QUICK REFERENCE TO ALASKA'S HISTORICALLY ACTIVE VOLCANOES
QUICK REFERENCE TO ALASKA'S ACTIVE VOLCANOES AND LISTING OF HISTORICAL ERUPTIONS, 1760-1994

By

Robert G. McGimsey and Thomas P. Miller

Open-File Report 95-520

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QUICK REFERENCE TO ALASKA'S HISTORICALLY ACTIVE VOLCANOES

Over 40 active volcanoes occur in Alaska along the 2500-kilometer-long Aleutian volcanic arc (fig. 1). This report summarizes historical data on those volcanoes in condensed outline form and is meant to serve as an abridged reference guide. The information was drawn from a forthcoming more thorough and comprehensive U.S. Geological Survey (USGS) catalog of Alaska's active volcanoes (Miller and others, in review). General information on Alaskan volcanoes can also be found in Simkin and Siebert (1994), Wood and Kienle (1990), Coats (1950), McGimsey and others (1995), Neal and others (1995), Smithsonian Institution (1975-94), and Alaska Geographic Society (1991).

In Alaska, written historical records begin about 1760 when Russian sailors and fur traders began exploring the southern mainland coast and the Aleutian Island chain. Many of the early accounts of volcanic eruptions are brief and incomplete, and more eruptions probably occurred than were reported. Undoubtedly, in some reports the active volcano was misidentified, or, minor (e.g. steaming) and noneruptive (e.g. meteorological) activity was portrayed as "eruptions". For this report we have listed dates for which actual volcanic eruptions are attributed; reports that describe low level emission of steam and gas have been omitted.

Frontispiece is Mount Spurr (center) and Crater Peak (lower center).
Format:
0. NAME
   --type of volcano
   --location (also refer to Figure 1)
     --latitude, longitude
   --USGS 1:250,000 quadrangle map(s)
   --elevation above sea level
   --historical activity (records begin in 1760), "?" after the year
     indicates the type of eruptive activity is uncertain, or, that
     the date is questionable

1. WRANGELL:
   --shield with summit caldera
   --west end of Wrangell Mountains, 80 km east of Glennallen, in
     Wrangell-St. Elias National Park
   --62°00' N, 144°01' W
   --Gulkana, Nabesna, Valdez, McCarthy
   --4317 m
   --rare, minor steam plumes

2. SPURR:
   --stratovolcano and explosion(?) caldera
   --130 km west of Anchorage, east flank of southern end of the
     Alaska Range
   --61°18' N, 152°15' W
   --Tyonek
   --3374 m; Crater Peak satellite flank vent 2309 m and 3.5 km south
     of Mt. Spurr summit
   --1953, 1992 (Crater Peak)

3. REDOUBT:
   --stratovolcano
   --170 km southwest of Anchorage in Aleutian Range, Lake Clark
     National Park
   --60°28' N, 152°45' W
   --Kenai
   --3108 m with a 1.5-km-wide, ice-filled summit crater
   --1902, 1966-68, 1989-90

4. ILIAMNA:
   --stratovolcano
   --225 km southwest of Anchorage in Aleutian Range, Lake Clark
     National Park
   --60°02' N, 153°04' W
   --Lake Clark
   --3053 m
   --no historic activity; solfataric vents at ~2740 m on eastern
     flank
5. **AUGUSTINE**:  
--central dome cluster  
--Augustine Island in lower Cook Inlet, 290 km southwest of Anchorage  
--59°23'N, 153°26'  
--Iliamna  
--1260 m  

6. **KATMAI**:  
--stratovolcano with central caldera  
--Alaska Peninsula, 440 km southwest of Anchorage in Katmai National Park  
--58°16'N, 154°59'W  
--Mt. Katmai  
--2047 m  
--June 6-8, 1912

7. **NOVARUPTA**:  
--plug dome  
--Alaska Peninsula, 440 km southwest of Anchorage in Valley of Ten Thousand Smokes, Katmai National Park  
--58°16'N, 155°09'N  
--Mt. Katmai  
--841 m  
--June 6-8, 1912, 1929-31?

8. **TRIDENT**:  
--dome complex  
--Alaska Peninsula, 440 km southwest of Anchorage in Katmai National Park  
--54°14'N, 155°07'W  
--Mt. Katmai  
--1097 m (elevation of 1953 dome)  
--1953-1968

9. **MAGEIK**:  
--stratovolcano  
--Alaska Peninsula, 440 km southwest of Anchorage in Katmai National Park  
--58°11'N, 155°14'W  
--Mt. Katmai  
--2165 m  
--1927?, 1929?, 1936?, 1946?

10. **MARTIN**:  
--stratovolcano  
--Alaska Peninsula, 440 km southwest of Anchorage in Katmai National Park  
--58°10'N, 155°21'W  
--Mt. Katmai  
--1860 m  
11. **PEULIK:**
--stratovolcano with summit domes
--Alaska Peninsula, 540 km southwest of Anchorage
--57°45'N, 156°21'W
--Ugashik
--1474 m
--1814, 1852

12. **UKINREK MAARS:**
--maar
--Alaska Peninsula, 530 km southwest of Anchorage
--57°50'N, 156°30'W
--Ugashik (not shown on map)
--91 m
--Mar 30-Apr 10 1977

13. **CHIGINAGAK:**
--stratovolcano
--Alaska Peninsula, 600 km southwest of Anchorage
--57°08'N, 157°00'W
--Ugashik
--2135 m
--1852?, 1929?, 1971?

14. **ANIAKCHAK:**
--stratovolcano with summit caldera, intracaldera domes, cones, and vents
--Alaska Peninsula, 670 km southwest of Anchorage
--56°53'N, 158°10'W
--Chignik
--1341 m, caldera rim; 1021 m, Vent Mtn. stratocone
--1931

15. **VENIAMINOF:**
--stratovolcano with summit caldera and intracaldera cones
--Alaska Peninsula, 760 km southwest of Anchorage
--56°10'N, 159°23'W
--Chignik
--caldera rim 2507 m, intracaldera cone 2156 m

16. **PAVLOF:**
--stratovolcano
--near southwest end of Alaska Peninsula, 60 km northeast of Cold Bay
--55°25'N, 161°54'W
--Port Moller
--2518 m
17. **DUTTON**

--stratovolcano
--southwest tip of Alaska Peninsula 30 km east of Cold Bay
--55°11'N, 162°16'W
--Cold Bay
--1473 m
--no historic eruptions; intense seismic swarms in 1984 and 1988

18. **ISANOTSKI:**

--stratovolcano
--Unimak Island, eastern Aleutian Islands, about 80 km west of Cold Bay
--54°45'N, 163°44'W
--False Pass
--2446 m
--1795, 1825, 1830, 1845

19. **SHISHALDIN:**

--stratovolcano
--Unimak Island, eastern Aleutian Islands, about 90 km southwest of Cold Bay
--54°45'N, 163°58'W
--False Pass
--2857 m

20. **FISHER:**

--caldera with intracaldera domes
--Unimak Island in the eastern Aleutian Islands about 70 km southwest of the tip of the Alaska Peninsula
--54°39'N, 164°26'W
--Unimak
--1095 m (caldera rim)
--1795?, 1826?, 1830?

21. **WESTDAHL:**

--uncertain; possibly a pyroclastic cone on a truncated ancestral stratovolcano
--Unimak Island in the eastern Aleutian Islands about 85 km southwest of the tip of the Alaska Peninsula
--54°31'N, 164°39'W
--Unimak
--1560 m
22. **AKUTAN:**
--- stratovolcano with caldera
--- west-central Akutan Island, eastern Aleutian Islands about 185 km southwest of tip of Alaska Peninsula
--- 54°08'N, 165°58'W
--- Unimak
--- 1303 m

23. **MAKUSHIN:**
--- stratovolcano with caldera and parasitic cone
--- Unalaska Island, eastern Aleutian Islands about 250 km south-southwest of tip of the Alaska Peninsula
--- 53°53'N, 166°56'W
--- Unalaska
--- 2036 m

24. **BOGOSLOF:**
--- stratovolcano
--- Bogoslof Island, 43 km north of Umnak Island and about 312 km west-southwest of the tip of Alaska Peninsula
--- 53°56'N, 168°02'W
--- Umnak
--- 101 m high

25. **OKMOK:**
--- central volcanic complex with nested caldera
--- Umnak Island, in the eastern Aleutian Islands about 340 km west-southwest of the tip of Alaska Peninsula
--- 53°24'N, 168°10'W
--- Umnak
--- 1073 m

26. **VSEVIDOF:**
--- stratovolcano
--- Umnak Island, westernmost of the Fox Island group in the eastern Aleutian Islands, about 388 km west-southwest of the tip of the Alaska Peninsula
--- 53°08'N, 168°41'W
--- Umnak
--- 1419 m
--- 1784, May 30 1790, 1817, 1830, 1878, 1880, Mar 11-12 1957?
27. **KAGAMIL:**
   --stratovolcano
   --Kagamil Island, northeasternmost of the Islands of the Four Mountains group; 467 km west-southwest of the tip of the Alaska Peninsula
   --52°58'N, 169°43'W
   --Samalga Island
   --893 m high
   --Dec 1929

28. **CARLISLE:**
   --stratovolcano
   --Carlisle Island, in the Islands of the Four Mountains group; about 491 km west-southwest of the tip of the Alaska Peninsula
   --52°54'N, 170°03'W
   --Amukta
   --1620 m
   --1774, 1828, 1838, Nov 1987

29. **CLEVELAND:**
   --stratovolcano
   --Chuginadak Island, east-central Aleutians in the Islands of the Four Mountains, 490 km west of the tip of the Alaskan Peninsula
   --52°49'N, 169°57'W
   --Samalga Island
   --1730 m

30. **YUNASKA:**
   --shield volcano with caldera and associated stratocones
   --Yunaska Island, in the Islands of the Four Mountains group; about 540 km west-southwest of the tip of the Alaska Peninsula
   --52°38'N, 170°38'W
   --Amukta
   --550 m
   --1817, 1824, 1830, 1929?, Nov 3-4 1937

31. **AMUKTA:**
   --stratovolcano
   --Amukta Island, westernmost of the Islands of the Four Mountains group; about 585 km west-southwest of the tip of the Alaska Peninsula
   --52°30'N, 171°15'W
   --Amukta
   --1066 m
32. **SEGUAM (Pyre Peak):**
   --stratovolcano
   --Seguam Island is in the central Aleutian arc, 645 km west-southwest of the tip of the Alaskan Peninsula
   --52°19'N, 172°31'W
   --Seguam
   --1054 m
   --1786-1790, 1827, Dec 1891, spring 1892, 1901?, 1927, Mar 6 1977, Dec 27 1992

33. **KOROVIN:**
   --stratovolcano
   --Atka Island, in the central Aleutian arc about 762 km west-southwest of the tip of the Alaska Peninsula
   --52°23'N, 174°09'W
   --Atka
   --1533 m

34. **KASATOCHI:**
   --stratovolcano
   --Kasatochi Island, 20 km north-northwest of Atka Island in the central Aleutian arc, about 838 km west-southwest of the tip of the Alaska Peninsula
   --52°11'N, 175°30'W
   --Atka
   --314 m
   --1760, 1827, 1828

35. **GREAT SITKIN:**
   --stratovolcano with caldera and dome
   --Great Sitkin Island, central Aleutians, about 965 km west-southwest of the tip of the Alaska Peninsula
   --52°05'N, 176°08'W
   --Adak
   --1740 m

36. **KANAGA:**
   --stratovolcano within caldera
   --Kanaga Island, one of the Andreanof group near the center of the Aleutian arc; 965 km west-southwest of the tip of the Alaska Peninsula
   --51°55'N, 177°10'W
   --Adak
   --1307 m
37. **TANAGA:**
---stratovolcano with two flanking stratovolcanoes
---Tanaga Island, westernmost of the Andreanof Islands, about 1024 km west-southwest of the tip of Alaska Peninsula
---51°53'N, 178°08'W
---Gareloi Island
---1806 m
---1763-1770?, Jun 7 1791, 1829, 1914

38. **GARELOI:**
---stratovolcano
---Gareloi Island, northernmost of the Delarof group, Andreanof Islands, about 1062 km west-southwest of the tip of the Alaska Peninsula
---51°47'N, 178°48'W
---Gareloi Island
---1573 m

39. **CERBERUS (Semisopochnoi):**
---intracaldera stratocones
---Semisopochnoi Island, easternmost of the Rat Island Group, Andreanof Islands, about 1168 km west-southwest of the tip of the Alaska Peninsula
---51°56'N, 179°35'E
---Rat Islands
---800 m
---1772, 1790, 1792, 1830, 1873, 1873?, Sugarloaf? 1987

40. **LITTLE SITKIN:**
---stratovolcano within nested calderas
---Little Sitkin Island, in the Rat Island group of the western Aleutian Islands, about 1200 km west-southwest of the tip of the Alaska Peninsula, and 76 km northwest of Constantine Harbor on Amchitka Island
---51°57'N, 178°32'E
---Rat Islands
---1188 m
---1776, 1828-30, ca. 1900?

41. **KISKA:**
---stratovolcano
---Kiska Island, westernmost of the Rat Island group, in the western Aleutian Islands, 1270 km west-southwest of the tip of the Alaska Peninsula, and about 400 km west of Adak
---52°06'N, 177°36'E
---Kiska
---1220 m
References Cited:


Figure 1. Index map of active Alaskan volcanoes.
INDEX MAP OF HISTORICALLY ACTIVE ALASKAN VOLCANOES

1. Wrangell
2. Spurr
3. Redoubt
4. Iliamna
5. Augustine
6. Katmai
7. Novarupta
8. Trident
9. Mageik
10. Martin
11. Peulik
12. Ukinrek
13. Chiginagak
14. Aniakchak
15. Veniaminof
16. Pavlof
17. Dutton
18. Isanotski
19. Shishaldin
20. Fisher
21. Westdahl
22. Akutan
23. Makushin
24. Bogoslof
25. Okmok
26. Vsevidof
27. Kagamil
28. Carlisle
29. Cleveland
30. Yunaska
31. Amukta
32. Seguam
33. Korovin
34. Kasatochi
35. Great Sitkin
36. Kanaga
37. Tanaga
38. Gareloi
39. Cerberus
40. Little Sitkin
41. Kiska