676	187 + 19	1.6		
	1677			≤ 2230	≤ 11.1
	1678	49.6 + 5	0.3		
	1679	156 + 16	1.4		
	1680	250 + 25	1.8		
	1681			≤ 3010	≤ 13.5
	1682	308 + 31	1.4		
	1683	44.8 + 4	0.2		
	1684	63.8 + 6	0.3	≤ 3520	≤ 16.0
	1685	219 + 22	0.9	≤ 3440	≤ 13.8
	1687	239 + 24	1.0		
	1688	383 + 38	1.4	≤ 3780	≤ 14.1

Table 4.4 (continued)

<u>Date</u>	<u>Sample No.</u>	<u>dpm Sr⁸⁹</u> <u>1000 SCF</u>	<u>Sr⁸⁹</u> <u>Sr⁹⁰</u>	<u>dpm Zr⁹⁵</u> <u>1000 SCF</u>	<u>Zr⁹⁵</u> <u>Sr⁹⁰</u>
23Jun59	1690	342 + 34	1.7		
	1691	175 + 18	0.9		
	1692	323 + 32	1.7		
	1693	374 + 37	1.8		
	1694	463 + 46	1.8	< 4860	< 19.1
	1695	324 + 32	1.7	3480	18.1
	1696	305 + 31	1.4		
	1697	381 + 38	1.7		
	1698	528 + 53	2.4	< 4380	< 20.3
	1699	223 + 22	1.2	609 + 8	3.2
	1700	280 + 28	1.3		
	1701	384 + 38	1.3		
	1702	622 + 62	1.8	< 3860	< 11.1
	1703	426 + 43	1.4		
	1724			< 3480	< 19.7

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰
26Jun59	1704	302 + 30	1.8	7Jul59	1769	202 + 20	1.1
	1705	307 + 31	1.8		1770	255 + 26	1.4
	1706	387 + 39	1.8		1773	411 + 41	3.4
	1707	331 + 33	1.7		1774	130 + 13	1.1
	1708	275 + 28	1.2		1775	161 + 16	1.2
	1709	222 + 22	1.1		1777	170 + 17	1.0
	1710	232 + 23	1.1		1778	159 + 16	1.0
	1711	382 + 38	2.5		1779	209 + 21	1.3
	1712	356 + 36	2.6		1780	84.2 + 8	2.3
	1713	371 + 37	2.8		1781	310 + 31	1.9
	1714	236 + 24	1.5		1782	202 + 20	1.4
	1715	291 + 29	2.3		1783	79.2 + 8	1.6
	1716	228 + 23	1.8		1784	54.8 + 5	1.2
	1717	230 + 23	2.1		1785	112 + 11	1.2
	1718	291 + 29	2.3		1786	140 + 14	1.0
	1719	199 + 20	1.7		1794	62.6 + 6	2.5
	1720	73.0 + 7	2.6				
1Jul 59	1733	104 + 10	1.0	10Jul59	1800	24.8 + 2	0.9
	1735	42.3 + 4	0.4		1802	35.7 + 4	0.4
	1736	120 + 12	0.9		1803	154 + 15	1.2
	1737	273 + 27	1.9		1805	156 + 16	1.3
	1742	255 + 26	1.2		1810	149 + 15	0.8
	1743	115 + 12	1.6		1811	361 + 36	1.7
	1745	238 + 24	7.7		1812	79.2 + 8	1.0
	1746	7.80 + 1	0.3		1813	231 + 23	3.9
	1747	75.1 + 8	1.9		1814	22.4 + 2	0.4
	1748	161 + 16	3.8		1815	153 + 15	0.8
	1749	340 + 34	2.5		1818	152 + 15	0.7
	1751	208 + 21	1.1		1820	529 + 53	2.4
	1752	247 + 25	1.3	14Jul59	1822	349 + 35	2.0
3Jul59	1758	488 + 49	1.5		1825	181 + 18	0.8
	1759	541 + 54	1.9		1826	738 + 74	3.0
	1760	352 + 35	1.5		1828	254 + 25	1.2
	1761	261 + 26	1.4		1829	378 + 38	1.8
	1763	350 + 35	1.4		1830	119 + 12	0.5
	1765	214 + 21	0.8		1831	224 + 22	0.9
	1766	708 + 71	3.0		1832	105 + 11	0.6
7Jul59	1768	288 + 29	1.6		1834	291 + 29	1.4
					1835	229 + 23	1.1
					1837	309 + 31	1.0

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰
14Jul59	1838	412 + 41	1.8	21Jul59	1898	149 + 15	1.0
	1840	422 ± 42	1.5		1899	220 ± 22	1.9
	1841	484 ± 48	1.7		1901	354 ± 35	1.9
16Jul59	1864	193 + 19	1.9	24Jul59	1902	180 ± 18	0.9
	1865	115 ± 12	0.8		1903	464 ± 46	3.5
17Jul59	1843	196 + 20	1.0		1905	161 ± 16	0.8
	1844	200 ± 20	1.0		1906	163 ± 16	0.7
	1845	297 ± 30	1.4		1907	235 ± 24	1.1
	1848	229 ± 23	1.0		1908	189 ± 19	0.9
	1849	136 ± 14	0.7		1909	295 ± 30	1.3
	1850	254 ± 25	1.5		1910	226 + 23	1.3
	1851	308 ± 31	2.2		1911	274 ± 27	1.5
	1852	181 ± 18	1.0		1912	220 ± 22	1.1
	1854	268 ± 27	1.5		1913	258 ± 26	1.3
	1855	268 ± 27	1.5		1914	362 ± 36	1.6
	1858	218 ± 22	4.8		1915	289 ± 29	1.4
	1859	37.3 ± 4	0.8		1916	127 ± 13	0.6
	1861	148 ± 15	1.4		1917	194 ± 19	0.9
19Jul59	1866	88.5 + 9	0.8		1918	236 ± 24	1.1
	1867	160 ± 16	1.2		1919	211 ± 21	0.9
	1868	225 ± 23	1.4		1920	79.7 ± 8	1.4
	1869	125 ± 13	0.9		1921	36.5 ± 4	0.5
	1870	145 ± 15	1.2		1922	162 ± 16	1.5
	1871	226 ± 23	1.8		1923	172 ± 17	1.4
	1872	212 ± 21	1.2		1924	237 ± 24	2.4
	1873	86.7 ± 9	0.6		1925	242 ± 24	1.8
	1874	293 ± 29	1.9		1927	134 ± 13	0.8
	1875	240 ± 24	1.3		1928	234 ± 23	1.5
	1881	243 ± 24	1.5	26Jul59	1948	237 ± 24	1.2
	1886	136 ± 14	0.8		1952	259 ± 26	1.3
					1956	354 ± 35	1.9
21Jul59	1890	65.2 + 7	1.3	28Jul59	1963	13.7 + 1	1.5
	1891	86.5 ± 9	1.3		1966	40.5 ± 4	0.8
	1892	111 ± 11	1.5		1967	17.3 ± 2	0.7
	1893	108 ± 11	1.6		1969	84.9 ± 8	2.1
	1894	92.2 ± 9	1.3		1971	162 ± 16	1.7
	1895	115 ± 12	1.4		1972	128 ± 13	1.0
	1896	215 ± 22	1.1				

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰
28Jul59	1973	146 ± 15	1.1	7Aug59	2030	104 ± 10	0.6
	1975	643 ± 64	3.6		2031	142 ± 14	0.8
	1976	507 ± 51	2.4		2033	182 ± 18	1.0
	1977	214 ± 21	1.5		2035	367 ± 37	2.6
	1978	153 ± 15	0.8		2037	105 ± 11	0.7
	1979	136 ± 14	0.6		2038	131 ± 13	0.7
	1980	316 ± 32	1.3		2039	177 ± 18	1.1
	1984	108 ± 11	1.3		2040	142 ± 14	0.9
	1986	78.4 ± 8	0.7		2042	168 ± 17	1.0
	1988	81.7 ± 8	0.6		2044	95.6 ± 10	1.2
30Jul59	1989	107 ± 11	1.6		2045	99.0 ± 10	1.6
	1992	170 ± 17	1.1		2046	99.6 ± 10	1.4
31Jul59	1993	90.1 ± 9	1.9	8Aug59	2056	34.4 ± 3	0.4
	1994	123 ± 12	1.1		2061	221 ± 22	0.9
	1995	104 ± 10	1.0		2062	258 ± 26	1.1
	1996	70.0 ± 7	0.5		2064	153 ± 15	0.6
	1997	218 ± 22	1.2		2066	330 ± 33	1.4
	1998	230 ± 23	1.3	21Aug59	2067	2.91 ± 0.3	0.1
	1999	62.1 ± 6	0.8		2068	29.0 ± 3	1.5
	2000	77.4 ± 8	1.4		2070	37.1 ± 4	1.1
	2002	53.6 ± 5	0.9		2071	17.6 ± 2	0.6
	2003	205 ± 21	1.2		2072	16.7 ± 2	0.4
	2004	319 ± 32	1.6		2073	26.3 ± 3	0.9
	2005	90.8 ± 9	0.6		2075	18.7 ± 2	0.6
	2006	207 ± 21	1.2		2076	69.7 ± 7	1.9
4Aug59	2007	112 ± 11	0.6		2077	23.4 ± 2	0.9
	2008	115 ± 12	0.6		2078	32.0 ± 3	1.1
	2009	155 ± 16	0.8		2320	48.4 ± 5	1.2
	2010	208 ± 21	1.0		2342	88.5 ± 9	2.7
	2014	141 ± 14	0.7	15Sep59	2079	46.6 ± 5	0.4
	2015	201 ± 20	1.1		2080	48.4 ± 5	0.4
	2018	184 ± 18	0.7		2082	21.0 ± 2	0.2
	2019	325 ± 33	1.2		2083	52.2 ± 5	0.4
	2020	222 ± 22	0.8		2088	37.5 ± 4	0.2
	2023	101 ± 10	0.4		2089	262 ± 26	2.1
6Aug59	2054	103 ± 10	0.6		2090	56.9 ± 6	0.4
					2091	127 ± 13	0.8
					2092	143 ± 14	0.8

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰
15Sep59	2093	134 ± 13	0.8	25Sep59	2167	39.5 ± 4	0.2
	2098	65.9 ± 7	0.4				
	2099	63.7 ± 6	0.3	29Sep59	2195	83.4 ± 8	0.5
	2102	92.2 ± 9	0.5		2196	95.5 ± 10	0.6
	2103	58.0 ± 6	0.3		2199	65.5 ± 7	0.8
	2106	89.6 ± 9	0.4				
16Sep59	2094	100 ± 10	0.6	30Sep59	2176	45.7 ± 5	0.2
	2095	116 ± 12	0.7		2177	91.9 ± 9	1.3
	2096	137 ± 14	0.6		2178	34.1 ± 3	0.6
	2097	87.7 ± 9	0.5		2179	30.1 ± 3	0.4
					2181	19.6 ± 2	1.2
18Sep59	2113	235 ± 24	1.3		2183	74.4 ± 7	0.4
	2114	186 ± 19	1.2		2184	227 ± 23	1.1
	2116	163 ± 16	1.0		2192	314 ± 31	1.4
	2118	98.6 ± 10	0.6	1 Oct59	2227	24.8 ± 2	0.3
	2120	58.4 ± 6	0.3		2228	144 ± 14	1.9
	2121	116 ± 12	0.9				
	2122	55.0 ± 6	0.4	2 Oct59	2205	1.79 ± 0.2	0.2
	2123	94.6 ± 9	0.6		2206	1.79 ± 0.2	1.7
	2124	66.8 ± 7	0.4		2207	1.79 ± 0.2	3.1
	2125	102 ± 10	0.6		2208	1.79 ± 0.2	3.4
	2126	83.7 ± 8	0.4		2209	1.79 ± 0.2	0.5
	2129	114 ± 11	0.7		2210	1.79 ± 0.2	0.3
	2130	57.2 ± 6	0.3		2211	59.0 ± 6	1.2
	2131	69.2 ± 7	0.8		2213	57.5 ± 6	1.5
	2132	39.7 ± 4	0.6				
	2134	50.9 ± 5	0.8	6 Oct59	2232	63.5 ± 6	0.3
	2136	22.6 ± 2	0.3		2235	45.6 ± 5	0.2
	2137	187 ± 19	1.3		2239	78.8 ± 8	0.5
	2139	40.5 ± 4	0.3		2240	90.1 ± 9	0.5
	2140	94.5 ± 9	0.6		2246	122 ± 12	0.7
					2250	90.1 ± 9	0.5
22Sep59	2152	91.1 ± 9	0.9		2257	46.0 ± 5	0.2
	2154	22.7 ± 2	0.3		2252	39.0 ± 4	0.2
	2155	12.1 ± 1	0.6		2253	80.1 ± 8	0.3
	2157	18.8 ± 2	0.7		2255	60.6 ± 6	0.3
	2158	10.8 ± 1	0.2		2256	29.7 ± 3	0.1
	2159	10.1 ± 1	0.2		2260	123 ± 12	0.8
23Sep59	2161	10.4 ± 1	0.6	8 Oct59	2279	203 ± 20	1.2
	2162	26.1 ± 3	1.3				
	2164	47.1 ± 5	0.7				

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	
8Oct59	2286	152 ± 15	1.1	16Oct59	2321	90.1 ± 9	0.8	
9Oct59	2264	15.7 ± 2	0.5	2323	24.8 ± 2	0.2		
	2268	51.7 ± 5	0.4	2324	59.3 ± 6	0.3		
	2270	65.5 ± 7	0.3	2325	14.5 ± 1	0.1		
	2271	51.0 ± 5	0.9	2326	128 ± 13	0.6		
				2327	78.1 ± 8	0.4		
13Oct59	2292	3.37 ± 0.3	2.4	2329	50.0 ± 5	0.3		
	2293	3.37 ± 0.3	2.8	2331	42.4 ± 4	0.3		
	2294	3.37 ± 0.3	1.2	2334	109 ± 11	0.8		
	2295	3.37 ± 0.3	0.9	2335	51.8 ± 5	0.3		
	2296	3.37 ± 0.3	0.6	2337	146 ± 15	1.1		
	2297	3.37 ± 0.3	1.3	2338	89.8 ± 9	0.6		
	2303	18.6 ± 2	0.4	2339	82.1 ± 8	0.6		
	2304	69.4 ± 7	1.7	2340	170 ± 17	1.0		
	2305	34.4 ± 3	1.0	20Oct59	2380	12.5 ± 1	0.1	
	2306	45.3 ± 5	1.4		2381	43.0 ± 4	2.0	
	2349	4.75 ± 0.5	0.4		2382	37.5 ± 4	1.1	
	2350	4.75 ± 0.5	1.0		2383	27.5 ± 3	1.2	
	2351	4.75 ± 0.5	0.3		2385	42.7 ± 4	1.8	
	2357	33.9 ± 3	0.6		2391	26.5 ± 3	1.3	
	14Oct59	2307	4.20 ± 0.4		0.9	2392	32.6 ± 3	0.2
2308		3.54 ± 0.4	0.3		2396	131 ± 13	1.8	
2310		6.14 ± 0.6	0.3		2400	82.6 ± 8	1.3	
2311		11.1 ± 1	0.6		2403	104 ± 10	0.6	
2312		21.3 ± 2	0.6	2404	109 ± 11	0.5		
2314		13.7 ± 1	0.5	2411	224 ± 22	1.6		
2315		14.5 ± 1	0.8	22Oct59	2420	2.54 ± 0.3	6.5	
2316		16.7 ± 2	0.5		2421	2.54 ± 0.3	2.1	
2317		15.3 ± 2	0.6		2422	2.54 ± 0.3	1.7	
2344		15.6 ± 2	0.5		2423	2.54 ± 0.3	5.7	
	2424				2.54 ± 0.3	0.6		
15Oct59	2359	59.3 ± 6	0.4		2425	2.54 ± 0.3	0.4	
	2362	61.0 ± 6	0.3	2437	29.5 ± 3	0.1		
	2366	49.7 ± 5	0.3	27Oct59	2444	110 ± 11	0.8	
	2367	62.1 ± 6	0.3		2448	88.5 ± 9	0.5	
	2371	61.7 ± 6	0.3		2454	28.8 ± 3	0.1	
	2373	92.2 ± 9	0.4		2461	48.1 ± 5	0.2	
	2374	159 ± 16	0.6		28Oct59	2463	86.8 ± 9	0.6
						2465	298 ± 30	2.0

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰
28Oct59	2467	131 + 13	0.8	6Nov59	2571	33.5 + 3	0.1
	2470	42.9 ± 4	0.2		2572	263 ± 26	1.1
	2471	46.0 ± 5	0.2	10Nov59	2573	79.9 + 8	0.5
	2472	106 ± 11	0.6		2575	73.7 ± 7	0.5
	2477	25.4 ± 3	0.1		2576	35.6 ± 4	0.3
30Oct59	2483	27.7 + 3	0.5		2580	70.5 ± 7	0.4
	2489	96.6 ± 10	0.5		2581	98.1 ± 10	0.5
	2496	9.00 ± 1	0.1		2588	19.1 ± 2	0.3
	2500	137 ± 14	0.9		2592	19.4 ± 2	0.1
	2503	91.5 ± 1	0.5	11Nov59	2598	27.5 + 3	0.2
	2505	75.0 ± 8	0.4		2599	70.0 ± 7	0.5
	2506	35.1 ± 4	0.4		2601	38.0 ± 4	0.3
	2507	10.1 ± 1	0.1		2602	106 ± 11	0.6
	2508	25.3 ± 3	0.3	12Nov59	2623	21.1 + 2	1.3
3Nov59	2511	26.6 + 3	0.2		2635	29.4 ± 3	0.6
	2514	128 ± 13	0.7		2636	39.0 ± 4	0.4
	2515	0.938 ± 0.01	0.1		2637	31.8 ± 3	0.5
	2516	0.938 ± 0.01	0.6		2639	144 ± 14	1.0
	2517	0.938 ± 0.01	0.3		2640	17.5 ± 2	0.1
	2518	0.938 ± 0.01	0.3	13Nov59	2607	16.1 + 2	0.6
	2527	2.23 ± 0.2	0.1		2608	10.5 ± 1	0.4
6Nov59	2533	47.7 + 5	0.4		2616	40.8 ± 4	0.3
	2536	4.99 ± 0.5	0.04		2617	19.3 ± 2	0.3
	2539	47.1 ± 5	0.2		2619	13.3 ± 1	0.3
	2541	39.7 ± 4	0.2		2622	43.9 ± 4	0.6
	2553	72.7 ± 7	0.4	17Nov59	2642	20.7 ± 2	0.1
	2555	37.9 ± 4	0.2	19Nov59	2660	66.1 + 7	0.5
	2556	111 ± 11	0.6		2661	123 ± 12	0.8
	2558	53.8 ± 5	0.3		2662	134 ± 13	0.8
	2560	36.1 ± 4	0.2		2672	29.5 ± 3	0.3
	2561	14.8 ± 1	0.1		2676	129 ± 13	0.8
	2563	216 ± 22	1.5		2677	126 ± 13	0.9
	2564	91.6 ± 9	0.7		2678	452 ± 45	3.7
	2565	18.8 ± 2	0.1	24Nov59	2688	58.7 ± 6	6.8
	2566	44.8 ± 4	0.3				
	2567	91.2 ± 9	0.5				
	2568	54.3 + 5	0.3				
	2570	62.6 ± 6	0.3				

Table 4.4 (continued)

Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰	Date	Sample No.	dpm Sr ⁸⁹ 1000 SCF	Sr ⁸⁹ Sr ⁹⁰
24Nov59	2689	119 ± 12	5.9	16Dec59	2896	58.9 ± 6	0.4
	2690	276 ± 28	3.7		2897	38.6 ± 4	0.4
	2691	381 ± 38	6.2				
	2692	310 ± 31	4.4	7Jan60	2985	57.1 ± 6	0.7
	2693	138 ± 14	5.0		2994	18.5 ± 2	0.3
	2694	99.7 ± 10	3.8		3005	8.50 ± 1	0.1
	2695	151 ± 15	6.2		3010	7.83 ± 1	0.1
	2696	44.7 ± 4	--				
25Nov59	2711	19.8 ± 2	0.8	12Jan60	3014	37.0 ± 4	0.3
	2712	49.5 ± 5	0.6		3015	79.3 ± 8	0.5
	2718	68.3 ± 7	0.8		3016	51.0 ± 5	0.3
1Dec59	2739	44.9 ± 4	0.3		3035	192 ± 19	1.3
	2745	15.5 ± 2	0.2		3036	73.9 ± 7	0.7
	2747	4.57 ± 0.5	0.1		3037	30.6 ± 3	0.2
	2748	24.5 ± 2	0.5		3042	17.7 ± 2	0.1
	2751	28.8 ± 3	0.3		3051	38.2 ± 4	0.2
	2752	21.8 ± 2	0.2	15Jan60	3077	4.83 ± 0.5	0.2
	2754	31.5 ± 3	0.2		3082	10.1 ± 1	0.3
	2755	48.4 ± 5	0.3		3083	14.8 ± 1	0.3
	2761	40.5 ± 4	0.2		3086	5.57 ± 0.6	0.1
	2763	158 ± 16	0.8				
9Dec59	2821	8.74 ± 1	0.5				
10Dec59	2838	84.7 ± 8	0.7				
	2839	42.6 ± 4	0.3				
	2843	30.6 ± 3	0.2				
	2844	25.8 ± 3	0.1				
	2848	174 ± 17	0.9				
	2852	26.3 ± 3	0.1				
11Dec59	2855	13.9 ± 1	0.1				
	2858	107 ± 11	0.7				
	2865	63.9 ± 6	0.4				
	2866	21.8 ± 2	0.1				
	2870	48.4 ± 5	0.2				
16Dec59	2887	23.5 ± 2	0.2				
	2889	57.5 ± 6	0.4				
	2891	22.2 ± 2	0.1				

Table 4.4 (continued)

The following samples, collected after 23 Jun 1959, were analyzed for Zirconium-95, but the activities were below the limits of detection.

1707	1839	1948	2066	2110
1709	1841	1956	2067	2112
1710	1843	1978	2068	2122
1714	1845	1979	2069	2124
1717	1852	1980	2070	2138
1719	1854	1984	2071	2153
1739	1868	1988	2072	2160
1741	1876	1998	2073	2172
1749	1882	2003	2074	2175
1752	1885	2007	2075	2177
1760	1892	2009	2076	2237
1763	1897	2017	2077	2239
1770	1902	2019	2078	2248
1773	1907	2030	2082	2262
1782	1913	2032	2085	2286
1803	1916	2040	2092	2269
1805	1923	2042	2096	2270
1818	1926	2058	2097	2299
1828	1943	2062	2107	2343
				2361

Table 4.5 Barium-140 Analyses

Date	Sample No.	dpm Ba ¹⁴⁰ 1000 SCF	Ba ¹⁴⁰ Sr ⁸⁹	Date	Sample No.	dpm Ba ¹⁴⁰ 1000 SCF	Ba ¹⁴⁰ Sr ⁸⁹
28Mar58	359	38500 ± 1800	2.0	17Jun58	547	768 ± 62	0.2
	360	84800 ± 2600	2.2		548	2940 ± 82	0.5
	361	52700 ± 2800	2.7		549	3400 ± 68	0.8
	363	5180 ± 1000	2.9				
	364	7160 ± 170	1.6	20Jun58	550	321 ± 10	0.6
	365	≤ 281	≤ 0.4		551	798 ± 16	0.4
1Apr58	375	18400 ± 420	--		552	966 ± 17	0.3
	376	2440 ± 670	4.6		553	786 ± 32	0.3
	377	110 ± 390	6.6		555	1300 ± 16	0.3
	378	19000 ± 1200	3.1		556	573 ± 30	0.2
	379	27600 ± 1200	2.9		557	368 ± 36	0.2
	380	33200 ± 1400	2.7	24Jun58	558	1730 ± 88	0.6
	382	25700 ± 280	2.6		559	1540 ± 180	0.4
	383	15400 ± 850	4.0		560	1010 ± 68	0.2
	384	50800 ± 2100	--		561	1040 ± 80	0.3
	385	39200 ± 1500	2.8		562	1920 ± 110	0.6
	386	11900 ± 170	2.9		563	4560 ± 100	0.4
8Apr58	407	19600 ± 350	4.4		564	3870 ± 160	0.6
	408	50100 ± 2100	3.6		565	4500 ± 190	1.1
24May58	510	2220 ± 220	0.4	28Jun58	566	1590 ± 210	0.6
	511	2950 ± 300	0.4		567	903 ± 61	0.2
	513	5850 ± 590	1.0		568	938 ± 27	0.3
10Jun58	534	58.0 ± 3.4	1.8		569	619 ± 91	0.2
	535	3220 ± 48	0.7		570	2320 ± 35	0.4
	536	3840 ± 88	0.8		571	3330 ± 97	0.4
	537	588 ± 22	0.3		572	2550 ± 100	--
13Jun58	538	434 ± 10	0.8		573	3210 ± 110	0.6
	539	970 ± 32	0.2	1Jul58	574	57.1 ± 6.2	0.8
	540	1160 ± 46	0.4		575	87.0 ± 8.2	0.9
	541	680 ± 19	0.2		576	276 ± 17	0.5
17Jun58	542	154 ± 6	1.1		577	379 ± 11	0.3
	543	738 ± 15	0.5		578	438 ± 13	0.1
	544	2250 ± 36	0.6		579	556 ± 21	0.2
	545	1060 ± 49	0.3		580	3580 ± 100	0.6
	546	690 ± 170	0.3	4Jul58	581	2650 ± 71	0.5
					582	794 ± 65	0.3
					585	416 ± 20	0.1

Table 4.5 (continued)

Date	Sample No.	dpm Ba ¹⁴⁰ 1000 SCF	Ba ¹⁴⁰ Sr ⁸⁹	Date	Sample No.	dpm Ba ¹⁴⁰ 1000 SCF	Ba ¹⁴⁰ Sr ⁸⁹
4Jul58	586	950 + 58	0.2	17Oct58	695	18200 + 290	1.2
	587	1760 ± 53	0.6		696	66900 ± 600	1.2
	588	1780 ± 43	0.4		697	66800 ± 1600	1.1
	589	1740 ± 68	0.3		701	< 53.7	≤ 0.1
					702	18500 ± 300	1.2
8Jul58	591	563 + 10	0.3	19Oct58	716	19100 + 250	0.9
	592	105000 ± 630	2.0		717	13200 ± 210	0.6
	593	26600 ± 80	1.9		719	112000 ± 790	4.1
	594	526 ± 27	0.2				
	595	705 ± 22	--	21Oct58	721	≤ 27.6	≤ 0.04
	596	674 ± 19	0.2	22 Oct58	726	5550 ± 170	0.9
	597	470 ± 15	0.2		732	167000 ± 670	3.3
12Sep58	598	6830 ± 680	0.2	23Oct58	739	2680 ± 43	--
	605	3880 ± 390	0.1	29Oct58	751	279000 ± 3350	2.3
16Sep58	613	4970 ± 500	0.2		755	30900 ± 860	1.7
19Sep58	615	2460 ± 150	0.2		760	22400 ± 650	2.4
	618	≤ 50.2	≤ 0.1				
23Sep58	623	< 12.9	≤ 0.03	5Nov58	765	< 51.7	≤ 0.02
	632	11000 ± 250	0.7		768	≤ 35.0	≤ 0.03
30Sep58	633	< 54.3	≤ 0.01		770	23200 ± 440	2.0
	640	≤ 55.8	≤ 0.05		773	8350 ± 180	0.6
3Oct58	642	5560 ± 130	1.5	7Nov58	777	12500 ± 230	0.5
	645	< 64.8	≤ 0.2		783	< 78.8	≤ 0.01
	652	< 70.8	≤ 0.01		784	4080 ± 160	1.4
	654	285000 ± 1140	--	15Nov58	791	3080 ± 110	0.2
7Oct58	668	141000 ± 2250	--		792	2470 ± 110	0.3
10Oct58	674	161000 ± 650	1.9		798	56700 ± 450	1.7
	675	158000 ± 790	1.6	16Nov58	802	1300 ± 58	0.6
	678	≤ 68.1	≤ 0.2	18Nov58	806	49800 ± 700	2.4
14Oct58	682	256 ± 10	0.2		808	8950 ± 200	0.8
	688	61600 ± 1050	1.6		816	< 99.2	--
	689	68500 ± 960	1.5		818	≤ 65.1	≤ 0.05
	690	77200 ± 1200	1.1				

Table 4.5 (continued)

Date	Sample No.	dpm Ba ¹⁴⁰ 1000 SCF	Ba ¹⁴⁰ Sr 89	Date	Sample No.	dpm Ba ¹⁴⁰ 1000 SCF	Ba ¹⁴⁰ Sr 89
20Nov58	819	< 72.0	< 0.01	19Dec58	936	< 122	< 0.01
					941	< 112	< 0.01
21Nov58	824	< 63.6	< 0.02		946	< 108	< 0.2
	828	< 68.5	< 0.1	23Dec58	952	4180 + 270	0.4
22Nov58	831	2950 + 170	0.5		959	< 22.9	< 0.1
	837	6590 ± 320	--		960	< 65.0	< 0.1
25Nov58	841	< 48.2	--				
	843	< 11.1	< 0.2				
	845	3710 + 130	--				
	851	3030 ± 160	0.3				
28Nov58	855	3660 + 210	--				
	858	< 55.5	< 0.07				
	860	< 45.9	< 0.05				
3Dec58	866	7150 + 240	1.0				
	871	< 64.2	< 0.02				
	878	< 12.1	< 0.05				
	881	< 19.0	< 0.03				
5Dec58	876	2238 + 120	0.6				
	886	< 84.7	< 1.3				
9Dec58	887	< 42.8	< 0.03				
	888	< 48.5	< 0.03				
	911	< 50.7	< 0.1				
	917	< 57.8	< 0.1				
12Dec58	902	< 104	< 0.8				
	904	3920 + 140	--				
	910	3100 ± 150	0.5				
16Dec58	919	< 70.2	< 0.2				
	927	< 74.6	< 0.01				
	928	3090 ± 110	2.4				

Table 4.5 (continued)

The following samples, collected during 1959, were analyzed for barium-140, but the activities were below the limits of detection.

969	1116	1266	1369
976	1121	1269	1372
977	1128	1270	1374
978	1129	1276	1377
986	1135	1279	1384
989	1139	1287	1385
992	1142	1289	1390
995	1143	1294	1394
1000	1152	1298	1398
1002	1153	1305	1402
1005	1157	1306	1404
1007	1162	1310	1405
1013	1165	1311	1417
1020	1170	1317	1425
1022	1173	1321	1462
1023	1174	1328	1472
1026	1182	1329	1495
1031	1183	1330	1502
1034	1190	1338	1530
1035	1192	1339	1548
1042	1198	1342	1568
1044	1202	1348	1576
1052	1204	1349	1582
1053	1210	1354	1594
1060	1214	1355	1654
1062	1215	1356	1699
1074	1219	1357	1752
1078	1225	1358	1763
1082	1230	1359	1868
1086	1232	1360	1897
1091	1237	1361	1980
1094	1239	1362	1998
1097	1245	1363	2017
1100	1247	1364	2153
1102	1253	1365	2172
1110	1255	1366	2237
1111	1262	1367	2262

Table 4.6 Yttrium-91 Analyses

Date	Sample No.	dpm Y ⁹¹ 1000 SCF	Y ⁹¹ Sr 90	Date	Sample No.	dpm Y ⁹¹ 1000 SCF	Y ⁹¹ Sr 90
15Nov58	791	10300 ± 120	32.6	10Jul59	1803	206 ± 10	1.6
	792	14200 ± 140	54.6	14Jul59	1822	334 ± 17	1.9
23Dec58	960	983 ± 27	27.3	16Jul59	1864	195 ± 9	1.9
17Mar59	1244	2440 ± 34	12.5		1865	201 ± 19	1.4
27Mar59	1279	2330 ± 49	9.9	21Jul59	1890	139 ± 4	2.9
1Apr59	1305	3140 ± 44	10.4		1893	351 ± 3	5.3
7Apr59	1323	145 ± 9	4.4		1896	48.9 ± 0.8	0.3
14Apr59	1358	2670 ± 13	17.7		1899	330 ± 6	2.8
	1363	3560 ± 36	16.5		1902	402 ± 11	2.0
21Apr59	1382	1190 ± 31	12.4		1905	347 ± 6	1.6
	1386	2100 ± 120	7.9		1906	417 ± 10	1.9
	1388	2460 ± 27	9.3		1909	470 ± 16	2.2
16Jun59	1621	54.3 ± 0.8	0.3	24Jul59	1910	364 ± 11	2.1
	1624	470 ± 14	2.8		1912	384 ± 7	1.9
	1625	617 ± 15	3.2		1913	380 ± 14	1.8
	1630	72.5 ± 1.2	0.3		1914	45.9 ± 0.8	0.2
	1631	665 ± 23	2.8		1915	358 ± 8	1.8
	1633	966 ± 39	3.9		1917	359 ± 7	1.7
19Jun59	1653	980 ± 15	3.4		1919	56.3 ± 1	0.2
21Jun59	1684	605 ± 20	2.8		1920	271 ± 7	4.7
	1688	839 ± 30	3.1		1922	249 ± 6	2.3
1Jul59	1749	229 ± 3	1.7	28Jul59	1987	180 ± 6	1.6
	1751	486 ± 15	2.7	31Jul59	2003	531 ± 16	3.0
3Jul59	1757	1140 ± 17	3.8	4Aug59	2009	390 ± 11	2.0
	1758	840 ± 18	2.6		2019	540 ± 14	2.0
	1765	944 ± 13	3.6	7Aug59	2040	309 ± 6	2.0
7Jul59	1768	415 ± 9	2.4		2042	411 ± 5	2.5
	1786	332 ± 9	2.4	21Aug59	2071	68.1 ± 1	2.2
	1788	181 ± 7	1.6		2074	98.6 ± 2	2.2

Table 4.6 (continued)

Date	Sample No.	dpm Y^{91} 1000 SCF	Y^{91} Sr 90	Date	Sample No.	dpm Y^{91} 1000 SCF	Y^{91} Sr 90
15Sep59	2079	159 $\pm$ 5	1.4	14Oct59	2308	15.8 $\pm$ 0.7	1.2
	2081	166 $\pm$ 4	1.4		2313	37.3 $\pm$ 1.1	1.3
	2083	161 $\pm$ 4	1.3		2314	22.5 $\pm$ 0.9	0.9
	2086	207 $\pm$ 5	1.1		2315	32.6 $\pm$ 1.0	1.9
	2089	151 $\pm$ 6	1.2		2318	32.3 $\pm$ 0.5	1.1
	2091	212 $\pm$ 12	1.3		2343	23.1 $\pm$ 0.4	1.0
	2093	177 $\pm$ 5	1.0		2344	51.3 $\pm$ 0.5	1.5
	2098	233 $\pm$ 7	1.2				
	2100	84.1 $\pm$ 3.6	0.4				
	2102	183 $\pm$ 5	1.0				
	2105	190 $\pm$ 7	0.8				
	2107	219 $\pm$ 8	0.9				
18Sep59	2121	129 $\pm$ 3	1.0				
	2123	214 $\pm$ 3	1.3				
	2125	198 $\pm$ 10	1.1				
	2128	201 $\pm$ 5	1.0				
	2130	199 $\pm$ 4	1.2				
	2133	166 $\pm$ 4	2.4				
	2134	74.5 $\pm$ 5	1.2				
	2136	90.1 $\pm$ 2.4	1.2				
	2137	185 $\pm$ 1	1.3				
	2140	206 $\pm$ 12	1.4				
22Sep59	2151	108 $\pm$ 3	1.0				
	2152	123 $\pm$ 2	1.2				
	2154	95.3 $\pm$ 2.3	1.1				
	2155	27.5 $\pm$ 1.8	1.3				
	2156	27.7 $\pm$ 1.5	1.2				
	2158	53.0 $\pm$ 3.6	1.0				
	2159	49.2 $\pm$ 1.2	1.1				
	2160	111 $\pm$ 2	1.7				
30Sep59	2173	264 $\pm$ 7	1.7				
	2179	43.5 $\pm$ 2.4	0.6				
	2182	3.48 $\pm$ 2.3	0.7				
	2184	139 $\pm$ 4	0.7				
	2186	167 $\pm$ 6	0.8				
	2188	174 $\pm$ 6	0.7				
	2189	115 $\pm$ 7	0.5				
	2191	92.2 $\pm$ 5.3	0.5				

Table 4.7 Cerium-144 Analyses

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
6Mar58	283	2120 ± 320	15.4	6May58	476	5170 ± 150	15.8
	284	2190 ± 260	17.8		477	9250 ± 190	37.9
	285	1910 ± 250	15.0		478	2880 ± 110	22.9
	286	1780 ± 280	15.4		479	4620 ± 160	35.8
	287	780 ± 370	4.7		480	3520 ± 120	54.9
	288	2440 ± 440	15.7		481	1090 ± 50	25.8
	289	1980 ± 500	14.2		482	580 ± 50	31.8
	290	4210 ± 1100	28.0				
18Mar58	299	9300 ± 600	24.8	8Jul58	590	660 ± 37	21.0
25Mar58	327	5630 ± 300	26.7		591	450 ± 44	21.1
	328	12800 ± 920	31.6		592	12700 ± 370	25.3
	329	28300 ± 990	32.7		593	4580 ± 170	26.8
	330	7660 ± 270	26.9		594	3950 ± 170	26.6
	347	2450 ± 690	12.7	23Sep58	623	116 ± 4	12.0
	348	2650 ± 1300	14.8	30Sep58	633	2300 ± 21	19.0
	349	3870 ± 1400	20.3		640	1010 ± 71	12.9
	350	3730 ± 260	17.3				
	351	2240 ± 110	15.7	3Oct58	642	1430 ± 69	14.6
	352	2800 ± 380	13.8		643	500 ± 3	7.9
	353	2560 ± 430	12.8		645	632 ± 9	9.2
	354	3010 ± 170	13.9		646	751 ± 7	11.2
	355	5270 ± 550	23.0		647	1300 ± 80	17.0
	356	14300 ± 600	35.9		648	896 ± 47	10.3
	357	25400 ± 1000	36.3		654	40700 ± 460	31.4
	358	7460 ± 980	23.2				
4Apr58	391	6140 ± 530	26.6	7Oct58	658	2620 ± 52	13.1
	392	6570 ± 470	26.6		661	887 ± 9	13.9
	393	3970 ± 370	19.2		667	47400 ± 1600	25.9
	394	1010 ± 110	23.5		668	28500 ± 1000	28.5
	396	4120 ± 440	18.8	10Oct58	674	27900 ± 840	20.7
	397	1810 ± 810	23.4		675	32700 ± 2000	30.6
	403	3630 ± 510	29.1				
	404	13700 ± 850	29.9	14Oct58	682	1290 ± 90	12.5
	405	3590 ± 540	17.8		689	15900 ± 400	17.7
8Apr58	410	9800 ± 390	12.7		690	23000 ± 550	18.1
6May58	475	6510 ± 150	23.7	17Oct58	695	1860 ± 60	3.9
					696	4150 ± 83	3.8

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr 90	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr 90
17Oct58	697	4440 ± 93	3.9	5Dec58	884	639 ± 36	11.1
19Oct58	708	317 ± 4	23.3		885	317 ± 8	12.9
	709	568 ± 40	13.2		886	614 ± 72	7.1
	710	641 ± 29	7.8	12Dec58	895	1170 ± 25	17.4
	711	1770 ± 92	22.9		898	1030 ± 14	17.6
	712	510 ± 32	7.7	16Dec58	927	6730 ± 195	24.1
	713	543 ± 29	6.9		928	1120 ± 60	27.2
	714	3340 ± 140	25.8		929	420 ± 54	25.9
	715	4760 ± 140	25.0		930	434 ± 7	46.5
22Oct58	727	2360 ± 94	19.0	19Dec58	948	1290 ± 96	26.0
	728	691 ± 52	15.0		949	940 ± 17	19.3
	732	16600 ± 570	16.1	6Jan59	977	4450 ± 13	21.1
29Oct58	746	2170 ± 13	17.9	22Jan59	1027	279 ± 10	23.0
	751	20300 ± 670	11.1		1034	1160 ± 58	26.8
	755	9160 ± 350	38.7	25Jan59	1035	3380 ± 17	12.7
	760	5850 ± 250	24.4	3Feb59	1060	441 ± 13	17.1
3Nov58	764	1700 ± 65	13.6	14Feb59	1099	786 ± 18	14.1
	768	963 ± 10	16.2		1100	958 ± 12	15.6
15Nov58	791	6510 ± 230	20.7		1101	971 ± 12	11.9
	792	5920 ± 77	22.8		1102	871 ± 59	9.6
	796	860 ± 73	10.9		1103	847 ± 14	17.5
	798	15600 ± 310	23.5		1104	641 ± 86	11.8
18Nov58	806	8380 ± 250	18.0		1105	903 ± 13	14.4
	808	11200 ± 160	42.8		1106	901 ± 26	18.5
	810	1260 ± 59	25.0		1110	2880 ± 20	14.5
	811	1210 ± 66	26.5	6Mar59	1190	3850 ± 27	16.3
	818	2790 ± 25	28.2	13Mar59	1223	760 ± 22	11.8
21Nov58	824	2980 ± 12	28.8		1225	1090 ± 13	14.2
	828	3630 ± 33	50.0		1226	550 ± 7	9.9
25Nov58	851	2700 ± 19	9.4	17Mar59	1239	206 ± 2	18.4
3Dec58	878	292 ± 16	11.4		1241	150 ± 3	19.4
	881	554 ± 25	9.2		1242	41.8 ± 1.3	14.4

Table 4.1 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
20Mar59	1253	2850 ± 88	14.3	21Apr59	1382	1080 ± 18	11.2
	1255	2270 ± 68	11.1		1384	1370 ± 310	14.4
	1258	2410 ± 14	17.2		1385	1270 ± 50	11.7
	1259	317 ± 8	6.0		1386	2920 ± 130	11.0
	1260	796 ± 10	16.3		1388	2990 ± 140	11.3
	1261	1040 ± 62	10.9		1389	2510 ± 110	11.4
	1262	3540 ± 28	18.6				
	1264	196 ± 4	39.8	22Apr59	1663	2460 ± 5	12.5
					1664	2360 ± 7	9.2
24Mar59	1269	1540 ± 12	25.3				
	1270	1320 ± 380	12.2	24Apr59	1393	536 ± 9	8.3
	1287	312 ± 6	12.8				
	1289	578 ± 9	12.6	25Apr59	1665	761 ± 2	14.4
	1290	482 ± 7	9.9		1666	2210 ± 18	10.1
27Mar59	1278	3880 ± 140	13.4	26Apr59	1400	3040 ± 18	9.9
	1282	2250 ± 14	14.3				
	1294	924 ± 27	12.6	28Apr59	1410	609 ± 7	11.5
					1667	1940 ± 6	13.3
1Apr59	1303	2820 ± 25	13.9	29Apr59	1668	2350 ± 7	13.1
	1305	4200 ± 29	13.9	1May59	1421	250 ± 9	13.6
	1306	5920 ± 220	14.5				
				5May59	1422	760 ± 19	10.4
3Apr59	1311	1430 ± 17	21.6		1425	2190 ± 24	14.3
	1314	631 ± 6	14.3		1427	2000 ± 26	13.0
					1430	3480 ± 52	11.7
14Apr59	1354	2780 ± 42	20.7				
	1355	2490 ± 92	19.4	8May59	1439	704 ± 17	10.6
	1356	2200 ± 86	13.4				
	1357	2960 ± 80	17.1	12May59	1446	646 ± 17	10.0
	1358	2130 ± 81	14.1		1447	610 ± 14	10.6
	1359	6570 ± 92	21.3		1448	537 ± 10	10.6
	1360	4500 ± 140	11.8		1449	695 ± 15	10.9
	1361	4570 ± 41	16.0				
	1362	3870 ± 81	18.1	15May59	1457	223 ± 4	10.2
	1363	3850 ± 85	17.9		1459	362 ± 12	9.0
	1364	4230 ± 76	18.1				
	1365	1860 ± 60	14.4	20May59	1473	1630 ± 150	15.0
	1366	2560 ± 64	18.7		1474	2160 ± 13	28.1
	1367	4930 ± 89	17.7		1476	1750 ± 18	13.6
					1479	1850 ± 9	13.8
					1480	331 ± 6	4.7
					1483	800 ± 11	6.4

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
24May59	1499	2690 ± 27	10.0	3Jul59	1757	2970 ± 21	10.0
					1760	3410 ± 24	14.8
26May59	1505	420 ± 13	9.6		1761	2220 ± 16	11.7
	1511	328 ± 5	14.2		1763	2970 ± 21	11.8
	1515	408 ± 11	7.5		1764	3740 ± 26	14.8
29May59	1517	197 ± 5	8.6	7Jul59	1786	1270 ± 10	9.4
					1793	514 ± 11	7.7
2Jun59	1524	2070 ± 29	11.6	10Jul59	1800	283 ± 4	10.2
	1526	3050 ± 30	13.3				
	1527	3480 ± 28	11.3	14Jul59	1839	3730 ± 78	10.5
	1532	3040 ± 24	11.1		1841	3130 ± 22	11.1
	1533	3510 ± 32	10.6				
	1537	641 ± 12	10.1	16Jul59	1864	1170 ± 23	11.3
	1541	562 ± 4	9.8		1865	1160 ± 22	8.4
5Jun59	1543	545 ± 11	8.6	21Jul59	1892	975 ± 6	12.8
14Jun59	1601	1830 ± 15	12.4		1895	924 ± 62	11.4
16Jun59	1618	1560 ± 11	14.4		1897	1030 ± 5	6.4
	1621	1740 ± 17	9.1		1902	2160 ± 13	11.0
	1628	2120 ± 17	10.1		1930	832 ± 7	17.3
	1630	2470 ± 20	10.2		1932	549 ± 3	8.7
	1631	2320 ± 21	9.7		1935	84.1 ± 15	7.0
	1655	1800 ± 13	11.1		1937	293 ± 5	8.9
	1656	1730 ± 24	10.0	24Jul59	1911	1640 ± 11	9.3
	1657	1510 ± 27	11.5		1913	1970 ± 20	9.6
	1658	1040 ± 8	8.5		1916	2160 ± 13	9.5
19Jun59	1651	786 ± 9	8.3		1919	2290 ± 14	9.6
	1652	1530 ± 14	8.4		1923	1470 ± 10	12.2
	1653	2750 ± 17	9.4		1925	1170 ± 8	8.6
	1654	3100 ± 16	8.4		1926	2100 ± 15	12.3
23Jun59	1702	3200 ± 45	9.3	28Jul59	1969	577 ± 7	14.3
26Jun59	1714	1890 ± 15	12.0		1970	668 ± 14	11.9
2Jul59	1754	773 ± 13	12.5		1971	1080 ± 14	11.3
	1756	2350 ± 26	28.7		1972	1360 ± 23	10.2
					1977	1750 ± 14	11.9
					1978	1040 ± 11	5.1
					1979	3210 ± 29	14.3
					1980	2710 ± 16	10.8
					1981	116 ± 3	9.5
					1982	379 ± 5	7.6
					1983	473 ± 13	7.3
					1984	901 ± 12	11.0

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
28Jul59	1985	40.6 ± 2.2	9.5	22Sep59	2157	263 ± 5	9.7
	1986	814 ± 20	7.0				
	1987	1250 ± 15	11.1	30Sep59	2181	173 ± 7	11.0
	1988	1230 ± 18	9.3				
30Jul59	1991	833 ± 14	8.7	14Oct59	2308	130 ± 3	9.6
	1992	1410 ± 18	9.3		2310	166 ± 2	8.1
					2312	366 ± 2	9.6
					2313	222 ± 2	7.8
31Jul59	1996	1430 ± 13	10.3		2314	224 ± 2	8.9
	1998	2110 ± 11	12.2		2316	300 ± 3	9.5
					2318	287 ± 3	9.4
4Aug59	2047	154 ± 3	8.0				
	2050	284 ± 5	9.4	16Oct59	2327	1740 ± 50	9.3
8Aug59	2055	881 ± 13	9.9				
	2056	841 ± 11	9.5	20Oct59	2392	938 ± 13	8.5
	2057	922 ± 13	7.4		2393	1360 ± 7	8.4
	2058	955 ± 12	8.7		2394	1680 ± 12	7.0
	2059	1380 ± 22	8.7		2395	1990 ± 14	8.1
	2060	2020 ± 48	10.0		2401	382 ± 5	7.4
	2063	2670 ± 29	9.1		2402	931 ± 11	6.4
	2065	2530 ± 30	10.1		2404	1580 ± 17	7.9
					2407	1440 ± 13	6.3
					2409	1530 ± 12	9.0
21Aug59	2067	222 ± 3	10.4		2411	1450 ± 22	10.2
	2069	273 ± 4	15.4		2412	1510 ± 14	7.8
	2071	339 ± 4	11.1		2414	2650 ± 77	8.0
	2072	481 ± 5	12.5		2415	2760 ± 19	10.1
	2073	336 ± 4	12.0	30Oct59	2494	1510 ± 24	7.0
	2074	525 ± 4	11.8				
	2076	350 ± 4	9.7	6Nov59	2539	1500 ± 55	7.9
	2078	320 ± 4	11.3				
15Sep59	2082	1220 ± 12	9.7	11Nov59	2601	1120 ± 9	7.8
	2084	1500 ± 15	11.1				
	2085	1370 ± 12	7.3	13Nov59	2607	284 ± 5	9.9
	2091	2480 ± 82	14.6		2609	253 ± 4	8.2
	2092	1870 ± 19	10.1		2611	32.1 ± 1.7	8.4
					2612	93.4 ± 2.5	8.2
18Sep59	2124	1550 ± 73	9.4	19Nov59	2658	1340 ± 110	8.0

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
25Nov59	2712	286 + 3	3.5	8Dec59	2816	758 + 5	7.5
	2714	656 ± 6	7.9		2817	1130 ± 7	9.2
	2715	1190 ± 8	6.5		2819	779 ± 6	8.2
	2718	689 ± 6	8.1	11Dec59	2855	1020 ± 27	6.8
1Dec59	2720	1070 + 6	7.9	15Dec59	2873	982 + 7	6.8
	2722	1170 ± 6	8.1		2876	988 ± 7	8.1
	2724	1370 ± 4	7.9		2877	393 ± 6	7.9
	2725	71.8 ± 3.6	0.4		2882	593 ± 5	14.5
	2727	1250 ± 11	6.6		2884	1360 ± 9	7.0
	2730	1430 ± 13	8.2		2886	1620 ± 13	7.7
	2732	1472 ± 15	8.0	17Dec59	2904	786 + 8	6.2
	2734	1803 ± 13	7.9		2907	856 ± 8	7.6
	2735	1560 ± 17	8.1		2909	1290 ± 13	7.0
	2738	1830 ± 20	8.1		2910	1730 ± 14	9.5
	2755	1010 ± 10	6.9		2913	2420 ± 19	10.5
3Dec59	2765	1130 + 6	7.9		2914	1310 ± 12	8.5
	2767	978 ± 9	8.4		2919	1880 ± 13	8.2
	2770	367 ± 3	6.1	18Dec59	2924	237 + 2	8.2
	2771	662 ± 4	8.0		2926	277 ± 2	7.8
	2774	912 ± 6	8.5		2927	370 ± 2	3.4
	2776	1010 ± 5	7.0	22Dec59	2942	1170 + 15	7.6
	2778	1240 ± 7	8.8		2944	1170 ± 14	7.5
	2780	1590 ± 8	9.1		2946	1100 ± 10	7.5
	2781	1770 ± 16	10.2		2947	1210 ± 13	7.1
	2783	1760 ± 16	8.1		2950	1670 ± 17	8.4
	2791	754 ± 7	7.4	23Dec59	2951	1400 + 14	8.3
	2794	828 ± 12	7.2		2954	1770 ± 16	7.9
	2796	991 ± 8	6.2		2956	1970 ± 16	8.0
	2798	1100 ± 12	6.6		2959	2000 ± 16	8.7
	2800	2010 ± 24	8.4	5Jan60	2960	545 + 7	7.5
8Dec59	2802	908 + 5	8.0		2962	1080 ± 9	8.6
	2803	1230 ± 6	7.6		2964	1090 ± 9	6.9
	2804	1470 ± 7	3.9		2967	1910 ± 11	8.8
	2805	1600 ± 85	8.4		2969	1180 ± 13	6.7
	2806	285 ± 4	8.5				
	2807	195 ± 4	7.9				
	2812	176 ± 4	8.2				
	2814	635 ± 6	7.0				

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
5Jan60	2974	485 + 4	7.6	22Jan60	3127	879 + 4	6.5
	2975	1710 ± 14	7.9		3128	1820 ± 15	7.4
					3130	1950 ± 12	7.5
12Jan60	3042	1180 ± 31	7.6		3132	1840 ± 13	9.7
					3134	2290 ± 14	9.3
14Jan60	3061	353 + 3	6.6		3136	2260 ± 14	8.3
	3062	842 ± 8	6.2		3138	2150 ± 19	8.5
	3065	730 ± 8	5.3		3141	2922 ± 18	10.9
	3067	770 ± 6	6.7				
	3069	1280 ± 6	8.1	26Jan60	3157	741 + 6	7.5
	3071	1410 ± 7	7.2		3159	1340 ± 12	7.9
15Jan60	3091	2820 ± 48	14.9		3161	1520 ± 9	7.7
					3162	2160 ± 22	8.0
19Jan60	3092	955 + 9	7.6		3164	1780 ± 16	8.1
	3094	902 ± 8	6.9		3172	1030 ± 3	6.9
	3096	390 ± 4	6.5	28Jan60	3176	2410 ± 12	12.6
	3099	387 ± 5	7.2		3178	2330 ± 12	11.7
	3101	246 ± 4	7.4		3179	1520 ± 8	9.1
	3103	344 ± 4	6.4				
	3105	285 ± 3	6.8	29Jan60	3180	344 + 3	6.4
	3107	565 ± 7	7.1		3182	210 ± 2	7.7
	3109	326 ± 4	7.2		3187	245 ± 2	6.7
	3113	382 ± 6	7.0		3191	195 ± 2	6.9
	3115	672 ± 7	7.3		3193	292 ± 3	6.4
	3117	655 ± 5	5.8		3195	369 ± 3	7.0
	3118	1150 ± 9	6.6		3196	686 ± 8	6.4
	3120	450 ± 7	7.2		3198	456 ± 6	5.9
21Jan60	3142	1450 ± 25	6.8	2Feb60	3200	948 ± 12	5.7
	3143	1320 ± 43	6.4		3202	1140 ± 14	7.0
	3145	3420 ± 17	13.2		3206	1840 ± 20	7.2
	3148	4000 ± 28	14.2		3209	1830 ± 11	7.0
	3149	3790 ± 26	13.6		3213	997 ± 11	6.7
	3151	1660 ± 13	7.6		3214	1040 ± 77	6.3
	3152	1140 ± 14	7.3		3217	1060 ± 14	6.2
	3154	762 ± 12	7.0		3219	1550 ± 19	7.0
	3155	821 ± 10	6.4				
22Jan60	3123	876 + 6	6.6	3Feb60	3221	282 ± 2	6.7
	3125	627 ± 7	6.3		3222	351 ± 2	6.0
					3223	623 ± 4	6.9

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
3Feb60	3225	397 ± 2	7.2	12Feb60	3263	307 ± 2	5.4
	3226	587 ± 4	6.1		3264	416 ± 3	7.1
	3227	283 ± 7	7.0		3265	1010 ± 6	7.0
	3228	587 ± 8	5.8		3267	1100 ± 5	6.0
	3229	1440 ± 14	8.3		3268	1770 ± 7	7.6
	3230	228 ± 3	2.5		3269	1200 ± 8	6.9
	3231	604 ± 8	16.0		3270	479 ± 5	6.9
	3232	531 ± 5	6.3		3271	374 ± 4	5.4
	3233	1180 ± 8	8.3		3272	318 ± 3	2.9
	3234	1220 ± 53	7.4		3273	473 ± 4	5.5
	3235	1190 ± 11	7.4		3274	549 ± 4	5.9
4Feb60	3236	463 ± 5	6.7		3275	1150 ± 6	6.3
	3240	723 ± 7	5.9		3276	1660 ± 5	7.4
	3241	910 ± 5	6.7		3277	1740 ± 9	7.0
	3242	1480 ± 15	7.1		3278	2240 ± 9	8.7
	3244	1080 ± 11	7.4	16Feb60	3299	596 ± 7	5.6
	3246	280 ± 6	7.1		3300	770 ± 10	5.9
	3250	169 ± 3	6.2		3301	184 ± 1	6.2
6Feb60	3252	417 ± 2	6.0		3302	695 ± 8	6.0
	3253	717 ± 4	6.1		3307	519 ± 4	5.4
	3254	842 ± 5	6.6		3309	736 ± 7	6.4
	3255	1800 ± 9	10.4		3310	1110 ± 11	5.7
	3256	490 ± 3	7.0		3311	1070 ± 12	5.5
	3257	975 ± 5	6.2		3312	772 ± 6	8.8
	3258	1170 ± 5	6.4		3314	807 ± 6	7.4
	3259	2530 ± 8	13.0		3316	667 ± 5	6.5
	3260	2290 ± 5	10.8		3318	653 ± 5	5.6
	3261	2330 ± 7	11.6		3320	765 ± 7	6.5
11Feb60	3279	1160 ± 12	7.3		3323	2820 ± 20	14.1
	3281	2120 ± 30	10.0		3325	1530 ± 9	6.2
	3282	2030 ± 34	9.6		3328	2320 ± 12	9.4
	3283	2560 ± 23	12.2		3329	2880 ± 17	11.6
	3285	1750 ± 21	7.4		3330	2130 ± 13	9.2
	3286	1430 ± 13	7.5		3331	2160 ± 13	10.0
	3287	1030 ± 10	8.1	18Feb60	3333	903 ± 7	6.3
	3290	786 ± 12	6.4		3335	877 ± 7	6.7
	3293	804 ± 10	5.9		3336	715 ± 6	6.2
	3295	1490 ± 13	7.7		3337	639 ± 5	6.2
	3296	1630 ± 16	7.4		3340	624 ± 4	6.3

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
19Feb	3346	201 + 1	5.7	3Mar60	3412	1270 + 8	7.1
	3348	597 ± 8	6.5		3414	1170 ± 6	7.8
	3350	585 ± 8	5.6		3415	1070 ± 5	7.5
	3352	665 ± 6	4.6		3417	894 ± 4	6.2
23Feb60	3355	552 + 3	6.9	4Mar60	3418	1170 + 7	6.3
	3356	759 ± 4	7.7		3419	1380 ± 8	7.4
	3357	3320 ± 66	10.3		3420	1520 ± 14	7.1
	3358	430 ± 4	6.2		3421	1900 ± 13	8.3
	3359	666 ± 4	7.6		3422	1550 ± 8	7.9
	3360	883 ± 3	7.5		3426	678 ± 12	4.6
	3361	1580 ± 6	7.8		3429	614 ± 9	5.7
	3362	540 ± 4	9.3		3431	606 ± 7	5.7
	3363	761 ± 4	6.9		3432	736 ± 11	5.1
	3364	956 ± 5	7.4		3433	784 ± 12	5.4
	3365	1990 ± 8	9.0		3434	950 ± 8	6.5
	3366	2420 ± 29	9.7				
	3367	2270 ± 9	10.5	10Mar60	3435	344 ± 3	5.3
25Feb60	3368	916 + 5	6.9		3436	198 ± 2	5.0
	3369	1880 ± 9	10.1		3442	217 ± 2	5.4
	3371	900 ± 5	6.9		3443	360 ± 3	6.1
	3372	904 ± 8	6.0		3444	380 ± 3	5.2
	3373	981 ± 9	5.9		3446	226 ± 2	5.2
	3376	519 ± 5	5.5		3447	404 ± 3	5.0
	3377	575 ± 7	6.4		3448	685 ± 3	5.7
	3378	1620 ± 11	7.3		3449	493 ± 3	6.0
	3381	2570 ± 15	10.9		3450	663 ± 4	5.5
	3382	847 ± 9	7.7		3451	893 ± 5	6.6
	3385	1780 + 14	9.6		3452	794 ± 5	6.5
	3387	2190 ± 11	9.5	11Mar60	3455	470 + 3	6.3
	3388	2490 ± 20	9.9		3456	478 ± 3	5.7
	3391	1690 ± 15	8.2		3457	516 ± 4	6.0
	3400	1110 ± 8	7.1		3458	1360 ± 7	8.5
	3401	1380 ± 12	7.8		3459	929 ± 6	6.9
1Mar60	3402	781 + 5	6.1		3460	1010 ± 6	7.9
	3404	948 ± 9	6.6	22Mar60	3479	319 + 5	5.1
	3406	540 ± 12	4.9		3480	238 ± 4	3.9
	3408	832 ± 6	6.3	24Mar60	3468	2030 ± 6	10.9
	3411	426 ± 4	5.5				

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
24Mar60	3469	1820 + 13	8.1	5Apr60	3535	2110 + 6	8.2
	3471	1810 ± 15	8.8		3537	1790 ± 5	8.0
	3472	2150 ± 15	8.5		3540	1710 ± 12	8.5
	3483	1050 ± 9	6.9		3542	1740 ± 16	9.0
	3484	1620 ± 18	9.0		3543	253 ± 3	7.1
	3486	1730 ± 43	9.0		3549	410 ± 8	5.2
	3487	1530 ± 12	6.9		3552	819 ± 10	8.6
	3488	2260 ± 14	9.1		3553	625 ± 8	6.2
	3489	1700 ± 17	8.0		3556	474 ± 9	5.2
	3490	1800 ± 16	7.3		3558	487 ± 6	5.6
	3491	1880 ± 15	7.8		3559	716 ± 10	6.4
	3492	1940 ± 19	9.4		3562	1140 ± 16	7.0
	3493	439 ± 3	6.8				
	3494	1230 ± 14	5.1	7Apr60	3563	358 ± 4	6.2
	3495	751 ± 13	5.3		3571	575 ± 7	5.6
	3496	1340 ± 12	7.1		3572	529 ± 10	5.9
	3497	537 ± 11	4.9		3575	399 ± 8	4.7
29Mar60	3498	294 ± 1	6.2		3577	403 ± 7	4.3
	3501	426 ± 1	6.9		3578	493 ± 8	4.4
	3504	629 ± 4	7.4		3579	553 ± 9	4.9
	3505	770 ± 6	7.2		3580	799 ± 11	4.9
	3506	898 ± 8	6.8		3581	1130 ± 10	7.0
	3507	1200 ± 10	8.5		3582	1330 ± 8	8.9
	3508	1010 ± 4	7.5		3584	1090 ± 8	7.3
	3509	1130 ± 7	7.8		3585	405 ± 9	6.1
	3510	1720 ± 14	7.9		3587	333 ± 2	7.2
	3511	1470 ± 16	7.3		3590	288 ± 2	7.1
	3512	1140 ± 11	6.2		3591	1490 ± 6	8.5
	3513	1130 ± 8	7.1		3592	1290 ± 5	7.4
	3517	322 ± 8	6.6		3593	1380 ± 8	8.1
	3518	99.2 ± 1.5	3.2		3594	1550 ± 9	9.6
	3520	498 ± 8	5.9	12Apr60	3601	304 ± 2	6.1
	3521	619 ± 9	6.6		3602	248 ± 2	6.2
5Apr60	3529	1040 ± 7	6.6		3603	280 ± 2	5.5
	3530	648 ± 3	6.4		3605	305 ± 3	5.3
	3531	1100 ± 3	7.1		3606	321 ± 3	5.2
	3532	1160 ± 3	6.9		3607	379 ± 4	5.6
	3533	1160 ± 5	6.0		3608	382 ± 3	5.3
	3534	1430 ± 4	7.6		3609	291 ± 4	5.1
					3610	313 ± 3	6.5

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
12Apr60	3611	300 + 5	4.2	19Apr60	3659	1150 + 8	6.8
	3612	275 ± 6	4.9		3660	318 ± 5	5.4
	3613	234 ± 5	4.1		3661	290 ± 6	6.2
	3614	315 ± 8	4.3		3662	328 ± 6	5.6
	3615	363 ± 3	5.5		3663	332 ± 5	6.0
	3624	163 ± 5	4.9	20Apr60	3664	424 + 4	6.1
	3626	180 ± 2	5.4		3667	378 ± 4	5.3
	3627	661 ± 6	5.4		3669	516 ± 5	5.9
	3628	425 ± 5	5.6		3670	1050 ± 9	6.6
	3629	316 ± 3	5.1		3672	1110 ± 8	6.9
	3630	231 ± 2	5.7		3673	1200 ± 11	7.3
14Apr60	3631	1100 + 11	6.3		3674	1220 ± 77	7.0
	3632	1460 ± 15	7.2		3675	1330 ± 10	--
	3633	1550 ± 15	8.1		3676	1650 ± 10	6.4
	3634	1710 ± 12	8.3		3677	1480 ± 9	7.7
	3635	1670 ± 12	7.4		3679	1290 ± 8	7.6
	3636	1780 ± 14	7.9	21Apr60	3680	125 + 2	6.3
	3637	2060 ± 16	8.4		3682	126 ± 3	5.5
	3638	1710 ± 12	8.0		3689	70.2 ± 2	5.8
	3639	1700 ± 14	8.1		3690	176 ± 2	5.4
	3640	1560 ± 14	8.2		3691	388 ± 4	6.0
	3641	680 ± 8	4.5		3692	464 ± 5	5.3
	3642	865 ± 9	5.4		3693	440 ± 3	5.6
	3643	813 ± 11	6.0		3694	482 ± 3	6.6
	3644	677 ± 11	6.0		3695	450 ± 2	5.9
	3645	842 ± 10	6.1		3696	507 ± 6	5.9
	3646	715 ± 9	6.6		3697	341 ± 5	5.6
	3647	852 ± 14	5.8		3698	425 ± 5	5.6
	3648	965 ± 12	5.8	26Apr60	3701	1110 + 8	6.4
	3649	1290 ± 13	6.7		3702	1020 ± 10	6.0
	3650	1440 ± 16	6.6		3704	978 ± 5	6.9
19Apr60	3651	188 + 4	4.5		3705	1590 ± 10	6.9
	3652	761 ± 8	7.3		3706	1740 ± 9	8.3
	3653	584 ± 5	3.6		3707	1470 ± 12	7.7
	3654	1360 ± 12	7.8		3708	1490 ± 9	7.8
	3655	1470 ± 25	6.8		3709	1500 ± 15	7.8
	3656	1700 ± 15	7.4		3710	907 ± 11	6.4
	3657	1400 ± 14	7.2		3712	1310 ± 7	7.6
	3658	1410 ± 14	6.6				

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
26Apr60	3714	1330 ± 7	6.6	3May60	3762	375 ± 4	5.3
	3715	1200 ± 4	6.4		3763	336 ± 4	5.4
	3716	1510 ± 6	6.5		3764	384 ± 4	5.1
	3717	1240 ± 6	7.0		3765	357 ± 6	4.9
	3718	1620 ± 16	--		3766	320 ± 5	5.7
27Apr60	3733	1150 ± 6	8.0		3767	221 ± 6	6.0
	3734	1320 ± 5	11.1		3768	241 ± 2	5.9
	3735	1350 ± 8	9.1		3769	258 ± 2	6.9
	3736	1260 ± 9	7.7		3770	318 ± 2	5.9
	3737	352 ± 5	7.4		3771	303 ± 2	6.2
	3738	344 ± 6	7.0		3772	369 ± 4	5.3
	3739	749 ± 8	7.5		3773	353 ± 2	5.9
	3742	825 ± 4	7.2	5May60	3780	900 ± 5	6.3
	3743	1340 ± 9	7.2		3781	610 ± 4	4.9
	3744	1230 ± 9	6.8		3785	396 ± 8	4.8
	3745	1380 ± 10	6.8		3786	419 ± 3	4.3
	3746	2090 ± 13	10.3		3788	779 ± 4	5.3
					3789	964 ± 4	5.4
28Apr60	3719	417 ± 4	5.5	6May60	3791	262 ± 1	5.4
	3720	518 ± 5	5.0		3793	867 ± 5	7.5
	3721	842 ± 5	6.8		3794	1440 ± 7	7.3
	3722	889 ± 10	6.3		3795	1640 ± 8	7.5
	3730	1140 ± 8	5.8		3798	772 ± 4	6.9
	3731	1230 ± 12	6.1		3799	1190 ± 6	6.8
	3732	1390 ± 12	6.8		3800	1270 ± 8	6.1
30Apr60	3747	1210 ± 7	8.7		3801	1470 ± 9	6.6
	3748	2450 ± 10	13.6	9May60	3802	298 ± 5	5.4
	3749	2420 ± 12	12.8		3803	92.9 ± 3.9	5.2
	3750	1730 ± 9	9.7		3808	294 ± 5	5.2
	3751	1370 ± 5	7.5		3809	370 ± 9	3.9
	3753	1510 ± 8	8.1		3810	509 ± 9	3.9
	3754	688 ± 3	6.7		3812	636 ± 6	5.0
	3756	431 ± 2	6.4		3813	623 ± 7	5.1
	3757	295 ± 2	2.6		3814	513 ± 5	5.0
3May60	3758	504 ± 6	6.9		3816	493 ± 6	5.0
	3759	701 ± 7	6.8		3819	694 ± 6	5.3
	3760	1170 ± 8	7.4		3820	835 ± 7	5.3
	3761	784 ± 6	7.1		3821	1300 ± 14	6.3

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
10May60	3822	844 $\pm$ 5	7.6	17May60	3842	1770 $\pm$ 7	7.5
	3823	844 $\pm$ 5	7.6		3843	1770 $\pm$ 7	7.5
	3824	1400 $\pm$ 4	7.7	19May60	3894	819 $\pm$ 8	5.0
	3825	1400 $\pm$ 4	7.7		3896	618 $\pm$ 5	5.3
	3826	1520 $\pm$ 8	7.6		3900	183 $\pm$ 3	4.0
	3827	1520 $\pm$ 8	7.6	20May60	3844	28.0 $\pm$ 1.4	0.2
11May60	3828	1610 $\pm$ 11	7.1		3876	1470 $\pm$ 12	7.7
	3829	1610 $\pm$ 11	7.1		3877	1470 $\pm$ 12	7.7
12May60	3849	561 $\pm$ 6	5.1		3878	457 $\pm$ 5	5.9
	3850	417 $\pm$ 5	4.4		3879	457 $\pm$ 5	5.9
	3851	429 $\pm$ 7	4.8		3880	1500 $\pm$ 6	6.8
	3852	552 $\pm$ 6	5.6		3881	1500 $\pm$ 6	6.8
	3853	664 $\pm$ 5	5.6	23May60	3873	386 $\pm$ 3	5.2
	3854	483 $\pm$ 5	4.5		3911	871 $\pm$ 3	5.0
	3855	469 $\pm$ 5	4.5		3913	325 $\pm$ 1	4.4
	3856	279 $\pm$ 4	4.8	24May60	3884	198 $\pm$ 2	5.5
	3865	736 $\pm$ 7	5.9		3904	756 $\pm$ 2	6.3
	3866	394 $\pm$ 7	4.1		3905	756 $\pm$ 2	6.3
	3867	446 $\pm$ 8	4.5		3906	1540 $\pm$ 22	6.6
	3868	663 $\pm$ 7	4.8		3907	1540 $\pm$ 22	6.6
	3869	751 $\pm$ 6	5.6		3908	1430 $\pm$ 6	7.7
	3870	470 $\pm$ 6	4.4		3909	1430 $\pm$ 6	7.7
	3871	445 $\pm$ 5	3.7	25May60	3886	421 $\pm$ 3	5.0
	3872	725 $\pm$ 6	5.3		3887	96.2 $\pm$ 1.0	5.3
13May60	3830	579 $\pm$ 2	5.8	26May60	3891	606 $\pm$ 5	5.9
	3831	579 $\pm$ 2	5.8		3916	406 $\pm$ 5	4.8
	3832	221 $\pm$ 2	1.0		3918	406 $\pm$ 5	4.8
	3833	221 $\pm$ 2	1.0		3919	406 $\pm$ 5	4.8
	3834	1570 $\pm$ 5	8.2		3921	138 $\pm$ 2	4.3
	3835	1570 $\pm$ 5	8.2	31May60	3930	834 $\pm$ 3	4.9
14May60	3836	1510 $\pm$ 6	7.0		3934	288 $\pm$ 1	5.1
	3837	1510 $\pm$ 6	7.0	2Jun60	3942	473 $\pm$ 3	6.8
17May60	3838	348 $\pm$ 2	5.6				
	3839	348 $\pm$ 2	5.6				
	3840	1630 $\pm$ 7	8.9				
	3841	1630 $\pm$ 7	8.9				

Table 4.7 (continued)

Date	Sample No.	dpm 1000 SCF	Ce ¹⁴⁴ Sr ⁹⁰
2Jun60	3943	639 ± 9	4.9
	3945	240 ± 3	5.1
	3946	240 ± 3	5.1
	3947	105 ± 2	4.0
	3949	105 ± 2	4.0
	3950	250 ± 3	5.1
	3952	639 ± 9	4.9
6Jun60	3953	974 ± 8	5.9
	3954	931 ± 7	5.2
	3955	1140 ± 10	5.7
	3956	1260 ± 14	5.5
8Jun60	3974	581 ± 8	4.8
	3975	448 ± 4	5.0
	3976	373 ± 8	4.0
	3977	458 ± 6	4.8
	3978	654 ± 4	4.9
	3979	536 ± 3	4.4
	3980	360 ± 4	4.0
	3981	522 ± 6	4.1
	3982	573 ± 10	4.2
	3983	393 ± 5	4.1
	3984	370 ± 7	3.8
	3985	474 ± 8	4.5
	3986	683 ± 5	4.3
	3987	443 ± 3	4.3
	3988	437 ± 5	4.1
	3989	539 ± 6	4.3
10Jun60	3960	136 ± 1	4.9
	3962	446 ± 2	4.9
	3964	816 ± 2	5.3

ACTIVITIES OF TRACER AND COSMIC RAY NUCLIDES

Measurements of the tracer nuclides tungsten-185, tungsten-181 and rhodium-102, injected into the stratosphere during Hardtack, and of the cosmic ray products beryllium-7 and phosphorus-32 have yielded information on the mechanisms and rates of stratospheric mixing.

The tungsten isotopes, tungsten-185 (74 days) and tungsten-181 (120 days), serve as tracers for debris produced by certain surface shots during the mid-1958 Pacific test series. Analytical data for tungsten-185 are given in Table 4.3 and those for tungsten-181, together with measured ratios of tungsten-181 to tungsten-185, in Table 4.8. The activities of these nuclides are corrected for decay to 15 Aug 1958. The W^{181}/W^{185} ratio in samples collected during and after July 1959 dropped in value and became rather erratic indicating that the analysis for one or both of these nuclides was giving erroneous data. Consequently the analysis of individual samples for these nuclides was soon terminated and the analysis of composites of several samples for tungsten-185 was begun.

Rhodium-102 serves as a tracer for debris injected into the high atmosphere by the rocket shot, Orange, detonated at about 100,000 feet on 12 Aug 1958 over Johnston Island. Regular measurement of rhodium-102 in HASP samples began in January, 1960, with composites of samples collected during December 1959 being analyzed. Measurements of composites of later samples and of a few individual samples continued until the termination of sampling. A few composites of samples collected before December 1959 were then prepared and were analyzed. Analytical data for rhodium-102 are given in Table 4.9. Composites are numbered according to time of collection, 57.1, 58.2, 59.1 etc. indicating the year of collection for older samples and D1, D2, J1, J2, etc., the month of collection for later samples. Thus O1 - O3 were collected during

October 1959 and D1, D2, etc. during December 1959. The composites designated J, F, and M were collected during January, February and March 1960, while those designated A were collected during April and May 1960 by aircraft flying from Minot, Laughlin and Ramey. Samples collected during Phase 5 (May and June 1960) were designated EN if collected at Eielson, Alaska and ES if collected at Ezeiza, Argentina. The concentrations are given for the collection date of the samples and for 12 Aug 1958.

Beryllium-7 (53 days) and phosphorus-32 (14.5 days) are among the nuclides formed by cosmic ray bombardment of air molecules in the upper atmosphere. Their rates of formation and equilibrium concentrations may be calculated using data on the intensity of cosmic radiation as a function of latitude and altitude in the stratosphere. Comparison of measured concentrations with the theoretical concentrations may be useful for deducing rates and directions of mixing and transfer of stratospheric air. Measured concentrations of beryllium-7, corrected for decay to collection date, are included in Table 4.9 because most of the composites which were analyzed for rhodium-102 were also analyzed for this nuclide. There appears to be a discrepancy between data for the first samples that were analyzed for this nuclide and data for samples (collected during and after October 1959) which were analyzed later, and the former are assumed to be in error. The data are expressed in dpm/1000SCF, the same units used to express concentrations of nuclear debris.

The measurement of phosphorus-32 in HASP samples was begun in May 1960, and samples collected during April, May and June 1960 were analyzed. The results of these measurements are given in Table 4.10, where the concentrations of phosphorus-32 are expressed as dpm/1000 SCF and as atoms per gram of air, both on collection date. The ratio of beryllium-7 to phosphorus-32 is also given, both as a ratio of activities ($\text{dpm Be}^7/\text{dpm P}^{32}$) and as a ratio of atoms ($\text{atoms Be}^7/\text{atoms P}^{32}$).

Table 4.8 Tungsten-181 Analyses

Activities (corr. to 15 Aug 58)				Activities (corr. to 15 Aug 58)			
Date	Sample No.	dpm 1000 SCF	W ¹⁸¹ W ¹⁸⁵	Date	Sample No.	dpm 1000 SCF	W ¹⁸¹ W ¹⁸⁵
29May58	523	4240 ± 68	0.91	16Dec58	927	11900 ± 150	0.80
20Jun58	555	4080 ± 53	0.97		928	3350 ± 60	0.81
24Jun58	563	72300 ± 2900	1.01	19Dec58	935	8890 ± 130	0.85
28Jun58	570	12700 ± 130	1.04		936	18000 ± 250	0.87
	571	35500 ± 180	0.99		937	5290 ± 130	0.95
1Jul58	576	1550 ± 22	0.97		938	8720 ± 160	0.83
4Jul58	582	8450 ± 110	1.00		939	16000 ± 270	0.83
	584	6960 ± 28	0.96		940	26600 ± 270	0.83
17Sep58	962	1950 ± 41	0.97		941	28400 ± 400	0.81
23Sep58	630	41300 ± 170	0.83		942	20500 ± 230	0.78
27Sep58	964	657 ± 15	0.46	23Dec58	952	9870 ± 140	0.78
10Oct58	672	3180 ± 57	0.99		953	12400 ± 110	0.81
14Oct58	689	51600 ± 260	0.73		954	10500 ± 990	0.81
	690	60800 ± 430	0.87		958	1400 ± 20	1.12
17Oct58	698	55200 ± 220	0.87		959	1930 ± 31	0.81
	701	2780 ± 130	0.82		960	4500 ± 81	0.90
21Oct58	721	4070 ± 37	0.99	6Jan59	969	7770 ± 70	0.77
29Oct58	746	3250 ± 59	0.63		972	2080 ± 46	0.87
20Nov58	820	3050 ± 46	1.44		977	7980 ± 96	0.81
25Nov58	839	1600 ± 33	0.83		978	2460 ± 39	0.96
	841	9050 ± 91	0.88	9Jan59	985	1940 ± 49	0.99
	843	837 ± 19	0.77		987	2980 ± 65	0.93
3Dec58	872	8710 ± 170	0.80		989	2990 ± 54	0.91
9Dec58	893	1420 ± 26	0.86		993	11300 ± 170	0.88
12Dec58	909	13600 ± 1200	0.85		994	7620 ± 61	0.48
					996	8860 ± 120	0.94
				13Jan59	997	18500 ± 170	1.26
					1000	4510 ± 59	0.92
					1002	860 ± 14	0.85
					1005	1990 ± 38	0.84
					1006	3430 ± 45	0.83
				16Jan59	1010	8640 ± 130	0.75
					1011	20500 ± 210	0.83
					1012	23500 ± 420	0.81
					1013	23100 ± 230	0.78
					1014	7200 ± 65	1.59
					1022	2200 ± 50	0.89

Table 4.8 (continued)

Date	Sample No.	Activities (corr. to 15 Aug 58)		Date	Sample No.	Activities (corr. to 15 Aug 58)	
		dpm 1000 SCF	$\frac{W^{181}}{W^{185}}$			dpm 1000 SCF	$\frac{W^{181}}{W^{185}}$
19Jan59	1023	8090 $\pm$ 110	0.87	26May59	1508	3350 $\pm$ 77	0.85
	1024	5510 $\pm$ 72	0.92				
22Jan59	1031	2120 $\pm$ 38	0.97	5Jun59	1547	3440 $\pm$ 100	0.89
	1032	1790 $\pm$ 38	0.79	12Jun59	1576	2760 $\pm$ 83	0.81
	1033	2260 $\pm$ 45	0.86	14Jun59	1606	3140 $\pm$ 53	0.79
25Jan59	1036	4550 $\pm$ 73	0.87	16Jun59	1617	3360 $\pm$ 54	0.91
	1038	9980 $\pm$ 160	0.91	23Jun59	1724	8310 $\pm$ 140	0.93
28Jan59	1042	1390 $\pm$ 31	0.81	3Jul59	1758	7450 $\pm$ 130	0.82
	1047	1740 $\pm$ 38	0.93		1759	6710 $\pm$ 150	0.83
	1048	4710 $\pm$ 61	0.90	7Jul59	1781	2420 $\pm$ 240	--
	1052	1810 $\pm$ 51	0.77		1783	1050 $\pm$ 160	--
3Feb59	1060	2020 $\pm$ 38	0.94	7Jul59	1795	534 $\pm$ 110	--
6Feb59	1078	6390 $\pm$ 96	0.81	10Jul59	1802	925 $\pm$ 190	--
	1080	2310 $\pm$ 46	0.94		1804	1040 $\pm$ 210	--
	1082	3440 $\pm$ 58	0.86		1806	1200 $\pm$ 240	--
14Feb59	1101	2720 $\pm$ 57	0.75		1807	1100 $\pm$ 220	--
	1102	4680 $\pm$ 94	0.94		1813	925 $\pm$ 190	--
	1111	16500 $\pm$ 160	0.96		1815	1800 $\pm$ 180	--
	1112	18500 $\pm$ 150	0.87		1819	2140 $\pm$ 210	--
20Feb59	1126	4410 $\pm$ 97	0.84		1820	2130 $\pm$ 320	--
	1131	15700 $\pm$ 140	0.86	14Jul59	1824	3730 $\pm$ 370	--
28Feb59	1158	2450 $\pm$ 370	--		1838	2080 $\pm$ 310	--
	1170	753 $\pm$ 110	3.19		1839	2790 $\pm$ 280	0.30
21Apr59	1382	1870 $\pm$ 37	0.88		1840	2420 $\pm$ 360	--
22Apr59	1663	810 $\pm$ 12	0.74	17Jul59	1849	1400 $\pm$ 280	--
1May59	1417	1140 $\pm$ 170	--		1853	1680 $\pm$ 170	--
8May59	1431	4140 $\pm$ 87	0.86		1855	2880 $\pm$ 290	--
					1856	2140 $\pm$ 210	--
17May59	1468	3420 $\pm$ 89	0.81		1857	2600 $\pm$ 260	--
24May59	1498	3020 $\pm$ 82	0.78				

Table 4.8 (continued)

Date	Sample No.	Activities (corr. to 15 Aug 58)		Date	Sample No.	Activities (corr. to 15 Aug 58)	
		dpm	W ¹⁸¹			dpm	W ¹⁸¹
		1000 SCF	W ¹⁸⁵			1000 SCF	W ¹⁸⁵
19Jul59	1866	923 ± 140	--	21Aug59	2320	389 ± 39	--
	1867	1030 ± 150	--		2341	349 ± 35	--
	1868	1040 ± 160	--		2342	445 ± 45	--
	1869	1210 ± 180	--	18Sep59	2108	986 ± 200	--
	1870	1440 ± 140	--		2109	1010 ± 150	--
	1871	1550 ± 160	--		2113	1130 ± 230	--
	1872	1440 ± 140	--		2121	1050 ± 210	0.26
	1873	1350 ± 200	--		2122	498 ± 100	0.12
	1874	1340 ± 200	--		2123	891 ± 180	--
	1875	1220 ± 240	--		2125	902 ± 180	0.23
	1876	1200 ± 240	--		2126	803 ± 160	0.33
	1877	1070 ± 210	0.47		2130	1180 ± 240	0.58
	1878	1180 ± 240	--		2131	812 ± 160	--
	1879	1100 ± 220	--		2132	843 ± 130	--
	1882	1520 ± 230	--		2135	827 ± 170	0.24
	1886	1260 ± 250	--		2136	928 ± 190	--
					2137	1830 ± 270	--
21Jul59	1930	651 ± 130	--		2138	1270 ± 250	0.23
24Jul59	1923	1030 ± 100	0.28		2139	1840 ± 180	--
	1925	1210 ± 120	0.51		2140	1100 ± 220	0.25
26Jul59	1943	1050 ± 160	--	22Sep59	2151	939 ± 94	0.27
	1944	1010 ± 150	--		2152	1110 ± 110	0.38
	1945	836 ± 170	--		2153	939 ± 94	--
	1946	1140 ± 170	--		2154	677 ± 100	0.16
	1947	789 ± 160	--		2158	450 ± 90	0.27
	1949	1070 ± 210	--		2159	543 ± 110	--
	1950	1190 ± 240	--		2160	807 ± 81	--
	1953	1170 ± 230	--	23Sep59	2163	395 ± 79	≥ 1.38
31Jul59	2004	2230 ± 220	--		2164	596 ± 89	--
	2005	2110 ± 210	--	25Sep59	2165	1180 ± 240	0.38
4Aug59	2022	1570 ± 310	--		2166	1150 ± 230	0.37
	2023	2360 ± 350	--		2168	1510 ± 300	1.52
	2024	2230 ± 330	--		2171	1550 ± 310	--
	2025	2030 ± 410	--	29Sep59	2197	1050 ± 210	--
	2026	1640 ± 330	0.28		2198	1070 ± 210	--
7Aug59	2046	1150 ± 230	--				

Table 4.8 (continued)

Date	Sample No.	Activities (corr. to 15 Aug 58)		Date	Sample No.	Activities (corr. to 15 Aug 58)	
		dpm	$\frac{W^{181}}{W^{185}}$			dpm	$\frac{W^{181}}{W^{185}}$
		1000 SCF				1000 SCF	
30Sep59	2173	775 $\pm$ 160	--	14Oct59	2310	247 $\pm$ 49	--
	2174	905 $\pm$ 180	0.31		2312	305 $\pm$ 61	--
	2175	802 $\pm$ 160	0.26		2313	664 $\pm$ 66	--
	2177	700 $\pm$ 140	--		2314	248 $\pm$ 50	--
	2178	562 $\pm$ 110	0.23		2315	254 $\pm$ 51	--
	2179	536 $\pm$ 110	0.29		2318	312 $\pm$ 62	--
1Oct59	2227	845 $\pm$ 130	--		2343	266 $\pm$ 27	--
	2228	754 $\pm$ 150	--		2344	247 $\pm$ 25	--
6Oct59	2232	738 $\pm$ 150	--	15Oct59	2372	1070 $\pm$ 210	0.19
	2233	1000 $\pm$ 100	--	16Oct59	2321	701 $\pm$ 140	--
	2234	794 $\pm$ 160	--		2322	798 $\pm$ 120	--
	2235	765 $\pm$ 150	--		2323	763 $\pm$ 110	--
	2236	717 $\pm$ 140	--		2324	694 $\pm$ 140	--
	2237	1650 $\pm$ 170	--		2325	884 $\pm$ 130	--
	2253	1480 $\pm$ 300	--		2326	803 $\pm$ 160	--
	2259	985 $\pm$ 200	--		2328	999 $\pm$ 200	--
	2261	1410 $\pm$ 280	--		2330	1020 $\pm$ 200	--
	2262	1480 $\pm$ 300	0.40				
				20Oct59	2392	954 $\pm$ 190	--
					2393	1330 $\pm$ 130	--
8Oct59	2286	3300 $\pm$ 330	--		2394	958 $\pm$ 140	--
9Oct59	2264	452 $\pm$ 90	--		2395	950 $\pm$ 140	--
	2265	748 $\pm$ 75	--		2397	2170 $\pm$ 220	--
	2268	878 $\pm$ 130	--		2403	2280 $\pm$ 340	--
	2269	751 $\pm$ 150	--		2407	1620 $\pm$ 320	--
	2271	698 $\pm$ 140	--		2408	1740 $\pm$ 350	--
	2272	980 $\pm$ 150	--		2409	1610 $\pm$ 320	--
	2273	1080 $\pm$ 160	--		2410	2040 $\pm$ 410	--
13Oct59	2298	916 $\pm$ 180	--	22Oct59	2426	721 $\pm$ 140	--
	2299	1090 $\pm$ 160	0.38		2439	1390 $\pm$ 280	--
	2304	572 $\pm$ 110	--		2436	728 $\pm$ 150	--
	2353	613 $\pm$ 120	0.73	27Oct59	2442	868 $\pm$ 170	--
	2354	695 $\pm$ 140	--		2443	1030 $\pm$ 150	--
	2356	957 $\pm$ 190	--		2446	935 $\pm$ 190	--
	2357	1670 $\pm$ 170	0.86				

Table 4.8 (continued)

Date	Sample No.	Activities (corr. to 15 Aug 58)	
		dpm 1000 SCF	$\frac{W^{181}}{W^{185}}$
28Oct59	2462	417 $\pm$ 83	--
	2463	424 $\pm$ 85	--
30Oct59	2483	513 $\pm$ 100	--
	2488	750 $\pm$ 150	--
	2492	957 $\pm$ 190	--
	2509	331 $\pm$ 66	--
6Nov59	2533	759 $\pm$ 110	--
	2534	894 $\pm$ 89	--
	2536	800 $\pm$ 120	--
	2537	282 $\pm$ 56	--
	2538	306 $\pm$ 61	--
12Nov59	2638	826 $\pm$ 170	--
13Nov59	2615	733 $\pm$ 110	0.49
19Nov59	2654	746 $\pm$ 150	--
	2675	1480 $\pm$ 220	0.53
1Dec59	2753	1770 $\pm$ 350	--
	2754	1920 $\pm$ 380	--
	2757	1730 $\pm$ 350	--
	2742	1080 $\pm$ 220	--
9Dec59	2826	872 $\pm$ 170	--
11Dec59	2856	675 $\pm$ 140	--
	2857	387 $\pm$ 77	--
	2858	326 $\pm$ 65	--

Table 4.9 Rhodium-102 and Beryllium-7 Analyses

Composite or Sample No.	Date	Sample Numbers	dpm Rh ¹⁰² /1000 SCF		dpm Be ⁷ 1000 SCF
			Coil. Date	12 Aug 53	
57.1	8 Nov 57 12 Nov 57	44, 45, 46, 47 60, 61	48.5 ± 5.5	19.2 ± 2.2	--
58.1	16 Sep 58 19 Sep 58	610, 611, 612, 613 615	10.2 ± 1.1	11.4 ± 1.3	--
58.2	17 Oct 58	692, 693, 694 695, 698, 699	≤ 0.5	≤ 0.7	--
58.3	19 Dec 58	935, 936, 937 938, 939, 940	≤ 0.7	≤ 1.1	--
59.1	1 Apr 59	1301, 1302, 1303, 1304, 1305, 1306	≤ 0.6	≤ 1.3	--
59.2	14 Apr 59	1362, 1363, 1364 1365, 1366, 1367	0.27 ± 0.03	0.61 ± 0.07	--
59.3	5 May 59 17 May 59	1427, 1428, 1429, 1430 1468, 1469	≤ 0.4	≤ 0.9	--
59.4	2 Jun 59	1522, 1523, 1524, 1525, 1526, 1527	≤ 0.4	≤ 1.0	--
59.5	16 Jun 59	1629, 1630, 1631, 1632, 1633, 1634	0.47 ± 0.06	1.29 ± 0.16	--
59.6	23 Jun 59	1700, 1701, 1702, 1703, 1723, 1724	≤ 0.3	≤ 0.8	--
59.7	16 Jun 59 23 Jun 59	1671, 1672 1725, 1726, 1727, 1728	≤ 0.2	≤ 0.5	--
59.8	7 Jul 59	1790, 1791, 1792, 1793	≤ 0.3	≤ 1.0	--
59.9	16 Jul 59 7 Jul 59	1864 1796	≤ 0.4	≤ 1.3	--
59.10	21 Jul 59	1904, 1905, 1906, 1907, 1908, 1909	0.78 ± 0.09	2.41 ± 0.28	--
59.11	24 Jul 59	1914, 1915, 1918 1917, 1918, 1919	≤ 0.2	≤ 0.5	--
59.12	21 Jul 59 24 Jul 59	1896, 1897 1926, 1927, 1928, 1929	0.16 ± 0.02	0.50 ± 0.06	--
59.13	28 Jul 59 30 Jul 59 6 Aug 59	1983, 1984 1989, 1990 2051, 2052	≤ 0.1	≤ 0.3	--
59.14	4 Aug 59	2009, 2010, 2017 2018, 2019, 2020	≤ 0.3	≤ 0.9	--
59.15	7 Aug 59	2027, 2028, 2037 2038, 2039, 2040	≤ 0.2	≤ 0.7	--
O1	27 Oct 59	2446, 2447, 2448 2449, 2450, 2451	--	--	728 ± 27
O2	27 Oct 59	2456, 2457, 2458 2459, 2460, 2461	--	--	863 ± 16
O3	28 Oct 59	2471, 2472, 2473 2474, 2475, 2476	--	--	728 ± 15
D1	1 Dec 59	2723, 2724	--	--	650 ± 13
D2	1 Dec 59	2725, 2726, 2727	--	--	989 ± 14

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	dpm Rh ¹⁰² /1000 SCF		dpm Be ⁷ 1000 SCF
			Coll. Date	12 Aug 58	
D3	1Dec59	2733, 2734, 2735, 2736	--	--	622 ± 12
D4	1Dec59	2751, 2752, 2753	0.565 ± 0.041	2.71 ± 0.20	319 ± 11
D5	1Dec59	2759, 2760, 2761 2762	0.590 ± 0.039	2.83 ± 0.19	413 ± 9
D6	3Dec59	2769, 2770, 2771 2772, 2773, 2774	0.257 ± .014	1.25 ± .068	597 ± 7
D7	8Dec59	2817, 2818, 2819, 2820	0.866 ± 0.044	4.26 ± 0.22	689 ± 9
D8	10Dec59	2847, 2848, 2849, 2850	9.69 ± 1.08	48.0 ± 5.3	951 ± 17
D9	15Dec59	2877, 2878, 2879, 2880, 2881, 2882	0.459 ± 0.024	2.31 ± 0.12	449 ± 5
D10	17Dec59	2904, 2905, 2906, 2907, 2908, 2909	0.866 ± 0.041	4.39 ± 0.21	766 ± 8
D11	17Dec59	2916, 2917, 2918, 2919	5.32 ± 0.21	27.0 ± 1.1	829 ± 12
D12	18Dec59	2927, 2928, 2929	0.279 ± 0.020	1.41 ± 0.10	460 ± 9
D13	22Dec59	2945, 2946, 2947, 2948	1.27 ± 0.07	6.52 ± 0.36	491 ± 16
D14	23Dec59	2955, 2956, 2957	10.2 ± 0.4	52.5 ± 2.1	728 ± 15
J1	5Jan60	2966, 2967, 2968, 2969	6.31 ± 0.30	33.9 ± 1.6	697 ± 12
J2	7Jan60	3009, 3010, 3011, 3012	0.460 ± 0.029	2.49 ± 0.16	388 ± 6
J3	7Jan60	2988, 2989, 2990	0.545 ± 0.087	2.95 ± 0.47	461 ± 6
J4	7Jan60	2991, 2992, 2993	0.597 ± 0.035	3.24 ± 0.19	584 ± 8
J5	7Jan60	2998, 2999, 3000, 3001, 3002	0.241 ± 0.017	1.31 ± 0.092	321 ± 4
J6	12Jan60	3025, 3026, 3027, 3028	0.822 ± 0.048	4.52 ± 0.26	305 ± 8
J7	12Jan60	3033, 3034, 3035	1.25 ± 0.20	6.88 ± 1.10	315 ± 10
J8	12Jan60	3036, 3037, 3038	0.914 ± 0.058	5.03 ± 0.32	267 ± 11

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	dpm Rh ¹⁰² /1000 SCF		dpm Be ⁷
			Coll. Date	12 Aug 58	1000 SCF
J9	12Jan60	3039, 3040, 3041, 3042	2.41 ± 0.11	13.3 ± 0.61	617 ± 7
J10	12Jan60	3043, 3044	13.3 ± 0.6	73.2 ± 3.3	758 ± 14
J11	12Jan60	3049, 3051, 3052, 3053	38.1 ± 1.2	210 ± 6.6	1163 ± 16
J12	14Jan60	3067, 3068, 3069, 3070, 3071	1.56 ± 0.08	8.69 ± 0.45	281 ± 7
J13	15Jan60	3080, 3090	14.8 ± 0.5	82.6 ± 2.8	793 ± 11
J14	19Jan60	3096, 3097, 3099, 3100, 3101	0.363 ± 0.020	2.05 ± 0.11	417 ± 5
J15	19Jan60	3098, 3106, 3107, 3108, 3109	0.239 ± 0.016	1.35 ± 0.090	508 ± 6
J16	19Jan60	3116, 3117	0.451 ± 0.028	2.55 ± 0.16	576 ± 7
J17	19Jan60	3118, 3119, 3120, 3121	0.880 ± 0.042	4.97 ± 0.24	487 ± 7
J18	22Jan60	3126, 3127	1.72 ± 0.08	9.80 ± 0.46	716 ± 11
J19	22Jan60	3128, 3129, 3130	4.19 ± 0.16	23.9 ± 0.91	644 ± 9
J20	22Jan60	3136, 3137, 3138, 3139	17.2 ± 1.3	98.0 ± 7.4	993 ± 15
J21	21Jan60	3147, 3148, 3149, 3150, 3151	39.9 ± 3.0	226 ± 17	1306 ± 14
J22	26Jan60	3160, 3161	7.87 ± 0.61	45.6 ± 3.5	770 ± 14
J23	26Jan60	3162, 3163, 3164, 3165	12.8 ± 1.0	74.2 ± 5.8	761 ± 11
J24	26Jan60	3170, 3171	≤ 0.033	≤ 0.191	273 ± 7
J25	29Jan60	3184, 3185, 3186, 3187, 3188, 3189	≤ 0.008	≤ 0.047	211 ± 3
J26	29Jan60	3196, 3197, 3198, 3199	≤ 0.020	≤ 0.117	463 ± 7
F1	2Feb60	3204, 3205, 3206	1.83 ± 0.15	10.8 ± 0.88	542 ± 13
F2	2Feb60	3207, 3208, 3209	≤ 0.129	≤ 0.759	570 ± 9
F3	2Feb60	3217, 3218, 3219	0.547 ± 0.039	3.22 ± 0.23	547 ± 14

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	dpm Rh ¹⁰² /1000 SCF		dpm Be ⁷
			Coll. Date	12 Aug 58	1000 SCF
F4	4Feb60	3242, 3243, 3244	5.59 ± 0.24	33.2 ± 1.4	547 ± 12
F5	11Feb60	3283, 3284, 3285, 3286	23.8 ± 0.8	144 ± 4.8	838 ± 13
F6	11Feb60	3293, 3294, 3295, 3296	4.22 ± 0.16	25.6 ± 0.97	523 ± 9
F7	16Feb60	3309, 3310, 3311	0.927 ± 0.061	5.75 ± 0.38	272 ± 7
F8	16Feb60	3316, 3317, 3318 3319, 3320	0.857 ± 0.046	5.31 ± 0.29	610 ± 5
F9	16Feb60	3328, 3329, 3330, 3331	27.9 ± 1.2	173 ± 7.4	887 ± 10
F10	18Feb60	3336, 3337, 3338	0.290 ± 0.021	1.81 ± 0.13	628 ± 6
F11	18Feb60	3339, 3340, 3341	0.834 ± 0.047	5.20 ± 0.29	606 ± 6
F12	19Feb60	3346, 3347	0.326 ± 0.022	2.04 ± 0.14	--
F13	23Feb60	3357, 3367	33.9 ± 1.4	214 ± 8.8	989 ± 10
F14	25Feb60	3372, 3373, 3374	2.67 ± 0.13	17.0 ± 0.83	819 ± 9
F15	25Feb60	3375, 3376, 3377	1.33 ± 0.07	8.45 ± 0.44	680 ± 7
F16	25Feb60	3388, 3389, 3390, 3391	2.49 ± 0.08	15.8 ± 0.51	824 ± 12
F17	25Feb60	3398, 3399, 3400, 3401	5.32 ± 0.21	33.7 ± 1.3	414 ± 8
M1	1Mar60	3406, 3407, 3408	0.622 ± 0.030	4.04 ± 0.20	631 ± 6
M2	1Mar60	3409, 3410, 3411	0.477 ± 0.027	3.10 ± 0.18	565 ± 6
M3	3Mar60	3416, 3417	6.31 ± 0.23	41.2 ± 1.5	616 ± 5
M4	4Mar60	3422, 3423, 3424, 3425	19.5 ± 0.6	128 ± 3.9	626 ± 11
M5	4Mar60	3430, 3431, 3432, 3433, 3434	1.25 ± 0.08	8.19 ± 0.52	269 ± 11
M6	10Mar60	3439, 3440, 3441	≤ 0.016	≤ 0.107	304 ± 21
M7	10Mar60	3442, 3443, 3444	0.150 ± 0.023	1.01 ± 0.15	326 ± 4

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	dpm Rh ¹⁰² / 1000 SCF		dpm Be ⁷
			Coll. Date	12 Aug 58	1000 SCF
M8	10Mar60	3449, 3450	2.43 ± 0.23	16.3 ± 1.5	513 ± 9
M9	10Mar60	3451, 3452	4.33 ± 0.62	29.0 ± 4.2	502 ± 10
M10	11Mar60	3455, 3456, 3457	0.380 ± 0.017	2.55 ± 0.11	527 ± 5
M11	11Mar60	3458, 3459, 3460	6.94 ± 0.63	46.6 ± 4.2	790 ± 7
M12	22Mar60	3461, 3462, 3463	0.440 ± 0.043	3.06 ± 0.30	415 ± 4
M13	22Mar60	3464, 3465, 3466	3.21 ± 0.30	22.3 ± 2.1	499 ± 5
M14	24Mar60	3467, 3468, 3469	16.0 ± 1.5	112 ± 11	750 ± 11
M15	24Mar60	3470, 3471, 3472	18.7 ± 0.9	131 ± 6.3	777 ± 18
M16	22Mar60	3479, 3480, 3481, 3482	0.970 ± 0.054	67.4 ± 0.38	292 ± 6
M17	24Mar60	3487, 3488, 3489	18.7 ± 0.9	131 ± 6.3	718 ± 14
M18	24Mar60	3490, 3491, 3492	23.8 ± 1.1	167 ± 7.7	764 ± 16
M19	29Mar60	3508, 3509	7.13 ± 0.36	50.8 ± 2.6	592 ± 11
M20	29Mar60	3510, 3511, 3512, 3513	8.85 ± 0.42	63.1 ± 3.0	423 ± 7
M21	29Mar60	3519, 3520, 3521	6.22 ± 0.30	44.3 ± 2.1	535 ± 12
M22	31Mar60	3523, 3524, 3535	1.29 ± 0.07	9.22 ± 0.50	347 ± 6
M23	31Mar60	3526, 3527	6.13 ± 0.23	43.8 ± 1.6	354 ± 6
A1	5Apr60	3533, 3534	8.14 ± 0.25	59.2 ± 1.8	607 ± 11
A2	5Apr 60	3535, 3536, 3537, 3538	14.8 ± 0.8	108 ± 5.8	793 ± 10
A3	5Apr60	3549, 3550, 3551, 3552	0.985 ± 0.120	7.16 ± 0.87	270 ± 6
A4	5Apr60	3559, 3560, 3561, 3562	1.54 ± 0.19	11.2 ± 1.4	251 ± 10

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	dpm Rh ¹⁰² /1000 SCF		dpm Be ⁷
			Coll. Date	12 Aug 58	1000 SCF
A5	7Apr60	3568, 3569, 3570, 3571	--		204 ± 9
A6	7Apr60	3577, 3578, 3579, 3580	1.95 ± 0.15	14.3 ± 1.1	278 ± 8
A7	7Apr60	3585, 3586, 3587	0.329 ± 0.017	24.1 ± 0.12	432 ± 6
A8	7Apr60	3588, 3589, 3590	0.687 ± 0.028	5.04 ± 0.21	293 ± 6
A9	12Apr60	3605, 3606, 3607	0.422 ± 0.018	3.14 ± 0.13	383 ± 6
A10	12Apr60	3608, 3609, 3610	0.407 ± 0.017	3.03 ± 0.13	399 ± 5
A11	12Apr60	3615, 3616, 3617, 3618, 3619, 3620	--		193 ± 4
A12	12Apr60	3627, 3628, 3629	1.71 ± 0.07	12.7 ± 0.52	160 ± 3
A13	14Apr60	3635, 3636, 3637, 3638, 3639, 3640	0.581 ± 0.065	4.38 ± 0.49	691 ± 8
A14	14Apr60	3645, 3646, 3647, 3648, 3649, 3650	1.53 ± 0.07	11.5 ± 0.53	440 ± 7
A15	19Apr60	3656, 3657, 3658, 3659	--		651 ± 13
A16	20Apr60	3664, 3665, 3666, 3667, 3668, 3669	1.83 ± 0.05	14.0 ± 0.38	511 ± 16
A17	20Apr60	3674, 3675	12.8 ± 0.4	97.9 ± 3.1	628 ± 14
A18	20Apr60	3676, 3677, 3678, 3679	2.41 ± 0.27	18.4 ± 2.1	640 ± 12
A19	21Apr60	3684, 3685, 3686, 3687, 3688, 3689	---		73.1 ± 2.6
A20	21Apr60	3694, 3695	2.18 ± 0.08	16.8 ± 0.62	482 ± 10
A21	21Apr60	3696, 3697, 3698	0.763 ± 0.040	5.86 ± 0.31	329 ± 8
A22	26Apr60	3706, 3707, 3708, 3709	7.39 ± 0.82	57.6 ± 6.4	689 ± 13
A23	26Apr60	3714, 3715, 3716, 3717, 3718	4.07 ± 0.45	31.7 ± 3.5	634 ± 10
A24	28Apr60	3730, 3731, 3732	--		629 ± 12

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	<u>dpm Rh¹⁰²/1000 SCF</u>		<u>dpm Be⁷</u>
			<u>Coll. Date</u>	<u>12 Aug 58</u>	<u>1000 SCF</u>
A25	27Apr60	3741, 3742	29.0 ± 2.9	227 ± 22.7	1159 ± 7
A26	27Apr60	3743, 3744, 3745, 3746	2.26 ± 0.25	17.7 ± 2.0	614 ± 9
A27	30Apr60	3747, 3748	2.19 ± 0.24	17.3 ± 1.9	306 ± 6
A28	30Apr60	3749, 3750	11.8 ± 1.3	93.2 ± 10.0	1181 ± 43
A29	3May60	3762, 3763, 3764, 3765, 3766, 3767	--		396 ± 4
A30	3May60	3772, 3773, 3774, 3775, 3776, 3777	--		424 ± 6
A31	5May60	3784, 3785, 3786, 3787, 3788, 3789	--		247 ± 5
A32	6May60	3800, 3801	9.87 ± 1.09	79.9 ± 8.8	857 ± 32
A33	9May60	3816, 3817, 3818, 3819, 3820, 2821	≤ 0.023	≤ 0.188	246 ± 12
EN1	10May60	3822, 3823	3.01 ± 0.38	24.7 ± 3.1	511 ± 10
EN2	10May60	3824, 3825	8.96 ± 1.13	73.5 ± 9.7	699 ± 13
EN3	10May60	3826, 3827	3.77 ± 0.49	30.9 ± 4.0	769 ± 18
EN4	11May60	3828, 3829	1.47 ± 0.16	12.1 ± 1.3	942 ± 31
EN5	13May60	3830, 3831	≤ 0.030	≤ 0.249	526 ± 17
EN6	13May60	3832, 3833	4.32 ± 0.38	35.8 ± 3.2	822 ± 27
EN7	13May60	3834, 3835	5.03 ± 0.52	41.7 ± 4.3	1014 ± 39
EN8	14May60	3836, 3837	7.17 ± 0.70	59.6 ± 5.8	724 ± 26
EN9	17May60	3838, 3839	1.30 ± 0.14	10.9 ± 1.2	389 ± 15
EN10	17May60	3840, 3841	9.90 ± 1.22	83.2 ± 10.0	1054 ± 15
EN11	17May60	3842, 3843	13.5 ± 1.7	113 ± 14	999 ± 26
ES1	12May60	3849, 3853, 3865 3869	1.09 ± 0.12	9.00 ± 0.99	401 ± 20

Table 4.9 (continued)

Composite or Sample No.	Date	Sample Numbers	$\frac{\text{dpm Rh}^{102}}{1000 \text{ SCF}}$		$\frac{\text{dpm Be}^7}{1000 \text{ SCF}}$
			Coll. Date	12 Aug 58	
ES2	12May60	3850, 3854, 3866, 3870	0.359 ± 0.040	2.97 ± 0.33	255 ± 13
ES3	12May60	3851, 3855, 3867, 3871	0.205 ± 0.023	1.69 ± 0.19	247 ± 12
ES4	12May60	3852, 3856, 3868, 3872	7.92 ± 0.87	65.4 ± 7.2	257 ± 13
EN12	20May60	3876, 3877	--		745 ± 34
EN13	20May60	3878, 3879	--		469 ± 22
EN14	20May60	3880, 3881	8.05 ± 0.89	68.3 ± 7.5	1001 ± 47
ES5	19May60	3894, 3895	2.19 ± 0.26	18.5 ± 2.2	635 ± 25
ES6	19May60	3896, 3898, 3899	≤ 0.072	≤ 0.608	618 ± 30
ES7	19May60	3900, 3902, 3903	0.400 ± 0.047	3.38 ± 0.40	522 ± 26
EN15	24May60	3904, 3905	2.18 ± 0.24	18.7 ± 2.1	536 ± 25
EN17	24May60	3908, 3909	5.07 ± 0.56	43.6 ± 4.8	1001 ± 50
3911	23May60	--	--		842 ± 22
3913	23May60	--	--		539 ± 18
3930	31May60	--	--		712 ± 20
3934	31May60	--	--		452 ± 14
ES12	6Jun60	3953, 3954, 3955, 3956	3.32 ± 0.37	29.7 ± 3.3	689 ± 34
3960	10Jun60	--	0.888 ± 0.099	8.04 ± 0.90	276 ± 7
3962	10Jun60	--	1.61 ± 0.19	14.6 ± 1.7	243 ± 8
3964	10Jun60	--	3.66 ± 0.42	33.1 ± 3.8	549 ± 14
ES13	8Jun60	3974, 3978, 3982, 3986	--		555 ± 8
ES14	8Jun60	3975, 3979, 3983, 3987	--		346 ± 7
ES15	8Jun60	3976, 3980, 3984, 3988	--		221 ± 6
ES16	8Jun60	3977, 3981, 3985, 3989	0.358 ± 0.041	3.22 ± 0.37	155 ± 8

Table 4.10 Phosphorus-32 Analyses

<u>Composite or Sample No.</u>	<u>Date</u>	<u>Sample Numbers</u>	<u>dpm P^{32} 1000 SCF</u>	<u>dpm Be^7 dpm P^{32}</u>	<u>atoms P^{32} g of air</u>	<u>atoms Be^7 atoms P^{32}</u>
A2	5Apr60	3535, 3536, 3537, 3538	12.5 ± 2.5	63.4	10.9	231
A6	7Apr60	3577, 3578, 3579, 3580	3.04 ± 0.45	91.4	2.64	333
A7	7Apr60	3585, 3586, 3587	6.44 ± 0.80	67.1	5.60	244
A12	12Apr60	3627, 3628, 3629	4.35 ± 0.50	36.8	3.78	134
A13	14Apr60	3635, 3636, 3637 3638, 3639, 3640	11.1 ± 1.4	62.3	9.65	227
A14	14Apr60	3645, 3646, 3647, 3648, 3649, 3650	5.03 ± 0.89	87.5	4.37	319
A18	20Apr60	3676, 3677, 3678, 3679	12.6 ± 1.7	50.8	10.9	185
A21	21Apr60	3696, 3697, 3698	4.68 ± 1.17	70.3	4.07	256
A22	26Apr60	3706, 3707, 3708, 3709	10.6 ± 1.6	65.0	9.21	237
A23	26Apr60	3714, 3715, 3716, 3717, 3718	14.3 ± 3.5	44.3	12.4	161
A26	27Apr60	3743, 3744, 3745, 3746	9.42 ± 0.69	65.2	8.19	237
A29	3May60	3762, 3763, 3764, 3765	7.14 ± 0.96	55.5	6.20	202
A30	3May60	3772, 3773, 3774, 3775, 3776, 3777	6.13 ± 0.76	69.2	5.33	252
A31	5May60	3784, 3785, 3786, 3787, 3788, 3789	3.10 ± 0.44	79.7	2.69	290
EN1	10May60	3822, 3823	8.13 ± 1.61	62.9	7.06	229
EN2	10May60	3824, 3825	10.5 ± 1.5	66.6	9.12	242
EN3	10May60	3826, 3827	12.5 ± 2.7	61.5	10.9	224
EN10	17May60	3840, 3841	12.6 ± 1.6	83.7	10.9	305
EN11	17May60	3842, 3843	16.1 ± 1.4	62.0	14.0	226
3911	23May60	--	5.64 ± 0.93	149	4.90	542
3913	23May60	--	9.97 ± 1.99	54.0	8.66	197
3930	31May60	--	11.2 ± 1.4	63.8	9.73	232
3934	31May60	--	5.72 ± 0.25	79.0	4.97	288
3962	10Jun60	--	7.09 ± 0.68	34.3	6.16	125
3964	10Jun60	--	7.80 ± 0.40	70.4	6.78	256

ACTIVITIES OF CESIUM-137 AND PLUTONIUM

Among the potentially hazardous constituents of world-wide fallout are the long lived, gamma emitting, fission product cesium-137 (29 years) and the very long lived isotopes of plutonium, plutonium-239 (24,300 years) and plutonium-240 (6,600 years), which may be original constituents of some weapons and may be formed by neutron activation of uranium-238 in others. Over 300 HASP samples were analyzed for cesium-137 and plutonium. The analytical results for cesium-137, in dpm/1000 SCF on collection date, and the observed $\text{Cs}^{137}/\text{Sr}^{90}$ ratios are given in Table 4.11. Equivalent data for plutonium are given in Table 4.12. The plutonium was alpha counted and it was not possible to determine the relative contributions to the activity of plutonium-239 and plutonium-240 because their alphas are similar in energy.

Table 4.11 Cesium-137 Analyses

Date	Sample No.	dpm 1000 SCF	Cs ¹³⁷ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Cs ¹³⁷ Sr ⁹⁰
5Nov57	23	1490 + 46	1.8	9May58	491	407 + 25	2.3
	24	338 ± 20	1.6		492	338 ± 26	2.8
12Nov57	50	412 + 13	2.7	13Jun58	538	32.4 + 14	2.0
	51	495 ± 17	2.4		539	275 ± 4	1.5
22Nov57	89	1650 + 56	1.7		540	251 ± 8	2.2
	91	1530 ± 46	1.6		541	341 ± 9	2.0
26Nov57	104	187 + 5	2.3	17Jun58	542	4.69 + 0.25	2.8
	106	138 ± 11	2.3		543	73.0 ± 1.2	2.1
4Feb58	197	231 + 9	1.4		544	162 ± 5	2.9
	198	334 ± 16	1.8		545	208 ± 24	2.4
	200	193 ± 10	0.9		547	420 ± 14	2.8
	224	727 ± 17	1.7		548	372 ± 77	2.1
7Feb58	226	1090 + 20	1.6	1Jul58	574	(106 + 2)	(57.9)
	227	1700 ± 25	1.5		575	(91.7 ± 2.7)	(31.0)
	228	1650 ± 30	1.6	19Sep58	963	273 ± 7	1.6
6Mar58	283	260 + 13	1.9	27Sep58	964	170 ± 6	0.9
	284	272 ± 16	2.2	1Oct58	967	179 ± 4	1.2
	285	255 ± 19	2.0	3Oct58	645	168 + 7	2.4
	286	300 ± 26	2.6		646	171 ± 10	2.6
	287	294 ± 21	1.8		654	1770 ± 50	1.4
	288	290 ± 32	1.9	7Oct58	667	2450 ± 61	1.3
	289	309 ± 19	2.2	10Oct58	674	1450 + 25	1.1
	290	204 ± 18	1.4		675	1440 ± 40	1.3
25Mar58	349	368 + 15	1.9		676	1180 ± 41	1.2
	350	347 ± 15	1.6		677	714 ± 28	1.8
1Apr58	375	356 + 16	1.4	14Oct58	688	1160 + 32	1.3
	380	337 ± 11	1.2		689	1910 ± 65	2.1
	381	463 ± 11	1.9		690	1160 ± 29	0.9
	384	555 ± 20	2.2		691	1130 ± 32	2.0
	385	518 ± 16	2.3	17Oct58	694	870 + 30	1.5
4Apr58	404	941 + 26	2.1		695	836 ± 27	1.8
	405	457 ± 22	2.3		696	1750 ± 52	1.4
					697	1300 ± 28	1.2
					699	623 ± 22	1.1
					705	80.9 ± 10.5	1.9

Table 4.11 (continued)

Date	Sample No.	dpm 1000 SCF	$\frac{Cs^{137}}{Sr^{90}}$	Date	Sample No.	dpm 1000 SCF	$\frac{Cs^{137}}{Sr^{90}}$
19Oct58	716	770 $\pm$ 26	0.8	9Jan59	994	440 $\pm$ 15	2.8
	717	894 $\pm$ 18	2.3		995	506 $\pm$ 17	2.7
	719	990 $\pm$ 32	1.7	13Jan59	1004	29.6 $\pm$ 1.2	2.2
22Oct58	726	566 $\pm$ 15	2.5		1006	76.0 $\pm$ 2.4	2.1
	729	150 $\pm$ 6	1.7	16Jan59	1019	124 $\pm$ 5	1.4
	732	1340 $\pm$ 45	1.3	3Feb59	1062	76.5 $\pm$ 2.4	1.6
23Oct58	740	192 $\pm$ 7	1.5		1086	127 $\pm$ 4	2.1
	741	108 $\pm$ 4	1.9	10Feb59	1091	53.5 $\pm$ 1.8	2.3
29Oct58	748	172 $\pm$ 15	2.3	20Feb59	1129	471 $\pm$ 14	1.6
	751	2330 $\pm$ 61	1.3		1131	344 $\pm$ 11	1.9
	752	518 $\pm$ 17	1.3	6Mar59	1192	403 $\pm$ 52	1.9
	755	522 $\pm$ 12	2.2	10Mar59	1210	95.4 $\pm$ 2.7	1.7
	760	336 $\pm$ 8	1.4	17Mar59	1235	119 $\pm$ 4	2.0
5Nov58	771	766 $\pm$ 13	1.8		1242	5.38 $\pm$ 0.32	1.9
	772	661 $\pm$ 18	1.7	20Mar59	1255	378 $\pm$ 18	1.9
	773	546 $\pm$ 19	1.5		1259	112 $\pm$ 4	2.1
	774	546 $\pm$ 23	1.4		1265	18.1 $\pm$ 0.7	1.1
	775	515 $\pm$ 17	1.3	3Apr59	1311	127 $\pm$ 6	1.9
7Nov58	777	755 $\pm$ 35	1.7		1312	111 $\pm$ 2	2.0
15Nov58	798	1170 $\pm$ 47	1.8		1315	14.8 $\pm$ 0.6	1.8
18Nov58	809	312 $\pm$ 10	1.6		1317	48.9 $\pm$ 0.7	2.2
20Nov58	822	318 $\pm$ 11	1.8	10Apr59	1339	339 $\pm$ 11	1.9
28Nov58	864	140 $\pm$ 9	2.0		1340	305 $\pm$ 8	2.0
3Nov58	872	209 $\pm$ 10	2.0		1342	100 $\pm$ 1	2.0
19Dec58	942	701 $\pm$ 14	1.4		1344	94.5 $\pm$ 1.2	1.6
6Jan59	975	82.3 $\pm$ 2.8	1.8		1345	72.9 $\pm$ 1.5	1.3
	976	105 $\pm$ 5	2.1	14Apr59	1354	198 $\pm$ 6	1.5
9Jan59	991	206 $\pm$ 8	3.1		1362	351 $\pm$ 11	1.6

Table 4.11(continued)

Date	Sample No.	dpm 1000 SCF	$\frac{Cs^{137}}{Sr^{90}}$	Date	Sample No.	dpm 1000 SCF	$\frac{Cs^{137}}{Sr^{90}}$
14Apr59	1364	345 + 10	1.5	16Jun59	1662	87.0 + 1.0	1.4
	1367	491 $\pm$ 14	1.8		1670	20.4 $\pm$ 0.6	1.7
28Apr59	1402	294 $\pm$ 28	1.9		1672	143 $\pm$ 5	1.6
5May59	1430	537 $\pm$ 55	1.8	1Jul59	1737	165 + 4	1.1
8May59	1435	124 + 4	1.9		1741	334 $\pm$ 6	1.3
	1436	120 $\pm$ 2	1.9	3Jul59	1757	529 + 4	1.8
	1437	80.5 $\pm$ 2.7	2.0		1766	361 $\pm$ 4	1.5
	1439	139 $\pm$ 4	2.1	7Jul59	1787	112 + 4	1.2
	1442	114 $\pm$ 5	1.8		1791	254 $\pm$ 4	3.2
15May59	1457	36.9 $\pm$ 1.4	1.7		1793	101 $\pm$ 1	1.5
	1458	91.1 $\pm$ 1.0	2.2	14Jul59	1836	596 + 5	1.7
17May59	1462	253 $\pm$ 14	1.9		1837	504 $\pm$ 16	1.6
20May59	1473	223 + 17	2.1	21Jul59	1892	124 + 1	1.6
	1474	144 $\pm$ 5	1.9		1894	110 $\pm$ 4	1.6
	1477	251 $\pm$ 5	1.8		1897	327 $\pm$ 2	2.0
	1478	280 $\pm$ 8	2.0		1901	425 $\pm$ 14	2.2
2Jun59	1526	430 $\pm$ 15	1.9		1908	392 $\pm$ 11	1.8
	1527	472 $\pm$ 17	1.5		1930	71.6 $\pm$ 1.3	1.5
	1528	143 $\pm$ 14	1.0		1932	90.6 $\pm$ 1.6	1.4
	1529	160 $\pm$ 7	1.5		1937	69.8 $\pm$ 1.1	2.1
	1530	62.2 $\pm$ 2.4	0.5	24Jul59	1911	263 + 3	1.5
9Jun59	1564	33.6 $\pm$ 0.8	1.6		1915	422 $\pm$ 2	2.0
	1570	69.1 $\pm$ 8.6	2.7		1918	430 $\pm$ 4	2.0
14Jun59	1594	250 + 60	1.8		1921	151 $\pm$ 2	1.9
	1614	169 $\pm$ 6	0.7		1925	258 $\pm$ 1	1.9
16Jun59	1618	242 + 8	2.2		1926	372 $\pm$ 1	2.2
	1620	241 $\pm$ 18	1.7		1928	303 $\pm$ 1	2.0
	1627	363 $\pm$ 11	1.6	26Jul59	1944	49.6 + 1.9	0.4
	1629	422 $\pm$ 15	1.6		1953	155 $\pm$ 2	0.9
	1632	415 $\pm$ 14	1.5		1961	229 $\pm$ 4	1.0
	1660	70.7 $\pm$ 1.2	2.0	28Jul59	1972	185 + 1	1.4
					1977	154 $\pm$ 2	1.1
					1978	156 $\pm$ 2	0.8

Table 4.11 (continued)

Date	Sample No.	dpm 1000 SCF	$\frac{\text{Cs}^{137}}{\text{Sr}^{90}}$	Date	Sample No.	dpm 1000 SCF	$\frac{\text{Cs}^{137}}{\text{Sr}^{90}}$
28Jul59	1980	422 $\pm$ 14	1.7	18Sep59	2136	120 $\pm$ 3	1.6
	1984	161 $\pm$ 4	2.0		2137	267 $\pm$ 3	1.8
4Aug59	2020	433 $\pm$ 10	1.6		2138	272 $\pm$ 9	1.6
6Aug59	2052	135 $\pm$ 3	1.8		2139	138 $\pm$ 1	0.9
7Aug59	2038	294 $\pm$ 3	1.7	22Sep59	2157	44.6 $\pm$ 1.0	1.6
	2039	280 $\pm$ 3	1.8	25Sep59	2169	281 $\pm$ 3	1.6
8Aug59	2058	168 $\pm$ 3	1.5	30Sep59	2176	376 $\pm$ 4	1.7
	2062	461 $\pm$ 5	1.9		2177	124 $\pm$ 2	1.8
	2065	454 $\pm$ 5	1.3		2184	313 $\pm$ 3	1.6
21Aug59	2067	16.2 $\pm$ 0.2	0.8		2189	340 $\pm$ 2	1.6
	2072	46.8 $\pm$ 0.3	1.2		2190	339 $\pm$ 3	1.4
	2077	43.7 $\pm$ 0.6	1.8	1Oct59	2227	116 $\pm$ 1	1.3
	2342	28.4 $\pm$ 0.3	0.9	6Oct59	2253	325 $\pm$ 3	1.3
15Sep59	2080	204 $\pm$ 7	1.7		2256	417 $\pm$ 4	1.8
	2082	218 $\pm$ 2	1.7		2259	369 $\pm$ 3	2.1
	2084	225 $\pm$ 2	1.7		2261	267 $\pm$ 3	1.6
	2085	321 $\pm$ 11	1.7	8Oct59	2280	13 $\pm$ 2	1.7
	2087	357 $\pm$ 29	1.9	13Oct59	2356	83.5 $\pm$ 0.8	0.9
	2092	403 $\pm$ 28	2.2	14Oct59	2307	9.93 $\pm$ 0.32	2.0
	2102	385 $\pm$ 3	2.1		2312	61.8 $\pm$ 0.4	1.8
	2105	326 $\pm$ 2	1.4		2313	39.4 $\pm$ 1.1	1.4
16Sep59	2095	313 $\pm$ 4	1.8		2318	52.8 $\pm$ 0.8	1.7
	2096	384 $\pm$ 4	1.7		2319	50.4 $\pm$ 0.9	1.8
	2097	306 $\pm$ 3	1.6	15Oct59	2367	335 $\pm$ 4	1.7
18Sep59	2121	228 $\pm$ 2	1.8		2368	333 $\pm$ 4	1.6
	2122	236 $\pm$ 3	1.6		2369	355 $\pm$ 5	1.7
	2125	249 $\pm$ 1	1.4		2370	331 $\pm$ 5	1.5
	2126	319 $\pm$ 3	1.7		2371	358 $\pm$ 5	1.7
	2127	345 $\pm$ 11	2.0		2373	440 $\pm$ 45	1.8
	2129	267 $\pm$ 2	1.6		2374	447 $\pm$ 5	1.8
	2131	161 $\pm$ 3	1.8		2376	288 $\pm$ 2	1.4
	2132	94.3 $\pm$ 1.4	1.4				
	2135	138 $\pm$ 2	1.8				

Table 4.11(continued)

Date	Sample No.	dpm 1000 SCF	Cs ¹³⁷ Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Ca ¹³⁷ Sr ⁹⁰
16Oct59	2325	286 ± 2	1.6	13Nov59	2615	180 ± 2	1.7
	2326	411 ± 2	1.9		2616	255 ± 2	1.7
	2327	295 ± 63	1.6				
	2328	738 ± 3	3.7	17Nov59	2642	287 ± 2	1.6
	2329	371 ± 4	2.0				
	2337	264 ± 3	2.0	19Nov59	2647	293 ± 3	2.0
	2339	333 ± 5	2.3		2658	303 ± 22	1.8
	2340	253 ± 5	1.5				
				24Nov59	2708	76.0 ± 0.8	1.7
20Oct59	2385	56.0 ± 1.0	2.3				
	2410	392 ± 4	1.8	1Dec59	2750	78.3 ± 1.6	1.5
	2412	361 ± 3	1.9		2751	233 ± 2	2.2
	2415	498 ± 4	1.8				
22Oct59	2426	209 ± 3	1.8	3Dec59	2774	229 ± 2	2.1
					2781	309 ± 3	1.8
27Oct59	2458	220 ± 6	1.1	8Dec59	2805	324 ± 2	1.7
	2460	277 ± 3	1.2				
28Oct59	2469	263 ± 3	1.3	11Dec59	2869	374 ± 4	1.6
30Oct59	2506	149 ± 2	1.8	22Dec59	2947	245 ± 3	1.4
6Nov59	2533	238 ± 2	1.9	26Jan60	3166	94.3 ± 2.0	1.5
	2534	254 ± 3	1.6				
	2535	293 ± 3	1.6	11Feb60	3296	299 ± 5	1.4
	2536	213 ± 2	1.6				
	2537	326 ± 2	1.9	16Feb60	3312	195 ± 2	2.2
	2538	247 ± 2	1.5				
	2540	336 ± 3	2.0	18Feb60	3341	142 ± 1	1.6
	2549	351 ± 4	1.8				
	2550	348 ± 4	1.8	19Feb60	3353	169 ± 2	1.4
	2551	313 ± 4	1.6				
	2569	376 ± 4	1.8	25Feb60	3386	252 ± 2	1.3
	2571	444 ± 5	1.8				
	2572	370 ± 3	1.5	24Mar60	3494	262 ± 3	1.1
10Nov59	2580	354 ± 3	2.1	29Mar60	3498	59.6 ± 0.5	1.3
	2583	225 ± 4	1.9		3501	39.3 ± 0.2	0.6
12Nov59	2637	106 ± 1	1.7	31Mar60	3525	139 ± 2	1.9
	2640	246 ± 2	1.7		3526	73.8 ± 0.9	0.9

Table 4.12 Plutonium Analyses

Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr 90	Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr 90
4Oct57	15	≤ 0.04	≤ 0.5	25Mar58	352	3.24 ± 0.39	1.6
5Nov57	23	15.0 ± 0.6	1.8		353	3.26 ± 0.24	1.6
	31	2.41 ± 0.12	1.2		354	3.70 ± 0.03	1.7
8Nov57	44	1.73 ± 0.12	1.1		355	3.17 ± 0.24	1.4
12Nov57	48	1.79 ± 0.04	1.6		356	7.25 ± 0.64	1.8
	49	2.11 ± 0.18	1.2		357	13.1 ± 0.2	1.9
	50	3.73 ± 0.23	2.4	4Apr58	404	7.28 ± 0.47	1.6
	51	4.77 ± 0.03	2.3	8Apr 58	410	7.78 ± 0.55	1.0
	52	1.76 ± 0.10	1.8	9May 58	491	3.73 ± 0.22	2.1
	53	2.14 ± 0.33	1.9		492	3.19 ± 0.19	2.6
	55	4.27 ± 0.50	1.3		493	2.74 ± 0.26	2.1
22Nov57	88	5.66 ± 0.23	1.8		494	2.01 ± 0.14	2.0
	90	27.1 ± 0.3	1.2		495	1.66 ± 0.14	2.5
	91	13.0 ± 0.1	1.3		496	3.34 ± 0.17	2.2
4Feb58	222	4.90 ± 0.02	2.0		497	1.98 ± 0.14	1.2
	223	5.50 ± 0.10	1.7		498	3.98 ± 0.34	2.4
	224	5.70 ± 0.31	1.3		499	2.97 ± 0.29	2.2
7Feb58	226	9.64 ± 0.53	1.4		500	2.05 ± 0.10	1.7
	227	12.5 ± 0.8	1.1		501	3.91 ± 0.10	1.9
	228	12.0 ± 0.7	1.1		502	1.57 ± 0.02	2.5
6Mar58	283	1.73 ± 0.13	1.3		503	1.64 ± 0.01	2.1
	284	2.43 ± 0.15	2.0		504	1.70 ± 0.10	2.4
	285	2.01 ± 0.13	1.6		505	0.82 ± 0.10	2.4
	286	2.58 ± 0.21	2.2	13Jun58	506	0.037 ± 0.017	2.1
	287	2.83 ± 0.18	1.7		538	0.176 ± 0.013	1.1
	288	2.49 ± 0.17	1.6		540	2.93 ± 0.18	2.5
	289	2.74 ± 0.19	2.0		541	3.37 ± 0.17	2.0
	290	2.74 ± 0.18	1.8	17Jun58	542	0.049 ± 0.005	3.0
25Mar58	347	3.10 ± 0.15	1.6		543	0.76 ± 0.05	2.2
	348	3.34 ± 0.24	1.9		544	1.65 ± 0.08	3.0
	349	3.49 ± 0.29	1.8		545	1.70 ± 0.09	2.0
	350	3.94 ± 0.17	1.8		547	3.40 ± 0.20	2.3
	351	2.31 ± 0.13	1.6		548	4.17 ± 0.25	2.4
					549	4.92 ± 0.30	2.6

Table 4.12 (continued)

Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr 90	Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr 90
8Jul58	594	2.85 ± 0.21	1.9	22Oct58	727	2.52 ± 0.25	2.0
	596	4.11 ± 0.34	2.1		728	1.85 ± 0.31	4.0
	597	3.20 ± 0.08	2.1		729	1.60 ± 0.12	1.8
12Sep58	602	5.72 ± 0.20	1.3		730	0.25 ± 0.08	0.7
	603	5.41 ± 0.43	2.4		731	0.51 ± 0.02	1.2
	604	6.72 ± 0.07	4.2		732	11.2 ± 0.3	1.1
	961	1.77 ± 0.05	2.4		733	2.58 ± 0.18	1.4
17Sep58	962	2.60 ± 0.10	2.1	23Oct58	740	1.72 ± 0.01	1.4
19Sep58	618	1.19 ± 0.17	0.4		741	1.74 ± 0.35	3.0
	619	1.02 ± 0.02	2.0		742	2.53 ± 0.38	3.3
	620	1.15 ± 0.10	1.2	29Oct58	751	11.1 ± 0.6	0.6
	621	0.97 ± 0.05	1.2		752	3.61 ± 0.27	0.9
	963	3.17 ± 0.16	1.8		753	5.26 ± 0.27	1.9
24Sep58	965	1.42 ± 0.02	2.7		755	4.99 ± 0.12	2.1
27Sep58	964	3.92 ± 0.02	2.1		756	2.25 ± 0.01	1.8
	966	1.34 ± 0.02	1.9		757	1.93 ± 0.15	0.9
30Sep58	638	1.78 ± 0.18	1.8		759	1.19 ± 0.03	1.0
	639	1.98 ± 0.09	2.0		760	2.79 ± 0.13	1.2
	640	1.25 ± 0.28	1.6	5Nov58	773	4.33 ± 0.37	1.2
1Oct58	967	1.82 ± 0.08	1.2		774	4.15 ± 0.33	1.0
2Oct58	968	0.58 ± 0.04	0.5		775	3.75 ± 0.31	1.0
3Oct58	645	2.38 ± 0.25	3.5	7Nov58	780	3.36 ± 0.13	1.3
	654	11.7 ± 0.6	0.9	15 Nov58	794	2.13 ± 0.04	2.9
7Oct58	658	3.38 ± 0.12	1.7		795	1.36 ± 0.01	3.2
	668	7.93 ± 0.10	0.8	16Nov58	801	0.82 ± 0.09	1.9
10Oct58	674	7.02 ± 0.37	0.5		802	1.23 ± 0.15	2.5
	675	9.02 ± 0.16	0.8		803	1.26 ± 0.13	2.5
	678	1.51 ± 0.01	1.6	18Nov58	805	1.92 ± 0.20	2.3
14Oct58	688	5.85 ± 0.27	0.7		806	6.63 ± 0.46	1.4
	689	6.88 ± 0.08	0.8		807	6.04 ± 0.41	2.2
	690	5.52 ± 0.11	0.4		808	7.39 ± 0.48	2.8
	691	4.57 ± 0.07	0.8		809	3.64 ± 0.06	1.8
17Oct58	696	3.25 ± 0.16	0.3		810	2.82 ± 0.32	5.6
	697	8.23 ± 0.63	0.7		811	3.20 ± 0.32	7.0
					812	2.04 ± 0.07	1.8
				21Nov58	827	6.34 ± 0.44	10.2
					830	8.32 ± 0.57	12.5
				12Dec58	895	0.92 ± 0.10	1.4
					896	0.81 ± 0.12	1.5
					897	0.66 ± 0.01	1.5

Table 4.12 (continued)

Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr ⁹⁰
12Dec58	898	0.78 ± 0.09	1.3	14Feb59	1111	4.10 ± 0.32	1.5
	899	1.16 ± 0.001	2.7		1112	3.47 ± 0.06	1.4
	900	1.48 ± 0.02	3.0		1113	3.97 ± 0.10	2.4
	902	2.22 ± 0.06	2.1		1114	2.18 ± 0.02	1.1
	903	4.77 ± 0.18	1.4				
	904	4.11 ± 0.35	1.6	3Mar59	1171	0.88 ± 0.21	1.5
	906	1.94 ± 0.05	1.1		1172	2.42 ± 0.06	4.7
	907	2.18 ± 0.08	1.4		1173	1.30 ± 0.02	1.6
	908	2.25 ± 0.10	1.2		1174	1.42 ± 0.05	1.4
	909	3.46 ± 0.12	1.7		1175	0.05 ± 0.02	2.2
	910	3.32 ± 0.16	1.6		1176	0.80 ± 0.06	7.2
					1179	3.83 ± 0.49	1.5
9Jan59	996	9.53 ± 0.79	6.1		1181	2.99 ± 0.02	1.2
					1182	1.96 ± 0.14	0.9
16Jan59	1007	2.02 ± 0.21	1.6		1183	2.87 ± 0.20	1.0
	1008	2.56 ± 0.03	1.7		1185	1.95 ± 0.36	0.9
	1009	4.94 ± 0.21	1.8				
	1010	3.48 ± 0.22	1.0	6Mar59	1194	2.87 ± 0.51	2.4
	1011	3.31 ± 0.25	0.9		1201	0.71 ± 0.03	3.9
	1012	7.56 ± 0.67	2.5		1202	4.10 ± 0.43	10.6
	1013	2.59 ± 0.05	0.8				
	1015	6.35 ± 0.55	10.5	10Mar59	1212	2.69 ± 0.33	2.3
	1016	4.31 ± 0.49	7.4		1216	1.71 ± 0.26	2.1
	1017	1.29 ± 0.03	2.0				
	1018	1.42 ± 0.14	1.3	27Mar59	1293	1.73 ± 0.39	2.9
	1019	1.42 ± 0.08	1.7		1294	1.58 ± 0.28	2.1
	1020	1.50 ± 0.08	1.5		1297	1.86 ± 0.36	2.7
	1021	1.27 ± 0.09	1.4		1298	1.88 ± 0.34	3.0
	1022	0.48 ± 0.05	1.6				
14Feb59	1099	1.06 ± 0.06	1.9	1Apr59	1303	3.98 ± 0.51	2.0
	1100	1.01 ± 0.16	1.7		1304	3.91 ± 0.59	1.7
	1101	0.88 ± 0.02	1.1	3Apr59	1310	2.68 ± 0.32	1.7
	1102	1.11 ± 0.13	1.2				
	1103	0.91 ± 0.16	1.9	7Apr59	1322	1.53 ± 0.24	3.8
	1104	1.24 ± 0.19	2.3		1330	2.37 ± 0.18	1.1
	1105	0.98 ± 0.04	1.6				
	1106	1.02 ± 0.12	2.1	14Apr59	1354	2.54 ± 0.04	1.9
	1108	3.95 ± 0.43	2.0		1355	2.37 ± 0.19	1.8
	1109	3.62 ± 0.05	2.0		1356	3.09 ± 0.09	1.9
	1110	3.71 ± 0.36	1.9		1357	3.20 ± 0.02	1.9

Table 4.12 (continued)

Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr ⁹⁰	Date	Sample No.	dpm 1000 SCF	Pu x 100 Sr ⁹⁰
14Apr59	1358	2.85 ± 0.03	1.9	2Jul59	1754	1.23 ± 0.31	2.0
	1359	6.59 ± 0.28	2.1		1755	1.16 ± 0.27	1.2
	1360	7.73 ± 0.29	2.0		1756	0.98 ± 0.29	1.2
	1361	3.29 ± 0.03	1.1				
	1362	3.77 ± 0.03	1.8	3Jul59	1757	3.92 ± 0.74	1.3
	1363	3.76 ± 0.05	1.7		1766	3.19 ± 0.42	1.3
	1364	3.59 ± 0.27	1.5				
	1365	2.44 ± 0.03	1.9	7Jul59	1787	1.02 ± 0.33	1.1
	1366	2.55 ± 0.08	1.9		1790	0.59 ± 0.14	1.2
	1367	3.39 ± 0.26	1.2		1792	0.73 ± 0.19	0.9
					1793	0.80 ± 0.34	1.2
21Apr59	1385	2.51 ± 0.23	2.3				
	1389	1.27 ± 0.22	0.6	14Jul59	1838	2.59 ± 0.49	1.1
					1839	5.22 ± 0.73	1.5
22Apr59	1663	3.14 ± 0.15	1.6				
	1664	3.54 ± 0.19	1.4	17Jul59	1853	1.57 ± 0.18	1.1
					1854	1.75 ± 0.35	1.0
25Apr59	1665	0.79 ± 0.05	1.5		1859	0.59 ± 0.17	1.3
	1666	2.86 ± 0.17	1.3		1860	0.56 ± 0.18	1.1
26Apr59	1394	3.71 ± 0.38	1.6	21Jul59	1932	1.07 ± 0.38	1.7
	1398	3.62 ± 0.38	1.8		1936	0.47 ± 0.13	1.2
					1937	0.58 ± 0.35	1.8
29Apr59	1668	3.27 ± 0.21	1.8				
				23Jul59	1938	0.08 ± 0.07	1.8
1May59	1417	2.33 ± 0.24	2.0		1939	0.06 ± 0.07	2.3
					1940	0.69 ± 0.14	1.3
4May59	1424	1.58 ± 0.30	2.2		1941	0.55 ± 0.14	1.5
	1425	2.81 ± 0.42	1.8				
	1428	3.22 ± 0.54	1.8	24Jul59	1911	1.09 ± 0.32	0.6
					1915	3.78 ± 0.60	1.8
12May59	1449	2.59 ± 0.44	4.0		1918	2.84 ± 0.59	1.3
					1921	1.65 ± 0.26	2.1
20May59	1475	1.09 ± 0.24	2.0		1925	2.11 ± 0.20	1.6
	1479	2.43 ± 0.25	1.8		1926	2.89 ± 0.43	1.7
	1487	0.61 ± 0.11	3.3		1928	2.02 ± 0.23	1.3
1Jul59	1737	2.24 ± 0.41	1.6	26Jul59	1944	1.50 ± 0.38	1.2
	1741	2.01 ± 0.54	0.8		1953	2.21 ± 0.31	1.3
					1961	1.77 ± 0.55	0.8
2Jul59	1753	1.01 ± 0.26	2.0				

Table 4.12(continued)

Date	Sample No.	dpm 1000 SCF	$\frac{\text{Pu} \times 100}{\text{Sr} 90}$	Date	Sample No.	dpm 1000 SCF	$\frac{\text{Pu} \times 100}{\text{Sr} 90}$
28Jul59	1972	1.18 ± 0.22	0.9	14Oct59	2312	0.04 ± 0.03	0.1
	1977	1.33 ± 0.30	0.9		2313	0.29 ± 0.05	0.1
	1978	1.82 ± 0.29	0.9	15Oct59	2373	2.34 ± 0.29	1.0
	1979	3.71 ± 0.49	1.7		2376	2.56 ± 0.38	1.2
31Jul59	2001	1.20 ± 0.30	2.0	16Oct59	2324	1.90 ± 0.24	1.1
	2002	0.92 ± 0.22	1.6	20Oct59	2385	0.298 ± 0.159	1.2
	2004	2.64 ± 0.25	1.4		2410	2.00 ± 0.54	0.9
	2005	1.79 ± 0.30	1.1		2412	2.44 ± 0.42	1.3
8Aug59	2058	1.81 ± 0.60	1.9		2415	4.70 ± 0.72	1.7
	2062	2.78 ± 0.68	1.1	22Oct59	2426	1.00 ± 0.25	0.9
	2065	3.88 ± 0.77	1.3	27Oct59	2458	3.25 ± 0.67	1.6
21Aug59	2070	0.58 ± 0.05	1.7		2460	2.26 ± 0.67	1.0
	2072	0.67 ± 0.07	1.7	6Nov59	2572	3.40 ± 0.41	1.4
	2075	0.40 ± 0.09	1.4	10Nov59	2580	2.98 ± 0.35	1.8
	2320	0.31 ± 0.04	0.8		2583	1.84 ± 0.47	1.5
15Sep59	2102	2.28 ± 0.33	1.2	12Nov59	2637	0.866 ± 0.213	1.4
	2105	3.98 ± 0.60	1.7	17 Nov59	2642	4.07 ± 0.37	2.2
18Sep59	2125	1.59 ± 0.29	1.0	19Nov59	2647	2.16 ± 0.34	1.4
25Sep59	2169	2.12 ± 0.61	1.2	24Nov59	2708	0.66 ± 0.13	1.5
30Sep59	2180	0.754 ± 0.162	1.4	1Dec59	2750	1.21 ± 0.31	2.3
	2185	3.20 ± 0.37	1.4		2751	1.32 ± 0.36	1.2
	2189	3.86 ± 0.43	1.2	3Dec59	2774	1.15 ± 0.25	1.1
	2190	2.73 ± 0.45	1.2		2778	1.83 ± 0.29	1.3
1Oct59	2227	0.88 ± 0.23	1.0		2781	3.22 ± 0.66	1.9
6Oct59	2235	3.30 ± 0.31	1.4	8Dec59	2805	4.08 ± 0.41	2.1
	2253	3.47 ± 0.39	1.4	9Dec59	2835	1.47 ± 0.24	2.0
	2256	2.35 ± 0.65	1.0				
8Oct59	2280	1.39 ± 0.40	1.1				
13Oct59	2356	1.93 ± 0.26	2.2				

Table 4.12(continued)

Date	Sample No.	dpm <u>1000 SCF</u>	$\frac{\text{Pu} \times 100}{\text{Sr}^{90}}$
11Dec59	2869	9.65 ± 1.19	4.3
22Dec59	2947	1.74 ± 0.56	1.0
23Dec59	2957	3.51 ± 0.71	1.5
26Jan60	3166	1.30 ± 0.36	2.1
11Feb60	3296	4.89 ± 0.89	2.2
16Feb60	3312	2.51 ± 0.38	2.8
	3328	9.33 ± 1.21	3.9
18Feb60	3332	2.39 ± 0.39	2.1
	3341	1.34 ± 0.16	1.5
19Feb60	3353	1.09 ± 0.22	0.9
25Feb60	3386	0.99 ± 0.22	0.5
24Mar60	3494	3.82 ± 0.74	1.6
29Mar60	3498	0.50 ± 0.08	1.0
	3501	1.07 ± 0.12	1.7
31Mar60	3525	1.26 ± 0.21	1.7
	3526	0.47 ± 0.09	0.6
8Jun60	3979	1.41 ± 0.17	1.2

ACTIVITIES OF ACTIVATION PRODUCTS

A few measurements were made of calcium-45 and sodium-22 activities in HASP samples. Sodium-22 (2.6 years) is formed by neutron activation of sea salt during the explosion of a nuclear weapon in contact with marine waters. Calcium-45 (160 days) is formed by neutron activation of calcareous rocks, such as coral, during such explosions. It is likely that considerable quantities of these nuclides were produced by United States weapon tests in the Pacific during 1952, 1954, 1956 and 1958 and it is possible that measurable quantities are still present in the stratosphere, where they might be used as tracers for debris from U.S. surface shots.

Data from the analysis of a few individual HASP samples are presented in Table 4.13. The mean latitude and altitude of collection of the samples are included in the tables. It would appear that composites of several samples would have to be analyzed to give more usable information.

Table 4.13 Sodium-22 and Calcium-45 Analyses

<u>Sample No.</u>	<u>Date</u>	<u>Mean Latitude</u>	<u>Altitude (feet)</u>	<u>dpm Na²² 1000 SCF</u>	<u>dpm Ca⁴⁵ 1000 SCF</u>
755	29Oct58	41°N	55,000	93.2 ± 2.5	
831	22Nov58	41°N	55,000	18.7 ± 1.0	
935	19Dec58	35°N	64,500	≤ 3.8	
938	"	18°N	65,000	≤ 9.4	
939	"	5°S	65,000	≤ 2.5	≤ 59
1302	1Apr59	19°N	67,200	≤ 5.1	≤ 38
1429	5May59	7°N	68,700	≤ 3.3	≤ 32
1694	23Jun59	19°N	67,500	≤ 1.7	≤ 17
1834	14Jul59	1°N	65,600	≤ 2.7	≤ 15
1918	24Jul59	53°N	65,000	≤ 1.4	
1919	"	48°N	65,000		≤ 13

THE ANALYSIS OF COMPOSITE SAMPLES

The radiochemical procedures used for the analysis of HASP filter samples were designed for the measurement of the activities normally displayed by fission products in the stratosphere. When samples were collected in the troposphere instead or when activities were low due to long continued decay of short-lived fission products or to low production rates of tracer nuclides or cosmic ray products, it was often necessary to combine samples into composites to provide the higher activities needed for accurate and precise measurements.

Only occasionally, during the first four phases of Crowflight, was it necessary to combine samples in order to analyze them for strontium-90. During Phase 5, however, all samples collected at Eielson and many collected at Ezeiza were combined into composites because of the short exposure times which were common for such filters. The samples which were combined into composites for strontium-90 analysis are listed in Part A of Table 4.14. Strontium-89 was also measured in some of these composites.

Part B, of Table 4.14 lists those composites which were analyzed for strontium-89. The first half of this list includes samples which were measured only as composites. The samples listed in the second half were also analyzed individually for some nuclides, including strontium-90. For these latter samples the strontium-90 activities listed in Tables 4.2 and 4.3 are those of the individual samples. It was necessary to measure strontium-90 in the composites also, however, in order to calculate the strontium-89 concentrations. The strontium-90 data for the composites, in dpm/1000 SCF, are given in Part B of Table 4.14. They are not given or used elsewhere in this report.

As tungsten-185 activities in stratospheric air decreased during 1959 it

became evident that composites would have to be analyzed if usable information was to be obtained. Hence a large number of such composites were prepared and analyzed, especially for samples collected during late 1959 and early 1960. The samples used in these composites are listed in Part C of Table 4.14.

Twice composites were used for the analysis of zirconium-95, and most cerium-144 measurements made on samples collected during Phase 5 of Crowflight were made on composites. The samples involved are listed in Table 4.14, Parts D and E.

It has been mentioned above that most samples analyzed for rhodium-102, beryllium-7 and phosphorus-32 were analyzed as composites. These samples are listed in Tables 4.9 and 4.10.

Table 4.14 Samples Analyzed as Composites

A. Samples Analyzed for Strontium-90 as Composites

158, 159	1557, 1558	3840, 3841
173, 174	1559, 1560	3842, 3843
175, 176	1561, 1562	3876, 3877
371, 372	1571, 1572	3878, 3879
373, 374	1589, 1590	3880, 3881
415, 416	1635, 1636, 1637, 1638	3894, 3895
417, 418	3822, 3823	3896, 3898, 3899
435, 436	3824, 3825	3900, 3902, 3903
437, 438	3826, 3827	3904, 3905
1055, 1056, 1057, 1058	3828, 3829	3906, 3907
1063, 1064, 1065	3830, 3831	3908, 3909
1067, 1068, 1069, 1070	3832, 3833	3943, 3952
1351, 1352, 1353	3834, 3835	3945, 3946, 3950
1371, 1373	3836, 3837	3947, 3949
1452, 1453, 1454, 1455	3838, 3839	

B. Samples Analyzed for Strontium-89 as Composites

1. Strontium-90 analyzed only in the composite

371, 372
 373, 374
 1055, 1056, 1057, 1058
 1063, 1064, 1065
 1067, 1068, 1069, 1070
 1351, 1352, 1353
 1371, 1373
 1452, 1453, 1454, 1455
 1561, 1562

2. Strontium-90 analyzed in the individual samples as well as in the composite

	<u>Sr⁹⁰ activity of composite (dpm/1000 SCF)</u>
2141 - 2146	106 ± 3
2201 - 2204	33 ± 1
2205 - 2210	119 ± 2
2215 - 2220	245 ± 10
2221 - 2224	125 ± 1
2292 - 2297	95 ± 3
2345 - 2348	95 ± 4
2349 - 2351	171 ± 5
2416 - 2419	239 ± 1
2420 - 2425	84 ± 3
2515 - 2518	79 ± 5
2519 - 2524	≤ 13

C. Samples Analyzed for Tungsten-185 as Composites

1055, 1056, 1057, 1058	2936-2939	3312-3315	3557-3559
1063, 1064, 1065	2941-2944	3317-3320	3560-3562
1067, 1068, 1069, 1070	2947-2950	3322-3325	3568-3571
1351, 1352, 1353	2951-2954	3328-3331	3572-3575
1371, 1373	2956-2959	3332-3335	3577-3580
1557, 1558	2960-2963	3336-3338	3581-3584
2201, 2202, 2203, 2204	2966-2969	3339-3341	3588-3590
2205-2210	2970-2973	3348-3351	3601-3604
2215-2220	3062-3065	3368-3371	3605-3607
2221, 2222, 2223, 2224	3068-3071	3372-3374	3608-3610
2292-2297	3092-3095	3375-3377	3611-3614
2345-2348	3096-3098	3378-3381	3615-3617
2349-2351	3099-3101	3382-3385	3618-3620
2416-2419	3103-3105	3388-3391	3621-3624
2420-2425	3106-3109	3402-3405	3627-3629
2515-2518	3113-3115	3406-3408	3631-3634
2519-2524	3118-3120	3409-3411	3635-3637
2715-2718	3122-3125	3412-3415	3638-3640
2719-2722	3128-3130	3418-3421	3641-3644
2725-2728	3132-3135	3422-3425	3645-3647
2730-2732	3138, 3139, 3141	3426-3429	3648-3650
2735-2738	3153-3155	3430-3433	3651-3654
2765-2768	3156-3159	3455-3457	3656-3659
2771-2774	3162-3165	3458-3460	3660-3663
2781-2784	3166-3168	3461-3463	3664-3666
2785-2788	3176-3179	3464-3466	3667-3669
2792-2795	3180-3182	3469-3472	3670-3673
2798-2800	3196-3198	3479-3482	3676-3679
2806-2808	3200-3203	3483-3484	3680-3683
2812-2814	3206-3209	3487-3489	3684-3689
2817-2820	3210-3213	3490-3492	3690-3693
2873-2876	3217-3219	3494-3496	3696-3698
2877-2879	3242-3244	3505-3507	3706-3709
2880-2882	3246-3249	3510-3512	3710-3712
2883-2886	3280-3282	3514-3517	3714-3715
2900-2903	3283-3285	3519-3521	3716-3718
2904-2906	3287-3290	3523-3525	3719-3722
2907-2909	3293-3296	3526-3527	3730-3732
2910-2913	3297-3300	3539-3542	3733-3736
2914-2916	3302-3305	3549-3552	3737-3739
2917-2919	3309-3311	3553-3556	3743-3746

C. (continued)

3747-3748	3802-3805	3896, 3898, 3899
3749-3750	3808-3810	3900, 3902, 3903
3758-3761	3812-3815	3906-3907
3762-3764	3819-3821	3916, 3918, 3919
3765-3767	3849, 3853, 3865, 3869	3943, 3952
3768, 3769, 3771	3850, 3854, 3866, 3870	3945, 3946, 3950
3772-3774	3851, 3855, 3867, 3871	3947, 3949
3775-3777	3852, 3856, 3868, 3872	3953-3954
3784-3786	3876, 3877	3955-3956
3794-3795	3878, 3879	3974, 3978, 3982, 3986
3798-3799	3880, 3881	3975, 3979, 3983, 3987
3800-3801	3894, 3895	3976, 3980, 3984, 3988
		3977, 3981, 3985, 3989

D. Samples Analyzed for Zirconium-95 as Composites

175, 176
187, 188

E. Samples Analyzed for Cerium-144 as Composites

3822-3823	3838-3839	3900, 3902, 3903
3824-3825	3840-3841	3904, 3905
3826-3827	3842-3843	3906-3907
3828-3829	3876-3877	3908-3909
3830-3831	3878-3879	3916, 3918, 3919
3832-3833	3880-3881	3943, 3952
3834-3835	3894-3895	3945, 3946, 3950
3836-3837	3896, 3898, 3899	3947, 3949

DUPLICATE ANALYSES OF HASP SAMPLES

In the evaluation of the precision of HASP radiochemical measurements (Chapter 3) reference was made to the duplicate analysis of a number of samples. Table 4.15 is a list of samples which were analyzed in duplicate for strontium-90 (Part A), strontium-89 (Part B), zirconium-95 (Part C), cerium-144 (Part D), tungsten-185 (Part E), tungsten-181 (Part F), barium-140 (Part G), and cesium-137 (Part H). The notations QI, QII, etc. indicate that two or more quadrants of the sample were analyzed separately, and that the quadrant designated was also analyzed in duplicate.

Often analytical results would fail to agree with predicted concentrations, or samples collected within the same region would differ greatly in activity, and analytical errors would be suspected. When this occurred the samples were sometimes reanalyzed, especially if it was the strontium-90 data which showed the discrepancy. When the reanalyses were completed the data were examined and either the original number was discarded or both the original and the reanalysis were accepted and were averaged. Samples which were reanalyzed in this way for strontium-90 are listed in Table 4.16. A few samples which were also reanalyzed for strontium-89 are listed in Table 4.17, and those reanalyzed for other nuclides are listed in Table 4.18.

Table 4.15 Duplicate Analyses of Individual Sample Solutions

A. Samples Analyzed in Duplicate for Strontium-90

266	324	351 QII	1255	2327
268	325	352 QI	1270	2372
283	326	352 QII	1306	2405
284	327 QI	353 QI	1335	2494
285	327 QII	353 QII	1384	2539
286	328 QI	354 QI	1400	2572
287	328 QII	354 QII	1429	2601
288	329 QI	355 QI	1461	2658
289	329 QII	355 QII	1495	2755
290	330 QI	356 QI	1520	2805
313	330 QII	357 QI	1548	2855
314	335	357 QII	1573	3042
315	336	358 QI	1600	3091
316	338	358 QII	1617	3214
317	344	359	1667	3234
318	347 QI	360	1748	3357
319	348 QI	361	1750	3486
320	348 QII	363	1895	3534
321	349 QII	1060	1923	3585
322	350 QI	1090	1925	3655
323 QI	350 QII	1150	2088	3674
323 QII	351 QI	1193	2116	3753
		1230	2124	3816

B. Samples Analyzed in Duplicate for Strontium-89

266	328 QII	355 QI	1306	1925
268	329 QI	356 QI	1335	2088
283	329 QII	357 QI	1384	2116
284	330 QI	358 QI	1400	2124
285	330 QII	358 QII	1429	2327
286	335	359	1461	2372
289	338	360	1495	2405
290	344	361	1520	2494
316	348 QI	363	1548	2539
317	350 QI	1060	1573	2572
323 QII	351 QI	1090	1600	2601
324	351 QII	1150	1617	2658
326	352 QII	1193	1667	2755
327 QI	353 QI	1230	1748	2855
327 QII	353 QII	1255	1750	3042
328 QI	354 QII	1270	1895	3091
			1923	3234

C. Samples Analyzed in Duplicate for Zirconium-95

283	314	325	336	354 QI
284	316	326	337	355 QI
285	317	327 QI	338	355 QII
286	318	327 QII	343	256 QI
287	319	328 QI	344	356 QII
289	320	328 QII	345	357 QII
290	321	329 QII	350 QI	358 QII
299	322	330 QI	352 QI	359
313	324	330 QII	352 QII	360
		335	353 QI	361

D. Samples Analyzed in Duplicate for Cerium-144

284	352 QI	358 QI	1925	3091
327 QII	352 QII	682	2124	3214
328 QII	353 QII	1060	2327	3234
329 QII	354 QII	1255	2539	3357
330 QII	355 QI	1270	2572	3486
347 QII	355 QII	1306	2601	3534
348 QII	356 QI	1384	2658	3585
349 QII	356 QII	1400	2755	3655
350 QII	357 QI	1511	2805	3674
351 QII	357 QII	1895	2855	3753
		1923	3042	3816

E. Samples Analyzed in Duplicate for Tungsten-185

535	1255	1495	1895	2494
1060	1270	1520	1923	2539
1079	1306	1548	1925	2572
1090	1335	1573	2088	2601
1150	1384	1600	2116	2658
1180	1400	1617	2124	2755
1193	1429	1667	2327	2855
12	1461	1748	2372	3042
		1750	2405	3091

F. Samples Analyzed in Duplicate for Tungsten-181

1060
1617

G. Samples Analyzed in Duplicate for Barium-140

359
360
361
363

H. Samples Analyzed in Duplicate for Cesium-137

283
284
285
286
287
288
289
290
2327
2658

Table 4.16 Samples Which Were Reanalyzed for Strontium-90

A. Analyzed twice, one result accepted

23	251	1000	1320	1857
25	303	1007	1380	1876
26	375	1010	1381	1877
29	384	1017	1390	1878
30	389	1018	1391	1879
35	427	1019	1412	1880
36	476	1021	1413	1882
37	477	1035	1499	1883
38	584	1038	1527	1894
39	595	1044	1529	1897
41	619	1061	1533	1926
42	639	1072	1566	1937
43	668	1073	1579	1946
47	670	1079	1584	1974
50	677	1105	1593	1976
51	700	1107	1614	2017
52	702	1110	1645	2021
53	704	1127	1655	2024
62	729	1145	1665	2025
68	739	1146	1727	2026
71	764	1154	1738	2027
73	782	1155	1739	2029
74	809	1168	1750	2031
75	837	1182	1754	2032
89	841	1183	1755	2058
96	849	1184	1756	2065
97	850	1185	1762	2085
98	855	1187	1764	2127
99	885	1203	1767	2128
104	904	1204	1776	2138
105	906	1205	1804	2151
106	923	1206	1806	2160
110	940	1251	1809	2163
135	967	1262	1827	2194
148	982	1263	1833	2197
180	985	1266	1836	2230
192	988	1286	1839	2257
208	989	1292	1846	2259
222	992	1295	1847	2277
223	993	1319	1853	2283

A. (continued)

2284	2559	2834	3033	3390
2288	2610	2836	3045	3391
2299	2673	2840	3047	3435
2330	2697	2842	3112	3518
2332	2698	2857	3115	3533
2333	2724	2862	3116	3536
2370	2727	2867	3126	3538
2377	2732	2871	3146	3548
2386	2733	2881	3160	3631
2407	2741	2882	3161	3643
2409	2744	2883	3167	3649
2455	2764	2898	3168	3650
2473	2776	2899	3244	3751
2476	2780	2907	3302	3754
2482	2795	2919	3319	3757
2485	2796	2927	3329	3799
2513	2798	2928	3347	3815
2545	2828	2991	3352	3844
2546	2829	2992	3387	3873
2549	2833	3031	3389	3924
				3974

B. Analyzed twice, both results accepted

61	385	1016	1749	2696
69	388	1032	1753	2739
70	491	1059	1790	2767
72	578	1080	1797	2794
91	654	1096	1884	2800
102	658	1252	1896	2838
103	667	1256	1903	2846
111	673	1258	1940	2864
112	676	1379	1914	2866
113	682	1536	1915	2885
123	693	1540	1916	2896
136	711	1570	1917	3145
142	740	1575	1927	3149
145	753	1615	1928	3150
146	759	1616	1973	3203
147	778	1632	1975	3249
179	779	1650	2089	3283
197	780	1664	2172	3284
198	784	1668	2253	3285
229	878	1685	2270	3326
291	887	1708	2285	3349
343	965	1709	2289	3674
345	967	1725	2334	3760
346	1008	1726	2445	38
	1009	1728	2664	3920

C. Analyzed three times, one result accepted

24
337
986
1190
1904
1929
2016
2495
2725
3361
3392
3923

D. Analyzed three times, two results accepted

1261
1532

E. Analyzed three times, three results accepted

252
338
343
492
674
675
755
918
2782
2783
2784

Table 4.17 Samples Which Were Reanalyzed for Strontium-89

A. Analyzed twice, neither result accepted

2482

B. Analyzed twice, one result accepted

639	1044	1380
702	1061	1391
1000	1072	1412
1007	1073	1413
1017	1190	1976

C. Analyzed twice, both results accepted

693	1016
755	1096
780	1379

Table 4.18 Samples Which Were Reanalyzed for Cesium-137, Tungsten-185
Zirconium-95 or Barium-140

A. Analyzed twice, one result accepted

<u>Cs¹³⁷</u>	<u>W¹⁸⁵</u>
89	528
91	539
375	546
384	550
385	
491	
492	
540	
541	
544	
963	

B. Analyzed twice, both results accepted

<u>Cs¹³⁷</u>	<u>W¹⁸⁵</u>	<u>Zr⁹⁵</u>	<u>Ba¹⁴⁰</u>
538	1405	72	566
545		73	
548		108	
2087		400	
2092		404	
2373		405	