Introduction

1. The accumulation and recording of geographic names must be regarded as an important and essential task in any country. Dependent upon the degree of social sophistication, the process may range from simple unplanned listing on a private level to a nationally controlled endeavour presenting a complex and comprehensive pattern.

2. Canada's development in this field has progressed well beyond elementary levels. It involves the elements of national control, research, nation-wide inventory, the application of standards, regional co-ordination, decision-making and publication. Our experience extends over the past 75 years. The Permanent Committee has not yet ventured into the computerization of its geographic names, although a feasibility study on the subject has been made. An actual start in this direction has been made at the University of Laval in Quebec City, where a project to transfer the geographic names of the province of Quebec to magnetic tape has been initiated under the direction of Prof. H. Dorion.

3. This paper will attempt to outline the office methods used by the national control organization, the Canadian Permanent Committee on Geographical Names. The methods used by regional authorities - in Canada's case, the provinces and territories of the Canadian federation - are basically similar, as each nominates a member on the national Committee.

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4. The task of the Canadian Permanent Committee is to co-ordinate geographical name work throughout the country; to maintain established principles; to record and publish decisions; to ensure that federal Government departments employ such decisions; to provide advice and guidance to the provincial toponymic authorities and to aid in the solution of interprovincial and broadly national toponymic problems.

5. Individual provinces have decision-making autonomy. Each may, if it wishes, publish its decisions unilaterally; to date only one province, Quebec, has done so.

6. To carry out its work, the Committee is supported by an office staff supplied by the Surveys and Mapping Branch of the federal Government. This staff is directed by the Committee's executive secretary, and is responsible for the office processing of names ruled on by the Committee.

I. STANDARDS

7. Principles to be observed in the acceptance of geographic names for official purposes were established in 1897 when the Geographic Board of Canada (now known as the Canadian Permanent Committee on Geographical Names) was established by the Government of Canada.

8. These principles were carefully designed to be simple, broad and flexible. While some modifications have been introduced over the years, the basic structure has survived. These principles govern office treatment of geographic names. They are summarized below.

Principles of nomenclature

(a) Names established by statutory authority are accepted unchanged.

(b) Names in public use shall have primary consideration.

(c) Names proposed for railway, postal or resource development use should be evaluated by the Committee.

(d) Name duplication should be avoided.

(e) Names of living individuals should only be used in exceptional circumstances.

(f) Differing names for the same feature in the English and French languages should be recognized only if unalterably established in public use.

(g) Native names (Indian and Eskimo) must be recorded in a recognized orthography.

(h) Names characterized as follows are to be avoided: incongruous, multilingual combinations, Christian and surname combinations, qualified names, double names, corrupted, unduly cumbersome, obscene, derogatory or commercialized names.

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(i) Generic terms must be appropriate to features described. The language of
generic terms may accord with the text of publication.

(j) Names for features outside Canadian sovereignty must accord with forms
established by the national authority of the country concerned, subject to North
Atlantic Treaty Organization, International Hydrographic Bureau or United Nations
requirements.

(k) Names proposed must be accompanied by exact information as to location, feature
identification, origin, or if alteration is proposed, by a rationale.

9. Copies of the booklet, "Principles and Procedures of the Canadian Permanent
Committee On Geographical Names" are available from the Canadian delegation.

II. CLASSES OF NAMES CONSIDERED

10. Geographical names referred to the Canadian Permanent Committee may be
categorized as follows:

(a) Topographical - relating to natural features of the landscape;

(b) Hydronymic - relating to natural surface water features;

(c) Bathymetric - relating to undersea features, inland, coastal or open sea;

(d) Physiographic - relating to the special regional or classification
requirements of geology, mineralogy, forestry or soil evaluation disciplines;

(e) Cultural - relating to populated places and man-made landscape
occurrences;

(f) Extraterritorial names relating to any of the above classes for use on
hemispheric or world maps published in Canada.

III. SOURCES OF NAMES

11. The Committee secretariat examined 27,682 geographic names during the 12-month
period October 1970 to September 1971. Of these, approximately 5,000 were newly
applied names, about 3,000 were names to which some change from the previously
approved forms was required, and the remainder were names in good standing which
had already been approved by the Committee at earlier dates. The reason for the
recurrence of the latter names is explained hereunder in the section on mapping
organizations. Names referred to the Committee originate with mapping
organizations, field returns or other sources as discussed below.
A. Mapping organizations

12. In Canada it is the practice for federal and provincial mapping organizations to submit to the Permanent Committee new and revised maps, accompanied by a complete list of all names to be shown, prior to publication. The submission of complete name lists, including many names previously approved by the Committee, provides insurance for the mapping organization, by virtue of a clearance from the Committee, that all names to be used are properly spelled and properly applied. It enables a check to be made for any changes which have come to the Committee's attention since the original decisions were made but about which the mapping agency may be ignorant. It also ensures that names not previously recorded and officially approved may be noted and dealt with. Names which are controversial in spelling or topographic application are exposed to scrutiny, and decisions are rendered which the mapping agency may accept with confidence. The system also enables the mapping agency to secure through the Committee's records, and its contacts with provincial members, any new names which the agency's own documentary sources may lack.

13. The submission before publication of complete name lists for maps produced by federal government agencies is a standard procedure.

14. As the Surveys and Mapping Branch of the Department of Energy, Mines and Resources produces virtually all of the basic maps of Canada, this Branch originates the greatest volume of names received by the Permanent Committee. It is not mandatory that provincial mapping agencies submit their maps and name lists, but many do. When they do not, it is usually because their geographical names have been taken directly from the base federal maps on which they know the names have already been approved. Commercial mapping agencies follow the same pattern, securing most of the names they use from approved federal maps. They are free to submit names they propose using to the Committee, and often do. More frequently, they request information regarding specific names which for some reason they consider doubtful.

B. Field returns

15. A second major input of names originates in the field activities of governmental organizations, both federal and provincial. These may relate to topographical, geological, hydrographic, mineral exploratory, forestry or soil evaluation work. The officers concerned report new names encountered and discrepancies between names on maps they are using and local designations. These are channeled to the Permanent Committee for examination and decision. In addition, the Committee receives the results of its own field studies, which provide much more thorough and detailed coverage of the areas examined.

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C. Other sources

16. A not inconsiderable number of names are submitted to the Committee by commercial interests involved in resource development, by railways establishing or altering rail point names, by postal authorities opening or closing post offices, by mountaineering groups or others engaged in geographic exploration, and by the general public.

17. Most are suggestions for the naming of unnamed features. Some relate to native names in undeveloped areas. Others concern conflicts between names locally used as opposed to map usage in identifying identical features.

IV. PROCESSING OBJECTIVES

18. In dealing with each name submitted to it, the Permanent Committee has the following objectives:

(a) To create a permanent record of the name; to establish the geographic location of the feature it identifies; to determine its compatibility with Committee principles; to record alternate forms, if any; to resolve any controversy relating to spelling, language or application; to accumulate data concerning origin, history of use or other supplementary facts which may be available;

(b) The clearance of the name with the provincial member of the Committee;

(c) The rendering of a decision, if this has not already taken place;

(d) The dissemination of decisions. (This is done by direct advice to mapping organizations and others making name submissions, and by publication in gazetteers to the general public.)

The processing procedures are established to achieve these ends.

V. PROCESSING SUPPORT ELEMENTS

A. The processing staff

19. The operational work force is clerical and stenographic. Two out of three supervisory and research staff, however, are university trained. All staff are expected to be thoroughly familiar with the Canadian mapping system, able to read maps and use locational devices.
B. Working criteria

20. In the interpretation of the Committee's principles, working staff are trained to keep in mind the following criteria:

(a) Promote name stability by avoiding changes in the absence of compelling reasons;
(b) Give major weight to local usage in preparing recommendations;
(c) Respect the claims of native names to due recognition;
(d) Restore original forms when practical;
(e) Avoid compound names;
(f) Standardize abbreviations of generic terms;
(g) Consider appropriateness of generic terms to the features designated;
(h) Minimize duplications;
(i) Ensure proper identification;
(j) Include proper diacriticals and hyphenation for the language of the name.

C. Use of maps and charts

21. Maps and charts are basic tools in working with geographic names. They enable geographic positions to be determined, the extent of features to be decided, and the suitability of generic terms to be assessed.

22. Canada employs a topographic grid termed the National Topographic System on which all map areas from the 1:25,000 to the 1:1,000,000 scale, inclusive, are based. Each 1:1,000,000 area has a main number in the system, which ranges from 1 to 117, and each number denotes an area of 8 degrees of longitude and 4 degrees of latitude. By a quartering of one of these areas, 1:500,000 scale map limits are indicated, and by further quartering, the areas of 1:250,000; 1:125,000; 1:50,000 and 1:25,000 scale areas are delimited. These are the scale factors for series map production.

23. Thus, number 16 indicates a particular 1:1,000,000 scale map, 16NW denotes a 1:500,000 scale, 16-A denotes a 1:250,000 scale, 16 A/NW a 1:125,000 scale, 16 A/10 a 1:50,000 scale and 16 A/10e a 1:25,000 scale sheet. Marine charts are less uniform in area representation, but bear identifying numbers. Comprehensive indexes of both maps and charts for each scale, covering the entire country, are available and constantly updated.

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24. The reception of the majority of names processed by the Committee in blocks corresponding to these maps and charts enables the construction of a corresponding file for each map sheet or chart. Names received in smaller groups, or individually, are related to the largest scale map available and to its corresponding file. Normally this is the 1:50,000 scale, but in areas where mapping at this scale is incomplete, the 1:250,000 scale map is used, as this series is complete for all parts of Canada. The largest scale series, 1:25,000 is not commonly employed because coverage is confined to larger cities and their immediate environs.

D. Amendment copies

25. Maps and charts constitute unrivalled graphic storages for geographic names. The Permanent Committee secretariat takes advantage of this by maintaining in a pocket in each map or chart file cover a copy of the relevant map which is stamped "amendment copy".

26. The amendment copy is first created from a reproduction of the map manuscript which accompanies the name list as initially submitted to the Committee. The manuscript copy is replaced by the printed map as soon as this becomes available. The Committee and the production agencies co-operate very closely on these matters. The status of each name on the amendment copy is verified and indicated by a code number relating to the date of approval of the name, or to any qualification which the file record may contain.

27. Changes which may affect any name on the amendment copy, regardless of source, is noted by further coding. Such changes may concern spelling, feature designation, rescission, topographic alterations affecting name application, such as flooding; geodetic data, or any type of information affecting the status of the name. New names are hand lettered on the amendment copy, and a code number indicates source and status.

28. Thus at any time during the life of a particular map or chart, the status of the names displayed is instantly available and kept current. Questions about particular names or groups of names in the particular map area may thus be answered more quickly than by a computer printout. These answers can, of course, only relate to the facts which can be shown by this method - data on name history, or manipulated statistics are not storable in this way.

29. The code system is very simple. It consists merely of information keys written on the margin of the map, each item being assigned an arbitrary number. This number is then written against the name or names concerned. A typical key list would appear as:

(a) Names approved 7/10/69 File 23 K/l
(b) Names approved 16/4.71 File 23 K
(c) Names proposed by John Doe 15/1/70 File 23 K
(d) Names deleted, features flooded, 22/8/71 File 23NW

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When a revised edition of a particular map sheet is issued, it replaces the previous amendment copy, which is stored for record purposes. Subsequent changes in names on the new map are then built up as they occur in the same manner as before.

E. Card records

30. The card record system is the backbone of the information storage system maintained by the secretariat. As with many organizations, card records accumulated over a long period of time suffered from lack of foresight in the selection of card size, data recorded, cabinet choice and organizational grouping.

31. The Permanent Committee card records reflect these shortcomings, but a standardized system is now employed, and the conversion of older cards is gradually being accomplished.

32. For reasons connected with the utilization of carded information for gazetteer compilation, a standard card of the Hollerith type is now employed. Information on this card is typewritten. The top line contains the data used in the gazetteer entry - the name itself, the generic term, locational information such as country, township, parish, or in some parts of the country, range and concession, and the geographic co-ordinates to the nearest minute. Beneath this in a standard order are entered the date of approval of the name, the map and file reference, and when available, information concerning name origin, history, alternate forms, or other pertinent data. Obsolete and rejected names are also carded and cross referenced as necessary. Alphabetization is governed by the same rules employed in Committee gazetteers. A master card is established for every name.

33. Cards are filed in steel filing cases, in groups corresponding to provinces and territories. The secretariat has approximately 260,000 cards on file.

34. Supplementary card indexes are kept for certain classes of information. For example, all names assigned in commemoration of war dead, which total in excess of 8,000 applications throughout the country, are also recorded, in addition to their place in the main index, in a separate index so that statistics may be compiled regarding them, and additional assignments controlled.

35. Other special indexes concern such classifications as glacial features; features named for surveyors, and names in areas where toponymic research is in progress - in short, these are specialized accumulations of names and selected data designed to facilitate research, writing and inquiry response.

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F. File records

36. Files built up since the Geographic Board of Canada was first established in 1857 are in the possession of the Permanent Committee, and constitute an invaluable and irreplaceable source of reference data and historical record, much of it unpublished, but continually used in geographic name processing and research.

37. The original consecutive numbering system has long been replaced by the creation of individual files for every map sheet (totalling almost 30,000 files of this class alone) plus a large number of general files dealing with a wide variety of toponymic subjects. A feasibility study has been made for the placement of all this data on microfilm.

G. Reference aids

38. The secretariat staff has available for instant access on the premises a collection of several thousand volumes of reference publications. A library specializing in cartographic and geographic material maintained by the Surveys and Mapping Branch is also readily accessible, as are the map collections of the Department of Energy, Mines and Resources and those of the National Archives.

H. Consultative facilities

39. As an agency of the federal Government, the Permanent Committee secretariat is located in the national capital, Ottawa, and has the specialized resources of many governmental agencies to draw upon when advice is required on topographic, hydrographic, archival or linguistic matters, and makes considerable use of these facilities.

I. Sub-Committees

40. The Canadian Permanent Committee appoints sub-committees to advise on various geographic name problems, and the reports produced are available to the operational staff of the secretariat. A standing sub-committee on undersea feature terminology and others appointed to study the basis for a "national policy on geographic names for Canadian maps" and the "concept of a geographic name" will provide useful conclusions for operational purposes.

V. NAME PROCESSING OPERATIONS

A. Organization

41. The office treatment of the geographic name input is organized to deal with the work on a regional rather than a name class basis.

42. Names relating to areas where the language is predominantly French, as in the province of Quebec, are assigned to a supervisor qualified in this language. Names relating to the predominantly English speaking provinces go to a second unit, and those relating to northern Canada, the area of the
Yukon Territory and the Northwest Territories, are assigned to a third unit. The supporting staff for each unit varies in size according to the over-all workload of each.

43. The operational staffs of each section therefore are trained to cope with the full range of problems that the processing of geographic names involves. They do not specialize in topographic names, or in hydronyms, and consequently may be shifted from one unit to another in response to workload pressures without loss of efficiency.

B. Operational sequences

44. The office treatment of names is uniform in each of the three units, having regard to the differences arising from language and population density variations in the different geographic regions.

45. The first step in the sequence of operations for any name or group of names is normally the classification of names as established, whether contentious or new. This process is not a matter of regrouping or association. It relates to the evaluation of the status of the name and influences the treatment of it.

46. Established names are those which have been previously approved by the Committee, or which have had a history of public use, as evidenced from one or more usage indicators such as local verification, maps or charts or publication in books, newspapers or other documents, without evidence of conflict in orthography or alternate usage.

47. Contentious names are those for which similar evidence indicates alternate spellings, generics, feature applications or opposing names for the same features. Previously approved names may become contentious because of subsequent developments, or because of oversights in the evaluation when first approved. New names are those proposed for previously unnamed features, or names for which no record of past usage has been made.

48. Step two is the assignment of the incoming documentation for a name or names to a correspondence file, or the creation of a file if none exists. This is determined by the map sheet area or areas to which the names relate.

49. Step three is the record search regarding the names in question. Card records, maps, publications, field reports, and the services of language or other specialized consultants are employed to determine proper feature identification, orthography, spelling, previous usage, feature extents, compliance with Committee principles, suitability of generic terms, corruptions, problems with boundary crossings, origins and histories, and other aspects.

50. The geographic co-ordinates of the features named are determined to the nearest minute from the largest scale map available.
51. In the recording of the extent of features, headwaters of streams may be determined; the mouths of bays; the positions of peaks on mountains; the extent of particular massifs; the lengths of channels and straits; the separation between interconnected lake features for separate naming; the boundary limits to which names of communities apply and the elements involved in pluralized names.

52. In delineating these aspects on maps, coloured lines are used to trace limits and area shading to provide distinctions.

53. The processor must be knowledgeable about drainage patterns, map and chart symbolization and contour reading. He must be able to calculate distances on maps, and use proportional dividers in comparison between varying map scales.

54. Observations are recorded by the preparation of a master card for each name, by the creation or updating of an appropriate amendment map, and by notations on the document on which the name was received.

55. The name or names are then dispatched to the provincial or territorial member of the Committee to whose jurisdiction they relate, accompanied by copies of the appropriate map sheet, and a summary of the observations assembled by the processing staff.

56. If features for which no names exist require identification, the provincial member may be asked to select names from the casualty lists maintained in both the Committee and the provincial offices, if the provincial member cannot discover local names from regional sources.

57. The Committee processors may make suggestions respecting any phase of treatment of the name.

58. Upon the return of the names by the provincial or territorial member, the observations and decisions transmitted are examined, necessary amendments made to Committee records, and decision lists for the names are prepared.

59. These decision lists state the proper spelling of each name, the applicable generic term, the geographic co-ordinates, and the date of approval, rejection or suspension for further investigation. They also indicate any alternate names considered for the same feature.

60. The final step is the dissemination of the approved names to the mapping agency or other source from which they were originally received. At the same time, the gazetteer section of the secretariat is provided with the listed decisions.

VII. OFFICE NAME RESEARCH PROJECTS

61. A number of research projects utilizing the wealth of data accumulated in processing operations are normally in progress at any given time. These may relate to the isolation of classes of commemorative names; to the study of
abbreviations of generic terms; to the history of particular names or groups of names in respect to language or exploratory influences or as responses to general inquiries.

VIII. TREATMENT OF INQUIRIES

62. The Committee secretariat receives a steady flow of inquiries on toponymic matters. These come from governmental, business and private sources. They may concern the locations of named features, the extent or other aspects, the origin of the names or the history of them. Linguistic elements are often questioned, or requests are made for pronunciations or explanations of decisions.

63. Inquiries come by mail, by telephone and by personal visits. Every effort is made to respond promptly and fully to such requests. Office procedure requires an answer to written requests within 48 hours. A tickler card index is maintained to ensure the periodic follow-up of items under investigation. The facilities and records of the Committee are made available to researchers who wish to use them in person.

IX. REPORTS AND STATISTICS

64. Monthly progress reports of work accomplished are made by each unit of the secretariat to the Executive Secretary. Annual reports are made by the Executive Secretary to the annual meetings of the Permanent Committee.

65. Between annual meetings, problems in name treatment or in policy interpretation are resolved by consultation between the Executive Secretary and the Committee chairman.

X. SUMMARY

66. The centralized character of geographic name examination in Canada contributes materially to uniform toponymic usage throughout the country.

67. Office practices ensure that the majority of names in common use are recorded, standardized and made available for maps and other uses.

68. Regional co-operation is continuous and the transmission of local information attained to the extent possible under Canadian conditions.