

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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**Reports and Maps of the Military Geology Unit**  
**1942-1975**

compiled by  
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1981

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**1997**

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## INTRODUCTION

Included here are reports and maps which were prepared in the Military Geology Unit of the U. S. Geological Survey from 1942 through 1975. In addition to the references prepared primarily for military use and listed here, more than 200 reports of more general geologic interest were prepared for publication as Survey bulletins and professional papers and in outside journals. These reports are listed in "Publications of the Geological Survey" and other bibliographies.

Military Geology reports generally include basic subjects such as rock types, soils, water resources, landforms and vegetation, as well as interpretive subjects such as suitability of terrain for cross-country movement and for construction of roads and airfields in areas throughout the world. Reports on specific areas range from generalized texts with small scale maps derived from published sources to detailed texts with large-scale maps commonly based on photo-interpretation and, especially for Alaska and western Pacific islands, involving field mapping. Other reports treat topics of interest in military geology without reference to specific areas. A number of reports covering the moon include the first photogeologic map of the near side.

Abbreviations used for topics covered in the reports are as follows:

AF	airfield construction
AO	airborne operations
AT	atomic tests
ADP	automatic data processing
B	bibliography
CI	climate
CO	coasts
CM	construction materials
CCM	cross-country movement
D	drainage
EG	engineering geology
Geophys	geophysics
GW	ground water
I	imagery

L	landforms
M	maps and mapping
MG	military geology
Moon	
MR	mineral resources
Misc	miscellaneous
Perma	Permafrost
R	road construction
RT	rock types
Sci	scientific activities
S	soils
Spp	special physical phenomena (earthquakes, volcanoes, landslides, etc.)
SoG	state of the ground (seasonal variation in moisture and snow cover)
SW	surface water
TI	terrain intelligence
TS	terrain study
UI	underground installations
V	vegetation
WR	water resources

Authors are cited for some kinds of reports; however, many intelligence reports were published anonymously. Most of the reports were prepared by teams made up mainly of geologists but commonly including soils scientists, botanists, climatologists and geographers. Nearly all the soil scientists and climatologists were members of the World Soil Geography Unit, Soil Survey, Soil Conservation Service, U. S. Department of Agriculture. Manuscripts from this Unit were passed through a common review and other processing, as were the manuscripts originating in the Military Geology office, to be issued under the aegis of the latter.

In some instances where it has not been possible to list all authors, names of project supervisors are given.

All reports were prepared under the general direction of the following:

Chief, Military Geology

W. H. Bradley .....	1942
Charles B. Hunt .....	1944
Esper S. Larsen, III .....	1946
Frank C. Whitmore, Jr. ....	1946
Donald H. Dow .....	1959
Montis R. Klepper .....	1964
Verne C. Fryklund, Jr. ....	1964
L. D. Bonham .....	1966
Jack Rachlin .....	1973

Chief, World Soil Geography Unit

Arnold C. Orvedal .....	1946
John D. Rourke .....	1967

File copies of many of the Military Geology reports prepared since 1975 are kept in the Special Geologic Studies Group, U.S. Geological Survey, National Center, Reston, and may be examined there by appropriately cleared persons. Additionally, copies of many of the unclassified studies are in the U.S. Geological Survey Library. Some of the older reports are in the files of the Terrain Analysis Center, Fort Belvoir, Virginia, and other offices within the Corps of Engineers. Most of the reports are out of print and many of the other studies are no longer available.

## WASHINGTON OFFICE

Series Reports for the Office of the Chief of Engineers,  
1942-1963, and the Defense Intelligence Agency, 1963-1965

### Strategic Engineering Studies

These medium- and small-scale intelligence reports and maps were the principal product of the Washington office during World War II. They provide information on various aspects of the terrain and geology for many parts of the world, chiefly Asia, Europe, Africa, the Pacific Islands, and Alaska. Some were published as books, other as folios.

Geology and water supply, West African Ports (Bathurst, Pt. Etienne, Agadir, Mogador), 1942, 30 p., maps - various scales, bibliog. TS, RT, CM, S, WR.

Notes on geology of Madagascar and physical features and mineral resources, 1942, maps - various scales, bibliog. TS, L, CM, S, MR, WR, G, CM, V.

Madagascar (Diego Sorez), 1942, tables, map - 1:200,000. TS, WR, CM, G, CCM.

Belgian Congo, Physical features and mineral resources, 1942, 20 p., map - 1:6,250,000, bibliog. TS, MR, CI, CM.

Egypt, Physical features and mineral resources, 1942, 9 p., map - 1:5,000,000, bibliog. TS, CI, MR, WR.

Ethiopia, Physical features and mineral resources, 1942, 8 p., map - 1:6,000,000, bibliog. TS, CI, WR, MR.

Gold Coast, Physical features and mineral resources, British West Africa, 1947, 23 p., map - 1:2,000,000, bibliog. TS, CI, WR, MR.

Kenya Colony, Physical features and mineral resources, 1942, 9 p., map - 1:6,000,000, bibliog. TS, CI, WR, MR.

Libya, Physical features and mineral resources, 1942, 6 p., map - 1:7,000,000, bibliog. TS, CI, WR, MR.

Nyasaland Protectorate, Physical features and mineral resources, 1942, 7 p., map - 1:3,000,000, bibliog. TS, CI, WR, MR.

Morocco, Physical features and mineral resources, 1942, 13 p., map - 1:4,000,000, bibliog. TS, CI, MR, WR.

Mozambique, Physical features and mineral resources, 1942, 15 p., bibliog. TS, CI, WR, MR.

- Nigeria, Physical features and mineral resources, 1942, 19 p., sketch map, bibliog. TS, CI, WR, MR.
- Southern Rhodesia, Physical features and mineral resources, 1942, 20 p., sketch map, bibliog. TS, CI, WR, MR.
- Northern Rhodesia, Physical features and mineral resources, 1942, 12 p., sketch map, bibliog. TS, CI, WR, MR.
- Africa, Water supply in the Senegal and Ivory Coast, 1942, maps. TS, CM, A, R, WR, G.
- Sierra Leone, Physical geology and mineral resources, 1942, 18 p., sketch map. TS, L, CI, WR, MR.
- British Somaliland, Physical features and mineral resources; Italian Somaliland, Physical features and mineral resources, 1942, 5 p., maps - 1:3,000,000 and 1:5,000,000, bibliog. CI, WR, MR.
- Bechuanaland, Physical features and mineral resources, 1942, 6 p., map - 1:5,000,000, bibliog. CI, WR, MR, TS.
- Swaziland, Physical features and mineral resources, 1942, 9 p., sketch map, bibliog. TS, L, CI, WR, MR.
- Union of South Africa, Physical features and mineral resources, 1942, 44 p., maps - 1:7,500,000, bibliog. TS, L, CI, WR, MR.
- South West Africa, Its physical features and mineral resources, 1942, 31 p., maps, bibliog. TS, L, CI, V, WR, MR.
- Spanish Sahara, Physical features and mineral resources, Rio Do Oro, 6 p., maps, bibliog. Geology and physical features of Rio Do Oro, 15 p., maps. TS, CI, WR, MR, V, CM, L.
- Anglo-Egyptian Sudan, Terrain, construction materials and water supply of Khartown, 1942, 5 p., sketch map, bibliog. TS, CM, WR, MF.
- Anglo-Egyptian Sudan, Terrain, construction materials, and water supplies of Port Sudan, 1942, 3 p., sketch map, bibliog. TS, CM, WF.
- Anglo-Egyptian Sudan, Physical features and mineral resources, 1942, 8 p., map - 1:10,000,000, bibliog. TS, CI, WR, MR.
- Tanganyika, Physical features and mineral resources, 1942, 8 p., map - 1:3,500,000, bibliog. TS, CI, WR, MR.
- Tunisia, Physical features and mineral resources, 1942, 10 p., sketch map, bibliog. TS, CI, WR, MR.
- Uganda, Physical features and mineral resources, 1942, 12 p., map - 1:3,000,000, bibliog. TS, L, CI, WR, MR.



Angola, Physical features and mineral resources, 1942, 13 p., map, bibliog. TS, Cl, WR, MR.

Africa, Water supply and power, 1942, 67 p. WR.

Algeria, Physical features and mineral resources; excavation problems north of St. Andre, maps, bibliog. TS, RT, S, D, Cl, WR.

Eritrea, Physical features and mineral resources, 1942, 6 p., map - 1:3,000,000, bibliog. TS.

French Equatorial Africa, Physical features and mineral resources, 1942, 9 p., map, bibliog. TS, Cl, WR, MR.

New Hebrides Islands, Some possible sites for airfields, 1942, 77 p., tables, sketch maps. AF, Cl, V, L, S.

Solomon Islands, Some airfield sites, 1942, 4 p., maps. AF.

Bismarck Archipelago, Some airfield sites, 1942, SES unpubl.

Liberia, Terrain, construction materials and water supply, 1942, 25 p., sketch map, bibliog. TS, WR, Cl, MR, G, RT.

Muni, Fernando Po, etc., Topography and construction materials, 1942.

Cape Verde Islands, topography and construction materials, 1942.

Arabia, Terrain, building materials, building sites and water supply at places along the southeast coast, 1942, 39 p., illus., maps, bibliog. TS, G, CM, WR, A.

Cape Verde Islands, Water supply, 1942.

Gambia, Topography and construction problems, 1942.

Nairobi and Mombassa, Terrain, construction materials and water supplies, 1942, 26 p., maps. TS, Cl, G, S, CM, MR, WR.

USSR, Komandorski Islands, 1942, 12 p., maps. TS, RT, CM, AF.

Morocco, Qued Tensift Quadrangle, Terrain intelligence, 1942.

Morocco, Agadir and Taroudant Quadrangles, Terrain intelligence, 1942.

Morocco, Mogador and Chickaova Quadrangles, Terrain intelligence, 1942.

Lower California, Terrain intelligence and possible airfield sites; notes on the military geology, 1942, illus., maps. TS, WR, CM, V, Co, R, G, AF, Cl.

Batavia and Soeraba Ja, Java, Possible airfield sites, 1943, map - 1:2,000,000. AF, L, S, CM, WR.

- Rome region, Terrain intelligence, 1943. TS.
- Po Valley region, Terrain intelligence, 1943. TS.
- SES 6. Anglo-Egyptian Sudan (Khartoum, Port Sudan and El Obeid), 1942, 6 p. TS, EG.
- SES 6. Supplement, Anglo Egyptian Sudan, 1942, 10 p. TS.
- SES 13. Kamchatka, USSR, 1942, 37 p., maps. TS, C1, CM, MR, V, G.
- SES 15. French Morocco, Algeria, and Tunisia, 1944, tables, maps. TS, G, CM, MR, WR, D.
- SES 18. Eastern Siberia, Terrain intelligence, 1942, 21 p., maps. TS, RT, CM, SWR, D, C1, G.
- SES 19. Kuril Islands, Potential airfield sites, 1942, 33 p., maps. AF.
- SES 20. Angola, Terrain intelligence, 1942, 23 p., maps. TS, WR, V, CM, RT, MR, C1.
- SES 21. Belgian Congo, Terrain intelligence, 1942, 21 p., maps. TS, C1, V, WR, CM, MR, D, RT, G.
- SES 27. Alaska, 1942 (revised 1943), 44 p., maps - 1:9,000,000. TS, SW, V, R, AF, CM, RT, MR, C1.
- SES 30. Iran, 1942, maps - 1:4,500,000, bibliog. TS, V, D, WR, Spp, CM, G, MR.
- SES 32. Aralo-Caspian Region, Terrain intelligence, 1942, 23 p., maps, bibliog. TS, S, CM, MR, WR, G, C1.
- SES 33. Caucasus, Lower Don and Volga Regions, Terrain intelligence, 1942, 29 p., maps, bibliog. TS, V, CM, MR, WR, C1, G.
- SES 34. Belgium, Terrain intelligence, 1942, 19 p., maps. TS, G, CM, MR, WR.
- SES 35. French West Africa, Terrain intelligence, 1942, 29 p., maps. TS, WR, V, R, CM, RT, MR, C1.
- SES 36. Denmark, Terrain intelligence, 1942, 15 p., maps - 1:1,000,000. TS, G, CM, MR, WR, S.
- SES 37. Rio de Oro, 1942, 18 p., maps - 1:250,000. TS, WR, CM, RT.
- SES 38. Egypt and Sinai, Terrain intelligence, 1942, 11 p., maps - 1:2,000,000. TS, G, CM, WR.
- SES 39. Palestine and Trans-Jordan, Terrain intelligence, 1942, 13 p., maps - 1:1,000,000. TS, G, CM, WR.
- SES 40. Madagascar, Terrain intelligence, 1942, 11 p., maps - 1:3,000,000. TS, WR, CM, RT.

- SES 41. Libya, Terrain intelligence, 1942, 13 p., maps - 1:4,000,000.  
TS, G, CM, WR.
- SES 43. Levant States, Terrain intelligence, 1942, 20 p., maps.  
TS, S.
- SES 44. Iraq, Terrain intelligence, 1942, 20 p., maps, bibliog.  
TS, D, WR, CM, R, AF, G, Sci., RT.
- SES 45. Sardinia, Terrain intelligence, 1942, 60 p., maps -  
1:1,000,000, bibliog. TS, GW, SW.
- SES 46. Corsica, 1943, 48 p., maps - 1:450,000, bibliog.  
TS, WR, CM, MR, AF, R, CCM, V, Cl.
- SES 47. Krasnoyarsk-Welkal air route, Siberia, Terrain intelligence,  
1943, 54 p., maps, bibliog. TS, AF, Co, CM, MR, Perma.
- SES 48. Iraq, Terrain intelligence, 1943, 20 p., maps - 1:3,000,000,  
bibliog. TS, WR, CM, G, D, R, AF, Cl.
- SES 49. Afghanistan, Terrain intelligence, 1943, 33 p., maps -  
1:3,500,000. TS, WR, D, CM, R, AF, G.
- SES 50. Sicily, Terrain intelligence, 1943, 56 p., maps - 1:650,000,  
bibliog. TS, WR, CM, SoG, AF, R, G, MR.
- SES 51. Dodecanese Islands, Terrain intelligence, 1943, 41 p.,  
maps - 1:400,000, bibliog. TS, WR, AF, CM, RT, Spp.
- SES 52. Spain, Terrain intelligence, 1943, 34 p., maps - 1:3,000,000,  
bibliog. TS, WR, CM, R, AF, G, D, MR, Cl.
- SES 53. The Apulian Aqueduct, 1943, 55 p., illus., bibliog.  
WR, GW, SW.
- SES 54. Nigeria, Terrain intelligence, 1943, 31 p., maps - 1:5,000,000.  
TS, V, Cl, G, MR, D, WR, CM.
- SES 55. Greece, Terrain intelligence, 1943, 51 p., maps - 1:2,750,000,  
bibliog. TS, WR, AF, R, CM, G, MR, D, Cl, V.
- SES 56. Pantelleria Island, Terrain intelligence, 1942, 10 p., maps -  
1:350,000, bibliog. TS, WR, V, AF, Cl.
- SES 57. Crete, Terrain intelligence, 1943, 33 p., maps - 1:650,000,  
bibliog. TS, WR, R, AF, CM, S, RT, Spp.
- SES 59. Italy, Terrain intelligence, 1943, 82 p., maps - 1:2,500,000,  
bibliog. TS, WR, D, AF, CM, G, MR, Cl.
- SES 61. Mediterranean, Terrain intelligence, 1943, 34 p., maps -  
1:400,000, bibliog. TS, WR, V, R, AF, CM, RT.

- SES 62. Permafrost or permanently frozen ground and related problems, 1943, 135 p., illus., maps, bibliog.
- SES 62. Permafrost or permanently frozen ground and related problems, (2nd printing & corrections), S. W. Muller, 1945, 231 p., illus., maps, bibliog.
- SES 67. Norway, Terrain intelligence, 1943, 87 p., maps, bibliog. TS, CI, D, WR, CM, R, AF, S, G, MR, V.
- SES 68. China, Possible airfield sites along Hong-Kong-Changsha-Shanghai Railway, 1943, 78 p., illus., maps - 1:100,000, bibliog.
- SES 69. Levant States, Terrain intelligence (highways, aeroplane and seaplane bases), 1943, illus., maps - 1:2,500,000, bibliog. TS, WR, CM, G, D, CI.
- SES 70. Palestine and Trans-Jordan, Terrain intelligence (highways, airplane, and seaplane bases), 1943, illus, maps, bibliog. TS, WR, CM, G, R.
- SES 72. Turkey, Terrain intelligence, 1943, 45 p., illus., maps - 1:4,000,000, bibliog. TS, WR, CM, MR, R, AF, G, Spp, CI, V.
- SES 73. Puglia and Lucania Provinces, Terrain intelligence, 1943, 80 p., illus., maps - 1:250,000, bibliog. TS, WR, R, AF, CM, RT.
- SES 74. Calabria Province, Terrain intelligence, 1943, 80 p., illus., maps - 1:100,000, bibliog. TS, GW, R, SW, V, R, AF, CM, S, RT, CI.
- SES 75. Naples Region, Terrain intelligence, 1943, 55 p., illus., maps - 1:100,000, bibliog. GW, AF, CM, RT.
- SES 76. Part 2, Sicily (West), Terrain intelligence, 1943, 83 p., illus., maps - 1:100,000, bibliog. GW, SW, R, AF, CM, RT.
- SES 76. Part 3, Sicily (East), Terrain intelligence, 1943, 101 p., illus., maps - 1:100,000, bibliog. TS, WR, R, AF, RT, MR, CM.
- SES 76. Part 4, Aqueducts of Sicily, 1943, 68 p., illus., map - 1:1,000,000. WR.
- SES 77. The Netherlands, Terrain intelligence, 1943, 31 p., illus., maps - 1:1,000,000, bibliog. TS, WR, CM, D, R, MR, G.
- SES 78. French Indo-China, Terrain intelligence, 1943, 186 p., illus., maps - various scales, bibliog. TS, D, WR, CM, V.
- SES 79. Vol. 1, Sumatra, Terrain intelligence, 1943, maps - 1:1,000,000. TS, R, AF.
- SES 79. Vol. II, Southern Sumatra, Possible airfield sites, 1943, 131 p., maps - 1:1,000,000. AF, D, CCM, GW, SW, V, R, CM, S, RT, CI.

- SES 80. East Siberia, Chita Oblast, Terrain intelligence, 1943, 48 p., illus., maps - 1:4,500,000, bibliog. TS, D, WR, CM, MR, R, AF, G, Cl.
- SES 81. Albania, Terrain intelligence, 1943, 55 p., illus, maps - 1:250,000, bibliog. TS, WR, CCM, CM.
- SES 82. Yugoslavia, Terrain intelligence, 1943, 75 p., illus., maps - 1:2,000,000, bibliog. TS, Cl, V, D, WR, S, R, AF, G, CM, MR.
- SES 83. Bulgaria, Terrain intelligence, 1943, 63 p., illus., map - 1:1,000,000, bibliog. TS, Cl, WR, R, AF, S, CM, MR, G.
- SES 84. Mediterranean France, Terrain intelligence, 1943, 207 p., illus., maps - 1:2,000,000, bibliog. TS, D, WR, R, AF, CM, S, Cl.
- SES 86. Mindanao, Terrain intelligence, 1944, 125 p., illus., maps - 1:500,000, bibliog. TS, WR, V, R, AF, CM, S, RT, Cl, MR.
- SES 87. France, Terrain intelligence, 1943, 82 p., maps - 1:3,000,000, bibliog. TS, Cl, D, WR, AF, R, CM, MR, G.
- SES 88. Sakhalin Island, Terrain intelligence, 1943, 82 p., maps - 1:100,000 and 1:500,000, bibliog. TS, Cl, WR, R, CM, MR, RT.
- SES 89. Corfu Island, Terrain intelligence, 1943, illus., maps - 1:100,000, bibliog. TS, Co, WR, R, AF, CM, S, G, Cl.
- SES 90. Hokkaido, Possible airfield sites, 88 p., illus., maps, bibliog. Appendix A, Field check revision and Japanese airfield descriptions, 1948, 67 p., illus., maps. AF, Cl, V, S, CM.
- SES 93. Netherlands-New Guinea, Terrain intelligence, 1943, 111 p., illus., maps - 1:500,000. TS, WR, CM, G, MR, S, AF, D, Cl, V.
- SES 95. British Malaya, Terrain intelligence, 1944, 131 p., maps - 1:1,875,000, bibliog. TS, WR, CM, G, MR.
- SES 96. Boeroe (Molukkas), Terrain intelligence, 1944, 41 p., illus., maps - 1:250,000, bibliog. TS, WR, R, AF, CM, S, Cl.
- SES 97. Celebes, Terrain intelligence, 1944, 141 p., illus., maps - 1:125,000, bibliog. TS, D, WR, CM, AF, R, S, G, MR, V, Cl.
- SES 98. Kurile Islands, Terrain intelligence, 1944, 157 p., illus., maps - 1:250,000, bibliog. TS, WR, CM, AF, G, Cl, L, Spp.
- SES 99. Kamchatka, Terrain intelligence, 1944, 92 p., illus., maps - 1:2,500,000, bibliog. TS, Perma, WR, V, R, AF, CM, S, RT, Cl, SoG.

- SES 100. Formosa, Terrain intelligence summary, 1944, 54 p., maps - 1:550,000, bibliog. WR, AF, R, CM, S, MR, Cl.
- SES 101. Ceram (Moluccas), Terrain intelligence, 1944, 77 p., illus., maps - 1:500,000, bibliog. CCM, WR, R, AF, CM, Cl, RT.
- SES 102. Ambon and Oeliaser Islands, Terrain intelligence, 1944, 87 p., illus., maps - 1:100,000, bibliog. WR, R, AF, CM, S, Cl.
- SES 103. Halmahera (Moluccas), Terrain intelligence, 1944, 219 p., illus., maps - 1:500,000, bibliog. WR, AF, CM, S, G, Cl.
- SES 104. Soela (Moluccas), Terrain intelligence, 1944, 21 p., illus., maps - 1:250,000, bibliog. WR, R, AF, CM, Cl.
- SES 106. Truk Islands, Terrain intelligence, (revised), 1944, 63 p., maps - 1:45,000, illus., bibliog. WR, AF, CM, Cl.
- SES 107. Nomoi, Nukuoro and Kapingamarange Islands, Terrain intelligence, 1944, 21 p., illus., maps - various scales, bibliog. WR, AF, S, CM, Cl.
- SES 108. Kusaie (Ualan) Island, Terrain intelligence, 1944, 28 p., illus., maps - 1:500,000, bibliog. WR, R, AF, CM, S, Cl.
- SES 109. Ponape including Pakin and Ant Islands, Terrain intelligence, 1944, 63 p., illus., maps - 1:37,000, bibliog. WR, R, AF, CM, S, Cl.
- SES 110. Palau Islands, Terrain intelligence, 1944, 35 p., illus. maps - various scales, bibliog. WR, R, AF, S, CM, G, Cl.
- SES 111. Certain Western Carolines, Terrain intelligence, 1944, 33 p., illus., maps - 1:50,000, bibliog. CCM, WR, AF, CM, S, Cl, RT.
- SES 112. Yap Islands, Terrain intelligence, 1944, 26 p., illus., maps - 1:60,000, bibliog. WR, R, AF, S, CM, G.
- SES 113. Marianas except Guam, Terrain intelligence, 1944, 47 p., illus., maps - 1:100,000 and 1:135,000, bibliog. WR, R, AF, S, G, Cl.
- SES 114. Bonin and Volcano Islands, Terrain intelligence, 1944, 38 p., illus., maps - 1:55,000, bibliog. WR, AF, R, S, CM, G, Cl.
- SES 115. Northern Borneo, Terrain intelligence, 1944, 87 p., maps, bibliog. TS.
- SES 116. Palawan Province Philippine Islands, Terrain intelligence, 1944, 91 p., illus., maps - 1:500,000, bibliog. TS, WR, CM, AF, S, G, MR, V, Cl.

- SES 117. Cebu, Terrain intelligence, 1944, 91 p., illus., maps - 1:100,000, bibliog. TS, WR, V, CM, S, G, MR, Cl.
- SES 118. Talaud Islands and Sangih Island, Terrain intelligence, 1944, 31 p., illus., maps - 1:250,000, bibliog. TS, WR, R, AF, CM, Cl.
- SES 119. Nansei-Shoto, Part I, Ryukyu-Retto, Terrain intelligence, 1944, 217 p., illus., maps - 1:50,000, bibliog. TS, WR, R, AF, CM, S, G, Cl.
- SES 119. Nansei-Shoto, Part III, Satsunan-Retto, Terrain intelligence, 1944, 428 p., illus., maps - 1:50,000, bibliog. TS, WR, R, AF, CM, S, G, Cl.
- SES 122. Sulu Archipelago, Terrain intelligence, 1944, 85 p., illus., maps - 1:200,000, bibliog. TS, WR, V, R, AF, CM, S, G, Cl.
- SES 123. Panay, Terrain intelligence, 1944, 90 p., illus., maps - 1:200,000, bibliog. TS, WR, V, R, AF, CM, S, G, Cl.
- SES 124. Luzon, Terrain intelligence, 1944, 57 p., illus., maps - 1:1,110,000, bibliog. TS, WR, CM, AF, R, S, G, V, Cl.
- SES 125. Kyushu, Terrain intelligence, 1945, 45 p., illus., maps - 1:900,000, bibliog. TS, WR, R, AF, S, CM, MR.
- SES 126. Honshu and Shikoku, Terrain intelligence, 1945, 65 p., illus., maps - 1:1,250,000, bibliog. TS, WR, AF, R, S, CM, EG, G, V, Cl, UI.
- SES 127. Hokkaido, Terrain intelligence, 1944, 45 p., illus., maps - 1:1,000,000, bibliog. TS, D, CCM, WR, AF, S, CM, MR, G, V, Cl.
- SES 127. Appendix A, Hokkaido, Field check revision, 1947, 34 p., maps. TS.
- SES 131. Samar and Leyte, Terrain intelligence, 1944, 959 p., illus., maps - 1:300,000, bibliog. TS, WR, V, R, AF, CM, S, G, Cl.
- SES 135. Southern Luzon, Terrain intelligence, 1944, 83 p., illus., maps - 1:500,000, bibliog. TS, WR, R, AF, CM, S, G, MR.
- SES 137a. Southwestern Formosa, Tinan-Shinei Region, Terrain intelligence, 1944, 128 p., illus., maps - 1:50,000,000, bibliog. WR, V, R, AF, CM, S, G.
- SES 127b. Southwestern Formosa, Koshun-Tamari Region, Terrain intelligence, 1944, 157 p., illus., maps - 1:50,000, bibliog. TS, WR, V, R, AF, CM, S, G.
- SES 137c. Southwestern Formosa, Tinan-Suiteiryo, Terrain intelligence, 1944, 200 p., illus., maps - 1:50,000, bibliog. TS, WR, V, R, AF, CM, S, G.

- SES 138. Fukien Region, Terrain intelligence, 1944, 56 p., illus., maps - 1:1,000,000, bibliog. TS, WR, R, AF, CM, S, G, MR, Cl.
- SES 139. Chekiang Region, Terrain intelligence, 1944, 64 p., illus., maps - 1:1,000,000, bibliog. TS, D, WR, R, AF, CM, S, G, MR, Cl.
- SES 140. Kiangsu Region, Terrain intelligence, 1945, 68 p., illus., maps - 1:1,000,000, bibliog. TS, D, WR, V, R, AF, CM, S, G, MR, Cl.
- SES 141. Mindoro, Terrain intelligence, 1944, 34 p., illus., maps - 1:500,000 and 1:600,000, bibliog. TS, D, WR, AF, R, S, CM, G, MR, S, Cl, V.
- SES 142. Negros, Terrain intelligence, 1944, 64 p., illus., maps - 1:500,000, bibliog. TS, D, WR, V, R, AF, CM, S, G, Cl.
- SES 148. Luzon, Terrain intelligence, 1944, 107 p., maps - 1:63,000, bibliog. TS, D, VR, R, AF, CM, S.
- SES 149. Korea, Terrain intelligence, 1945, 85 p., illus., maps - 1:1,000,000, bibliog. TS, CCM, D, WR, AF, R, S, CM, G, MR, V, Cl.
- SES 150. Hopeh-Shantung Region, Terrain intelligence, summary, 1945, 54 p., illus., maps - 1:1,000,000, bibliog. TS, WR, D, R, AF, CM, S, G, Cl.
- SES 151. Hainan Island, Terrain intelligence, 1945, 44 p., illus., maps - 1:500,000, bibliog. TS, WR, AF, R, S, CM, G, Cl.
- SES 152. Kung Tung-Kuangsi Region, Terrain intelligence, summary, 1945, 45 p., illus., maps - 1:1,000,000, bibliog. TS, D, WR, R, AF, CM, S, Cl.
- SES 153. Nimrod Sound Area, Terrain intelligence, 1945, 146 p., illus., maps - 1:100,000, bibliog. TS, CCM, WR, V, R, AF, CM, S, G, Cl.
- SES 161. Manchuria, Mineral resources of China, Part I, 1945, 34 p., maps - various scales, bibliog. MR.
- SES 161. Mineral resources of China, Part 2, Northern Region, 1945, 72 p., maps - various scales, bibliog. MR.
- SES 161. Mineral resources of China, Part 3, Coastal Region, 1945, 47 p., maps - various scales, bibliog. MR.
- SES 161. Mineral resources of China, Part 4, Yangtze Valley, 1945, 48 p., illus., maps - various scales, bibliog. MR.
- SES 161. Mineral resources of China, Part 5, Southwest Region, Vei Chow Juan, 1945, 77 p., illus., maps - various scales, bibliog. MR.



- SES 161. Mineral resources of China, Part 6, Northwest Region, 1945, 21 p., maps - various scales, bibliog. MR.
- SES 171. Saishu-To, Quelpart Island and Tsushima, Terrain intelligence, 1945, 41 p., illus., maps - 1:250,000, bibliog. TS, WR, AR, S, CM, G.
- SES 172. Manchuria, Terrain intelligence, summary, 1945, 59 p., illus., maps - 1:2,500,000, bibliog. TS, WR, AF, S, CM, G, MR, Cl.
- SES 173. Hong Kong, Canton, & Shanghai, Water supply and sewage disposal, 1945, 60 p., illus., maps - various scales, bibliog. WR.
- SES 174. Tokyo Area, Terrain intelligence, 1945, 224p., illus., maps - 1:250,000, bibliog. TS, WR, R, AF, S, G, Cl, RT, CCM, CM.
- SES 174. Tokyo Area, Field check revision, 1948, 30 p., illus., maps - 1:250,000, bibliog. TS, CCM, WR, R, AF, CM, S, G, RT.
- SES 176. Southern Kyushu, Field check critique, 1946, 19 p. TS.
- SES 179. Northern Kyushu Region, Terrain intelligence, 1945, maps - 1:250,000, bibliog. TS, S, AF, WR, G, R, MR.

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Reports on various subjects, chiefly on areas in Asia and Alaska, 1944-1953.

- EN 18. Surface features of coral reefs, Lincoln Ryden, 1944, 62 p., illus. Co, CCM.
- EN 20. Photo interpretation of vegetation in the tropical Pacific area and its use as an indicator of kind ground, 1944, 115 p., illus., sketch map. S, L, D.
- EN 22. Terrain features of Riceland (Paddies) with special reference to China, 1944, 24 p., illus., sketch map. SoG, S, CCM, R, AF, I.
- EN 23. Summary, Terrain study of Shanghai Plain (excerpts from SES 139), 1944, 27 p., tables, sketch maps. WR, AF, R, S, G, CM.
- EN 30. Observation on river-ice conditions near highway bridges in Alaska, winter 1949-1950, John R. Williams, 1953, 40 p., illus., sketch maps, bibliog. R, CCM, Cl.
- EN 31. Break-up and freeze-up of the Yukon River at Beaver, Alaska, John R. Williams, 1953, 57p., illus., bibliog., sketch map.
- EN 32. Icings in Alaska, 1949-1950, John R. Williams, 1953, 18 p., illus., map - 1:1,500,000. D, R, CCM.
- EN 33. Regional terrain patterns: military evaluation of delta pattern, Esther J. Aberdeen, 15 p., illus., maps - various scales, bibliog. TS.

Joint Army-Navy Intelligence Studies, 1946-1948

- JANIS 312. Argentina, 1946. WR, MR, CM.
- JANIS 71. South Central China, 1947. WR, MR, CM.
- JANIS 40. European USSR, 1947. WR, MR, CM.
- JANIS 51. Turkey, 1947. WR, MR, CM.
- JANIS 41. Caucasus, 1948. WR, MR, CM.
- JANIS 404. Eastern Canada, 1948. WR, MR, CM.
- JANIS 41. Caucasus, Possible airfield sites, 1947.
- JANIS 51. Turkey, Possible airfield sites, 1947.
- JANIS 57. Trans Urals, Possible airfield sites, 1948.
- JANIS 404. Eastern Canada, Possible airfield sites, 1948.

## Basic Map Compilations

Maps compiled from the best available sources to be ready for quick use in preparing terrain studies, 1949-1965.

### Geologic Maps

- Saudi Arabia, G. F. Brown, 1949, colored litho, 1:4,500,000.
- Spain and Portugal, Nicholas Shreders, 1952, colored litho, 35 sheets, 1:1,000,000.
- Spain and Portugal, Nicholas Shreders, 1952, colored litho, 82 sheets, 1:250,000.
- China, E. C. T. Chao, 1953, colorproof, 1:7,000,000.
- Alaska, W. E. Davies et al., 1954-1964, litho, 134 sheets.
- Northern Greenland, W. E. Davies, et al., 1954-1960, litho, 59 sheets, 1:250,000.
- Venezuela, P. H. Mattson, 1959, stable overlay and colored manuscript, 1:2,000,000, bibliog. RT.
- Norway (Finnmark), W. E. Davies and D. B. Krinsley, 1960, litho, 2 sheets, 1:250,000.
- Norway (Finnmark), W. E. Davies and D. B. Krinsley, 1960, litho, 10 sheets, 1:50,000.
- Thailand, C. R. Warren, 1961, stable overlay, 57 sheets, 1:250,000. RT.
- Thailand, C. R. Warren, 1961, stable overlay, 2 sheets, 1:1,000,000. RT.
- Nicaragua, Livingston Chase, 1961, colored litho, 1:500,000, text, bibliog. L, RT.
- Brazil, D. P. Cox and G. W. Leo, 1:1,000,000, litho, 1962.
- Chad, Gabon, L. E. Wood, 1962, colored litho, 15 sheets, 1:1,000,000, table. RT, L, EG, GW.
- Gambia, Sierre Leone, Portuguese Guinea, J. M. Goldberg, 1962, colored litho, 1:1,250,000, table. RT, EG, GW, L.
- Jordan, W. P. Ketterer, 1962, stable overlay, 14 sheets, 1:250,000, table, bibliog. RT, L, EG, GW.
- Taiwan, R. W. Fary, 1962, stable overlay, 1:250,000.
- Kenya, Kenneth Kothe, 1962, colored overlay, 1:1,000,000, bibliog. S, RT, EG, GW, L.

Sinkiang, K. Y. Lee, 1962, stable overlay, 1:1,000,000.

Tanganyika, H. W. Dodge, 1962, colored litho, 5 sheets, 1:1,000,000, bibliog. RT, L, EG, CM, GW.

Uruguay, H. S. Revel, 1962, paper print, 1:1,000,000, text - 47 p., table, bibliog. RT, L, EG, GW, S.

Costa Rica, Jerry Harbour, 1962, colored litho. RT.

Mozambique, D. P. Cox, 1963, colored stable overlay, 8 sheets, 1:3,000,000, bibliog. RT.

Brazil, C. H. Maxwell, 1964, colored litho, 23 sheets, 1:1,000,000, table. RT, L, EG, CM, GW, S.

Angola, H. E. Holt and R. D. Krushensky, 1964, stable overlay and colored litho, 17 sheets, 1:1,000,000. RT, B.

Ecuador, B. Colton, 1964, 1:1,000,000, stratigraphic tables, 2 sheets, text - 20 p.

Cambodia, Henry Bell, 1964, colored manuscript, 2 sheets, 1:1,000,000.

Iran, J. Harbour, G. R. Rozanski, 1964, stable overlay, 12 sheets, 1:1,000,000. RT.

Chile, M. C. Gardner, 1964, colored litho, 12 sheets, 1:1,000,000, table. RT, L, EG, S, GW.

S. Africa, SW Africa, Bechuanaland, R. D. Krushensky, 1964, stable overlay, 21 sheets, 1:1,000,000, text, map coverage, bibliog. RT, L, M.

Soviet Central Asia, H. E. Holt, 1964, stable overlay, 1:1,000,000.

Switzerland, Mario Conti, 1964, stable overlays, 4 sheets, 1:1,000,000, table. RT, L, EG.

India, R. B. Mixon, 1964, stable overlay, 8 sheets, 1:1,000,000.

#### Geomorphologic Maps

Angola, C. H. Maxwell, 1964, stable overlay, 1:1,000,000.

Brazil, M. A. Conti and J. D. Friedman, 1958, cronoflex, 1:5,000,000.

Chile, D. E. Ward, 1964, stable overlay, 1:1,000,000.

Equador, P. L. Weis, 1964, cronoflex, 1:1,000,000, text - 26 p., bibliog.

Guatamala, George Rozanski, 1956, 1:500,000.

India, C. C. Cameron and F. J. Brandtner, 1964, litho, 1:1,800,000.

Iran, R. S. Jones, 1964, stable overlays, 4 sheets, 1:1,000,000, table.  
Mozambique, H. W. Dodge, 1964, colored overlay, 5 sheets, 1:1,000,000.  
South Africa, P. L. Weis, 1964, stable overlay, 1:1,000,000.  
Vietnam, Cambodia, W. L. Newman, 1964, stable overlay, 1:1,000,000.

#### Lithologic Maps

Spain, Portugal, Nicholas Shreders, 1952, colored litho, 1:1,000,000.  
Spain, Portugal, Nicholas Shreders, 1952, colored litho, 1:250,000.  
Europe, C. C. Cameron, 1955, colored paper, 5 sheets, 1:2,000,000.  
Italy, M. A. Conti, 1956, colored overlay, 1:1,250,000. CM, UI.  
North Korea, E. C. T. Chao, 1956, 1:250,000.  
Brazil, M. A. Conti, 1959, colored litho, 1:5,000,000.  
Hungary, Istvan Ferenczi, 1960, 1:1,000,000. CM, EG.  
Nicaragua, Livingston Chase, 1961, colored litho, 1:1,000,000.  
Thailand, C. R. Warren, A. N. Kover, 1961, overlay, 2 sheets,  
1:1,000,000. CM.  
Romania, Istvan Ferenczi, 1962, colored overlay, 1:1,000,000.  
Tanganyika, H. W. Dodge, 1962, colored litho, 1:3,050,000.  
China, K. Y. Lee, 1962, colored litho, 1:1,000,000, table, text -  
5 p., bibliog. CM, L, EG.  
Switzerland, M. A. Conti, 1964, paper print, 1:600,000.

#### Hydrologic Maps

Egypt, George Rozanski, 1949, manuscript, 1:2,000,000.  
Asia, George Rozanski, 1950-1965, colored manuscript, 67 sheets,  
various scales.  
Greece, George Rozanski, 1952, manuscript, 1:1,000,000.  
Borneo, George Rozanski, 1954, manuscript, 1:2,000,000.  
Ethiopia and Somalia, G. R. Rozanski, 1958, manuscript, 1:1,000,000.  
Honduras, George Rozanski, 1958, manuscript, 1:1,000,000.

Tunisia, Bizerte & vicinity, George Rozanski, 1962, manuscript,  
1:50,000.

Angola, H. W. Dodge, 1964, litho, 5 sheets, 1:1,000,000.

South Africa, H. W. Dodge, 1964, colored overlay, 14 sheets,  
tables, 1:1,000,000.

China, K. Y. Lee, 1964, stable overlays, 23 sheets, 1:1,000,000 -  
1:5,000,000.

Malay Archipelago, G. Rozanski, n. d.

#### Vegetation Maps

Ecuador, H. K. Svenson, 1964, colored manuscript, 1:1,000,000.  
L, CM.

Vietnam, L. A. Spetzman, 1964, stable overlay, 4 sheets, 1:1,000,000,  
text - 5 p. L, D.

Iran, E. D. Churchill, 1964, stable overlay, 23 sheets, 1:1,000,000.

Chile, F. R. Fosberg, 1964, stable overlay, 12 sheets, 1:1,000,000,  
text - 7 p.

South Africa, H. K. Svenson, 1964, stable overlay, 15 sheets,  
1:1,000,000, table. CM, L.

Soviet Central Asia, L. A. Spetzman, 1964, stable overlay, 22 sheets,  
1:1,000,000, text - 6 p. L, D, CM.

Sierra Leone, Gambia, Portuguese Guinea, 1964, manuscript, 2 sheets,  
1:1,500,000, text - 10 p., bibliog. V, G, Misc.

Angola, 1964, 1:4,000,000, text - 4 p., bibliog. V, G, S.

Cambodia, F. R. Fosberg, 1965, stable overlay, 2 sheets, 1:1,000,000.

World, F. R. Fosberg, 1965, manuscript, 1:30,000,000.

## Engineer Intelligence Studies

Strategic and tactical reports and maps providing information on various aspects of the terrain and geology, mainly of areas in the United States, Middle East and Asia, 1952-1964.

- EIS 1. Part A, Thule area, Allen Nicol et al, 1954, 45 p., maps - 1:100,000.
- Part B, Terrain intelligence, Nunatarssuak Area, Greenland, 1955, 77 p., illus., maps, bibliog. SM, Perma, AF, R, CCM, WR, GL, Co.
- Part C, Southern Inglefield Land, R. W. Lemke, Alfred Clebsch, J. H. Hartshorn, 1954, 49 p., illus., maps, bibliog.
- EIS 141. Terrain study of Monterey-Estero Bays Area, 1958, 200 p., maps - 1:50,000. (MGB, USGS; Beach Erosion Board; 517th Engineer Detachment). Cl, Co, MR, L, V, SW, GW, CM, CCM, AF, AO.
- EIS 180. Terrain study of the Sixth U. S. Army Area, 1958, 112 p., maps. Cl, D, V, CCM, R, RT, S, GW, CM, L.
- EIS 183. Water resources of the Middle East, 1958, 12 p., map - 1:5,000,000. SW, GW.
- EIS 185. Seward Peninsula, Alaska, 1959, 82 p., illus., maps, bibliog. Co, Perma, D, WR, V, G, Cl.
- EIS 187. Upper Kuskokwim Region, Alaska, 1959, 70 p., illus., maps - 1:250,000, bibliog. L, CCM, D, SW, GW, R, AF, CM, S, V.
- EIS 188. Reconnaissance of the Iliamna Tote Road from Cook Inlet to Iliamna Lake, Alaska, 1953, 14 p., photos, map. Cl, R, RT, EG.
- EIS 190. Certain engineering aspects of the geology along Glenn and Richardson Highways, Copper River Basin, Alaska, 1955, 16 p., 18 maps - 1:50,000. RT, G, CM.
- EIS 191. Terrain analysis, Arctic Slope Region, Alaska, 1955, 37 p., illus., 3 maps, bibliog. Cl, Perma, D, V, G, CCM, CM, L, S.
- EIS 208. Cross-country movement of the Middle East, 1958, 11 p., maps - 1:5,500,000.
- EIS 210. Military geology of the West Point Area, New York, 1958, 45 p., maps - 1:25,000, bibliog. L, C, SoG, WR, D, V, SR, R, AF, CCM, UI, AO, HF, CM.
- EIS 211. Military geology of the Fort Benning, Ga. Area, 1958, 79 p., maps. L, G, EG, WR, S.



- EIS 214. Terrain study of Afghanistan, 1959, 19 p., illus., maps.  
Cl, WR, A, CCM, CM, M.
- EIS 231. Suitability for airborne operations and airfield construction of the Middle East, 18 p., maps - 1:5,500,000.
- EIS 233. Construction resources of the Middle East, 1959, 26 p., maps - 1:5,500,000.
- EIS 248. Terrain and construction materials, Denali Area, Alaska, 1959, 55 p., illus., maps, bibliog. R, AF, D, V, Perma, WR.
- EIS 251. Terrain study of South Vietnam, 1960, photos, maps.  
L, D, V, CCM, CM, WR, AO.
- EIS 257. The vegetation of Micronesia, 1958, 160 p., illus., map - 1:20,000,000, bibliog. Cl, G, L.
- EIS 258. Terrain study of the exercise, Little Bear Area, Central Copper River Basin, Alaska, 1959, 50 p., illus., maps - 1:50,000, bibliog. V, Cl, G, S, CCM.
- EIS 263. Terrain study of St. Lawrence Island, Alaska, 1959, 65 p., illus., maps - 1:250,000, bibliog. CCM, AO, S, CM, AT, WR, G, Cl, L, Co, AF, RT.
- EIS 264. Terrain study of Delta River Region, Alaska, 1960, 46 p., illus., maps - 1:50,000 & 1:250,000, bibliog. G, RT, Spp, SW, CCM, Cl, GW, R, EG.
- EIS 269. Military geography of Tibet, 1959, 12 p., illus., maps.  
Cl, WR, CCM, CM, M.
- EIS 270. Terrain study of the Aleutian Islands, Alaska, Pt. 1, Near Islands (Attu, Agattu and Shemya), 1952, 33 p., illus., maps, bibliog. V, Cl, G, WR, AO, CM, CCM, AF, R, L, Spp, RT.
- EIS 274. Terrain study of Yukon Flats District, Alaska, 1958, 131 p., illus., maps, bibliog. CCM, V, S, AO, AF, G, WR, Perma, MR, R, UI, EG.
- EIS 292. Terrain study of the Exercise Willow Freeze Area, Central Copper River, Alaska, 1960, 87 p., illus., maps, bibliog.  
CL, V, G, S, CCM.
- EIS 293. Suitability of terrain for airborne operations in Lebanon, Syria, Jordan, and Iraq, 1960, 15 p., maps - 1:1,000,000.
- EIS 301. Terrain study of Alaska, 1961-64, maps - 1:2,500,000.  
Part I Climate  
II Physiographic regions  
III Soils  
IV Rock types  
V Vegetation  
VI Water resources  
VII State of ground  
VIII Permafrost  
IX Cross-country movement

X Airfield and road construction  
XI Airborne operations  
XII Terrain summary

EIS 302. Arctic Scandinavia cross-country movement, principal overland routes, special operational aspects, (Norway, Sweden, Finland), 1961, map - 1:2,500,000.

EIS 303. Canada and Alaska, cross-country movement, principal overland routes, special operational aspects, 1961, map - 1:6,500,000.

EIS 315. Terrain study of the Exercise Great Bear Area, Tanana Valley, Alaska, 1961, maps. V, G, CCM.

EIS 335. Soviet capability for production of cross-country movement, 1962, 38 p., maps. L, D, S, G.

Terrain study of the Exercise Polar Siege Area, Yukon, Alaska, 1963, illus., maps. CCM, G, V.

Terrain study of the Exercise Polar Strike Area, Yukon-Tanana Region, Alaska, 1964, illus., maps. G, V, CCM.

## Engineer Intelligence Guides

Guides on various subjects, to be used in the preparation of terrain studies, 1957-1964.

- EIG 1. Processing of engineer information for intelligence, Ch. 4, geology, 1957, 5 p. (revised 1964, 20 p.). G, TI.
- EIG 1. Processing of engineer information for intelligence, Ch. 6, vegetation, 1961, 6 p.
- EIG 1. Processing of engineer information for intelligence, Ch. 8, ground water, 1957, 6 p.
- EIG 1. Processing of engineer information for intelligence, Ch. 18, construction materials, 1961, 10 p.
- EIG 1. Processing of engineer information for intelligence, Ch. 28, moon, 1961.
- EIG 2. Statement of engineer intelligence interest (4th ed.), 1961, 15 p.
- EIG 13. Glossary of natural terrain features, 1957, 90 p., illus., maps.
- EIG 26. Identification and analysis of natural features of the North African and Near Eastern deserts, 1959, 93 p., illus., sketch maps, bibliog.
- EIG 30. Collection of information on underground installations, 1959, 84 p.
- EIG 31. Production of cross-country movement studies, 1959, 62 p., illus., map.
- EIG 33. Preparation of terrain diagrams, 1960, 33 p., illus., maps, bibliog.
- EIG 36. Photointerpretation atlas for selected areas in Alaska, 1960, 93 p., illus., map - 1:5,000,000, bibliog. G, L, Perma, RT, S, V, G.
- EIG 38. Production of tactical commander's terrain analysis (TACTA), 1962, 20 p., maps.

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Notes on current technical information for orientation and training, 1959.

- EIN 32. Chemical composition and neutron-induced radioactivity potential of selected soils and rocks, 1959, 235 p., illus., sketch maps.

## Basic Terrain Studies

Maps at 1:250,000 and accompanying tables describing various aspects of the terrain and geology in parts of Alaska, 1960-1965. Supervisor, William E. Davies.

Ambler River, A. T. Fernald, R. S. Sigafoos, and L. A. Spetzman, 1963. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

Anchorage, 1965. V, CCM, R, AF, CCM, L.

Baird Mountains, A. T. Fernald, R. S. Sigafoos, and L. A. Spetzman, 1963. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

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Circle (preliminary), 1964. L, Perma, Cl, EG, RT, S, V, WR, CCM, R, AF, CM.

Dillingham, E. H. Muller, W. E. Davies, Karl Raup, 1962. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

Fairbanks, G. S. Anderson and L. A. Spetzman, 1960, 1965. L, V, CCM, SoG, AF, S, CM, R.

Gulkana, O. J. Ferrians, Jr., D. R. Nichols, L. A. Spetzman, and J. R. Williams, 1963. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

Healy, D. R. Nichols, J. M. Goldberg and J. P. D'Agostino, 1961. L, AO, V, CCM, SoG, AF, Perma, RT, S, R, GW, SW, EG.

Hughes, A. T. Fernald, R. S. Sigafoos, and L. A. Spetzman, 1964. L, V, AO, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

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McCarthy, 1965, Mt. Hayes, 1962, D. R. Nichols, T. L. Pewe, G. W. Holmes, and L. A. Spetzman. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

Nabesna, 1965.

Naknek, 1962, E. H. Muller, W. E. Davies, Karl Raup, and L. A. Spetzman. L, AO, V, CCM, SoG, AF, Perma, RT, S, R, GW, SW, EG.

Nushagak Bay, 1962, E. H. Muller, W. E. Davies, Karl Raup, and L. A. Spetzman. L, AO, V, CCM, SoG, AF, Perma, RT, S, R, GW, SW, EG.

Selawik, A. T. Fernald, R. S. Sigafoos and L. A. Spetzman, 1963. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R, GW, SW, EG.

- Seldovia, 1961, D. B. Krinsley and L. A. Spetzman. L, AO, V,  
CCM, SoG, AF, RT, S, CM, R, GW, SW, EG.
- Seward, T. N. V. Karlstrom and L. A. Spetzman, 1961. L, AO, V,  
CCM, SoG, AF, RT, S, CM, R, GW, SW, EG.
- Shungnak, A. T. Fernald, R. S. Sigafos, and L. A. Spetzman, 1962.  
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- Survey Pass, A. T. Fernald, R, S, Sigafos, and L. A. Spetzman,  
1963. L, AO, V, CCM, SoG, AF, RT, S, CM, R, Perma, GW, SW, EG.
- Tanacross, G. W. Holmes, Helen Foster, L. A. Spetzman, D. B.  
Krinsley, W. E. Davies, and T. Pewe, 1962. L, AO, V, CCM, SoG,  
AF, Perma, RT, S, CM, R, GW, SW, EG.
- Valdez, H. W. Coulter, D. R. Nichols, L. A. Spetzman, and L. A.  
Yehle, 1963. L, AO, V, CCM, SoG, AF, Perma, RT, S, CM, R,  
GW, SW, EG.

## Pacific Engineer Intelligence Program

Medium-scale maps and tables giving information on various aspects of terrain and geology of areas in Asia, 1960-1965, Supervisor, Harold H. Hawkins.

Laos, Terrain study, 1960, 1:250,000. WR, CM, CCM, AO, R, AF.

Thailand, Terrain study, 1961, 1:250,000. WR, CM, CCM, AO, R, AF.

Vietnam, Terrain study, 1963, 1:250,000. WR, CM, CCM, AO, R, AF.

Burma, Terrain study, 1963, 1:250,000. WR, CM, CCM, AO, R, AF.

Malay Archipelago, Terrain study, 1964, 1:250,000. WR, CM, CCM, AO, R, AF.

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Special Reports for Office of the Chief of Engineers  
1942 - 1963

- Water supply, Santa Maria Island (Azores - Portugal). 1942, 3 p.  
GW, CI, RT.
- Cape Verde Islands, (incl. Sao Tiago Is., Sao Vicente Isl, Santo Antao, etc.), Water supply and construction materials, 1942, 50 p., sketch maps. TS, CI, G, RT, V, L, GW, SW, S, CM.
- Water supply of Oram, Algeria, 1942, 2 p. GW
- Location of greenstone and other rocks of interest in Virginia, Maryland and small part of Pennsylvania, L. W. Stephenson, 1942, 15 p.
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