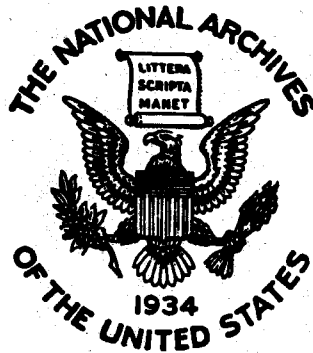


PRELIMINARY



INVENTORIES

Number 90

**RECORDS OF THE
UNITED STATES ANTARCTIC SERVICE**

Compiled by Charles E. Dewing and Laura E. Kelsay

**The National Archives
National Archives and Records Service
General Services Administration**

Washington: 1955

PRELIMINARY INVENTORY OF THE RECORDS OF THE
UNITED STATES ANTARCTIC SERVICE

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FOREWORD

To analyze and describe the permanently valuable records of the Federal Government preserved in the National Archives Building is one of the main tasks of the National Archives. Various kinds of finding aids are needed to facilitate the use of these records, and the first step in the records-description program is the compilation of preliminary inventories of the material in the 270-odd record groups to which the holdings of the National Archives are allocated.

These inventories are called "preliminary" because they are provisional in character. They are prepared as soon as possible after the records are received without waiting to screen out all disposable material or to perfect the arrangement of the records. They are compiled primarily for internal use, both as finding aids to help the staff render efficient reference service and as a means of establishing administrative control over the records.

Each preliminary inventory contains an introduction that briefly states the history and functions of the agency that accumulated the records. The records themselves are described series by series, that is, by units of records of the same form or that deal with the same subject or activity or that are arranged serially. Other significant information about the records may sometimes be given in appendixes.

When the record group has been studied sufficiently and the records have been placed in final order, the preliminary inventories will be revised and the word "preliminary" dropped from the title of the revision. Meanwhile, as occasion demands and time permits, special reports, indexes, calendars, and other finding aids to the record group will be prepared.

Several finding aids that give an overall picture of materials in the National Archives have been published. A comprehensive Guide to the Records in the National Archives (1948) and a brief guide, Your Government's Records in the National Archives (revised 1950), have been issued. Forty-four Reference Information Papers, which analyze records in the National Archives on such subjects as transportation, small business, and the Middle East, have so far been issued. Records of World War I have been described in the Handbook of Federal World War Agencies and Their Records, 1917-1921, and those of World War II in the two-volume guide, Federal Records of World War II (1950-51). Many bodies of records of high research value have been edited by the National Archives and reproduced on microfilm as a form of publication. Positive prints of some 4,700 rolls of this microfilm, described in the List of National Archives Microfilm Publications (1953), are now available for purchase.

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INTRODUCTION

The origins of the United States Antarctic Service, 1939-43, which carried out the official Antarctic expedition of 1939-41, are documented in widely scattered official and private papers that have been but partially surveyed and studied. Any full presentation of the background will have to await further research. Only a brief statement of some of the factors involved is necessary or possible here.

Rear Adm. Richard E. Byrd, USN (Retired), had led two successful and much publicized expeditions to Antarctica in 1928-30 and 1933-35. Largely as a result of these two expeditions, public awareness of Antarctica was in 1938-39 at a relatively high level, scientists showed an increasing interest in Antarctic problems, and Government policymakers had proof of the feasibility of such a project as that ultimately carried out by the United States Antarctic Service. Not the least accomplishment of the two Byrd expeditions was the development of a nucleus of personnel, experienced in polar survival and research techniques and actively interested in an Antarctic expedition.

It is apparent from official and newspaper sources that before the end of 1938 Admiral Byrd was definitely planning a third Antarctic expedition under private auspices, to leave sometime in 1939. Even as late as June 1939 when legislative approval was still in doubt, an Interior Department official stated that Admiral Byrd "is planning to go South whether the Government expedition is authorized or not."¹

Early in 1938 two former members of the Second Byrd Antarctic Expedition, Richard B. Black and Finn Ronne, also were actively promoting an Antarctic expedition. Black was at this time an official of the Division of Territories and Island Possessions in the Department of the Interior. In May 1938 he submitted to Dr. Ernest Gruening, Director of the Division, a lengthy report on Antarctic interests of the Government. In subsequent months Dr. Gruening, and perhaps other Interior Department officials, consulted with the State Department concerning these matters.

The State Department evidently brought Antarctic problems to the attention of the President, for on January 7, 1939, the President in a memorandum to the Secretary of State expressed approval of cooperative planning on the subject by the State, War, and Navy Departments and suggested including the Interior Department in the planning group.² He suggested the feasibility of annual colonization "at Little America and at the region South of the Cape of Good Hope," the colonists to be evacuated each Antarctic autumn "when it begins to get dark." He further proposed that Adm. Richard E. Byrd and Lincoln Ellsworth should be consulted on estimates of cost. No evidence has been noted, however, of any contacts with Ellsworth in connection with the project.

¹Records of the Division of Territories and Island Possessions, RG 126, File No. 9-13-2, Administrative, General.

²RG 126, File No. 9-13-2, Administrative, General.

President Roosevelt took a lively interest in the proposed expedition. In part, this was probably because of his official responsibilities in the field of global strategy, but it may also have been because of his personal interests in naval affairs and his acquaintance with Admiral Byrd. There is evidence in the records that Admiral Byrd had direct access to the White House, especially in 1938-39 during the preliminary planning for the expedition. The President's interest is documented by a few letters and memoranda (chiefly copies) addressed to Admiral Byrd.

As a result of the President's memorandum of January 7, the Secretary of State on January 13, 1939, invited the Secretaries of War, the Navy, the Treasury, and the Interior to appoint representatives to serve on a committee to study certain Antarctic problems. A period of intensive consultation followed, out of which evolved an Executive Committee, which came into semi-formal existence on or before July 27, 1939. On November 25, 1939, the President formalized the Executive Committee and made it the directing body of the United States Antarctic Service (hereafter referred to as "USAS"). Departments represented on the committee remained constant, but individual representation varied considerably, as follows: Navy, Capt. (later Rear Adm.) C. C. Hartigan; Coast Guard, Rear Adm. R. R. Waesche, and Comdr. E. G. Rose; State Department, Hugh S. Cumming, Jr.; Interior Department, Ernest Gruening, Ruth Hampton, R. A. Kleindienst, Paul W. Gordon, Rupert Emerson, and Guy J. Swope. Admiral Byrd was a member ex officio in his capacity as Commanding Officer, USAS. The Executive Secretary of the committee was Lt. Comdr. (later Comdr.) R. A. J. English, USN, until February 1942, when he was succeeded by J. E. MacDonald, who served concurrently as Administrative Assistant to the Commanding Officer, USAS.

During its active existence the Executive Committee held regular monthly meetings, plus special meetings as required. After the preliminary planning phase, ending early in 1940, State Department participation in the direction of the USAS practically ceased. The last committee meeting for which minutes are available was held November 4, 1941. After this date the functions of the committee appear to have been performed by the Executive Secretary, with the advice and consent of committee members when needed.

Preparations for the Antarctic expedition were complicated by shortage of time. Diplomatic and climatic considerations made it highly desirable for the ships to reach Antarctica early in the Southern Hemisphere summer of December 1939-February 1940. Yet, only in January 1939 had the President officially approved the planning of the project. The first appropriation for planning, a mere \$10,000, was contained in a vaguely worded paragraph in the Second Deficiency Appropriation Act, approved May 2, 1939 (53 Stat. 627). For a brief period thoughts were entertained of postponing the expedition until the following year. Funds for outfitting and operating the expedition were assured when the Urgent Deficiency and Supplemental Appropriation Act was approved on June 30, 1939 (53 Stat. 980). It contained an item of \$340,000 for expenses "in the investigation and survey

of natural resources of the land and sea areas of the Antarctic regions." Only a few months remained before the vessels would have to be on their way.

Almost from the start, Admiral Byrd was the central figure around whom the USAS developed. From the time he was called into consultation late in 1938 by the State Department, no other person was considered for the position of leader of the expedition. Although he was not formally designated Commanding Officer by the President until July 7, 1939, Admiral Byrd took the President's memorandum of January 7, 1939, as the signal for active preparations for the expedition. In cooperation with the Executive Committee and other Government agencies, Admiral Byrd promptly began operational planning, recruitment of personnel, and procurement of supplies. As assistants, he mobilized a small group of experienced Antarctic hands, members of previous Byrd expeditions, including R. A. J. English, P. A. Siple, R. B. Black, F. A. Wade, and F. Ronne. A field headquarters and supply depot was set up at the Boston Navy Yard under Siple soon after Government funds became available in July 1939.

The USAS was an official agency of the Federal Government. It occupied a position in the hierarchy of the Executive branch duly designated by the President and it spent funds appropriated by Congress. Nevertheless, the USAS benefited greatly by contributions from nongovernmental sources: key members of the scientific and operating staff volunteered for duty at nominal rates of pay, and private manufacturers furnished large quantities of supplies to the expedition free or at reduced prices. The most important nongovernmental source of supply was Admiral Byrd himself, who besides making other contributions sold to the Government for one dollar the SS. Bear of Oakland, his private property, which the Navy commissioned for duty with the USAS. These nongovernmental aspects of recruitment and procurement were crucially important but were also a source of some ambiguity and confusion in USAS operations.

On November 25, 1939, the President issued an order to Admiral Byrd setting forth in considerable detail the objectives and policy of the USAS. This order can be considered the organic directive for the USAS. It gathers together into one document a series of decisions and plans that had been worked out over the period from January to November 1939. A copy of this order appears as appendix I.

It should be noted that this order was issued while the two expeditionary vessels were en route to Antarctica. The records show that the Executive Secretary circulated a preliminary draft of the order to Executive Committee members on or before November 15, 1939. At a committee meeting on November 22, with Admiral Byrd in attendance, final revisions were made in the order; and H. S. Cumming took responsibility for submitting it via State Department channels to the President for signature. The U. S. M. S. North Star had meanwhile sailed from Boston on November 15 and transited the Panama Canal, and on November 30 it sailed from Balboa, Canal Zone, for Dunedin, New Zealand. The U. S. S. Bear sailed

from Boston on November 22 and cleared Balboa on December 6. The available records fail to show exactly when USAS expeditionary personnel were first made aware of the President's order of November 25, but the available evidence indicates that it was after the North Star had cleared Balboa for Dunedin on November 30. It appears that Admiral Byrd did not receive an official signed copy of the order until shortly before he boarded the North Star at Balboa on November 30. Apparently personnel on the Bear learned the contents of the order by radio at the same time as those on the North Star.

The ninth section of the President's order created major administrative problems for the USAS. "Paragraph Nine," as it came to be called by USAS personnel, concerns security of information. Although it conforms to regular Government policy, Paragraph Nine became a problem because of a special situation, which can be summarized as follows: (a) Many key members of the scientific staff were volunteers, serving for nominal pay, with the expectation of carrying out research projects and publishing the results through regular scientific channels; (b) certain individuals, notably an artist and a photographer, volunteered for service with the expectation of being able to exploit financially their membership in the expedition; (c) for various reasons, including lack of time and the complicated interdepartmental structure of the Executive Committee, the order containing Paragraph Nine was not promulgated to the members of the expedition until after the North Star had cleared Balboa for Dunedin, thus making voluntary withdrawal from the expedition practically prohibitive.

Paragraph Nine placed sweeping and stringent restrictions on personal as well as official records of the expedition. Expedition members were directed to surrender to the Government "all journals, diaries, memoranda, remarks, writings, charts, drawings, sketches, paintings, photographs, films, plates, as well as all specimens of every kind. . . . Such articles may be returned to the person concerned, or not, at the option of the Executive Committee . . ."

The administrative problems of carrying out Paragraph Nine were formidable, notably with respect to photographic records. The USAS was terminated in an emergency manner because of World War II and other causes. Under such circumstances the meticulous administrative task made necessary by Paragraph Nine became extremely difficult to carry out. Various gaps in the official documentation of USAS can be attributed largely to Paragraph Nine and its consequences. This is particularly evident with respect to the reports of scientific and technical investigations, and the logs of field operations (see entry 9). It is interesting that the sections of Paragraph Nine that created the most difficulty, namely (c) and (e), were closely paraphrased from the letter of instructions addressed to Lt. Charles Wilkes, USN, Commanding Officer of the United States Exploring Expedition of 1838-42.³

³RG 45, Naval Records Collection of the Office of Naval Records and Library, Letters to Officers, Ships of War, vol. 25, p. 411-412.

The USAS was an interdepartmental project. The consequent necessity of cooperation between departments, bureaus, and other agencies complicated USAS policymaking and operations. On May 29, 1940, Secretary of the Interior Harold L. Ickes discussed this situation in a letter to the President, as follows:⁴

As the situation now stands, although this Department has full responsibility for the expenditure of the appropriations, it has no authority whatever over the administration of the project. . . .

Upon practical analysis it is revealed that the Department of the Navy is vested with complete authority for the administration of the United States Antarctic Service. . . .

In the circumstances, I strongly recommend that any future appropriations for the United States Antarctic Service be made to the Department of the Navy. . . .

On June 8, 1940, the President replied to Secretary Ickes that the change "would not be desirable at present." Although Secretary Ickes may have overdrawn the inability of the Interior Department to control USAS expenditures, his analysis of the relative roles played by the Navy and Interior Departments in USAS affairs seems essentially accurate.

The two USAS expeditionary vessels sailed from Boston on November 15 and 22, 1939, and arrived January 12 and 14, 1940, at the site of West Base, Bay of Whales, Antarctica. The U. S. S. Bear made an exploratory cruise from January 19 to March 3, ending at the site of East Base, Palmer Peninsula, Antarctica. The U. S. M. S. North Star left West Base on January 24, proceeded to Valparaiso, Chile, to pick up supplies, and then headed for the East Base site, arriving March 5. Both vessels departed from East Base for the United States on March 21, 1940.

During the Antarctic winter an appropriation to the Interior Department of \$171,000 for continuing USAS expenses into the fiscal year 1941 was enacted by Congress and approved June 27, 1940 (54 Stat. 628).

The Bear and North Star arrived back at West Base on January 10 and 24, 1941, respectively. Having evacuated West Base, both ships left February 1 and met at Adelaide Island on February 24 for the purpose of evacuating East Base. Ice conditions caused delay, and on March 19 the North Star was sent to Punta Arenas, Chile, to refuel and reprovision, in case prolonged operations in Antarctic waters should become necessary. This proved not to be the case, however, and the North Star proceeded north from Punta Arenas, arriving at Boston on May 5. The North Star was detached from the USAS and taken over by the Coast Guard on May 14, 1941.

⁴RG 126, File No. 9-13-2, Administrative, General.

On March 22, 1941, an emergency evacuation by air was made from East Base to the Bear, which was anchored at Mikkelson Island. The next day the Bear sailed for the United States via Punta Arenas, arriving at Boston on May 18. The Bear was detached from the USAS and placed on special duty under the Commanding Officer, United States Atlantic Fleet, on June 2, 1941.

With the arrival of the North Star and Bear at Boston, the expeditionary phase of the USAS came to an end. Most of the personnel were hurriedly demobilized. Borrowed equipment was returned to the lending agencies, and other materiel was transferred to Government agencies. The most important remaining function of the USAS was the preparation of reports and maps. A congressional appropriation (55 Stat. 303) of \$19,610, plus the unexpended balance of the 1941 appropriation, for this purpose was approved June 28, 1941. A final appropriation (56 Stat. 593) not to exceed \$30,000 from the unexpended balance of the 1942 appropriation, was approved July 2, 1942. On the expiration date of this appropriation, June 30, 1943, the USAS ceased to operate.

The records described in this inventory comprise all those of the United States Antarctic Service that were in the custody of the National Archives on July 1, 1955. They amount to 64 cubic feet (22 cubic feet of textual material; 4 cubic feet of cartographic material; 12 cubic feet of motion pictures; and 26 cubic feet of still picture prints and negatives). They were accessioned chiefly from the Division of Territories and Island Possessions, Department of the Interior, and are maintained as a subgroup within Record Group 126, Records of the Division of Territories and Island Possessions.

Other records are known to remain in the hands of former expedition members, many of whom are still in Government service. An official "History of the Service," as contemplated by paragraph 9(f) of the President's order of November 25, 1939, was never prepared, nor were the scientific results brought together and edited by the Executive Committee in cooperation with the National Academy of Sciences, as was directed in the same paragraph. Wartime assignments and pressures presumably scattered the personnel before data could be studied and reports put in final form. The records described in this inventory include preliminary studies, drafts of reports, manuscripts approved for publication together with reprints of the published versions, and often complete but unpublished manuscripts, all of which are listed in an appendix. In addition, there are records of original observations and compilations of data that have not been fully exploited.

Records relating to the USAS presumably exist in the files of many cooperating agencies; most of these files have not as yet because of their recent date been transferred to the National Archives. The Interior, Navy, State, and Treasury Departments were represented on the Executive Committee, detailed personnel to the project, furnished supplies and equipment, and gave information and advice. In addition to records of the departments themselves, records documenting this service are presumably among the records

of the Bureau of Aeronautics, the Biological Survey, the Coast and Geodetic Survey, the Coast Guard, the Bureau of Fisheries, the General Land Office, the Hydrographic Office, the Office of Indian Affairs, the National Bureau of Standards, and the Weather Bureau. The National Academy of Sciences and the Smithsonian Institution were cooperating Government agencies of independent status. Among private organizations aiding the USAS were the Armour Institute of Technology, the Bartol Research Foundation, the Carnegie Institution of Washington, various universities, and business firms.

There is already in the National Archives one important body of records that closely supplements the files of the USAS itself. This is a section (12 cubic feet) of the central classified files of the Division of Territories and Island Possessions, the Interior Department unit to which the USAS was attached for administrative purposes. These records also form a part of Record Group 126. Smaller quantities of records concerning cooperation by the Navy Department are in the National Archives among the records of the Office of the Secretary of the Navy (RG 80), the records of the Chief of Naval Operations (RG 38), and the records of the Hydrographic Office (RG 37). Some pertinent material is to be found also in the records of the United States Coast Guard (RG 26).

Bibliography of the USAS is covered in the following publication: U. S. Naval Photographic Interpretation Center, Antarctic Bibliography (Washington, 1951. vi, 147 p. NAVAER 10-35-591). This work is devoted primarily to published material but also lists unpublished maps, charts, motion pictures, and still photographs.

This preliminary inventory of the records of the Antarctic Service was compiled by two members of the staff of the National Archives: entries 1-19 of the inventory and appendixes II-VI by Charles E. Dewing, and entries 20-22 and appendix VII by Laura E. Kelsay.

RECORDS OF THE UNITED STATES ANTARCTIC SERVICE

OFFICE FILE OF LT. COMDR. R. A. J. ENGLISH, EXECUTIVE SECRETARY, EXECUTIVE COMMITTEE. 1939-41. 1 ft. 1

The Executive Committee exercised general supervision over the USAS. Commander English's file consists of correspondence, reports, and other papers relating to the administration and operations of the Antarctic Service. Arranged alphabetically by subject and thereunder chronologically. A complete list of subject headings in this file appears as appendix II.

GENERAL FILE I. 1939-42. 2 ft. 2

Correspondence, memoranda, reports, publications, and other papers relating to the organization, functions, policies, and operations of the USAS. Included are minutes of meetings of the Executive Committee, copies of orders to the Commanding Officer, and records pertaining to such matters as finance, communications, transportation, personnel, procurement, demobilization, and the disposal of equipment. Arranged alphabetically by subject and thereunder chronologically.

It appears that this file was started in the Boston office of the expedition. No other differentiation between this and general file II (entry 3) has been established. For all general subjects it is desirable to consult both. A complete list of subject headings in this file appears as appendix III.

GENERAL FILE II. 1939-43. 3 ft. 3

Correspondence, reports, memoranda, inventories of supplies and equipment, press releases, and other papers concerning most aspects of USAS planning and operations. Arranged alphabetically by subject and thereunder chronologically.

A few records in this file, such as base bulletins, lists of personnel attending navigation classes, and lists of equipment prepared aboard the U. S. M. S. North Star, apparently originated in the ice party. Included also is a copy of the "Record of Proceedings of a Survey Board convened on Board the U.S.S. Bear" by the Commanding Officer "to pass upon the practicability of the evacuation of all material purchased with funds appropriated to the USAS." For all general subjects it is desirable to consult both this and the preceding file (entry 2). A complete list of subject headings in this file appears as appendix IV.

SPECIAL SUBJECT FILES. 1939-42. 1 ft. 4

Correspondence, memoranda, and other papers concerning certain matters of special importance to the USAS. Arranged alphabetically by subject and thereunder chronologically.

Among the subjects covered are the snow cruiser, an experimental vehicle financed, constructed, and lent to the USAS by the Research Foundation of the Armour Institute of Technology; "Paragraph Nine" of the President's order of November 25, 1939, concerning custody of photographs, diaries, notes, and reports prepared by members of the USAS and restrictions on the release of such materials; and radio broadcasts and radio-photographic

transmission. Included also are correspondence and memoranda between Rear Adm. Richard E. Byrd, J. E. MacDonald, his Administrative Assistant, and R. A. J. English, Executive Secretary of the Executive Committee.

COPIES OF OUTGOING CORRESPONDENCE OF THE ADMINISTRATIVE ASSISTANT.

Jan. 5, 1942-June 30, 1943. 4 in.

5

This "reading file" was apparently started by J. E. MacDonald (Jan.-June 1942) and continued by his successor, H. P. Gilmour. Arranged chronologically.

RADIOGRAMS. 1940-41. 2 ft.

6

A fragmentary file, consisting largely of personal and nonofficial radiograms, transmitted through officially approved channels, to and from Antarctica or between the East and West Bases. A few official radiograms are also included. Arranged roughly according to transmitting channels and thereunder chronologically.

APPROPRIATION FILE. 1939-40. 5 in.

7

Printed congressional committee hearings, incidental notes, memoranda, correspondence, and other materials relating largely to the USAS appropriation for the fiscal year 1941. Unarranged.

Included are statements of Commander English and John E. MacDonald to the House Committee on Appropriations (dated Jan. 31, 1940), preliminary lists of contributions to the expedition, lists of materials loaned to the expedition by Admiral Byrd, and a copy of the "Recommendation on Compilation of Scientific Reports."

INFORMATION FILE. 1939-42. 2 ft.

8

Press releases (in processed and typed form), correspondence, memoranda, and radiograms concerning the USAS information program and related matters. Included also are cards containing bibliographical references or notations on various subjects. Arranged alphabetically by subject and thereunder chronologically.

This file was apparently compiled by Roger Hawthorne, Official Recorder of the USAS. Many of the folders do not contain any quantity of significant materials; the cards are the only records in some of them. A complete list of the subject headings in this file appears as appendix V.

SCIENTIFIC AND TECHNICAL REPORTS, LOGS, AND RELATED MATERIAL. 1939-43.

8 ft.

9

Reports on scientific and technical research, operational reports, logs, journals, working papers, and incidental correspondence. Arranged alphabetically by name of author and thereunder by subject.

These records reflect the great variety and scope of USAS research programs, but much scientific and technical activity remains undocumented in the official records of USAS. This situation can be attributed to two basic causes: (1) The impact of World War II, which caused the hasty demobilization of personnel and the drastic curtailment of the editorial and publication program; and (2) the difficulty encountered in implementing "Paragraph Nine" of the President's order of November 25, 1939. An annotated,

complete list of the reports, logs, and related records, arranged alphabetically by name of author, appears as appendix VI. It is followed by a subject index.

SUPPLY AND FISCAL CORRESPONDENCE. 1939-42. 9 in. 10

Correspondence, memoranda, financial statements, requisitions, and other papers concerning procurement of supplies and equipment and fiscal administration. Arranged alphabetically by subject and thereunder chronologically.

This file was apparently compiled in the office of P. A. Siple, who served as Technical Supervisor of Equipment before the departure of the expedition from Boston in 1939. Additional records were placed in this file subsequently by Siple and others. Included are correspondence with W. B. Fry, Purchasing Officer, Department of the Interior, and with Ernest Gruening and Ruth Hampton, Director and Assistant Director, respectively, of the Division of Territories and Island Possessions; a manifest of items obtained through Department of Interior purchase orders; and lists of clothing supplies.

CLASSIFIED REQUISITION FILE. 1939. 1 ft. 11

Copies of requisitions, purchase orders, and related correspondence concerning procurement of USAS materials. These requisitions were issued by the Division of Territories and Island Possessions of the Department of the Interior and were addressed to the Chief Clerk of the Department. Arranged according to a subject classification scheme in which letters of the alphabet were used as symbols for various categories of supplies. Within each subject the records are arranged chronologically. An unclassified group of requisitions follows the classified series.

CONTRACTS. 1939. 7 in. 12

Copies of approved contracts for the purchase of USAS supplies and equipment, recorded on standard US Government forms (SF 33 Rev., Invitation, Bid and Acceptance). Unarranged, but roughly in chronological order.

PURCHASE ORDERS. 1939. 2 in. 13

Copies of orders for open-market purchases, issued by the Department of the Interior Purchasing Office. Arranged numerically (Nos. 200-599).

VOUCHERS. 1939. 4 in. 14

Copies of vouchers (SF 1034a and related forms) for both contract and open-market purchases of various types of equipment and supplies. Included also are copies of instructions for loading operations and daily loading sheets. Arranged alphabetically by subject and thereunder chronologically.

CARD INDEX OF PERSONNEL. n.d. 1 in. 15

Shows name, position, next of kin, and various personal details, such as date and place of birth, educational and vocational histories, memberships in scholarly or other associations, and previous exploring experience. Arranged primarily according to assignment, as follows: West Base, East Base, Snow Cruiser, and United States (i.e., personnel making the voyage south who did not remain on the ice over the winter). Within each group the arrangement is alphabetical.

This index is incomplete. In particular, it does not cover ships' crews or USAS employees whose service was entirely within the United States, and the data furnished on the cards are sometimes fragmentary. More complete information on USAS personnel is often provided by the personnel lists included among the records described in entry 16.

PERSONNEL DATA FILE. 1939-43. 1 ft. 16

Correspondence, memoranda, and other papers concerning personnel matters in general, and individual members of the USAS. Folders concerning individuals are arranged alphabetically by name and thereunder chronologically. Four folders of a general nature precede the individual name folders as follows: (1) Personnel, general; (2) Personnel lists; (3) Service personnel (Armed Forces); and (4) U. S. M. S. North Star personnel.

Personnel of the ship crews are not covered individually. The name folders included in this file were compiled in USAS primarily for internal administrative use. Official personnel folders were maintained in the Office of the Secretary of the Interior for civilians, and in the War or Navy Departments for Armed Forces personnel.

CARD INDEX OF OFFICE EQUIPMENT. n.d. 1 in. 17

Shows item number, standard catalog listing, unit, estimated price, and quantities allocated to East Base, West Base, the radio installation at each base, Bear, North Star, snow cruiser, and total. This index was apparently compiled by Roger Hawthorne, USAS Recorder. Arranged alphabetically by name of item.

Pictorial Records

PHOTOGRAPHIC PRINTS AND NEGATIVES. 1939-42. 35 ft. 18

Photographs and corresponding film negatives, transparencies, and aerial mapping film of the USAS made on board the U. S. S. Bear, and at East Base, West Base, and Little America II. They show personnel of the expedition, trail parties, work on scientific projects, explorations, dog sleds, penguins, seals, icebergs, the snow cruiser and airplanes, and results of tests made on equipment and clothing used in the Antarctic.

MOTION PICTURE FILMS. 1939-41. 100 reels. 19

Silent, 16- and 35-mm. black and white, and color motion picture films relating to the Antarctic expedition. Included are films showing supplies being loaded on the North Star and Bear at Boston; the North Star and Bear passing through the Panama Canal; views of Pitcairn scenery and habitation; scenes of icebergs, whales, seals, and penguins; shots of a camp near Rockefeller Mountains; unloading of supplies at Little America (West Base); dogs pulling supply sleds; snow storm and blizzard scenes; scientific laboratory and machine shop views; and general scenes of camp life at Little America.

Cartographic Records

A descriptive list of the maps covered by the following three entries appears as appendix VII.

GENERAL RECORDS. 1939. 2 items.

20

A small-scale printed map of Antarctica and a photoprocessed chart pertaining to the basic communication plan for the bases and outposts established during the expedition.

EAST BASE RECORDS. 1939-41. 17 items.

21

Manuscript, annotated printed, and annotated photoprocessed maps on various scales, several of which were prepared in the field by members of the East Base, Palmer Peninsula, party of the expedition. Some of the maps are finished drawings by J. Glenn Dyer, cadastral engineer; Finn Ronne, transportation engineer; D. C. Hilton, surveyor; and Leonard M. Berlin, cadastral engineer, all members of the expedition. These maps show place names, elevations, triangulation points, terrain, topographic features, magnetic variations, sledging routes, plane flight lines, survey stations, harbors, landing beaches, tractor trails, and the location of buildings, food and fuel caches, and the central radio antenna tower, and include other information pertaining to the area.

WEST BASE RECORDS. 1939-42. 12 items.

22

Manuscript, annotated printed, and annotated photoprocessed maps on various scales, a few of which were prepared in the field by members of the West Base, Little America III, party of the expedition. Most of the maps were plotted and drawn at Syracuse University by Raymond A. Butler, United States Antarctic Service cartographer, from maps compiled by the American Geographical Society of New York and the United States Hydrographic Office and from plottings made by Paul A. Siple, West Base leader, and information obtained from other members of the party. These maps show place names, triangulation stations, elevations, topographic features, geology, glaciers, crevasses, pressure ridges, plane flight lines, sledge and trail routes, routes of the U. S. S. Bear and the U. S. M. S. North Star, and the location of quarters and installations at West Base.

APPENDIX I

PRESIDENT ROOSEVELT'S ORDER OF NOVEMBER 25, 1939, TO ADMIRAL BYRD

November 25, 1939.

My dear Admiral Byrd:

1. By the Second Deficiency Appropriation act, Fiscal Year 1939, approved May 2, 1939, and the Urgent Deficiency and Supplemental Appropriation Act, Fiscal Years 1939 and 1940, approved June 30, 1939, the Congress has made available to the Department of the Interior, under the heading "Expenses, Division of Territories and Island Possessions", a total of \$350,000 for an "investigation and survey of natural resources of the land and sea areas of the Antarctic regions".

2. I have designated the organization of the Government activities in the Antarctic undertaken in pursuance of the foregoing Congressional authorization as The United States Antarctic Service.

3. By letters dated July 7, 1939, I requested the Secretaries of State, the Treasury, the Navy, and the Interior each to designate a representative to form a Committee for the purpose of organizing, directing, and coordinating the conduct of the investigation authorized by the Congress. This Committee is designated the Executive Committee of The United States Antarctic Service. It shall have authority to appoint an Executive Secretary, who shall perform such duties as may be assigned to him by the Committee.

4. Because of your experience and brilliant achievements in polar exploration and because of the confidence which the people of the United States have in you and in your qualities of leadership, I have designated you Commanding Officer of The United States Antarctic Service and an ex-officio member of the Executive Committee.

5. (a) I have directed all Departments and Agencies of the Government to cooperate with you as far as practicable in furthering the purposes of the investigation authorized by Congress. In pursuance of this request the Secretary of the Interior has made available the U.S.M.S. North Star.

(b) Under the authority given him by the Third Deficiency Act, Fiscal Year 1939, approved August 9, 1939, the Secretary of the Navy has chartered and placed in commission the U.S.S. Bear.

(c) The Executive Committee has authorized, under certain conditions, the operation and control by the Service of a privately constructed snow cruiser.

(d) The foregoing vessels, and the snow cruiser, together with the personnel which has been made available by the several Government

Departments and Agencies are hereby placed under your command as Commanding Officer of The United States Antarctic Service. The performance of your duties will involve flying.

6. When in all respects ready for sea, you will proceed to the Antarctic by routes chosen by you and there establish two continental bases, to be known as (a) East Base, and (b) West Base.

(a) It is desired that the East Base be established in the vicinity of Charcot Island or Alexander I. Land; in the event that a suitable site in those areas cannot be reached by ship or by ship based parties, alternative sites on the shores of Marguerite Bay should be investigated.

(b) It is desired that the West Base be established on the East Shore of the Ross Sea in the vicinity of King Edward VII Land; in the event that this area cannot be reached by ship, or a base established without undue hazard, an alternative site in the Bay of Whales at or near Little America should be investigated.

(c) The principal objective in the field is the delineation of the continental coast line between the meridians 72°W. , and 148°W. , and the consolidation of the geographical features of Hearst Land, James W. Ellsworth Land, and Marie Byrd Land. It is desired that long range aerial flights equipped with mapping cameras, consolidate these areas; if practicable, supply caches to extend the cruising range of the planes should be established. Flights in this area should be made from the U.S.S. Bear, if practicable, and such flights so far as possible should be planned to supplement previous flights which have been made along the 75th, 101st, 116th, 134th, 150th, and 152nd meridians of West Longitude.

(d) Secondary geographical objectives are the delineation of the unknown west coast of the Weddell Sea between Cape Eielson and Luitpold Coast, and the determination of the eastern extremity of the Queen Maud Range and the William Horlick Mountains and their relationship to the Sentinel Range.

It is desired that you investigate by air the area in the vicinity of the South Magnetic Pole and the unknown areas between the Weddell Sea and the South Pole.

(e) The scientific program outlined by the National Research Council of the National Academy of Sciences shall form the basis for the scientific efforts at the bases. It is desired that the Antarctic Service cooperate fully with the Argentine Meteorological Station at Laurie Island and the Chilean Government Meteorological Service in the exchange of meteorological and similar data. It is desired that one of the vessels determine the extent of Pactolus Bank, located in Latitude $56^{\circ}28' \text{ S.}$, Longitude $74^{\circ}20' \text{ W.}$

(f) The United States has never recognized any claims of sovereignty over territory in the Antarctic regions asserted by any foreign state. No member of the United States Antarctic Service shall take any action or make any statements tending to compromise this position.

Members of the Service may take any appropriate steps such as dropping written claims from airplanes, depositing such writing in cairns, et cetera, which might assist in supporting a sovereignty claim by the United States Government. Careful record shall be kept of the circumstances surrounding each such act. No public announcement of such act shall, however, be made without specific authority in each case from the Secretary of State.

(g) In the prosecution of the foregoing objective you will necessarily face situations which cannot be anticipated, and which may require independent action. In such emergencies your own judgment and discretion should be freely exercised to meet any situation so as to further the mission of the Antarctic Service.

(h) Upon the completion of your duties in the Antarctic during the spring of 1940 you will return to the United States, as your presence in this country at that time is essential for other duties in connection with the administration of The United States Antarctic Service.

7. The Commanding Officer shall be responsible for the correlation of the field operations and the performance of the Base Leaders. He shall require that the Executive Committee be kept informed of all field operations and the progress being made in accomplishing the objectives of the service. In this connection any plans for operations beyond the limits defined above, shall be referred to the Executive Committee for approval.

8. (a) The communication system of the Antarctic Service is an integral part of the Naval Communication System, as outlined in separate correspondence by the Chief of Naval Operations, and is governed by the U. S. Navy Communication Instructions. In this connection, those circuits authorized by the Interdepartment Radio Advisory Committee, the U. S. Army, and the Federal Communication Commission are restricted to the specific use intended and by their respective governing regulations.

(b) All official radio traffic to the United States will, therefore, be over Navy channels and shall be cleared through the Executive Committee. All releases, such as press, photographs, and motion pictures, shall be made through the Executive Committee, which shall also pass upon all radio broadcasting arrangements.

9. (a) You will direct Base Leaders and members of the Scientific Staff of the Service to maintain journals of the progress of the Service, and enter thereon events, observations, and remarks.

(b) You will prohibit all those under your command from furnishing any person not belonging to the Antarctic Service with copies of any

journal, diary, chart, plan, memorandum, specimen, drawing, painting, photograph, film, plate, or information of any kind, which has reference to the object, progress, or proceedings of the Antarctic Service.

(c) As it is highly important that no journal or narrative of the enterprise, either partial or complete, should be published, without the authority and under the supervision of the Government of the United States, at whose expense this Service is undertaken, you will, before they reach the first port north of the Antarctic regions, require from every person under your command the surrender of all journals, diaries, memoranda, remarks, writings, charts, drawings, sketches, paintings, photographs, films, plates, as well as all specimens of every kind, collected or prepared during their absence from the United States.

(d) Such articles may be returned to the person concerned, or not, at the option of the Executive Committee; but such writer, in the published records, shall receive credit for such part or parts of his material as may be used in said records.

(e) After causing correct inventories of these to be made and signed by two responsible Service representatives and by the parties by whom they were collected or prepared, you will cause them to be carefully sealed by the said Service representatives and reserved for such disposition as the Executive Committee may direct.

(f) You will transmit your own journals and records, together with those enumerated above for such disposition as may be directed. The History of the Service will be prepared by yourself, from all journals and records of the Service, under the supervision of the Executive Committee. The records of the scientific results will be prepared, supervised, and edited under arrangements to be made by the Executive Committee with the National Academy of Sciences.

10. You will work out, with the Executive Committee, all necessary plans for the relief of the continental bases next season, or for the evacuation of those parties in the event that the Service is not a continuing project.

11. This undertaking is one which necessarily attracts the attention of the world, and I am sure that you leave the shores of the United States with the heartfelt wishes of our people for the success of the enterprise, and the safe return of yourself and your companions.

12. You will bring these instructions to the attention of every person under your command, but you will give them no other publicity until authorized to do so by the Executive Committee.

Very sincerely yours,

(Signed) FRANKLIN D. ROOSEVELT

Rear Admiral
Richard E. Byrd, U. S. N.
Commanding Officer
The United States Antarctic Service

APPENDIX II

LIST OF SUBJECT HEADINGS, OFFICE FILE OF LT. COMDR. R. A. J. ENGLISH, EXECUTIVE SECRETARY, EXECUTIVE COMMITTEE (ENTRY 1)

Armour Institute. July 5-Nov. 29, 1940.

The Research Foundation of the Armour Institute of Technology financed, constructed, and lent to USAS an experimental vehicle known as the snow cruiser.

Aviation. Aug. 29-Oct. 30, 1939.

Concerns procurement, modification, and equipment of aircraft.

Broadcasts. May 6, 1940-Feb. 3, 1941.

Concerns nonofficial radio communication channels, chiefly via the General Electric Co. Station, WGEO, Schenectady, N. Y.

Cartographic work. June 14-Nov. 19, 1941.

Concerns USAS mapping activities and related matters. Concurrently with his USAS activities, Commander English was attached to the Navy Hydrographic Office, engaged in compiling HO Publication 138, Sailing Directions for Antarctica, issued in 1943.

Commander R. A. J. English. Nov. 25, 1939-Jan. 6, 1942.

General and personal correspondence concerning Commander English.

Communications. July 27, 1939-May 15, 1940.

Concerns nonofficial radio communications.

East Base operations. Nov. 7, 1939-Mar. 7, 1941.

East Base personnel. Sept. 5, 1940-Jan. 4, 1941.

Flight orders. Dec. 19, 1939-Mar. 25, 1941.

Concerns authorizations for flight operations by Armed Forces personnel entitled to flight pay.

Miscellaneous. Aug. 3, 1939-Jan. 3, 1941.

Navigation equipment. Sept. 23-Dec. 12, 1939.

Original press radios from expedition. Dec. 1, 1939-Apr. 1, 1941.

Paragraph Nine, President's orders. Dec. 6, 1939-July 9, 1941.

"Paragraph Nine" of the President's order of November 25, 1939, was concerned with the custody of informational and scientific material and its release to nonofficial parties.

Procurement of supplies. Dec. 1, 1939-Jan. 5, 1941.

Scientific. July 28, 1939-Aug. 3, 1941.

Concerns scientific field work and includes material concerning radio communications.

West Base operations. Feb. 27, 1940-Feb. 2, 1941.

West Base personnel. Aug. 6, 1940-Apr. 4, 1941.

APPENDIX III

LIST OF SUBJECT HEADINGS, GENERAL FILE I (ENTRY 2)

- Acknowledgments from contributors. Feb. 5-Apr. 12, 1940.
Acknowledgments from donors of supplies and equipment, in reply to radiograms of thanks from the Commanding Officer, USAS.
- Airplanes. Aug. 8-Sept. 30, 1940.
Concerns procurement, maintenance, and operation of airplane equipment.
- Aviation reports. June 24-Oct. 9, 1941.
Reports by USAS aviation personnel concerning mechanical functioning of aircraft, with related correspondence.
- Barkely-Grow. Oct. 4, 1939-Jan. 30, 1941.
Concerns procurement of airplanes, spare parts, and equipment.
- Bear. Feb. 24, 1939-Nov. 12, 1941.
General file concerning the U. S. S. Bear.
- Breakdown of equipment and materials purchased with Antarctic funds. n.d.
Lists of supplies and equipment procured with funds appropriated by Congress for USAS.
- Budget, U. S. A. S. July 12, 1939-June 5, 1942.
Correspondence, memoranda, lists, and supporting documents.
- Cachets and stamps. Nov. 23, 1939-Oct. 28, 1940.
Correspondence and memoranda concerning philatelic matters and the establishment of United States postoffices in Antarctica.
- Claim forms, 1940-41.
- Comments on equipment and supplies. Apr. 16-Nov. 20, 1940.
Concerns breakdowns and normal functioning of equipment.
- Communications. Sept. 28, 1939-Mar. 31, 1942.
Concerns procurement of equipment, and policy and operation of the USAS communication net.
- Communications and acknowledgments of press releases. Jan. 17-Sept. 25, 1940.
Concerns distribution of publicity releases.
- Correspondence with the Executive Committee. Sept. 13, 1940-Jan. 25, 1942.
Concerns personnel, editing of reports, and other matters.
- Cumshaw and wangle. Oct. 1-Nov. 7, 1939.
Records concerning begging and borrowing from Government agencies and

private firms to supplement officially appropriated funds. Cumshaw is a term current in South China; wangle is colloquial English.

Demobilization. Mar. 15-May 12, 1941.

Concerns demobilization of personnel and dispersal of equipment.

Disposition of dogs. Aug. 31, 1940-July 9, 1941.

Concerns transfer of 40 dogs to the United States Army and of the remaining dogs to ex-members of USAS.

Donations, master list. 1939.

Shows donor, material donated to USAS, and value.

Donations to Bear. n.d.

Shows donors of supplies and equipment to the U. S. S. Bear, material donated, and value.

Evacuation plans. Oct. 22, 1940-Apr. 11, 1941.

Includes material concerning demobilization.

Finances. July 25, 1939-July 19, 1941.

Concerns accounting for Government funds.

Flight operations. Jan. 12-May 23, 1940.

Radioed reports from Antarctica.

Flight reports and orders. May 23, 1940-Mar. 25, 1941.

Concerns authorization for flight operations by Armed Forces personnel entitled to flight pay.

Freight to Valpo. Oct. 9, 1939-Jan. 29, 1940.

Concerns shipping supplies to Valparaiso, Chile, for transshipment to USAS vessels.

General operations. Dec. 7, 1939-Apr. 4, 1941.

General file, which includes material concerning territorial claims and communications.

Government pamphlets. 1941-42.

Official publications concerning personnel and other administrative matters, together with incidental correspondence.

Inventory of evacuated materials. Aug. 8, 1941.

Correspondence and lists of materials.

Johansen, Bendik. May 15, 1940-May 12, 1941.

Concerns citizenship of Johansen, ice pilot on U. S. S. Bear.

Loading schedules. n.d.

Concerns photographic supplies.

Materials to be ordered by Ummel for East Base. Oct. 22, 1940-Mar. 25, 1941.
J. R. Ummel was Interior Department purchasing agent at Seattle, Wash.

Materials to be ordered by Ummel for West Base, and materials to be shipped
via U. S. M. S. North Star. Oct. 14-Nov. 27, 1940.

Materials to be returned with expedition. Aug. 21, 1940-Aug. 8, 1941.

Materials to be returned with the expedition, Navy Department. Oct. 9-
Oct. 28, 1940.

Materials, loaned, returned to Government agencies. Jan. 21, 1941-Feb.
26, 1942.

Minutes of meetings of the United States Antarctic Service. Mar. 14, 1940-
May 20, 1942.
Minutes of meetings of the USAS Executive Committee and related corre-
spondence.

Miscellaneous memorandums and letters. July 1, 1939-Feb. 22, 1942.
Also includes radiograms.

Newsreel agreement on releases. Dec. 6, 1939-Apr. 3, 1942.
General file concerning relations between USAS and newsreel companies.

North Star. Sept. 5, 1939-Dec. 10, 1940.
Chiefly concerns expenditures for equipping, altering, and operating
the North Star.

Oil drums returned. May 14-Oct. 3, 1941.
Concerns return of borrowed oil drums to Navy.

Operations, East Base. Mar. 8, 1940-Feb. 21, 1941.
Radiograms from East Base.

Operations, West Base. Feb. 19, 1940-Feb. 2, 1941.
Radiograms from West Base.

Orders to Commanding Officer. July 7-Nov. 25, 1939.
Duplicates of orders from the President to the Secretary of the Interior
and to Admiral Byrd. The order of November 25 is the organic directive
for USAS. It sets forth in some detail the top level organization, ob-
jectives, and executive policies to be followed.

Personnel. July 18, 1939-May 12, 1942.
Correspondence, memoranda, and radiograms.

Personnel, assignments of, for return journey. Nov. 9, 1940-Feb. 3, 1941.

Personnel, reports on, rendered to Civil Service Commission. 1942-43.
Concerns mainly administrative, clerical, and editorial personnel.

Photographic supplies. Aug. 20, 1939-Nov. 6, 1940.
Concerns procurement.

Picture controversy. Nov. 25, 1939-Mar. 16, 1942.
Concerns "Paragraph Nine" of the President's order of November 25, 1939, which established USAS. This paragraph, among other provisions, placed restrictions on release of photographs by USAS personnel.

Radio broadcasts. Dec. 7, 1939-May 2, 1941.
Concerns nonofficial communications. Largely devoted to the "Mail Bag" program conducted by the General Electric Co. Station, WGEO, Schenectady, N. Y., in cooperation with other radio broadcasting stations.

Report on contributions. Dec. 10, 1939-Jan. 5, 1940.
Lists of donations to USAS, showing value.

Report on personnel. Feb. 8, 1943.
Statistical report according to salary level. No names are included.

Reports to Government departments. May 21-Aug. 16, 1941.
Reports concerning supplies and equipment used by USAS.

Report of Survey Board. Mar. 27-June 24, 1941.
Reports concerning evacuation of supplies and equipment from Antarctica.

Requests for pictures and advertising. Nov. 8, 1939-Mar. 10, 1941.
Concerns requests by private firms desiring to exploit donations or sales to USAS.

Scientific papers published and delivered. 1941-42.
Printed and manuscript copies of scientific reports, submitted to USAS in accordance with "Paragraph Nine" of the President's order of November 25, 1939, together with incidental correspondence.

Scientific personnel and reports. May 16, 1940-May 1, 1942.
Correspondence, memoranda, lists, and other records concerning scientific activities of USAS.

Selective Service bulletins. Oct. 9, 1940-July 12, 1941.
Official bulletins issued by the Selective Service System concerning deferment and other matters, together with incidental correspondence.

Ships' operations. Nov. 2, 1939-May 17, 1941.
Correspondence, memoranda, and other records concerning itineraries, equipment, operations, and other matters, for the U. S. S. Bear and the U. S. M. S. North Star.

Snow cruiser. Oct. 18, 1939-Dec. 5, 1941.
Concerns an experimental vehicle constructed and built by the Research Foundation of the Armour Institute of Technology and lent to USAS.

Surplus property. June 30-Oct. 27, 1941.
Concerns disposal to Government agencies.

United States Antarctic Service. n.d.

An account of the establishment of the USAS and prospectus of planned operations. This document appears to have been issued early in the history of USAS, before exigencies caused modification of plans.

Zoological specimens to be secured. Oct. 9, 1940-July 8, 1941.

Concerns specimens to be secured for the National Museum and National Zoological Park of the Smithsonian Institution.

APPENDIX IV

LIST OF SUBJECT HEADINGS, GENERAL FILE II (ENTRY 3)

- Adamkiewicz, Comdr. L. L. Sept. 27-Oct. 11, 1941.
Concerns medical officer of the Bear.
- Additions to narrative appendix. 1942.
Concerns information for inclusion in appendix to official log prepared by Hawthorne. See appendix VI, No. 74.
- Administration. Apr. 22, 1940-July 23, 1942.
Chiefly concern administration of the Oxford, Ohio, office of the USAS, and appropriations.
- American Geographical Society. May 9, 1941-June 23, 1943.
Correspondence between P. A. Siple, in charge, Oxford, Ohio, office of the USAS, and the Society.
- American Geographical Society, estimate. 1942.
Concerns estimates, made by the Society at the request of the USAS, of the cost of processing USAS maps with the Society's facilities.
- Antarctic academy. 1940.
Concerns classes in navigation held at West Base.
- Antarctic Service. 1939-42.
Copies of a mimeographed issuance entitled "General Information, The United States Antarctic Service" (no date, but probably issued in 1939). Also printed congressional documents concerning reimbursement of naval personnel for losses incurred in the emergency evacuation of East Base.
- Bartol Research Foundation. Aug. 8-26, 1941.
- Base bulletins and notices. 1940.
Official issuances of P. A. Siple, West Base leader.
- Bills of lading, duplicate. 1941-43.
- Biology. May 24-July 30, 1941.
- Cartographic cost estimates. Oct. 1, 1941-Nov. 12, 1942.
Correspondence between USAS offices in Washington and Oxford, Ohio, and the American Geographical Society, concerning compilation, editing, and production of USAS maps.
- Cartography. June 9, 1941-Dec. 12, 1942.
Includes correspondence with the Hydrographic Office, Department of the Navy.

Charts. Dec. 6, 1941-Dec. 12, 1942.

Claim forms. 1940.

Clothing and material lists prepared for U. S. Army. n.d.

Clothing, general. Aug. 28, 1939-May 12, 1942.

Clothing, boots. June 17-July 14, 1941.

Clothing, inquiries. Dec. 13, 1941-Apr. 8, 1942.

Clothing, Byrd. n.d.

Coal consumption charts. 1940.

Confidential memorandums. Feb. 21-Sept. 26, 1939.
Concerns organization, plans, and preparatory operations.

Correction sheets for errored vouchers. Oct. 1-14, 1942.
Work sheets concerning routine transactions.

Correspondence on aviation reports. Aug. 12-Sept. 29, 1942.

Correspondence, bulletins of North Star voyage home. Feb. 2-May 5, 1941.

Correspondence, dogs. Sept. 16, 1939-Apr. 26, 1943.

Correspondence, official. 1939-40.
Concerns supplies and equipment.

Correspondence, personnel. July 30, 1941-June 3, 1943.

Correspondence, scientific reports. June 27, 1941-June 3, 1943.

Cubic capacity and tonnage estimates. 1941.
Concerns transshipment of supplies, equipment, and personal effects
from ship to shore in Boston.

De Luxe Laboratories. Sept. 27, 1941-Feb. 26, 1942.

Department equipment reports. Oct. 23-Nov. 14, 1939.

Douglass, Malcolm C. 1939-41.
Concerns a member of West Base staff.

English-Siple correspondence. June 8, 1941-Jan. 20, 1942.

Equipment to be shipped via North Star. n.d.

Equipment loaded in Bear. 1941.

Evacuation, instructions, plans, and procedure. 1940-41.

Evacuation, inventories of equipment. 1940-41.

Evacuation, survey board report. Apr. 8, 1941.

Films, inventories submitted (Paragraph Nine). 1941.

Films, none to turn in (Paragraph Nine). 1941.

Films, official motion pictures. 1940-41.

Films, partial submissions (Paragraph Nine). 1941.

Films, refusals (Paragraph Nine). 1941.

Food cache, correspondence. 1939.

Food cache, inventory. 1940.

Form letters. 1943.
Concerns Private Law 12, 78th Congress, which appropriated funds for reimbursement of civilian members of the USAS for personal property losses incurred in evacuating East Base. Also includes roster (no date) of former USAS personnel indicating the activity of each man in relation to the war effort.

Fuel. 1939.
Concerns procurement.

Fuel consumption charts, West Base. 1940.

Geographical correspondence. July 10, 1941-Feb. 20, 1942.
Does not include correspondence with the American Geographical Society or with the New York Times.

Gilmour-MacDonald official correspondence. May 17, 1941-Mar. 31, 1942.
Gilmour's official title was "Recorder," and he later performed administrative duties. From the time the expedition returned to the United States until November 9, 1941, he was stationed in Boston. After that date he was stationed at Miami University, Oxford, Ohio.

Gilmour-Siple memoranda. Dec. 17, 1941-July 3, 1942.

Inventory, abandoned equipment, West Base. n.d.

Inventory, East Base. 1941.

Inventory, master, evacuated equipment, West Base. 1941-42.

Inventory, materials purchased with USAS funds. 1941.

Inventory, returned equipment. 1942.

Library. 1939-41.

MacDonald-Siple correspondence. May 8, 1941-June 2, 1942.
MacDonald was Administrative Assistant to the Commanding Officer, USAS.

Manifest, distribution to bases. 1939-41.
Includes lists of supplies and equipment showing source and obligation to return loans.

Mapping and map prospectus. June 12, 1941-Feb. 16, 1943.
Concerns compilation and processing of USAS maps.

Medical-dental. May 12-Aug. 8, 1941.

Miscellaneous correspondence. Sept. 8, 1942-May 24, 1943.

Miscellaneous memorandums. July 1, 1942-May 13, 1943.

Movies. 1939-40.

National Academy of Sciences and National Research Council. July 28, 1939-June 15, 1942.
To the National Academy were delegated certain advisory and executive duties concerning preparation of a history of the USAS and scientific reports, by the President's order of November 25, 1939.

Optical. June 12-Nov. 28, 1941.

Outpost, West Base. Mar. 2, 1940.
Lists of supplies.

Oxford office. July 24, 1941-Apr. 14, 1943.
General correspondence of the USAS office at Miami University, Oxford, Ohio.

Oxford office, monthly reports. Aug. 7-Nov. 11, 1942.

Packing requirements, evacuation. Aug. 20-29, 1940.

Pemmican formulas. Aug. 25, 1939.
Correspondence, containing formulas, with Dana Coman, M. D., of Johns Hopkins University Medical School.

Personal manifests. 1939.
Original signed declarations of personal property and of some official property.

Polar Record manuscript. n.d.

Summarizes field activities of the USAS. This manuscript by P. A. Siple was published in the Polar Record, 3:427.

Press releases, West Base. Feb. 12-Nov. 20, 1940.

Publication of history of expedition. Jan. 28, 1940-Jan. 20, 1943.

Purchase order summary. n.d.

For the actual purchase orders, see entry 13.

Radio. June 25-July 1, 1941.

Radio messages. Nov. 10, 1939-May 4, 1941.

Radio messages, confidential. 1940-41.

Radio messages, flight operations. Feb. 11, 1940-Jan. 4, 1941.

Radio messages, semi-official. Feb. 28, 1940-Apr. 8, 1941.

Radio messages, sent and received aboard North Star en route to Bay of Whales. Nov.-Dec. 1939.

Radio messages to and from East Base. 1939-41.

Radio presentation ideas. Apr. 13-Dec. 31, 1940.
Concerns nonofficial broadcasts.

Receipts for property on loan. May 13, 1942-June 29, 1943.
Largely concerned with loans of USAS photographs.

Reports, chronological order of completion. 1941-42.
Concerns scientific and historical reports and maps.

Reports, miscellaneous, concerning supplies. 1941-42.
Correspondence with manufacturers of USAS supplies.

Reports, scientific.

Reports filed under this heading are listed in appendix VI.

Reports to Executive Committee. Sept. 11, 1941-Jan. 17, 1942.

Requisitions. July 15, 1942-June 30, 1943.

Ross Shelf Ice Committee. Oct. 24, 1941-June 30, 1942.

Correspondence concerning a committee formed under National Research Council auspices, under the Chairmanship of Dr. Walter H. Bucher.

Schedule of adjustments. 1942-44.

Concerns appropriation adjustments within the Interior Department and between the Interior Department and the National Archives.

Schedule of collections. Sept. 3-Nov. 13, 1942.

Concerns reimbursements of Government for overpayments.

Schedule of disbursements. July 16, 1942-June 26, 1943.

Shipping lists, original, personal effects. 1941.

Supplies and accounts. 1941-42.

Telegrams. 1942-43.

Trail operations, equipment and supply requirements. 1940.

Concerns procurement.

Trail operations, West Base plans. 1940.

Travel authorities. 1942-43.

Tunnel Cache, supply lists. n.d.

Vouchers. Feb. 9, 1942-Apr. 26, 1943.

APPENDIX V

LIST OF SUBJECT HEADINGS, INFORMATION FILE (ENTRY 8)

- Addresses. n.d.
List of press contacts in Boston, Mass.
- Advertising commitments. 1939-40.
Concerns supplies and equipment donated to USAS.
- Arrival at West Base. 1940.
- Biographical material. 1939.
Concerns USAS personnel.
- Broadcasts. n.d.
- Clothing. n.d.
- Dead file. 1939-42.
General file concerning ephemeral, trivial, or routine matters.
- Departure. 1939-40.
Concerns southward voyage.
- Disbandment. n.d.
- Dogs. 1939.
- Donors. 1939.
- East Base. 1940.
- East Base narrative. 1940.
- Eastern cruise. 1940.
Concerns exploratory cruise of the Bear.
- Evacuation, East Base. 1941.
- Evacuation, West Base. 1941.
- Evacuation sidelights. 1940-41.
- First aid program. 1939-42.
Hawthorne, who maintained this file, served as Antarctic Field Representative of the American Red Cross.
- Food. 1939.

General file. 1939-41.
Concerns USAS matters in general.

History. 1939-40.
A collection of material for a projected historical report on USAS.

Ice pack. 1940.

King Neptune. 1939.

Libraries. 1939-40.
Book lists and correspondence concerning USAS libraries.

Magnetic cruise. 1940.

Maps. n.d.
Reference copies of maps of Antarctica.

Messages. 1940.
Radiograms to and from Antarctica concerning the information program.

Miscellaneous procurement. 1939-41.

Newsreels. 1939.
Correspondence and memoranda concerning plans for newsreel photography in Antarctica.

New Zealand. n.d.

Official film, captions, credits. 1939-42.
Concerns making of official USAS motion pictures and related matters.

Paragraph Nine. 1939.
Consists of a copy of the President's order of Nov. 25, 1939, and related documents.

Personnel. 1939.
Lists of personnel, biographical record sheets, related documents, and a few photographs of personnel.

Photograph captions. n.d.
Hawthorne's rough work sheets.

Pitcairn. 1939.
Concerns visit to Pitcairn Island by North Star on a southward voyage.

Postal. 1939.
Concerns the projected establishment of United States post offices in Antarctica, cachets, and other matters of philatelic interest.

Preparations. 1939.

Preparations prior to embarkation in Boston.

Press releases. 1939-41.

Mimeographed bulletins issued by R. Hawthorne. The record set of mimeographed releases covers the period July 20, 1939-Apr. 7, 1941, but is not complete. A series of releases entitled "Press Highlights from Little America III," by H. P. Gilmour, correspondence, memoranda, radiograms concerning press releases, and an incomplete card index to press releases, are also included.

Quotes. n.d.

Radio. 1939-40.

Concerns nonofficial radio broadcasts.

Radio photos. 1939.

Wide World Photos, Inc., a subsidiary of the New York Times, loaned radio photographic transmission equipment, with which photographs were successfully transmitted from Antarctica.

Rapa. 1939.

The North Star visited Rapa Island in Polynesia during the southward voyage.

Recommendations. n.d.

Rendezvous. 1941.

Concerns rendezvous of the North Star and the Bear at Punta Arenas on northward voyage.

Requisitions and orders. 1939-40.

Concerns photographic supplies and service.

Return routes. 1940.

Concerns northward voyage and unsuccessful search for Pactolus Bank.

Science. 1939-41.

Concerns preparatory phase of USAS scientific program. Also includes a table giving in parallel columns the planned and completed programs.

Scientific reports. 1942.

Correspondence of R. Hawthorne concerned mainly with editing and publishing scientific reports.

Snow Cruiser. 1939.

An experimental vehicle, loaned to the USAS by the Research Foundation of the Armour Institute of Technology.

South Pacific Cruise. 1940.

Concerns cruise to eastward from West Base, preparatory to establishing East Base.

Specimens. 1940-41.

Concerns specimens collected for the National Zoological Park, Washington, D. C.

Supplies. 1939.

Concerns donations of supplies to the USAS.

U. S. M. S. North Star. n.d.

U. S. S. Bear. n.d.

Voyage home. 1941.

Typewritten copy of Vol. IV of West Base Log, which covers the northward voyage of West Base personnel in the North Star, by H. P. Gilmour.

West Base narrative. 1940.

Informational material, consisting largely of press releases, concerning West Base activities.

APPENDIX VI

LIST OF SCIENTIFIC AND TECHNICAL REPORTS, LOGS, AND RELATED MATERIAL (ENTRY 9)

The records listed in this appendix vary greatly in content and form. They range from formal reports, ready for publication, to rough journals and work sheets, compiled in the laboratory or on the trail while work was in progress.

The main body of reports comprise the Report File, described in inventory entry 9. Additional reports from the files described in entries 2, 3, and 8 are included and are cross-referenced to the appropriate inventory entry. For example, item No. 4 in the list closes with the notation, "(Entry 3.)" This indicates that the report is filed with the records described in entry 3 of the inventory.

The items are listed alphabetically by author. Five items for which no author can be identified are placed at the end of the list. Each item is identified by a number. Numbers in parentheses, out of serial order, indicate that the report is filed with another report under that number. A subject index to the numbered items in this list follows the list.

Logs of the two USAS expeditionary vessels are not included among the records of the USAS. Deck logs of the U. S. M. S. North Star for the relevant periods, Nov. 1939-Apr. 1940, and Dec. 1940-May 1941, are among the records of the Division of Territories and Island Possessions in the National Archives. Deck logs of the U. S. S. Bear for the period Sept. 11, 1939-June 2, 1941, are among the records of the Bureau of Navigation in the National Archives.

- 1 AMERICAN PHILOSOPHICAL SOCIETY. [Program of] Autumn General Meeting . . . Nov. 21-22, 1941. Printed, 4 p. (Entry 2.)
- 2 ~~1~~ The Autumn General Meeting . . . Nov. 21-22, 1941. Reprint from Science, 94:547. 6 p. A report of the meeting, which includes abstracts of papers by H. M. Bryant, A. Court, H. G. Dorsey, R. G. Fitzsimmons, S. A. Korff, E. E. Lockhart, P. A. Siple, F. A. Wade, and L. A. Warner. Also mimeographed copies of the abstracts, 16 p.
- 3 ASMAN, ADAM. [Report on] Light Tank M2A2. Typescript, 1 p., with incidental correspondence. (Entry 3.)
- 4 ASMAN, ADAM, and CLYDE W. GRIFFITH. Tension and Breakaway Tests [of Snow Friction]. Typewritten tabulation, 7 p. Also rough notes. For a narrative report on these tests, see No. (69) under Siple. (Entry 3.)

- 5 BAILEY, CLAY W. Report on Aircraft Operations in the South Polar Regions. Typescript, 3 p. This report was submitted to USAS for transmittal to the Navy Bureau of Aeronautics. (Entry 2.)
- 6 ---- Basic Communication Plan. Blueprint, 30" x 36". Diagrammatic plan for radio communication.
- 7 ---- Report on U. S. Antarctic Service Radio Communications for Period 1939-1941. Processed, 65 p., with photographs and diagrams. This report was submitted to the Radio Branch of the Navy Bureau of Ships.
- 8 BAILEY, DANA K. Cosmic Ray Report. Typescript, 5 p.
---- See also Nos. 87 and 88.
- 9 BENYAS, D. Discovery in Antarctica! Article in Honolulu Advertiser, Nov. 16, 1941. 2 p. Based on an interview with R. B. Black, whose covering letter is included. (Entry 2.)
- (69) BERLIN, LEONARD M. Preliminary Report of Ground Surveys Accomplished at West Base. Typescript, 4 p.
- 10 ---- Ice Movement--West Cape [Bolling Bight, West Base, and] Aerial Map Plotting [Progress Report, June 1940]. Typescript, 1 p., also pencil notes, 1 p. (Entry 3.)
- 11 ---- Survey Notes. Typescript, ca. 80 p. Contain a description of procedures, computations of bearings and distances, and a record of the placement of General Land Office brass monuments and the building of cairns.
- 12 BERLIN, LEONARD M., and PAUL A. SIPLE. Ground Survey [and] Aerial Survey Program. Typescript, 4 p. (Entry 3.)
- 13 BLACK, RICHARD B. Rough Log [East Base, 1939-41]. Longhand journal in 2 vols., ca. 420 p.. Includes pages torn from rough field logs kept by Black.
- 14 ---- Operations From East Base. Typescript, 24 p. Read by title only at meeting of the American Philosophical Society, Nov. 21-22, 1941, under the title "Operations in Palmer Land."
- 15 ---- Flight Logs of Richard B. Black [East Base, 1940]. Typewritten transcripts from rough logs. Include survey data and radio logs.
- 16 ---- Rough Flight Logs [East Base, May 20, 1940-Jan. 19, 1941]. Rough flight logs in pencil, 2 vols. 82 p. and 40 p.
- 17 ---- First Ascent to [Palmer Peninsula] Plateau, Rough Log, [Aug. 6-13, 1940]. Typewritten transcription, 7 p; rough notes, 46 p.

- 18 BLACK, RICHARD B. Relief Journey to Meet Ronne and Eklund [Jan. 21-27, 1941]. Rough notes in pencil, 12 p.
- See also No. 108.
- 19 BLACKBURN, QUIN A., S. EDWARD ROOS, and F. ALTON WADE. Some Geographical Results of the Second Byrd Antarctic Expedition, 1933-35. Reprint from Geographical Review, 27:574-614.
- (5) BOWLIN, W. M. Report on Aircraft Operation in South Polar Regions, [1941]. Typescript, 7 p. This report was submitted to USAS for transmittal to the Bureau of Aeronautics. Bowlin, not a member of USAS, based the report on experience on the Second Byrd Antarctic Expedition. (Entry 2.)
- (69) BOYD, VERNON D. Motorized Surface Transportation in the Antarctic. Typescript, 9 p.
- BRAMHALL, E. H. See No. 97.
- 20 BRYANT, HERWIL M. Biology at East Base. Typescript, 51 p. A list of photographic illustrations is given in an appendix, but the photographs are not present. This report was prepared to be read before a meeting of the American Philosophical Society and to be published in the Proceedings of the Society. For an abstract of the report, see No. 2.
- 21 ---- Summary Report, Biology Department [East Base], Feb. 16, 1941. Typescript, 5 p.
- 22 ---- Biology Record, East Base. Longhand notes and pen, pencil, and colored crayon sketches of specimens. 192 p. (including blank pages). Also a negative photostat copy.
- 23 ---- Field Catalog of Birds. Longhand, 2 p. Also a negative photostat copy.
- 24 ---- Preliminary Report of the Scientific Work Accomplished at East Base, Biology. Typescript, 5 p. (Entry 3.)
- 25 ---- Field Catalog for Mammals. Longhand, 2 p. Also a negative photostat copy.
- 26 ---- [Miscellaneous Papers.] Typescript, 19 p. Notes concerning biological activities at East Base, including checklists, sketches, progress reports, and instructions for collecting.
- See also No. 53.

- 27 BURSEY, JACK. [Pacific Coast] Survey Party, Trail Log [West Base, Oct. 17, 1940-Jan. 7, 1941]. Rough log in pencil, ca. 100 p. Also typewritten transcription, 25 p. (Entry 3.)
- 28 ---- [Trail Log, Pacific Coast Survey Party, West Base, Oct. 18, 1940-Jan. 7, 1941.] Rough entries in pencil on mimeographed forms, showing navigational, meteorological, and snow surface data with additional remarks.
- 29 BUTLER, RAYMOND A. [Preliminary Report on] Cartography [West Base]. Typescript, 1 p. (Entry 3.)
- 30 ---- [Progress Report on Mapping Program, West Base, Aug. 2, 1940.] Typescript, 1 p. (Entry 3.)
- 31 CARNEGIE INSTITUTION, WASHINGTON, D. C., DEPARTMENT OF TERRESTRIAL MAGNETISM. Instructions for Magnetic Work, McGregor Arctic Expedition, 1937-38. Typescript with blueprints and map, 43 p.
- 32 CLARKE, ERIC T., and SERGE A. KORFF. Latitude Effect in Cosmic Rays at Far Southern Latitudes. Reprint from Physical Review, 58:179. 1 p. (Entry 2.)
- See also Nos. 86-88.
- (5) COLLIER, ZADIK. Aviation Report [1941]. Typescript, 3 p. This report was submitted to the Bureau of Aeronautics. (Entry 2.)
- (2) COURT, ARNOLD. Disappearance of the Tropopause During the Antarctic Winter. Printed, 1 p. Part of No. 2. Also typewritten copies, 2 p.
- 33 ---- Field Altitudes, West Base. Typescript, 7 p. Computations based on barometric observations, with explanatory note. (Entry 3.)
- 34 ---- Individualism of the Antarctic Atmosphere. Typescript, 7 p. Paper delivered before the American Meteorological Society, Dec. 1941. Also abstract of paper (1 p.) and incidental correspondence. (Entry 2.)
- 35 ---- Meteorological Data for Little America III [West Base]. Page proofs, ca. 150 p. A report published by the United States Department of Commerce, Weather Bureau, as Supplement No. 48, 1949.
- (69) ---- Preliminary Report of Meteorological Observations and Accomplishments at West Base. Typescript, 6 p.
- (29) ---- Preliminary Report of Meteorological Observations and Accomplishments [West Base]. Typescript, 2 p. (Entry 3.)

- 36 COURT, ARNOLD. Progress Notes, Meteorological Section [West Base], May 14, 1940. Typescript, 3 p. (Entry 3.)
- 37 ---- [Progress Report on Meteorological Program, West Base, July 1, 1940.] Typescript, 1 p. (Entry 3.)
- 38 ---- Progress Report on Micro-Climatology, West Base, July 1, 1940. Typescript, 1 p. Summarizes the program of temperature readings carried out by L. Wells and I. Schlossbach in Elinor Bolling Night. For a fuller report, see No. 119. (Entry 3.)
- 39 ---- Tropopause Disappearance During the Antarctic Winter. Reprint from Bulletin of the American Meteorological Society, 23:220. 19 p. (Entry 2.)
- 40 ---- Little America [West Base], Weather Observations, 1940-1941. Typescript, 108 p. This is the final general report on meteorological activity at West Base.
- 41 ---- Weather Records Obtained at Little America III [West Base], 1940-41. Typescript, 2 p. (Entry 3.)
- 42 ---- Wind Roses. 10 p. Statistical charts showing, for a given time period, the altitude, direction, number of hours, and force of the wind. They probably pertain to the report described in No. 35.
- 43 ---- [Work Sheets and Rough Drafts Pertaining to Meteorology.] ca. 85 p. Include daily weather forecasts for West Base, Aug.-Sept. 1940. (Entry 3.)
- See also Nos. 93 and 115.
- (26) DARLINGTON, H. Biological Notes, Weddell Coast Party, Nov. 19, 1940-Jan. 20, 1941. Typescript, 4 p.
- 44 DAVIS, MALCOLM C. Collecting Antarctic Fauna. Typewritten rough draft, 5 p.
- (2) DORSEY, HERBERT G. An Antarctic Mountain Weather Station [East Base]. Printed, 1 p. Part of No. 2. Also typewritten copies.
- (21) ---- Preliminary Report of Meteorological Operations at East Base, [Mar. 1, 1941]. Typescript, 1 p.
- 45 ---- Meteorology at East Base. Typescript, 18 p.
- (21) DYER, J. GLENN. Report of Magnetic Surveys and Studies [East Base, Feb. 26, 1941]. Typescript, 2 p.

- (21) DYER, J. GLENN. Report of Reconnaissance Sledging Trip into Neny Trough, [Oct. 26-29, 1940]. Dated Nov. 1, 1940. Typescript, 2 p.
- 46 ---- [Summary Log of Southeastern Survey Party, East Base.] Typescript, 2 p. A summary in tabular form. For rough notes, see No. 48.
- (21) ---- Report of Southeastern Survey to Eternity Range Area, [Nov. 20-Dec. 10, 1940]. Typescript, 5 p., with table of dates, camp locations, elevations, and distances. Also rough draft of the report.
- 47 ---- [Survey Notes and Other Records.] ca. 400 p. Position computations in pencil on mimeographed forms, instruction manuals for instruments, other informational material, and copies of USAS correspondence including a progress report sent by Dyer to R. B. Black on July 17, 1940.
- 48 ---- Survey Book, Field Book, Trail Logs, and Flight Logs. Rough notes in pencil, in two 5" x 8" notebooks, ca. 200 p.
- 49 EKLUND, CARL R. Biology Notes. Rough notes in pencil, 17 p. Also a negative photostat copy.
- 50 ---- Field Catalog of Birds. Rough notes in pencil, 10 p. Also a negative photostat copy.
- (24) ---- Ornithological Report, Biology Department, [East Base, 1940-41]. Typescript, 2 p. (Entry 3.)
- 51 ---- Antarctic Ornithological Record. Longhand, 199 p. (including blank pages).
- 52 ---- Ornithological Report. Typescript, ca. 100 p., illustrated by photographs.
- (21) ---- Ornithological Report, Biology Department [East Base], Feb. 27, 1941]. Typescript, 2 p.
- 53 EKLUND, CARL R., and HERWIL M. BRYANT. Penguin Measurement Charts. Pencil notations on mimeographed forms, 36 p. Measurements of Adelie penguins. Also negative photostat copies.
- 54 FITZSIMMONS, ROY G. Report on Magnetic Observations, West Base, July 1, 1940. Typescript, 1 p. (Entry 3.)
- 55 ---- Notes on Preparation of Instruments for Magnetic Program. Rough notes in pencil and pen, ca. 75 p. (including blank pages).

- (29) FITZSIMMONS, ROY G. Magnetic Program [West Base]. Typescript, 1 p. (Entry 3.)
- 56 ---- Notes Taken During Assembly of Magnetograph. Rough notes in pencil and pen, ca. 50 p. (including blank pages).
- (2) ---- Preliminary Report on the Magnetic and Seismic Program. Printed, 1 p. Part of No. 2.
- 57 FITZSIMMONS, ROY G. Log of the Rockefeller Mountains Seismic Party. ca. 55 p. Apparently a longhand transcription in ink from the rough log.
- 58 ---- Seismic Observations in Antarctica. Typewritten rough draft. 7 p., 2 photographs.
- (29) ---- Seismic Program [West Base]. Typescript, 1 p. (Entry 3.)
- 59 ---- [Seismological Working Papers.] ca. 80 p. Description of seismological instruments, operating and reporting instructions, photographs, and related material.
- 60 ---- Terrestrial Magnetism. Typescript, 14 p., 1 diagram, 8 photographs. (p.1 missing.) Rough draft with duplicate diagram and photographs. Negative photostat copies of photographs.
- 61 ---- [Seismographic Data From the Rockefeller Mountains Seismic Station.] Included in Seismographic Report, Nov. and Dec. 1940, published by the United States Coast and Geodetic Survey.
- 62 FITZSIMMONS, ROY G., and MURRAY A. WIENER. Magnetic Program [and] Auroral Program. Typescript, 9 p.
- 63 ---- [Records of Magnetic Observations.] ca. 300 p. Tables of instrument readings, tracings from recording instruments, other working papers, and correspondence about instruments and related matters.
- See also Nos. 125 and 126.
- 64 FRAZIER, RUSSELL G. [Progress Reports on Medical and Physiological Programs, West Base, July 1, 1940.] Typescript, 1 p. (Entry 3.)
- (69) ---- Preliminary Report of Medical Research as Conducted at West Base. Typescript, 2 p.
- (29) ---- [Preliminary Report on Medical Work, West Base]. Typescript, 1 p. (Entry 3.)

- 65 FRIEDMAN, HERBERT. Pelagic Birds from the West Coast of South America. Typescript, 6 p. Describes specimens collected on USAS vessels. Friedman was Curator, Division of Birds, National Museum.
- (5) GILES, WALTER R. Report on Aircraft Operation in the South Polar Regions [1941]. Typescript, 2 p. This report was submitted to USAS for transmittal to the Bureau of Aeronautics. (Entry 2.)
- 66 GILMOUR, HAROLD P. [Narrative] Trail Log of the Edsel Ford [Mountains] Geological Survey Party, [West Base], Oct. 17, 1940-Jan. 7, 1941]. Rough notes in pencil, in two notebooks, ca. 200 p.
- 67 ---- Trail Log [of Edsel Ford Mountains Geological Survey Party, West Base], Oct. 17, 1940-Jan. 7, 1941.] Rough entries in pencil on mimeographed forms, showing navigational, meteorological, and snow surface data, with additional remarks. ca. 150 p. Original and pencil transcription. For narrative logs of this party, see Nos. 66 and 70.
- 68 GILMOUR, HAROLD P. Gilmour's Log Book from Philadelphia, Penna. to Little America [West Base]. Typescript, 15 p. Consists of excerpts from the West Base Log (see No. 69).
- 69 ---- West Base Log. Nov. 21, 1939-May 5, 1941. 6 typewritten vols., ca. 1,200 p. Includes 25 appendixes, as follows: 1 set of fuel-consumption charts, 5 food inventories, and 19 scientific and technical reports by L. M. Berlin, V. D. Boyd, A. Court, R. G. Frazier, E. E. Lockhart, J. C. McCoy, C. F. Passel, C. C. Shirley, P. A. Siple, F. A. Wade, and L. A. Warner.
- 70 GILMOUR, HAROLD P., and LAWRENCE A. WARNER. Geological Survey Party to Edsel Ford Mountains, Oct. 17, 1940-Jan. 7, 1941. Typescript, 2 vols., 303 p. Includes negative photostats of transcribed Survey Notes (see No. 116). Also included as "addenda" are technical data concerning West Base sledging parties in general.
- 71 GREAT BRITAIN, HYDROGRAPHIC DEPARTMENT, ADMIRALTY. The Antarctic Pilot. London, 1930. Published manual, compiled by C. V. Smith, Capt., RN. xxiv, 193 p.
- 72 ---- Supplement No. 8 - 1939, Relating to the Antarctic Pilot. Corrected to 16th December, 1939. London, 1940. Published manual, compiled by H. V. Silk, Comdr., RN. 65 p.
- GRIFFITH, CLYDE W. See No. 4.
- 73 HARTNELL, GEORGE, and H. E. McCOMB. A Magnetic Observatory in the Antarctic. Typescript with diagrams and photographic illustrations, 21, 3, and 4 p. This paper consists of instructions for

installation and maintenance. It was apparently prepared expressly for USAS.

- 74 HAWTHORNE, ROGER. Log Book, Establishment of the Bases. 2 type-written vols. illustrated with photographs, ca. 400 p. This log covers the period Nov. 15, 1939-May 14, 1940, including the voyage south on U. S. M. S. North Star, establishment of the bases, the exploratory cruise of U. S. S. Bear, the voyage north to Valparaiso on U. S. S. Bear, and the voyage from Valparaiso to the United States on SS. Santa Elena.
- 75 ---- Log Book, Evacuation Expedition. Typescript, 99 p., illustrated with photographs. Covers the period Dec. 10, 1940-May 5, 1941.
- 76 ---- Field Notes Covering Admiral [R. E. Byrd's] Flights, [Jan.-Feb. 1940.] Pen and ink and typewritten notes, 23 p.
- 77 ---- [Rough Log.] Longhand notes, ca. 100 p. Covers the period, Jan. 10-Apr. 14, 1940. For the smooth log of this period, see No. 74.
- 78 ---- [Rough Log.] Longhand notes, ca. 30 p. Covers the period, Dec. 10, 1940-Jan. 31, 1941. For the smooth log of this period, see No. 75.
- (21) HEALEY, JOSEPH D. Establishment of Meteorological Station on Central Plateau of Palmer Peninsula, [Oct. 23-26, 1940.] Typescript, 1 p.
- 79 HILTON, DONALD C. [Field Notes, May 1940-Jan. 1941.] 4 vols., ca. 400 p. Field survey notes and journals of sledge trips.
- 80 HILTON, DONALD C. [Survey Notes.] ca. 125 p. Records of observations, computation of positions, and other working papers. Include data concerning sledge trips.
- (24) KNOWLES, PAUL H. Geological Summary [East Base.] Typescript, 2 p. (Entry 3.)
- (24) ---- Glaciology [East Base]. Typescript, 1 p. (Entry 3.)
- (24) ---- Weddell Coast Journey [East Base]. Typescript, 4 p. (Entry 3.)
- (21) ---- Geological Summary [East Base]. Typescript, 3 p.
- 81 ---- Geology of Southern Palmer Peninsula. Typescript, 45 p., with photographs and map.
- (21) ---- Ice Studies Summary, East Base [Feb. 22, 1941.] Typescript, 3 p.

- 82 KNOWLES, PAUL H. Log of General Operations. Rough notes in pencil, ca. 60 p. Covers the period Sept. 20, 1939-Jan. 17, 1941.
- (21) ---- Log of the Weddell Coast Depot Party. Operation VI(a) [Sept. 10-20, 1940]. Dated Sept. 26, 1940. Typescript, 3 p.
- (21) ---- Weddell Coast Journey [Nov. 19, 1940-Jan. 17, 1941]. Dated Feb. 22, 1941. Typescript, 7 p.
- 83 KORFF, SERGE A. Cosmic Ray Investigations. Reprint from Carnegie Institution of Washington Year Book 40, for the year 1940-41, p. 131-133. (Entry 2.)
- 84 ---- Cosmic Ray Observations on the U. S. Antarctic Expedition. Typescript of article appearing in Sky and Telescope magazine, 5 p. Also printed copy of the article, 2 p. (Entry 2.)
- (2) ---- Report on Cosmic Ray Results. Printed, 1 p. Part of No. 2. Also typewritten copy, 2 p. (Entry 2.)
- 85 ---- Reports from Recipients of Grants from the Research Funds. Reprint from Year Book of the American Philosophical Society, 1941, p. 102-103. (Entry 2.)
- 86 KORFF, SERGE A., and ERIC T. CLARKE. Report of Cosmic Ray Observations. 15 p. Reprint from Journal of the Franklin Institute, 230:567. (Entry 2.)
- See also No. 32.
- 87 KORFF, SERGE A., ERIC T. CLARKE, and DANA K. BAILEY. Report on Cosmic Ray Investigations. Typescript, 10 p.
- 88 KORFF, SERGE A., DANA K. BAILEY, and ERIC T. CLARKE. Report on Cosmic Ray Observations. Typescript, 15 p., with tables and photographs.
- (21) LEHRKE, LESTER. Preliminary Report of Mile High Meteorological Outpost [Oct. 22, 1940-Jan. 1, 1941]. Dated Feb. 16, 1941. Typescript, 2 p.
- (2) LOCKHART, ERNEST E. [Acclimitization in the Antarctic.] Printed. Part of No. 2.
- 89 ---- Antarctic Trail Diet. Typescript, 41 p. with additional tables.
- 90 ---- Journal of the Biological Party, West Base [Oct. 15-Dec. 25, 1940]. Longhand version in pen and ink, 83 p. Typewritten transcription, 63 p., with incidental correspondence.

- 91 LOCKHART, ERNEST E. [Trail log of Biological Party, West Base, Oct. 15-Dec. 25, 1940.] ca. 175 p. Rough entries in pencil on mimeographed forms, showing navigational, meteorological, and snow surface data, with additional remarks.
- 92 ---- Department of Physiology [West Base], Report [July 1, 1940.] Typescript, 1 p. (Entry 3.)
- (69) ---- Preliminary Report of Physiological Work Accomplished at West Base. Typescript, 2 p.
- (29) ---- [Preliminary Report on] Physiology [West Base]. Typescript, 1 p. (Entry 3.)
- 93 LOCKHART, ERNEST E., and ARNOLD COURT. Oxygen Deficiency in Antarctic Air. Typescript, 13 p. Also reprint from Monthly Weather Review, 70:93.
- McCOMB, H. E. See No. 73.
- (5) McCOY, JAMES C. Report on Aircraft Activities at Little America, the West Base, of the United States Antarctic Expedition, 1939-41. A note indicates that this report was "edited and transcribed" by H. P. Gilmour, USAS Recorder. Typescript, 16 p. with additional tables. Also original longhand notes in pencil. (Entry 2.)
- (5) ---- Aviation Activities at West Base [1941.] This report was submitted to USAS for transmittal to the Bureau of Aeronautics. Typescript, 4 p. (Entry 2.)
- (69) PASSEL, CHARLES F. Supplement to Warner's Report of Geological Research Conducted at West Base, Antarctica. Typescript, 5 p.
- (29) ---- Supplement to Warner's Report [on Geology at West Base]. Typescript, 3 p. (Entry 3.)
- See Nos. 107 and (29) under Siple and Passel.
- (5) PERCE, EARL B. Report on Aircraft Operations at East Base. Typescript, 4 p. This report was submitted to USAS for transmittal to the Bureau of Aeronautics. (Entry 2.)
- 94 PERKINS, JACK E. [Progress Report on Biological Program at West Base, July 1, 1940.] Typescript, 1 p. (Entry 3.)
- 95 ---- Biology at West Base. Typescript, 65 p.
- (5) PETRAS, THEODORE A. Aircraft Operation in the South Polar Regions. Typescript, 3 p. This report was submitted to USAS for transmittal to Bureau of Aeronautics. (Entry 2.)

- 96 POULTER, THOMAS C. The Application of Seismic Methods in the Discovery of New Lands in the Antarctic. Reprint from Armour Engineer and Alumnus, Mar. 1937. 4 p. illustrated.
- (5) PULLIEN, WILLIAM. Report on Aircraft Operation in the South Polar Regions. Typescript, 2 p. This report was submitted to USAS for transmittal to the Bureau of Aeronautics. (Entry 2.)
- 97 RAWSON, K. L., and E. H. BRAMHALL. The Determination of the Latitude and Longitude of Little America [II] by Star Sights. Mimeographed issuance, 8 p. Bulletin of the Little America Forum, Vol. 1, No. 5, July 30, 1934.
- (21) RONNE, FINN. Brief Summary of the Southern Sledge Journey [East Base, Nov. 6, 1940-Jan. 28, 1941]. Typescript, 8 p.
- 98 ---- [Log of] the S[outhern] S[ledge] S[urvey] Party. Rough notes in pencil, consisting mainly of numerical notations of bearings and distances.
- ROOS, S. EDWARD. See No. 19.
- SCHLOSSBACH, ISAAC. See No. 119.
- (69) SHIRLEY, CHARLES C. Preliminary Report of Photographic Accomplishments and Photographic Technique Employed at West Base, Little America, III. Typescript, 8 p.
- 99 ---- [Photographic] Observation and Technique, Sub-zero Weather. Typescript, 3 p. (Entry 3.)
- (29) ---- [Preliminary Report on] Photography [West Base]. Typescript, 3 p. (Entry 3.)
- 100 ---- [Report on Proposed Plane Table Camera.] Typescript, 3 p. Also includes rough pencil work sheets. (Entry 3.)
- (21) SIMS, LEWIS S. Medical Summary of East Base, Feb. 12, 1941. Typescript, 2 p.
- 101 SIPIE, PAUL A. General Principles Governing Proper Selection of Clothing for Cold Climates, as Related to the Human Body, Climate and Textiles. Processed, 40 p. with additional tables. According to a note on the title page, this report was prepared for the Standardization Branch, Quartermaster General's Office, Oct. 31, 1941. (Entry 2.)
- 102 ---- General Principles Governing Selection of Clothing for Cold Climates. Typescript, 100 p. with additional 6-page bibliography. A 5-page descriptive list of illustrations is included, but the illustrations themselves are missing.

- 103 SIPLE, PAUL A. Report on Use of the Gyroscopic Drift Sight Loaned by the U. S. Navy. Typescript, 3 p. (Entry 3.)
- (29) ---- [Preliminary Report on] the Ross Shelf Ice and Other Littoral Ice Features . . . Interpreted by Physiographic Features. Typescript, 2 p. (Entry 3.)
- 104 ---- Report on Special Climatic Research [July 25, 1940]. Typescript, 2 p. Concerns research on a "wind chill index." (Entry 3.)
- 105 ---- A Summary of the Activities of the United States Antarctic Expedition, 1939-1941. Typescript, 33 p. This paper was published in the Polar Record, 3:427-449. (Entry 3.)
- (69) ---- First Outline of Plans for Summer Field Operations [West Base, June 4, 1940]. Typescript, 9 p.
- (69) ---- Daily Temperature and Wind Chill Compilations [Mar. 1940-Jan. 1941]. Typescript.
- (69) ---- Tension and Breakaway Tests . . . [of Snow Friction] May-Sept. 1940. Typescript, 11 p. For field notes of these tests, see No. 4.
- 106 ---- Geographical Exploration From Little America III, the West Base. Typescript, 69 p. with map. For an abstract on this subject, see No. 2.
- See also No. 12.
- 107 SIPLE, PAUL A., and CHARLES F. PASSEL. Measurements of Dry Atmospheric Cooling in Subfreezing Temperatures. Typescript, 48 p. with 5 p. bibliography.
- (29) ---- Studies in Relative Comfort (Wind-Chill Index). Typescript, 2 p. (Entry 3.)
- (69) SIPLE, PAUL A., and F. ALTON WADE. Instructions to the Biological Party [West Base, Oct. 13, 1940]. Typescript, 9 p.
- (69) ---- Instructions to the Edsel Ford Mountains Geological Survey Party [West Base, Oct. 15, 1940]. Typescript, 11 p.
- (69) ---- Instructions to the Pacific Coast Survey Party [West Base, Oct. 15, 1940]. Typescript, 12 p.
- (69) ---- General Instructions to the Rockefeller Mountains Seismic Station Personnel. Typescript, 6 p.
- (5) SNOW, ASHLEY C., JR. Report on Aircraft Operation in the South Polar Regions. Typescript, 8 p. This report was submitted to USAS for transmittal to the Bureau of Aeronautics. (Entry 2.)

- (21) SNOW, ASHLEY C., JR. Summary Report, Flight Operations [East Base, Feb. 16, 1941]. Typescript, 2 p.
- 108 SNOW, ASHLEY C., and RICHARD B. BLACK. Flight of 22 December, 1940 to the South West [East Base]. Typescript, 18 p. Log kept by Snow, annotated by Black. Includes a photographic and radio log. Typescript.
- 109 UNITED STATES ANTARCTIC SERVICE. General Instructions to Members of the Scientific Staff. Printed, 11 p. Apparently compiled in 1939 before the expedition left the United States. (Entry 8.)
- (2) WADE, F. ALTON. An Introduction to the Symposium on Scientific Results of the United States Antarctic Expedition, 1939-41. Printed, 1 p. Part of No. 2.
- 110 ---- Progress Report on Cosmic Ray Observations [West Base], June 3, 1940. Typescript, 1 p. (Entry 3.)
- 111 ---- Physical Aspects of the Ross Shelf Ice. Typescript with additional tables, 23 and 7 p. For an abstract of a paper on this subject, see No. 2.
- 112 ---- Narrative Report of Rockefeller Mountains Survey Party [West Base]. Typescript, 25 p.
- 113 ---- Daily Log of Snow Cruiser. Typescript, 102 p. Covers all Wade's activities, in addition to his duties as chief of the Snow Cruiser Unit, for the period Jan. 24, 1940-Jan. 25, 1941.
- 114 ---- Sub-Surface Temperatures [and] Changes in Snow Surface. Typescript, ca. 75 p.
- See also Nos. 19 and (69) under Siple and Wade.
- 115 WADE, F. ALTON, and ARNOLD COURT. Notes on Radiation Measurement [West Base, July 2, 1940]. Typescript, 1 p. (Entry 3.)
- 116 WARNER, LAWRENCE A. Survey Notes, Geological Party, Edsel Ford Ranges, Marie Byrd Land, Antarctica, Nov.-Dec. 1940. Pen-and-ink copy of original, 50 p.
- 117 ---- Field Elevations [West Base]. Pencil work sheets, 15 p. Tabulations of survey data. (Entry 3.)
- (69) ---- Preliminary Report of Geological Research as Conducted at West Base. Typescript, 5 p.
- (29) ---- [Preliminary Report on] Geology [West Base]. Typescript, 3 p. (Entry 3.)

- (69) WARNER, LAWRENCE A. Tractor trip, Little America [West Base] to Rockefeller Mountains, Sept. 1940. Typescript, 5 p.
- 118 ---- Structure and Petrography of the Southern Edsel Ford Ranges, Antarctica. Typescript, 120, 2, 9 p., including bibliography and appendix. Illustrated with photographs and map. For an abstract on this subject, see No. 2.
- See also No. 70.
- 119 WELLS, LORAN, and ISAAC SCHLOSSBACH. Micro-Climatological Studies of Elinor Bolling Valley [West Base]. Typescript, 6 p.
- 120 WIENER, MURRAY A. Report [on] Auroral Activity [West Base, June 10, 1940]. Typescript, 2 p. (Entry 3.)
- 121 ---- Report of Auroral Department, West Base, July 1, 1940. Typescript, 2 p. (Entry 3.)
- 122 ---- Aurora Record. Longhand notes on auroral observations, 53 p. (including blank pages). For a typewritten transcription of these notes, see No. 126.
- 123 ---- Official Log: Winter Auroral Sub-Base. Rough notes in pencil, ca. 55 p.
- 124 ---- [Dip Observations at Amberley Substation of Christchurch Magnetic Laboratory, New Zealand, Dec. 1939]. Tabulations of observations and rough computations, in pencil, ca. 50 p.
- 125 WIENER, MURRAY A., and ROY G. FITZSIMMONS. Auroral Observation Forms. Carbon copies of filled-in forms, ca. 90 p. For ribbon copies, see No. 126.
- 126 ---- Auroral Observation Log. Typewritten record of auroral observation program. Also original copies of auroral observation forms, filled in by Wiener and Fitzsimmons. 27 and ca. 150 p.
- See also Nos. 62 and 63.
- 127 AUTHOR UNKNOWN. Operation of Aircraft in the South Polar Regions, 1941. Typescript, 35 p. This report was compiled by the USAS for submission to the Bureau of Aeronautics. It consists of direct quotations from 9 individual reports submitted to the Commanding Officer by USAS aviation personnel. For copies of the individual reports, see Nos. 4 and (4).
- 128 ---- Log of U. S. S. Bear (Excerpts), Sept. 11, 1939-Oct. 10, 1940. Typescript, 35 p.

129. AUTHOR UNKNOWN. Brief Summary of Scientific Objectives of the United States Antarctic Service, 1939-41. Typescript, 6 p. Apparently compiled as of Nov. 1, 1940, showing accomplishments as of that date and future plans to Mar. 1, 1941.
- 130 ---- Instructions for Making Entries in Trail Logs, West Base. Mimeographed, 2 p. Specifies data to be entered and gives symbols to be used. For trail logs to which these instructions apply, see Nos. 28, 67, and 91.
- 131 ---- Photographic Log, Flight "A", West Base, Feb. 8-9, 1940. Pencil notations, including bearings. ca. 200 p. (including blank pages). By unidentified member of flight crew.

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The numbers refer to the numbered items in the preceding list. Numbers in parentheses may refer to more than one report on a subject, filed together but listed under different authors.

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APPENDIX VII

LIST OF CARTOGRAPHIC AND RELATED RECORDS (ENTRIES 20, 21, and 22)

In this list of maps parts of the description that have been copied from the maps are within quotation marks. The rest of the description is based upon an inspection of the map. When the scale is not given on the map the compiler computed the approximate scale. The dimensions given are to the edge of the sheet. Only the most significant information shown on the map is noted in the description; many maps include additional and often profuse detail of but secondary importance to the overall purpose of the map.

General Records (Entry 20)

1. "Antarctica. March 3, 1939. Azimuthal equal-area projection. Scale 1:16,000,000." Approximately 250 statute miles or 212 nautical miles to 1 inch. Printed map on paper. Map shows place names and the route of the Ellsworth expedition of November-December 1935 to Little America and indicates the fringe of the Antarctic Continent by gray shading. Area covered: from latitude S. 52° to the South Pole. Dimensions: 26 x 21 inches.

2. "Basic Communication Plan. United States Antarctic Service. Washington, D. C. 11, July, 1939. (Revised 28, Oct. 1939)." Blueprint. Plan shows types of long distance communication, long range operations, local operations, emergency and field communication, tractor operations, dog sled operations, aircraft operations, direction-finder equipment, and trail equipment for West Base (Ross Sea), East Base (Palmer Land), outposts, and Pacific Coast Base. Dimensions: 30 x 35½ inches.

East Base Records (Entry 21)

3. "Antarctic Regions, East Base and Vicinity. . . . Mercator projection. Scale 1 degree Longitude equals 9 inches. Drawn by D. C. Hilton, Surveyor." Manuscript map (in ink) on paper. "Data from sledging trips of Knowles-Hilton-Darlington-Dorsey-Healy-Musselman-Dolleman and plane flights." Relief shown by contour. Place names, elevations, triangulation and other control points, and caches are shown. A finished drawing. Area covered: latitude S. 67° 30' to 68° 30' and longitude W. 64° 30' to 67° 20'. Dimensions: 35½ x 26½ inches.

4. "Antarctic Regions. Palmer Peninsula Area. . . . East Base. Polyconic projection. Heights in feet above sea level. Drawn by D. C. Hilton, Surveyor." Scale 10 nautical miles equals 1 inch. Manuscript map (in ink, pencil, and colors) on paper. "Data from sledging trip of Knowles-Hilton-Darlington and plane flights of Black, Snow, Perce, Ronne, Dyer, Carroll." Essentially an outline map with some terrain shown by contour and spot elevations. Map shows camp sites, numbers indicating available photography, flight line, sledge routes, place names, and shore line features. A

partially finished map, portions being in rough pencil outline. Area covered: approximately latitude S. 67° to 71° and longitude W. 60° to 70° . Dimensions: $36 \times 27\frac{1}{2}$ inches.

5. "Antarctic Regions. Palmer Peninsula Area. . . . East Base. Polyconic projection. Scale 10 nautical miles per inch. Drawn and compiled by J. Glenn Dyer, Cadastral Engineer, United States General Land Office." Manuscript map (in ink and pencil) on paper. "From sledge trips of Ronne, Eklund, Hilton, Knowles, Darlington, Dyer, Musselman, Healy. Flights of Black, Snow, Perce, Carroll and Dyer. Delineation of King George the Sixth Sound from surveys of Rymill--British Graham Land Expedition, 1935-1937." Essentially an outline map with shore lines, principal place names and features, flight lines and sledging routes, annotations along routes, and elevations shown. A partially finished map, portions being in rough pencil outline. Area covered: approximately latitude S. 70° to 78° and longitude W. 49° to 75° . Dimensions: 54×36 inches.

6. "East Base. Palmer Peninsula, Antarctica. . . . Operations Chart. From Available Sources. Isogonic Lines from Observations of 1940 & 1941. Mercator Projection. Scale 1 degree Longitude equals 1 inch, [or approximately 70 miles to 1 inch]. Drawn by J. Glenn Dyer, Cadastral Engineer, General Land Office." Manuscript map (in colored ink and pencil) on paper. Map shows place names, routes of aircraft flights from May 20 to December 30, 1940, trail operations, new discoveries and delineation of conjectural positions, and delineation of coastline by former expeditions. Area covered: approximately latitude S. $66^{\circ} 45'$ to $77^{\circ} 30'$ and longitude W. 59° to 87° . Dimensions: 41×30 inches.

7. "East Base. . . . Stonington Island. Palmer Peninsula Antarctica. Plane Projection. Contour interval 5 feet. Datum mean sea level. Drawn by J. Glenn Dyer, Cadastral Engineer, United States General Land Office." Scale approximately 85 feet to 1 inch. Manuscript map (in ink and pencil) on paper. Map shows elevations by contours, triangulation points, and the location of landing beaches, tractor trails, buildings, food and fuel caches, the central radio antenna tower, and the United States General Land Office base and meridian station. Location: approximately latitude S. $68^{\circ} 11' 39.8''$ and longitude W. $67^{\circ} 02' 43.6''$. Dimensions: 30×41 inches.

8. "Antarctic Regions. Pacific Coast Area. . . . East Base. Polyconic projection. Scale 10 nautical miles per inch. Drawn and compiled by Finn Ronne, Transportation Engineer." Manuscript map (in ink and pencil) on paper. "Data from sledging trip of Ronne--Eklund and plane flights of Black-Snow-Perce-Ronne-Carroll--and all available sources." Essentially an outline planimetric map with shore lines, principal place names and features, flight lines and sledging routes, and annotations along routes shown. A finished drawing. Area covered: approximately latitude S. 68° to 74° and longitude W. 63° to 93° . Dimensions: 36×56 inches.

9. United States Hydrographic Office Plotting Sheet bearing a penciled title "Trail Chart Lat $67^{\circ}-45'$ to Lat $70^{\circ}-00'$ -- Hilton" showing the route

of the sledging party. Mercator projection. Scale approximately 6 miles equals 1 inch at S. latitude 69° . Manuscript map (in ink and pencil) on paper. Appears to be the original field survey sheet, with information added as to terrain (shown by contour and form line), route of sledging party, triangulations, place names, spot elevations, and position angles. Area covered: approximately latitude S. $67^{\circ} 45'$ to 70° and longitude W. 64° to 68° . Dimensions: 26 x 18 inches.

10. "Ground Control Points (East Base and Vicinity) Polyconic Projection - Scale 1 inch equals 1 nautical mile. Elevations in feet above mean sea level. Sledge Tracks - J. E. Healy and H. G. Dorsey, Jr. . . . Dorsey-Hilton N. E. Glacier Trail Chart." Signed by H. G. Dorsey, Jr., March 12, 1941. Manuscript map (in ink and pencil) on paper. Shows locations of survey stations and physical features by numbers and terrain by contour and form lines. Area covered: approximately latitude S. $67^{\circ} 55'$ to $68^{\circ} 15'$ and longitude W. $66^{\circ} 30'$ to $67^{\circ} 15'$. Dimensions: $20\frac{1}{2}$ x $19\frac{1}{2}$ inches.

11. "Hilton's Weddell Coast - Trail Chart, Lat. 70° to 72° ." Scale approximately 10 miles to 1 inch at 71° S. latitude. Manuscript map (in pencil and ink) on paper. Apparently a field sheet showing trail, area covered by dates, and a few place names with part from 71° to 72° marked void and corrected in inset. Area covered: approximately latitude S. $69^{\circ} 53'$ to 72° and longitude W. 60° to 63° . Dimensions: $21\frac{1}{2}$ x $15\frac{1}{2}$ inches.

12. "Palmer Archipelago. Melchior Harbour. From a Sketch Survey by Lieut. Commr. J. M. Chaplin, R. N., Assisted by Midn. W. P. O'Connor, RNR RRS 'Discovery' 1927. [Copied by] Leonard M. Berlin, C. Eng. G. L. O." Scale approximately 1,660 feet to 1 inch. Manuscript map (in pencil) on orange-line coordinate paper. Map shows place names and soundings. Area covered: approximately latitude S. $64^{\circ} 17'$ to $64^{\circ} 20'$ and longitude W. $62^{\circ} 48'$ to $62^{\circ} 58'$. Dimensions: 18 x $19\frac{1}{2}$ inches.

13. Unfinished sketch labeled on back in pencil "Trail Plot -- J. G. Dyer." Manuscript map (in pencil and ink) on paper. Map shows sledge trails, nunataks and knolls by hachures and numbers, crevasses, and triangulation points. Scale approximately 5 miles equals 1 inch. Area covered: approximately latitude S. 69° to $71^{\circ} 45'$ and longitude W. 62° to 68° . Dimensions: 56 x 30 inches.

14. East half of United States Hydrographic Office Chart No. 5411, 1st Edition, Nov. 1939, bearing a penciled title "Hilton's Trail Chart, H. O. No. 5411." Scale 1° longitude equals 1 inch. Chart bears annotations in pencil and shows in colored ink the route of flight to and from East Base, the southbound sledging trail from November 19 to December 22, 1940, and the northbound trail from December 22, 1940, to January 17, 1941. Area covered: latitude S. 63° to 73° and longitude W. 60° to $77^{\circ} 30'$. Dimensions: 29 x 18 inches.

15. "Andersen Harbour, Melchior Islands--Dallman Bay, Antarctic. [By] R. A. Butler. Surveyed by Leonard M. Berlin, Cadastral Engineer, G. L. O. Soundings by Leonard M. Berlin and Charles C. Shirley, P. I. C."

Scale approximately 300 feet equals 1 inch. Manuscript map (in ink) on paper. An outline compiled planimetric map which shows shore lines, elevations, and principal place names and features and indicates depths of harbor in fathoms and "fair holding ground between Anchorage Is. and Chain Point." Location: approximately latitude S. $64^{\circ} 18' 28''$ and longitude W. $62^{\circ} 52' 59''$. Dimensions: 34×40 inches.

16. Map without title of Andersen Harbor, Melchior Island--Dallman Bay, Antarctic. By "Leonard M. Berlin, Cadastral Engineer, General Land Office." Scale approximately 300 feet equals 1 inch. A manuscript map (in blue and black pencil and red ink) on green-line coordinate paper. Map shows shore lines, elevations, and principal place names and features and indicates depths of harbor in fathoms, and "Fair holding ground between Anchorage Is. and Chain Pt." Location: approximately latitude S. $64^{\circ} 18' 38''$ and longitude W. $62^{\circ} 52' 59''$. Dimensions: 26×33 inches.

17. Map without title in two overlapping sheets, one of which is signed "Finn Ronne," of George VI Sound area showing route of sledge trip and return from Wordie Shelf Ice Cache, labeled station No. 1, approximately S. latitude $69^{\circ} 30'$ and W. longitude $66^{\circ} 55'$ south and westerly to a point approximately S. latitude $72^{\circ} 32'$ and W. longitude $76^{\circ} 50'$. Scale 10 nautical miles equals 1 inch. Unfinished manuscript map (in ink and pencil) on yellow polyconic plotting sheet showing route in red pencil and stations Nos. 1-12 in red ink. Information along route includes dates, elevations, magnetic variations, terrain descriptions, and references to sheets by numbers. Area covered by the two sheets: approximately latitude S. 69° to 76° and longitude W. 61° to 76° , and latitude S. 69° to $73^{\circ} 45'$ and longitude W. 72° to 94° . Dimensions of each sheet: $30 \times 40\frac{1}{2}$ inches.

18. Sketch showing outline of Walgreen Coast, Antarctica, route of ship from which United States Antarctic Expedition flight observations were made, and route with furthest point south reached by Capt. James Cook's expedition of 1774. Scale approximately 45 miles equals 1 inch at 71° S. latitude. Positive photostat of a manuscript sketch which shows routes of plane flights of February 24, 25, and 27, 1940 (?), and includes information pertaining to flight of February 27 and appearance of the coast. Annotated in colored pencil to show additional longitude and latitude lines. Area covered: approximately latitude S. 67° to 76° and longitude W. 86° to 114° . Dimensions: 17×29 inches.

19. Rough sketch showing plane flights and other operations southwest of Peter I Island in the vicinity of Walgreen Coast, Antarctica. Scale approximately 28 miles equals 1 inch at 71° S. latitude. Enlarged positive photostat of a manuscript sketch apparently showing the plane flights of February 24, 25, and 27 and the route of the ship and its positions from February 21 to 28, 1940 (?). Lines and hachures added in colored ink evidently indicate a correction of coast line and location of mountains. Area covered: approximately latitude S. 70° to 76° and longitude W. 83° to 114° . Dimensions: 21×23 inches.

West Base Records (Entry 22)

20. "U. S. Antarctic Service. West Base - Little America III, Bay of Whales - Antarctic. Occupied Jan. 1940-41. Surveyed Jan. 27, 1941, by Leonard M. Berlin, Cadastral Engineer, G.L.O. [by] R. A. Butler." Scale 50 feet equals 1 inch. Manuscript drawing (in ink) on paper. Drawing shows the location of quarters and installations at the West Base and includes an inset of the headquarters for personnel on the scale of 30 feet to 1 inch. Location: approximately latitude S. $78^{\circ} 30'$ and longitude W. 164° . Dimensions: $29\frac{1}{2}$ x 32 inches.
21. "Chart of Flight Operations. Marie Byrd Land. Projection: Azimuthal Equidistant. Scale 1:2,661,120 [approximately $42\frac{1}{2}$ statute miles equals 1 inch]. Plotted and drawn at Syracuse University by Raymond A. Butler--Cartographer U. S. Antarctic Service, Little America III." Manuscript map (in ink) on paper. "Sources: Beardmore Gl. region and Liv Gl. to Thorne Gl. from maps compiled by the American Geographical Society of New York. King Edward VII and Marie Byrd Lands from map by U. S. Hydrographic Office. Beardmore Gl. to Liv Gl.; eastern limit of Ross Shelf Ice; outline of Roosevelt Island; coast line east of Jacob Ruppert Coast; crevasses; pressure ridges and flight tracks from original plottings made by Dr. Paul A. Siple, West Base Leader." Chart shows place names, crevasses, pressure ridges, and flight lines from October 4 to December 18, 1940. Area covered: approximately latitude S. 73° to 89° ; longitude W. 115° to 180° and longitude E. 150° to 180° . Dimensions: $41\frac{1}{2}$ x $27\frac{1}{2}$ inches.
22. "Chart of Trail Operations. Marie Byrd Land." This map is similar to the preceding one in projection, scale, compiler, type, sources, and area covered. Instead of flight tracks it shows trail routes of biological, geological, and other parties. The trail routes are from original plottings made by Paul A. Siple. Dimensions: 42 x 29 inches.
23. "Chart of Flight Operations. Ross Sea Area. . . . Projection: Azimuthal Equidistant. Scale 1:2,661,120 [approximately $42\frac{1}{2}$ statute miles equals 1 inch]. Plotted and drawn at Syracuse University by Raymond A. Butler--Cartographer U. S. Antarctic Service; Little America III." Manuscript map (in ink) on paper. "Sources: Coulman Is. to Beardmore Gl; Liv Gl. to Thorne Gl. from maps compiled by the American Geographical Society of New York. King Edward VII and Marie Byrd Lands from map by U. S. Hydrographic Office. Eastern limit of Ross Shelf Ice, outline of Roosevelt Island, crevasses, pressure ridges and flight tracks from original plottings made by Dr. Paul A. Siple, West Base Leader." Chart shows place names, crevasses, pressure ridges, and flight lines from December 7 to December 12, 1940. Area covered: approximately latitude S. 73° to 89° ; longitude W. 135° to 180° and longitude E. 150° to 180° . Dimensions: $41\frac{1}{2}$ x 26 inches.
24. Unfinished chart, without title, of operations in Marie Byrd Land, Ross Shelf Ice, and Ross Sea Area. "Compilation and Drafting By Raymond A. Butler. Interrupted June 30, 1942." Scale approximately 45 miles to

1 inch. Manuscript chart (in ink) on paper. Chart shows place names and routes of the U. S. S. Bear and U. S. M. S. North Star in 1940-41. No legend is given but symbols evidently indicate crevasses, pressure ridges, and flight lines. Area covered: approximately latitude S. 73° to 80° ; longitude W. 80° to 180° and longitude E. 125° to 180° . Dimensions: $39\frac{1}{2}$ x $39\frac{1}{2}$ inches.

25. "Marie Byrd Land. By Comr. H. O. [E], Saunders. From Survey by Marie Byrd Land Party B. A. E. II. Projection Lambert's Conformal Conic with two Standard Parallels. [Compiled by] R. A. Butler." Scale approximately 3 nautical miles to 1 inch. Manuscript chart (in ink) on paper. Chart shows Siple's track and stations, from the vicinity of Mt. Grace McKinley to the vicinity of the Raymond Fosdick Mountains and Wade's track in the vicinity of Saunders Mt. Peaks are indicated by numbers, some by two different numbers, one of which is enclosed in a box and labeled "Saunders." Area covered: approximately latitude S. 76° to 78° and longitude W. 143° to 150° . Dimensions: $38\frac{1}{2}$ by 37 inches.

26. "Marie Byrd Land. Projection Lambert's Conformal Conic with Two Standard Parallels. By Leonard M. Berlin, Cadastral Engineer, G. L. O. Drawn at Little America III During the Winter Night of 1940. From Aerial Photographs Taken on Marie Byrd Land Flight, Feb. 9, 1940, by Charles Shirley, P. I. C. [By] R. A. Butler." Scale approximately 3 nautical miles to 1 inch. Manuscript map (in ink) on paper. This is an unfinished map bearing only the names of a few mountains and many numbered points. Area covered: approximately latitude S. $75^{\circ} 30'$ to $77^{\circ} 45'$ and longitude W. 139° to 147° . Dimensions: $39\frac{1}{2}$ x $42\frac{1}{2}$ inches.

27. "Geologic Map of Southern Edsel Ford Ranges. Geology by Wade, Siple, Passel, Warner, and others. Compiled by L. A. Warner, 1942." Scale 3 nautical miles equals 1 inch. Manuscript map (in ink) on tracing cloth. In addition to geologic information the map shows names of glaciers and mountains and indicates principal mountain peaks by numbers. Area covered: approximately latitude S. 76° to 78° and longitude W. 142° to 148° . Dimensions: 37 x 30 inches.

28. Four overlapping sheets without title, signed by Raymond A. Butler, of part of Marie Byrd Land in the vicinity of Ruppert Coast and the Edsel Ford Ranges. Scale approximately 1 mile equals 1 inch. An unfinished manuscript drawing (in ink and pencil) on yellow paper, one sheet of which has an overlay on tracing paper. Sheets bear numbered points (to which hachures have been added south of $76^{\circ} 25'$ S. latitude to show relief), triangulation stations, and undesignated lines. Area covered by the four sheets; approximately latitude S. $75^{\circ} 57'$ to $77^{\circ} 3'$ and longitude W. $143^{\circ} 30'$ to $146^{\circ} 30'$. Dimensions of each sheet 41 x 30 inches.

29. United States Hydrographic Office Chart No. 5412. "Pacific Ocean. Antarctic Regions. 1st Edition, Sept. 1939. Mercator Projection." Scale approximately 15 miles equals 1 inch at 79° S. latitude. Printed chart, annotated in pencil and colored ink to show correction of coastline and

location of mountains, glaciers, etc. Area covered: latitude S. 70° to 80° and longitude W. 130° to 165° . Dimensions: 41 x 35 inches.

30. United States Hydrographic Office Chart No. 5412. "Pacific Ocean. Antarctic Regions. 1st Edition, Sept. 1939. Mercator Projection." Scale approximately 18 miles equals 1 inch at 79° S. latitude. Reduced positive photostat of an annotated printed map showing operations in Marie Byrd Land and King Edward VII Land with an extension of map and grid lines to the east showing, in manuscript, additional corrections to coast and several unidentified lines between 73° and 77° S. latitude and 120° to 147° W. longitude. Area covered by chart and extension: approximately latitude S. 72° to 80° and longitude W. 120° to 165° . Dimensions: 30 x 38 inches.

31. Unfinished map without title of operations in Marie Byrd Land and Ross Shelf Ice area with various unidentified annotations in color and pencil. Scale approximately 40 miles to 1 inch at S. latitude 83° . Annotated positive photostat. Area covered: approximately latitude S. 77° to 88° ; longitude W. 100° to 180° and longitude E. 150° to 180° . Dimensions: 24 x $30\frac{1}{2}$ inches.

For a list of other preliminary inventories, see the list of National Archives publications, which may be obtained upon request from the Exhibits and Publications Section, National Archives, General Services Administration, Washington 25, D. C.