SECOND UNITED NATIONS CONFERENCE ON THE
STANDARDIZATION OF GEOGRAPHICAL NAMES
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NAMES OF FEATURES BEYOND A SINGLE SOVEREIGNTY

UNDERSEA FEATURES

Undersea features gazetteer

Presented by the Government of the United States of America
INTRODUCTION

This gazetteer contains about 2,800 official standard names for undersea features of the world approved, as of 1 December 1971, by the Board on Geographic Names (BGN) and the Secretary of the Interior for use by the Government of the United States. About as many unapproved variant names are cross-referenced to the approved names. It is the second cumulative listing of standardized undersea feature names published by the BGN for use in official publications. Although binding only on the United States Government, the names are being given the widest possible circulation to facilitate communication within the oceanographic community and by the public at large.

How the names are listed

The first section of this gazetteer is an alphabetized, cross-referenced list of all the names included. Unapproved variant names are cross-referenced to the approved names by use of the word "see". Users of the gazetteer should always refer to main entries for approved names. The second section lists the names within blocks bounded by parallels and meridians at 30-degree intervals shown on the frontispiece.

Designations

The second column of the gazetteer contains designations that identify the kind of topographic feature to which the name applies. The designator term is usually the generic term in the approved name, but will differ when a generic that is not properly descriptive under BGN definitions is retained as part of a name in established usage. In names of features that constitute dangers to surface navigation, generics have been changed where necessary to make them properly descriptive and emphasize the danger.

The following are the designations and definitions currently used by the BGN. Designations not appearing in this gazetteer because no names of such features had been approved as of its date are indicated by an asterisk (*).

*archipelagic apron - a gentle slope with a generally smooth surface on the see floor, particularly found around groups of islands or seamounts.

bank - an elevation of the sea floor located on a shelf and over which the depth of water is relatively shallow but sufficient for safe surface navigation.

basin - a depression of the sea floor more or less equidimensional in form and of variable extent.

borderland - a region adjacent to a continent, normally occupied by or bordering a shelf, that is highly irregular with depths well in excess of those typical of a shelf.

canyon - a relatively narrow, deep depression with steep slopes, the bottom of which grades continuously downward.

/...
*continental rise - a gentle slope with a generally smooth surface, rising toward the foot of the slope.

cordillera - an entire mountain system including all the subordinate ranges, interior plateaus and basins.

escarpment - an elongated and comparatively steep slope of the sea floor, separating flat or gently sloping areas.

fan - a gently sloping, fan-shaped feature normally located near the lower termination of a canyon.

fracture zone - an extensive linear zone of unusually irregular topography of the sea floor characterized by large seamounts, steep-sided or asymmetrical ridges, troughs or escarpments, not necessarily of transform fault origin.

gap - a steep-sided depression cutting transversely across a ridge or rise.

knoll - an elevation rising less than 1,000 metres (or 500 fathoms) from the sea floor and of limited extent across the summit.

*levee - an embankment bordering one or both sides of a sea-channel or the low-gradient seaward part of a canyon or valley.

most - an annular depression that may not be continuous, located at the base of many seamounts or islands.

plain - a flat, gently sloping or nearly level region of the sea floor.

plateau - a comparatively flat-topped elevation of the sea floor of considerable extent across the summit and usually rising more than 200 metres (or 100 fathoms) on at least one side.

province - a region composed of a group of similar bathymetric features whose characteristics are markedly in contrast with surrounding areas. Term used once in this gazetteer as a designation for Guadalupe Arrugado, an area characterized by subdued corrugations on a scale previously unreported. Arrugado has not been incorporated into the BCN standard term list.

reef - an offshore consolidated rock hazard to navigation with a least depth of 20 metres (or 10 fathoms) or less.

ridge - a long, narrow elevation of the sea floor with steep sides and irregular topography.

rise - a long, broad elevation that rises gently and generally smoothly from the sea floor.

saddle - a low part on a ridge or between seamounts.
seachannel - a long, narrow, U-shaped, or V-shaped, shallow depression of the sea floor, usually occurring on a gently sloping plain or fan.

seamount - an elevation rising 1,000 metres (or 500 fathoms) or more from the sea floor, and of limited extent across the summit.

shelf - a zone adjacent to a continent or around an island, and extending from the low water line to the depth at which there is usually a marked increase of slope to greater depth.

shoal - an offshore hazard to navigation with a least depth of 20 metres (or 10 fathoms) or less, composed of unconsolidated material.

sill - the low part of the ridge or rise separating ocean basins from one another or from the adjacent sea floor.

slope - the declivity seaward from a shelf into greater depth.

spur - a subordinate elevation, ridge, or rise projecting outward from a larger feature.

tablemount or guyot - a seamount having a comparatively smooth flat top.

terrace - a bench-like structure bordering an undersea feature.

tongue - used only once, to designate Catoche Tongue, a lateral protrusion from a slope; this term has not been incorporated in the BGN list of standard terms and definitions.

trench - a long, narrow and deep depression of the sea floor, with relatively steep sides.

trough - a long depression of the sea floor, normally wider and shallower than a trench.

valley - a relatively shallow wide depression with gentle slopes, the bottom of which generally grades continuously downward. This term is used for features that do not have canyon-like characteristics in any significant part of their extent.

NOTE: In the case of reef and shoal, 30 metres (15 fathoms) will be the critical depth in those areas where deep draft vessels transit.

"Deeps", which were really deep soundings rather than physical features, were once given names with "deep" as the generic term indicating the class of thing named and commonly with the ship's name as the specific term identifying the individual thing within the class. Deep soundings are now identified on charts by a notation of the ship making the sounding, the sounded depth, and the year rather than by name. All names including the word "deep" have been dropped, whether or not they are listed as cross-references.
Extensive changes in terms and definitions have been made in the light of experience and discussions since the first edition of this gazetteer, most of the changes being in the direction of simplification. The terms fishing area, section of sea, shelf edge, spit and strath were dropped and not replaced. While shelf edge does not appear to be needed in proper names, this does not prejudice its textual use as a common noun in lower case letters. The identity of a shelf edge of continental extent is generally clear from context and the reference value of sections of a long shelf edge would vary with the subject under consideration, and hence can be handled by specific reference in text better than by name. Furthermore, as defined, it would not equate to the Norwegian egg or egge which, as found in names, apply to the upper part of a slope where fish abound, often a zone of some 300 metres. Features to which the term strath had been applied have been redesignated valley, and that term has also been used as the generic term in the names. The definition of valley was amended to say that it "generally" grades continuously downward.

The term continental has been deleted from continental borderland, continental shelf, continental slope; the simple term seamounts has replaced seamount chain, group and range as the generic and the designation in all cases. The term guyot is recognized as a permissible alternation to tablemount. The definition of fracture zone was modified by stating that it is not necessarily of transform fault origin, and plateau now need only have the more than 200-metre rise on one side rather than on all sides.

As in the case of shelf edge, simplification of the terms for use in names in no way precludes the use of longer terms in textual reference, as for instance in referring to Patton Seamounts as a seamount group, or Sohm Plain as an abyssal plain.

Latitude and longitude

The third and fourth columns indicate geographic co-ordinates, with the longitude based on Greenwich. Co-ordinates serve only to identify the features named.

Locational references

Features such as reefs, shoals and banks can usually be identified on nautical charts published by official government agencies in various countries for navigational use. Index maps showing the area covered by each chart are available in catalogues available from the publishing agencies. For bathymetric features, however, it is usually necessary to consult relatively recent special charts issued by both government and private agencies. One that will be useful in locating many of the larger features named in this volume is: H.O. Misc. 15,254, The World, 12 sheets, Naval Oceanographic Office. With the rapid accretion of new knowledge of the oceans, new features are being identified and named faster than charts can be revised to show them. Some are shown only on small maps in journal articles; still others have yet to appear in published material. It is not feasible
to cite all the sources, nor to indicate in which category individual names fall. Current textual and map or chart literature is examined and names appearing there are acted upon, but as the backlog of published names is reduced the emphasis is shifting to pre-publication assimilation and international exchange of new names.

PREFACE

All of the decisions by the Board on Geographic Names on these undersea names have been approved upon the recommendation of its Advisory Committee on Undersea Features. The present members of the Advisory Committee are Charles D. Rouse, Chairman, and Frederick Edvalson (Naval Oceanographic Office), A.W. Anderson and John O. Boyer (National Oceanic and Atmospheric Administration), Ned A. Ostenso (Office of Naval Research), Jack W. Pierce (Smithsonian Institution), Joshua I. Tracey, Jr. (Geological Survey) and Meredith F. Burrill, ex officio. The members serve as individuals with special knowledge, not as representatives of agencies. Others who have served on the Committee since it was first constituted late in 1962, with their Government connexion while serving, are: John V. Byrne (National Science Foundation), Joe S. Creager (National Science Foundation), John B. Hersey (Office of Naval Research), Harry Ladd (Geological Survey), John Lyman (National Science Foundation/Fish and Wildlife Service), H.W. Menard (Executive Office of the President), Harley D. Nygren (Environmental Science Services Administration), Roger S. Revelle (Department of the Interior), Harris B. Stewart, Jr. (Environmental Science Services Administration), Lorne G. Taylor (Environmental Science Services Administration), Miller J. Tonkel (Environmental Science Services Administration), I. Eugene Wallen (Smithsonian Institution).

The Committee has met more than 130 times. Research assistance has been provided by, successively, staff geographers Fred G. Alberts, William Lloyd and Boyd D. Peterson. Record maintenance and gazetteer preparation are done by the Geographic Names Division of the United States Army Topographic Command.

Undersea name policies

BCN policies applied in the official standardization of the approved names in this gazetteer are as follows:

1. The Board will consider appropriate name proposals by United States nationals for undersea features in international waters.

2. The Board will consider name proposals for features under United States territorial waters on the same basis as other domestic names.

3. Prior to the naming of a feature, identification of its character, extent and position shall have been established sufficiently for identification. Positions shall be given in terms of geographic co-ordinates. If it is necessary to refer to a feature before such full identifiability has been established, it is
suggested that the reference be by co-ordinates and generic term with the addition of (PA) after the co-ordinates if the position is not adequately established and (?) after the generic if the nature of the feature is in some doubt.

4. Undersea names in the immediate vicinity of the coast of another country will be treated as names in that country.

5. The Board will ordinarily approve names of undersea features beyond limits of the United States that are bestowed, or approved, by other countries or nationals of other countries unless there is some conflict or other question. Generics in English, if appropriate to the feature, will be accepted; those in other languages will be translated.

6. Guidelines for selection of specific terms

   A. It is long-established BGN policy to favour short and simple names as the most efficient, other things being equal.

   B. Specific terms in the names of major undersea features should, whenever feasible, indicate the general location of the area in which they lie, e.g., Mariana Trench, Ninetyeast Ridge.

      (1) In some cases, this can be accomplished simply by using the same specific term in the names of adjoining features, e.g., Aleutian Ridge, Aleutian Basin, Aleutian Trench, Mariana Ridge, Mariana Trench, Bellona Plateau, Bellona Reefs, Bellona Shoal.

      (2) In some cases, the specific term may indicate direction from a large well-known associated feature, e.g., South Honshu Ridge, West Caroline Basin.

      (3) In cases where extent of a long linear feature needs to be identified and the extremities can be identified by named geographic features, the names of those features may be hyphenated as the specific terms, e.g., Azores-Gibraltar Ridge, Peru-Chile Trench.

      (4) Canyons, since they usually extend close to the shore, are normally given as specific terms the names of rivers, points or other readily identifiable named land features, e.g., Barrow Canyon, Scripps Canyon and Ascension Canyon.

   C. Specific names for other features can be derived from ships or other vehicles utilized in the discovery of the feature, from expedition names, individuals associated with the discovery, organizations and institutions sponsoring the expedition or from individuals who have specifically been involved in the recognition of the uniqueness of the feature through the interpretation of the data.
(1) Names of ships may be applied to features such as seamounts, knolls, canyons, tablemounts, etc. The ship name to be used should be that of the discovering ship, or if that has been previously used for a similar feature, it should be the name of the ship verifying the feature, e.g., San Pablo Seamount, Atlantis II Seamount.

(2) Specific names of vehicles utilized in the discovery of a feature may be used, as in the Kiwi Seamount from the geomagnetic survey plane "KIWI" under Project MAGNET which discovered its existence through a magnetic anomaly.

(3) Expedition names may be used, e.g., Northern Holiday Seamount.

(4) Names of individuals associated with the discovery of a feature may be used, including any of the following:

a. The captain of the ship.

b. Expedition leaders, or survey party chiefs.

c. Individuals in charge at the time of discovery and recognition of the feature.

(5) Individuals involved in the interpretation of data leading to the recognition of the unique character of a feature, e.g., bathymetrists, oceanographers, geologists, hydrographers.

(6) Persons who have made important contributions to knowledge of the oceans, including the interpretation of oceanic data, or the preparation of charts of the oceans such as historical hydrographers, oceanographers, and scientists, e.g., Maury Channel, Ewing Seamount.

(7) Organizations and institutions involved in the study of the seas, such as Scripps Canyon.

(8) Names of persons prominent in the past history of the nation.

D. It is permissible to name groups of features after specific categories of historical personages, mythical figures, stars, and constellations, fish, birds, animals, etc. Such groups could be as follows:

Musicians Seamounts: Bach Seamount, Brahms Seamount, Schubert Seamount

Electricians Seamounts: Volta Seamount, Ampere Seamount, Galvani Seamount.
Ursa Minor Ridge and Trough Province, Kochab Ridge, Polaris Trough, Suhail Ridge

E. Descriptive names will be acceptable if not duplicated, particularly when they refer to distinguishing characteristics, e.g., Hook Ridge, Horseshoe Seamounts.

F. Names considered inappropriate include:

(1) Names applied to similar features elsewhere;

(2) Full names or unwieldy titles of individuals, institutions or organizations;

(3) Names of commercial products or their manufacturers;

(4) Names of individuals proposed because of relationship or friendship with the proponent.

7. Existing names that have been applied for many years may be accepted even though they do not coincide with the above policy.

Name proposal form

Undersea name proposal forms are provided in this publication to facilitate submittal and expedite approval and promulgation of names. Anyone may propose a name for an unnamed undersea feature that has been adequately identified as to type and geographic location.

Use a separate form for each name proposed, copying the form if necessary, and filling in all the blanks that are pertinent. Give co-ordinates of latitude and longitude ordinarily taken at the approximate centre of the feature and read fine enough to identify the feature, ordinarily the nearest degree for basins, or the nearest minute for smaller features such as canyons.

For "kind of feature", use the appropriate term from the list of designations and definitions in the current edition of the BGN Gazetteer of Undersea Features. This term will ordinarily be used also as the generic term in the name. If the feature is of a kind not covered by these terms or definitions, explain in a supplementary note.

Although "reference to prior publication" is provided for, it is hoped that authors will refer not-yet-acted-upon names to the Board before publication, and every effort will be made to act on them in time to accommodate publication schedules.
Reporting of errors

It is requested that all who use this gazetteer aid in its correction for future editions by reporting errors to the Board on Geographic Names, Department of the Interior, Washington, DC 20240. A statement of the source of the correct information will be helpful.

Geographic names or their spellings do not necessarily reflect recognition of the political status of an area by the United States Government.
BOARD ON GEOGRAPHIC NAMES
Undersea Feature Name Proposal

Ocean or Sea __________________________ Name proposed __________________________

Lat _______ (N)(S), Long _______ (E)(W); ______________ nautical miles in 
__________ direction from __________________________

Description: Kind of feature:
Identifying or categorizing characteristics
(size, shape, dimensions, least depth, 
steepness, etc.):

Associated features:

Chart reference:
Shown and named on chart (map)
Shown but not named on chart (map)
Not shown but within area covered by

Reason for choice of name:
If for a person, state how associated
with the feature to be named.

Discovery facts: Date __________; by (individuals or ship)

By means of (equipment):

Navigation used:

Estimated positional accuracy in nautical miles:

/...
Description of survey (track spacing, line crossings, grid network, etc.):

Nature and repository of other survey activities (dredge samples, cores, magnetics, gravity, photographs, etc.):

Supporting material: Enclose, if possible a sketch map of the survey area, profiles of the feature, etc. Reference to prior publication if any:

SUBMITTED BY:
Address:

Date:
CONCURRED IN BY (if applicable):
Address:

MAIL TO: Executive Secretary
Board on Geographic Names
Department of the Interior
Washington, DC 20240