

II. Organization and functions of a National Geographical Names Standardization Programme: A Manual*

Standardization of the written forms of geographical names and their applications at the national level of government is important to both administrators and scientists, who require clear, unmistakable geographical references. People at other levels of government, in industry, commerce, education and science also need standard names for effective reference. This is particularly true for those involved with map and chart production; land, water and mineral surveys; postal and shipping deliveries; land and water safety; and with demographic and other cultural, social and scientific research. A national standardization programme produces savings in time and money by increasing governmental efficiency. It can prevent internal conflicts and eliminate the duplication of work by more than one bureau or organization attempting, with varying results, to determine accurate name use. It provides a country with the means of establishing its own officially accepted names rather than having them determined by external organizations, such as atlas and gazetteer makers. Finally, such a programme plays a major role in preserving and promoting a nation's toponymic heritage.

In a resolution adopted at the Fourth United Nations Conference on the Standardization of Geographical Names (1982), it was recommended that the United Nations Group of Experts on Geographical Names consider preparing a manual of simplified guidelines to assist Member States with their national standardization.¹ At its tenth session (1982), the Group of Experts agreed to prepare such a manual. Donald J. Orth (United States) was asked to compile it, and the following experts were invited to work on the drafting committee: Ydelis Velasquez Garcia (Cuba), Allan Rostvik (Sweden), Rolf Bohme (Federal Republic of Germany), Josef Breu (Austria), François Beaudin (Canada), Dirk P. Blok (Netherlands), and Alan Rayburn (Canada).² Special acknowledgement for assistance in preparing the guidelines is extended to H. A. G. Lewis (United Kingdom), Nancy L. Engel and Carol A. Gleason (United States Geological Survey, Branch of Geographic Names), and Helen Kerfoot (Secretariat, Canadian Permanent Committee on Geographical Names).

The manual provides guidelines on the organization and functions of a national geographical names programme. It attempts to outline, as concisely as possible, the steps and processes by which a country may establish and maintain uniform geographical names for public and private use. The guidelines draw upon current experience and knowledge of existing programmes in several countries. They expand upon the information given in "Guidelines for establishing

a national geographical names authority and planning a standardization programme", published in volume XVIII of *World Cartography*.³ No one particular model is recommended. Instead, a variety of options and practical procedures is presented by which a job can be done effectively and efficiently within the framework of different governmental structures. Although the manual is intended primarily for national governments currently without a national names programme, it also may be useful to governments for improvement of established programmes.

The information in the manual is in accordance with recommendations contained in resolution 4 of the First United Nations Conference on the Standardization of Geographical Names, which provides an outline of national standardization procedures.⁴ The annex is a suggested training course outline which can be used in conjunction with the manual.

A. INTRODUCTION

The selection, spelling and application of acceptable geographical nomenclature within a country and between one country and other countries depends on effective national and international standardization programmes. An underlying theme found in over 100 years of effort by scholars and names specialists is that international standardization depends on national standardization.

National effort is normally directed towards the determination and selection of the best or most appropriate names in their written form, from both published and spoken language. It must take into consideration the practical application of names by their everyday users and the use of names established by legal and proprietary processes. International standardization, by contrast, is mainly concerned with such things as methods of converting names from one writing system to another, the standardization of names of international features and the reduction or elimination of conventional names (exonyms) used in many languages for places in other countries.

The degree or extent of domestic names standardization varies considerably from one country to another. The methods used for achieving national standardization also vary considerably between those countries that today have effective standardization programmes. In fact, no two countries approach the matter in the same way. Organization, policies and procedures vary widely. Some countries have established a national names authority to regulate most categories of names, while others distribute responsibility between two or more governmental offices according to their administrative functions and goals. No one method is better than another as long as each fulfils the needs of the Gov-

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ernment and other organizations in the country for standard names, and as long as those names are accepted and agree, when possible, with local spoken and written usage. It is the goal in some countries to collect and standardize most names found in local use. Such an effort is considered important because standardized names for major and minor features are needed for activities ranging from large-scale mapping and charting to their use as references in legal and other documentation. Other countries attempt to standardize formally only those names considered practical for administrative purposes, such as major inhabited places, administrative or civil divisions, and various places and features associated with communications systems. In such countries the names of natural features and smaller communities are generally standardized through the process of map publication.

B. GEOGRAPHICAL NAMES AND LANGUAGE

Geographical names are conventional sound or representative visual symbols that originate in and are used in everyday language to refer to particular places, features and areas on the earth's surface. They represent a primary geographical reference system used by people throughout the world. Their use illustrates a unique human ability to abstract and classify geographical entities in the spatial continuum we perceive as reality, and then identify specific items within that classification with proper names. Naming is a part of our intellectual need to classify and to reference. It is the nature of language, however, to be rather flexible, allowing variation in the forms of names and their application to geographical entities. The nature of this variation is complex but normally does not cause major problems in everyday spoken language. Language experts say that the meaning/application of names, like other words, need not be precise, because sentences, not words, are the essence of speech. This, of course, is not true when names are removed from their original context and their written forms are used alone on maps, on signs or in legal records.

Cartography, for example, is intolerant of name variation. Unambiguous and "accurate" reference is required when geographical names are used outside normal sentence structure. In fact, names are considered the most vulnerable feature of a map in terms of public criticism. Name error or name discrepancy between maps covering the same area can be easily identified by the user familiar with the land, sea or urban area covered by the map.

The United Nations Group of Experts on Geographical Names defines a geographical name as a name applied to a geographical feature. In general, a geographical name is the proper name (specific term, or expression) by which a particular geographical entity is, or was, known. A geographical entity is any relatively permanent part of the natural or artificial landscape or seascape that has recognizable identity within a particular cultural context. A geographical name, then, may refer to any place, feature or area on the earth's surface, or to a related group of similar places, features or areas.

The standardization of geographical names may be accomplished at both the international and national levels.

National standardization is understood to mean the regularization of the written forms of geographical names and their applications within a country by a process or authority approved by and supported by the Government of that country. The expression "geographical name standardization" does not apply to the regularization of names used in speech, although speech habits are often influenced by the written word. It does apply to the dual aspect of proper names, the name itself and identification of the entity to which the name refers. For this reason, standardization is generally limited to:

- (a) Establishing the standard written (orthographic) form for each official name;
- (b) Ensuring its application to a particular geographical place, feature or area.

Throughout the world, the number of speech sounds and the number of ways of uttering and modifying them are very large. No language contains them all, no person can use them all and no traditional system of writing can represent them all. Systems for writing languages can be classed in four groups:

- (a) Alphabetical systems, in which the unit sounds of vowels and consonants ideally are represented by distinct writing symbols called letters;
- (b) Syllabic systems, in which each writing symbol represents combinations of speech sounds called syllables;
- (c) Logographic systems, in which whole words or basic units of meaning are represented by distinct writing symbols called characters;
- (d) Combined systems, in which alphabetical, syllabic or logographic systems are used in combination.

The most common writing systems are those that use some form of alphabet. Alphabetical scripts, however, differ among languages. The conversion from the letters (sound symbols) of one alphabet into the closest corresponding letters (sound symbols) of another is called transliteration. Establishing acceptable methods of transliteration for the systematic transfer of geographical names from one alphabet to another for standardization purposes is a major goal of the United Nations Group of Experts on Geographical Names. Of course, it is impossible to adapt accurately the sound symbols of one language to another without ascribing special phonetic values to the letters of the writing system or adding special marks and "letter symbols". Such marks and letter symbols, however, are generally meaningless to people who are unfamiliar with their intended sounds. For this reason transliteration procedures normally attempt to use only letters and digraphs of the receiver alphabet which correspond as closely as possible to the phonetic values of the letters of the donor alphabet, without attempting to render exactly the original pronunciation.

In general, standardization is based on the writing system or systems used by the majority of the people who use maps and other publications. Names derived from other writing systems, however, are important. They are a significant part of the heritage of every country and should be collected for the standardization programme. The challenge is how to collect them. If a minority language has a written script that differs from the one used by the national majority, the names normally are transliterated so that they can be read by the majority of map users in the country. Names in languages

with no writing systems need to be transcribed into a written form. Because speech sounds differ among languages, the names that are transcribed are made to conform to a new writing system, or the established writing system must be modified by special symbols to fit unaccustomed sounds of the minority language. The task, then, of the names authority is to decide which solution is preferable: the one that is more linguistically correct but may prove to be too alien for public taste; or the one that would find greater favour in popular usage but would be held in disfavour by those who are linguistically more refined. Solutions can vary depending on the nature of the languages involved.

C. HOW TO BEGIN A NATIONAL GEOGRAPHICAL NAMES PROGRAMME

Beginning a new programme within the structure of a national Government often depends on the position in the Government of the person interested in promoting the programme. The effort generally needs to be justified in a governmental environment where other social and economic concerns seem to need more attention. It is often difficult to convince senior management officers in government of the need to devote time and money to an issue that has generally taken care of itself for so long. What is not realized by most is that a large amount of time and money is already being spent on efforts to determine and use "correct" names for maps, documents and other publications. The cost of such endeavours is generally hidden because they are part of other programmes. For example, mapping and charting organizations spend a great deal of time and production cost on the collection, selection and application of cartographic nomenclature. This and similar work in other offices and organizations is often being done without co-ordination and with conflicting results. A strong argument in favour of a national programme to standardize geographical names focuses on consolidation of effort with less overall cost, more consistent results and greater benefit to a larger number of governmental and non-governmental organizations throughout the country.

Setting up a programme includes a sequence of three steps:

- (a) Initial concern and effort to get it started;
- (b) Planning goals and basic principles and procedures;
- (c) Obtaining legal authority.

Someone in authority in the national Government must be made aware of the need for a geographical names programme and be interested and concerned enough to do something about it. If that person has adequate management responsibility and available financial and personnel resources, the programme may be organized by decree or order. The head of a mapping or internal affairs bureau can be effective in establishing a committee to investigate organizational procedures. It is also possible for the interested person to invite key persons of other governmental offices to meet and discuss the organization, support and membership of a national names authority, which in turn would be responsible for setting up a programme. In other words, someone must initiate whatever action is needed to get things started within the governmental structure of the country.

Once the decision to organize a programme has been made, the next step is to establish goals and a few basic, if not tentative, principles and procedures upon which the national standardization of geographical names will be conducted. A programme of this kind need not be as complicated as may be initially thought, provided there is agreement on the organizational and instrumental components of the task. An important factor to bear in mind is that the prime objective of the programme is standardization and not name study. An effective programme will operate on discretionary principles and procedures that rely very little on individual name research, except in cases where special information is needed as a basis for decisions to resolve particular name problems (see Section G), or is a critical factor in the success of a programme. A practical, perhaps often arbitrary, approach must normally be taken to regularize the written forms and applications of thousands of names at minimum cost and in a reasonable amount of time.

Organized programmes require a clear statement of purpose. Agreement on fundamental issues is essential at the planning stage. In the beginning, the following questions need to be considered and answered:

- (a) What kind of organization for a names authority best fits the organizational/internal structure of the Government?
- (b) What status and resources will be available for the staff-support activities of the authority?
- (c) How complete should the programme be with respect to name coverage?
- (d) What characteristics or attributes associated with geographical names need to be standardized?
- (e) What general procedures are best suited to meet the needs of governmental and other users in the country?

A names standardization programme should begin carefully and not be over-organized in its structure or the number of people involved. A small core of persons who are aware of the practical needs of the programme can effectively work out details of the organization and the procedures upon which the programme can be routinely adjusted and eventually expanded to full operation. Experience gained in the early stages will provide the basis for evaluation of the formulated principles and procedures and the development of new ones to meet particular conditions associated with name standardization in the country.

Once initial decisions have been made on goals, basic principles and procedures, it is important to obtain legal authority for the programme. The authority might be provided by a particular bureau that has been granted governmental power broad enough to include the national standardization of geographical names. It is better, though, if the needed authority is obtained directly from the law-making element of the national Government. The organizers must be prepared to submit the planned programme, along with convincing arguments, for approval.

D. A NATIONAL NAMES AUTHORITY

A national Government may standardize geographical names in any one of several ways. Resolution 4 of the First United Nations Conference on the Standardization of Geo-

graphical Names⁴ recommends that national standardization be accomplished by means of a national geographical names authority. Such a body, or co-ordinated group of bodies, is thought to provide the best opportunity for a balanced, efficient and successful programme.

As mentioned above, a national geographical names authority is best established by legal action, in the form of a law, order or directive by the Government of the country. Such action should give the national names authority:

- (a) Continuing status;
- (b) Clearly stated commission, powers, privileges, definition of its mission and areas of responsibility;
- (c) Responsibility for both national names policy and decisions on individual names; and
- (d) Some form of administrative support.

Continuing status for a names authority is not only important but necessary, since standardization is a continuous process. Geographical names, while relatively stable, are still dynamic to the extent that there are variable and constant pressures for change. They are subject to many of the same influences that affect other aspects of language and culture. This is particularly true in multilingual areas and in areas where cultural changes are occurring at a rapid pace. The designated features also may change in scope or nature. A significant interruption of the process could jeopardize a standardization programme.

An effective programme relies on the support and respect given to it by persons in national and regional government and by people throughout the country. This support depends a great deal on the real powers given to the names authority by the Government. A clearly stated commission defining the powers, mission and areas of responsibility of a national names authority is necessary for the authority to carry out a successful programme.

Another important element for effective national standardization is the need for the authority to have full responsibility for deciding on the written forms of geographical names chosen to be used on official maps and other publications. The standardization process includes:

- (a) Approval of names individually or in groups, according to a set of prescribed principles and procedures adopted by the national authority;
- (b) The promulgation of rules to be followed by cartographers and editors in the choice, spelling and application of official names.

Every governmental or institutional body requires both administrative and technical support to carry out its mission. Although some technical support may be provided to a names programme by volunteers from the general public and national institutions, there is generally need for some level of budgetary support from the Government. The cost of a names authority and a standardization programme, however, depends on several factors, including size and organization of the authority; number and complexity of the country's names; and procedures used to achieve standardization. It is important to balance the time and money spent on national standardization with the potential savings derived from the programme.

The organization of currently existing geographical names authority varies between countries with active standardization programmes. Most, however, can be classified under

one of two broad kinds of governmental organizations. In some countries, the authority is vested in an existing governmental department or university, which in turn establishes a geographical names office consisting of technical personnel within its administration to carry out a names standardization programme. In a variation, more than one department is given responsibility to standardize particular categories of names. In other countries, the national Government establishes a permanent geographical names committee or committees with provision for adequate staff support. When an authority for names is established in a geographical names office, all decisions, policies and procedures are determined by professional persons in that office. In the case of a permanent committee, however, the authority rests with a committee, consisting of persons representing various governmental offices and, perhaps, non-governmental experts and laypersons.

There are advantages and disadvantages with each approach, depending on the structure of the national Government. In fact, the organization of a names authority must be consistent with the governmental structure of the country. The authority should be organized in a way that will give it the best chance of success for carrying out a national standardization programme at reasonable cost in time and money. Because countries differ in structure, size and name complexity, national names authorities throughout the world also differ.

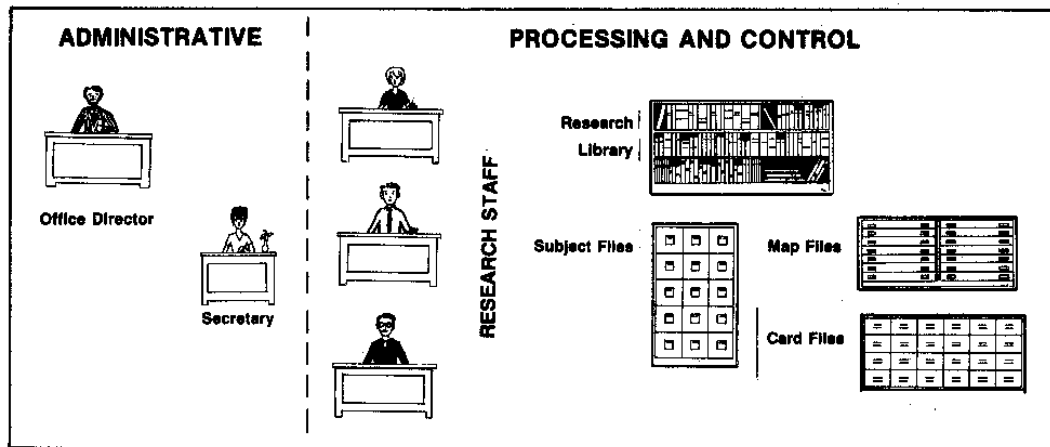
1. *A geographical names office*

A geographical names office is the simplest and usually the most efficient form of organization. Such an office established within a national mapping organization, for example, can be effective in many countries because map usage plays a major role in name standardization. A university, on the other hand, may be able to implement a programme by providing professional expertise in the form of linguists, historians and geographers. There are, however, disadvantages when the authority is vested in a single office. Many governmental departments and other users of official names may be worried that the assigned organization will introduce unacceptable preferences and prejudices in the selection of official names. There is also the risk that scholars at a university may become more involved with theoretical matters than with the practical effort of standardizing large numbers of names.

2. *A permanent geographical names committee*

The committee system introduces increased complexity into the organization of a national authority and it may also be slow to respond to pressing needs. Delay in resolving a name problem, for example, may interfere with a mapping or publishing programme. The advantage of the committee system, however, is that it allows persons with a broader spectrum of backgrounds, representing interested departments and organizations, to be involved in a national standardization programme. This reduces or eliminates the suspicion of bias and provides an opportunity for major users of standard names to integrate their needs into the programme. Also important: a broad representational base for a committee creates an environment that may allow name

Figure 4. Organization and functions of a geographical names office, in which policies and decisions are made by office personnel



policies and decisions to be respected and more readily accepted by governmental agencies and the citizens of a country.

The membership of a permanent committee might consist of one of the following:

- (a) Officials representing only national governmental departments or offices;
- (b) Officials representing both national and regional governmental offices;
- (c) Governmental officials and special experts;
- (d) Governmental officials and representatives of certain citizen groups that have a specific interest in the programme.

Regardless of which type of membership is preferred, it is important that committee membership include representation from those national governmental departments and offices that will be using names standardized by the programme. The national mapping organization definitely should be represented. Other governmental offices that may be considered include those involved with archives, libraries, cultural affairs, commerce, communications, town and landscape planning, transportation, defence, natural resources, publishing and postal services. Governmental offices represented on the permanent committee are more likely to comply with its policies and decisions.

3. Title of the names authority

Although it is not critical, an appropriate title can provide a sense of operational focus and prestige for a national names authority. Choices of titles found in various countries today include (generally prefixed with the name of the country):

- (a) Permanent Committee on Geographical Names;
- (b) Board on/of Geographical Names;
- (c) Geographical Board;

- (d) National Geographical Names Authority;
- (e) Department of Geographical Names/Nomenclature;
- (f) Office of Geographical Names/Nomenclature; and
- (g) National Committee of Geographical Names.

4. Size of a permanent committee

The number of persons to be appointed to a permanent names committee is an important consideration. The committee should be large enough to allow broad representation from key organizations but small enough to function well. The maximum number of voting members for most working committees appears to be 10-20. Since practical considerations are important in name standardization, committee membership need not be restricted to persons who have a scholarly knowledge of toponymy, because professional information can be provided by staff advisors or special advisory committees. Persons holding key or senior management positions in governmental offices are effective in making decisions and determining standardization policies. They are also in a position to ensure conformance with standardization policies and decisions within their own organizations.

The permanent committee is responsible for establishing policies and making decisions. A support staff, working closely with the committee, carries out the standardization programme and keeps the committee informed of problems requiring decisions.

5. Frequency of meetings

A permanent geographical names committee may meet on a regular or irregular basis, depending on its organization, potential workload and the need to formulate policies or resolve problems. In the beginning it may be necessary to

meet quite often. However, once a programme is well established, the committee may meet once a month, every other month, quarterly or even once a year. In some countries, the national authority meets as a committee from one to four times a year in order to deal with policy matters and resolve major problems. Its staff and, in some cases, special working sub-committees are responsible for carrying out the general programme and day-to-day work of the committee.

6. *Areas of responsibility*

Geographical entities that are normally given proper names can be divided into any number of categories. The more common ones used for purposes of name standardization are:

- (a) Natural landscape features (e.g., streams, valleys, hills, lakes, bays, mountains);
- (b) Populated places and localities (e.g., cities, villages, railroad stations);
- (c) Civil/political divisions (e.g., states, counties, provinces, departments);
- (d) Administrative areas (e.g., parks, forest reserves, historical sites, reservations);
- (e) Transportation routes (e.g., streets, roads, highways, trails); and
- (f) Constructed features (e.g., dams, buildings, monuments).

As mentioned above, a few countries rely on more than one governmental department to provide standard geographical names. For example, the national mapping organization may be responsible for the collection and standardization of natural landscape feature names, and the department of internal affairs may be commissioned to approve official standard names for populated places, minor civil divisions and various categories of administrative areas.

In many cases, the names of major administrative/political subdivisions of a country are determined by the national Government. Responsibility for determining the names of minor administrative or political divisions of a country, however, varies from country to country. In some cases, the names of urban districts, streets, roads, parks, forest reservations and certain man-made structures require approval of the national names authority. In other countries, the names of some or all of those categories of features are considered the responsibility of the national or local administrative or maintenance organization.

The decision to include or exclude some categories of administrative names within the scope of a national names authority is normally outlined in the document that creates that authority. The selection is dependent to some degree on the governmental structure of a country, and its standardization needs within the framework of traditional naming practices. In any case, it is often wise to give a national names authority the responsibility to collect and maintain a file of all geographical nomenclature, even though it does not have direct purview over the names of some of the entities. It is desirable and cost-effective to obtain official name information from one source. For this reason, it is recommended that official gazetteers include all approved geographical names, regardless of the organization responsible for their standardization.

E. TECHNICAL AND ADMINISTRATIVE SUPPORT

A names authority, like other governmental organizations, needs both administrative and technical support. The effectiveness of a national programme depends on the flow of information. A geographical names authority, whether it is in the form of an office or a committee, cannot function unless the everyday business of a names standardization programme is carried out. Geographical names require investigation and special office processing. Letters must be prepared and typed, records maintained, inquiries answered, policies and decisions published, and programmes managed. Much of this work can be done by a small, efficient staff headed by a director. The staff support operation can be a separate office within the government structure. However, there may be an advantage in placing the staff support responsibilities with an established governmental office with a direct interest in the programme, such as a mapping organization, or with a university. A larger, established organization can often provide office space and administrative and technical support for a small names staff. An established governmental department or agency may be able to shift support from a similar activity or even absorb the added small staff activity without difficulty. However, if needed, a small increase in its budget will help meet the extra costs associated with added personnel, material and space.

1. *Leadership*

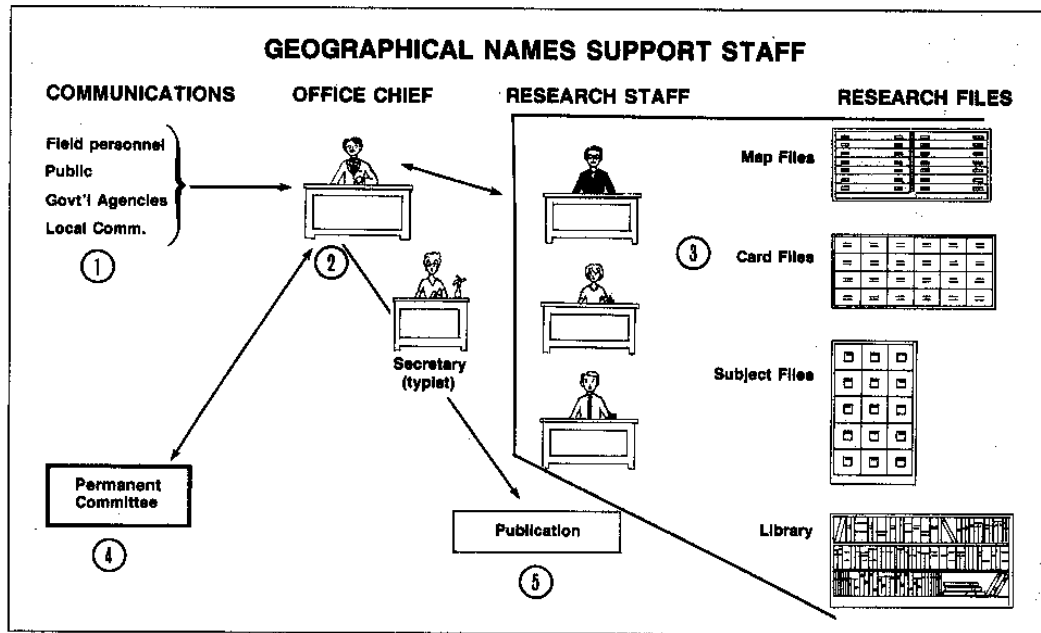
Key persons in any organization are those responsible for directing its mission and carrying out a successful programme. Administrative leadership is required for a names authority whether it consists of a geographical names office or is based on a committee structure with a supporting staff.

A geographical names office organized within the governmental structure of a country or at a university needs only the simplest form of administrative organization to do its work. The director of the office provides the principal leadership for the standardization programme. That person is responsible for the success or failure of the effort. The person chosen for the job should have both administrative and technical abilities. The office will require efficient and sensitive management. It is important for a director to know the governmental structure of the country and to be sensitive to the interests and special name problems of governmental agencies, private organizations and local citizen groups.

The staff support group of a permanent geographical names committee is generally organized in the same way as that of the geographical names office. The real difference is that policy and major decisions are made by the committee representing several interested governmental and (or) local citizen groups. The reconciliation of the interests of these groups is pursued by the committee, as far as possible. The staff is responsible only for providing the committee with the necessary information for decision-making and for carrying out its programme.

An elected or appointed president (chairperson) is generally the principal spokesperson for the committee. That person may be responsible also for full- or part-time management of the programme. The role, however, is generally performed in addition to other or regular job responsibilities.

Figure 5. Organization, functions and facilities of a permanent committee's support staff.
The numbers indicate the normal route followed in the processing of names.



A president (chairperson) usually will not have time to manage the staff and programme. It may be necessary to assign or appoint a professional person to act as programme director and executive secretary. The duties of such a person, performed under the immediate direction of the committee, can include:

- (a) Programme management;
- (b) Corresponding secretary;
- (c) Staff supervision.

A program director is expected to recommend plans of work to the committee and is responsible for directing the day-to-day business of the committee and its programme.

2. Responsibilities

A names authority, whether it resides with a geographical names office or with a permanent committee, needs appropriate and accurate information in order to formulate workable policies and practices and render acceptable decisions (see section H). This information is normally collected from a variety of sources and processed by the staff. In general, the sources include:

- (a) Staff research and investigation;
- (b) Special scholars appointed to advise the national names authority;
- (c) Special language or regional advisors;
- (d) Special field investigations, or field investigations associated with a national mapping programme;
- (e) Regional/local names offices or committees.

3. Number of staff

A major purpose of a national standardization programme is to save money at all levels of government and in the private sector. For this reason, every effort should be made to keep the costs of operation as low as possible without impeding the programme. The required size of a geographical names office staff, compared with a permanent committee's support staff, is about the same. The amount of work needed to support a programme remains constant regardless of the structure or organization of the names authority. Including the director and clerical support, the range of existing staff numbers for a national programme is between four and 10 people. Complexity of language problems, governmental structure, size of country, investigation procedures, outside support and special programme demands affect staff size. A staff may be relatively large during the early stages of a standardization programme and somewhat smaller when the programme becomes a maintenance activity.

4. Qualifications of staff

Staff and other personnel responsible for the collection and verification of name information should have adequate training in order to recognize and deal with linguistic problems such as those relating to phonetic systems, grammatical structures and orthography. It is recommended that these persons have an understanding of naming patterns associated

with the particular languages involved and the use of names within those languages. It is also important for staff researchers and field investigators to be knowledgeable about geographical phenomena and terminology, capable of identifying correctly the entities to which names apply and relating similar features symbolized on maps of various scales and accuracy, and able to identify and evaluate relevant historical information found in documents.

Not every staff member can or need be expert in all these areas. Those collecting and researching name information, however, should have adequate knowledge of toponymic processes and treatment to deal with these issues. Most important, they should have an interest in the work.

F. REGIONAL, LOCAL AND ADVISORY COMMITTEES

The First United Nations Conference on the Standardization of Geographical Names recommended that, when appropriate, provision be made for establishing co-operative regional, local and/or advisory committees.⁴ The need for establishing one or more of these kinds of support committees is normally determined by the national authority. Regional/provincial committees can be made part of the standardization process by law. They can be very useful if there is co-operation and compliance with the policies and practices of the national authority. Such committees often are able to investigate and resolve local name problems better than a national authority, generally located in a country's capital city some distance away. Regional/provincial committees, with their local involvement, can be sensitive to local situations important in the determination of official names. It is recommended that the need for regional/provincial committees be carefully considered. It may be best, however, to delay their organization in the beginning, at least until the national authority has developed some initial principles and practices and becomes operational.

Regional/provincial and local committees are preferably permanent and can be organized by particular language or culture areas and/or according to political subdivisions of a country. Such committees may consist of key persons in local or provincial government; knowledgeable persons from area schools, colleges and universities; and community leaders. Membership on the committees may be on a voluntary basis or as part of regional governmental activity. Besides investigating and reporting on local problems, regional and local committees may be able to investigate and collect toponymic information for the national programme and recommend policies affecting the national standardization of names.

Some national authorities utilize special advisory committees of volunteer scholars expert in disciplines pertinent to the names standardization programme. For example, the scholars may possess knowledge of a particular minority language or they may be able to make professional recommendations on specific kinds of problems, such as those associated with urban and administrative toponymy and names related to desert, coastal, mountain or underwater features. Special advisory committees may be permanent or temporary, depending on the nature of the work and length of time needed for the task.

G. STANDARDIZATION PROCEDURES

The success of a geographical names standardization programme depends principally on its ability to meet the needs of governmental bureaux and other organizations that rely on standard names for their operations. Different users have different reference requirements. It would be ideal to collect and standardize the written forms of all geographical names found in written and spoken use throughout the country. There will always be need for standard names of major and minor features for activities ranging from large-scale mapping or charting to their use as references for national, regional and local governmental records. However, it is almost impossible to collect and process a large percentage of a country's names within a period of a few years. In the beginning a standardization programme requires a strong practical approach, one where priorities are established to meet immediate and important national needs.

1. *Establishing guiding principles and procedures*

Major programmes with specific goals normally operate on general but formalized courses of action. Such courses of action are called principles. Principles provide the fundamental doctrine in guiding the national standardization programme. The principles, and decisions based on them, are put into effect by a series of formal procedures. As suggested above, it is recommended that, as one of its first activities following organization, a names authority formulate and adopt tentative guiding principles and practices for the national standardization of geographical names. The formulation of principles requires considerable care because principles provide the basis for a successful programme. Principles and procedures should take into account:

- (a) Rules for writing official standard names;
- (b) General acceptance of names in current local usage;
- (c) Treatment of names in multilingual areas;
- (d) General avoidance of more than one official name for one feature, if possible;
- (e) Treatment of minority language names;
- (f) Clarification of the precise extent of the application of each name to a feature, including the naming of the whole and parts of major features;
- (g) Treatment of names in conflict;
- (h) Treatment of names derived from unwritten languages.

It is suggested that the principles formulated for national standardization purposes be kept as practical and unbiased as possible. They should contain provisions that guard against special interest groups and political pressure. Decisions should not be arbitrarily based on personal opinions of correctness and appropriateness. It is also desirable for operating principles to be conservative about changing names. In each case, there should be assurance that each change reflects local usage or preference and that changing a name is in the best interest of national standardization. Hasty decisions often need to be reversed at a future date.

The names authority, which represents the regulatory point in the standardization process, should give adequate publicity not only to its organization and mission but also to its principles and procedures for achieving national stand-

ardization. This includes informing persons in governmental offices, private organizations and other groups of procedures to be followed when submitting to the authority controversial name reports, proposals for naming unnamed features and changes in existing names. It is important to make clear what kinds of information are needed for the processing of the reports and proposals.

It is recommended that the names authority establish procedures whereby all interested parties may express their views on a name problem or name proposal prior to a decision by the authority. Depending on working procedures, information briefs on names, in the form of docket lists or case reports, may be distributed to appropriate governmental offices and interested parties in order to solicit comments and recommendations. Regional and local committees can play a leading role in this effort by investigating public opinion and by public announcements concerning the nature of the name problem or proposal.

2. Decision factors

When dealing with name problems, members of a names authority are guided by established principles and procedures. The problems, however, exist in a variety of forms and gradations. They occur when there is a conflict in the name itself, its spelling or written form, and in the application of a name to a specific feature. Conflicts occur, for example, when local citizens use different names for the same feature, when locally used names differ from those used on maps or in other documents and records, and when different names are used on maps and in other records for the same entity. Principles obviously cannot cover all situations. Other factors must be considered in order to arrive at solutions to the problems. For example, if name decisions are based on locally used names and only one official name is allowed, would the name usage of a few newly settled families in a sparsely populated area justify changing names that have been in use on maps or other documents for 100 years? Here, factors that may be relevant to such a situation are:

- (a) Population density and degree of local usage;
- (b) The number of years the local names have been used;
- (c) The kind of documents and how many would be affected if names were changed.

Other social, cultural, ethnic and political factors may also apply in such a case. Each case requires special consideration. Decisions are made by people who view name problems differently within the broad guidance of established principles and procedures. Established factors on which to base decisions help narrow the divergence of opinion and provide greater uniformity to the process. Some of the factors that may apply when considering name problems and proposals are:

- (a) Current local oral usage, its amount and areal extent;
- (b) Current published usage on maps and in official records;
- (c) Historical background relating to the feature;
- (d) Historical usage of the name and circumstances of naming;
- (e) Name duplication;
- (f) Offensive or derogatory words in a name;

- (g) Length of name;
- (h) Regional and advisory committee recommendations;
- (i) Social, cultural and political concerns.

3. United Nations recommendations

In resolution 4, the First United Nations Conference on the Standardization of Geographical Names recommends⁴ that:

- (a) Unnecessary changing of names be avoided;
- (b) The spelling of geographical names be as much as possible in accordance with the current orthographic practice of the country, with due regard to dialect forms;
- (c) The systematic treatment of names should not operate to suppress significant elements;
- (d) Where some names occur in varying or grammatical forms, the national names authority should consider making one of those forms the official standard name (for names that can be declined, it will normally be the nominative case);
- (e) In all countries in whose languages the definite article can enter into geographical names, the national names authority should determine which names contain the definite article and standardize them accordingly. For languages in which both definite and indefinite forms exist for all or most names, it is recommended that standardization be based on one or the other form;
- (f) All countries set up standards for the use of abbreviations of elements in their geographical names;
- (g) A system be devised in each country for the treatment of compound names.

4. Basic considerations

A newly organized authority needs to consider two basic questions when establishing official standard names. The first concerns the basis on which names are selected to be standardized as official names. It is possible, for example, to choose names arbitrarily without reference to existing usage. However, this procedure is not recommended because it will introduce conflict and confusion in the naming process by creating two naming systems in a country—local and governmental. Instead, it is recommended that first precedence be given to those names in established public/local use. It is normally expedient to integrate administrative and academic judgements with the wishes and preferences of local people. Exceptions will occur when particular names cannot be adopted because of conflict with other principles or when public/local usage is variable or ephemeral.

The other question relates to the meaning and purpose of names standardization. The principle of one standard name for each geographical entity (place or feature), recommended in resolution 4, represents the ideal form of standardization. Every effort should be made to adhere to that principle. It may sometimes be difficult to do in all cases, especially in multilingual areas where name usage is divided along language lines. In such cases, the names authority can:

- (a) Choose one name based on specific criteria as the official form;
- (b) Recognize and make available for usage a second language form not equal to the official form;

reprinted or revised. This procedure for standardizing large numbers of names quickly, however, cannot be used if the names on the maps generally do not conform to established local usage or acceptable orthographic criteria. It is best not to change large numbers of map names after they have been declared official.

6. *Names of features on boundaries*

Boundaries between countries and between administrative/political divisions within a country affect naming practices and standardization. The use of names for places and features that lie on a boundary or across a boundary are often influenced by factors that are indigenous to the respective sides of the line. Principles and procedures can help prevent misunderstandings and conflicts that may occur over the treatment of such names. Variation in name use between two sides of a boundary is generally due to differences in languages and/or traditions, differences that often account for the existence of the boundary itself.

Name differences of features on internal boundaries are generally easier to handle for standardization purposes because a single names authority normally has jurisdiction over all the involved names. In the case of names for features on or across international boundaries, co-ordination in the naming of geographical entities is of mutual benefit to the people and Governments of the involved countries. Of course, in each case the linguistic, cultural and historical development of one country differs from that of the other and the differing names respectively reflect the heritage of each. Although those name differences should be respected, it is still practical, wherever feasible, to co-operate in a programme that may reduce the number of name differences between the two countries. It is possible, for example, for countries with mutual borders to have similar principles and procedures for handling boundary names. Compromise is often possible when spelling differences are minor, when names are ephemeral and not well established, or when a feature is mostly in one country. It is also possible to co-ordinate the approval of new names and proposed name changes and to agree to disagree when mutual standardization is not possible.

H. OFFICE TREATMENT OF GEOGRAPHICAL NAMES

It is economically desirable to standardize most names by established principles, policies and procedures. Research, however, is often required when there are important problems concerning name choice and application. Regardless of the process used to effect standardization, control is a factor. For this reason, the office treatment of geographical names is a critical part of the process. It involves a variety of procedures used by the names authority support staff to manage the programme. It includes:

- (a) The collection of name information;
- (b) Investigation and research of all names and their applications;
- (c) Maintenance of the official file of standard and variant names;
- (d) Dissemination of standard name information to a variety of users;

(e) Providing staff support to the national names authority, such as the preparation of information briefs on names and other information papers important for the decision process;

(f) Preparation of pre-field-investigation material and instructions, and the review of information submitted after field work has been completed.

1. *Collection of name information*

The process of standardization requires actual identification and recording of geographical name information. This is done in order that specific written forms of the names, and their applications to particular geographical entities, can be made official by the national authority. These records are then the basic reference with which the standardization process is controlled. The identification and recording of name information is accomplished by:

(a) Documentary investigation (the systematic review and cataloging of name information from maps and other publications); and

(b) Field investigation (the systematic collection of name information accomplished by oral inquiry among a select number of local informants).

Names information can be recorded on cards, paper forms, maps and in a computer. Regardless of the method used, a high percentage of office time will be spent developing and managing the name records. For this reason, the kind and amount of information to be collected to achieve standardization goals is worth careful consideration. An over-ambitious effort may defeat what is meant to be a practical programme intended to simply standardize the written forms of names and their applications.

The minimum or most basic information for a name record need only be the written form of the official name and a statement on the location and identification of the feature to which the name applies. Experience has shown, however, that it may be better to expand the list of information slightly in order to give more helpful information and perhaps prevent misunderstanding of the intended reference. It is suggested that the "basic" information needed for standardization include:

(a) Various names to be considered from which the preferred name or names can be decided;

(b) The location and identification of the geographical entity to which the name applies by reference to an administrative division, geographical co-ordinates and the standard series map on which the feature is located;

(c) A standard descriptive term that clearly identifies the kind of entity that is named (lake, stream, hill, mountain, bay);

(d) All other known names (variant names) that are currently used or once were used to refer to the feature, place or area—including various spellings of the variant names and the official name.

This list can be expanded to cover other kinds of information that may be useful for reference or publication purposes. Some items of information can be obtained only by field investigation. Additional information of this kind may include:

- (a) Elevation;
- (b) Population;

- When recording names, special care should be taken, in each case, to ascertain the best generic term used locally with the name of the entity. The generic term is an integral part of a geographical name and should be included in the standardization process. The meaning of generic terms used locally and the meanings of those terms that may vary from standard usage should be recorded.

Most name files that exist today are based on the use of cards for each name, arranged in alphabetical order and divided by major administrative division of a country. Although the use of computer files will increase and eventually be the leading method of name information handling, cards still provide the best medium for most countries. They are better than paper forms. Being of heavier stock, they are more easily handled and, being more durable, are less subject to damage from frequent use and prolonged storage. Cards are convenient because new name records can be

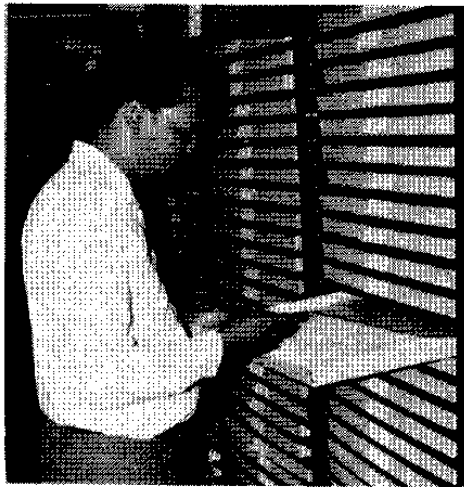
Information should be typed or carefully and clearly hand-printed on the name cards using a fine-point pen. In certain circumstances, especially when the name record is first compiled on a worksheet, the card can be filled in routinely using a typewriter. When doing research using maps and other publications, it is, however, generally easier to hand-print information for the permanent record.

[illegible]

3. Base map file

Card or paper record files by themselves are usually not adequate for controlling a names standardization programme. It is often necessary to identify official names in a particular geographical area. Names arranged alphabetically in a card file cannot easily furnish such information. For this reason, a base map file effectively complements the alphabetical name record file. A base map file consists of a set of intermediate-scale maps that cover the whole country and on which official geographical names are identified. Those not already printed on the maps can be carefully added by annotations using a fine-point pen. When necessary, map symbols can be drawn on the map in their approximate or relative locations so that the names can be identified with their appropriate features. Different colors of ink can be used to identify particular aspects of the name or feature. Each name can be accompanied by a number corresponding to a reference in a list of numbered sources in the map border.

Figure 8. Base map file



If available, intermediate-scale maps, such as those with 1:250,000, 1:100,000, or 1:50,000 scales, are considered most useful because they are more likely than larger-scale maps to show the whole of major features, and yet provide enough space to annotate smaller features not symbolized on maps of that scale. Also, fewer maps are needed than would be the case if maps of a larger scale were to be used. The map scales chosen for the base map files also depend on name density and size of the country. Of course, large-scale maps can be used, and when map coverage of an area is incomplete, it will be necessary to use whatever coverage is available.

4. Subject name report and area files

In association with special names problems, the geographical names authority office will accumulate various kinds of records worth keeping for future reference and research purposes. Most will be in the form of worksheets, letters, special maps, legal documents and reports. This material can be kept together in a subject file, in letter-size folders that are labelled at the top with the appropriate geographical name and/or civil administrative division, and filed alphabetically in standard drawer-files designed to hold such folders. The material can also be filed according to map sheets or a series of maps.

The subject file and other name records together become an important national cultural resource. The collection will be valuable not only for standardization and cartographic purposes, but also for students of names and scholars interested in socio-linguistic and historical matters.

5. Computer files

As was mentioned earlier, a major task in the office treatment of names is simply that of information handling. If our only concern were to "look up" individual name records, the card file would be the most efficient information system available to us. An efficient names support staff, however, often requires more. Ideally, it is desirable to have both access to large numbers of name records and the ability logically to retrieve, sort and correlate the record information rapidly and accurately, as needed. This can be done by the use of automated data processing (ADP). The development of ADP equipment in the last 25 years now offers a relatively new and powerful tool well suited for supporting a national names standardization programme. Names information can be processed quickly by using a computer. Unfortunately, at this time, many names authorities and their supporting staffs do not have ready access to computer systems. This, of course, will change in time. Those who are interested in ADP should consult the various United Nations conference technical papers on the subject and volume XVIII (1986) of *World Cartography*.³ Other references include the proceedings of the symposia (1980, 1985) on the use of computers for handling geographical names, sponsored by the Canadian Permanent Committee on Geographical Names, and the various publications of the United States Geological Survey describing its Geographic Names Information System.

6. Office research tools

Most office research in support of a national standardization programme involves the documentary investigation of geographical names. It entails the review, evaluation and collection of name information from maps and other publications, manuscripts and reports. The reference tools needed in a staff support office consist mainly of a specialized library made up of a selection of maps and publications useful for toponymic research. In addition to the card, map and subject files just reviewed, it would be very useful to obtain the following kinds of reference material, if available:

(a) A complete set of official topographic maps that cover the country at the largest scale available;

[illegible]

- at one time, such as those found on a map or group of standard series maps, requires little or no research as long as the map series is considered reliable. The collection or recording of accepted map names becomes mainly a clerical exercise. However, names that are in conflict, name changes and new name proposals require varying degrees of documentary and, in some cases, field research.

The meaning of the word "conflict" depends on how it is defined by a names authority within the framework of its principles of national standardization. In general, it is possible to state that name conflicts occur when:

- ## 7. Staff research

The amount of actual research required to support a names standardization programme depends a great deal on the standardization procedures, principles and decision criteria formulated by the national authority. For example, a policy and procedure that establishes a large body of official names

Figure 10. Examples of computer print-outs of individual name records

Kleine Ortze <f>	10° 07' E 52° 55' N	3 575200 m	5865600 m	32 575200 m	5863300 m	20486200	810
Weser, Aller, Ortze, Kleine Ortze					STPM	3026. L3126. C	
Kleinerknoten	08° 25' E 52° 51' N	3 461100 m	5857800 m	32 461100 m	5855500 m	03634120	071
Niedersachsen, Oldenburg, Oldenburg (Oldenburg), Wildeshausen					GEMT	3116. L3116. C	
Kleinensiel	08° 29' E 53° 27' N	3 465200 m	5923500 m	32 465200 m	5921200 m	03636131	071
Niedersachsen, Oldenburg, Wesermarsch, Stadland					GEMT, RSTRA, HBR	2516. L2516. C	
Klint	09° 13' E 53° 38' N	3 513900 m	5944500 m	32 513900 m	5942100 m	03432127	071
Niedersachsen, Stade, Land Hadeln, Hachthausen					GEMT	2321. L2320. C	
Kloster Oesede	08° 07' E 52° 12' N	3 439500 m	5785900 m	32 439500 m	5783600 m	03537129	071
Niedersachsen, Osnabrück, Osnabrück, Georgsmarienhütte					GEMT, RSTRA	3714. L3714. C	
Kluse	07° 21' E 52° 56' N	2 590700 m	5867600 m	32 389100 m	5865700 m	1097 8 m 03531165	071
Niedersachsen, Osnabrück, Achendorf-Hümmling, Kluse					GEM, RSTRA	3010. L3110. C	
Kneittlingen	10° 46' E 52° 11' N	4 415300 m	5783100 m	32 620400 m	5781500 m	066 165 m 03736162	071
Schöppenstedt Niedersachsen, Braunschweig, Wolfenbüttel, Kneittlingen					GEM	3830. L3930. C	

NAME - Gap, The
 TYPE OF FEATURE - gap
 STATE/COUNTY FIPS CODE - 04005
 GNIS MAP NO - 0268
 GEOGRAPHIC COORDINATES - 361812N1112656W
 USGS QUADRANGLE CODE - 36111-C4
 COUNTY NAME - Coconino
 FEDERAL STATUS - BGN
 MAP OR CHART NAME - The Gap

NAME - Gato, Ojo
 TYPE OF FEATURE - spring
 STATE/COUNTY FIPS CODE - 04001
 GNIS MAP NO - 1051
 GEOGRAPHIC COORDINATES - 341450N1093345W
 USGS QUADRANGLE CODE - 34109-B5
 COUNTY NAME - Apache
 FEDERAL STATUS - BGN
 MAP OR CHART NAME - Whiting Knoll

Most conflicts between published and local usage are not discovered in the office. They are brought to the attention of the names authority by:

(a) Letters of complaint received from local officials and citizens;

(b) Reports received from local and regional names committees and special advisory committees;

(c) Reports received from toponymic field parties, surveyors, mapping field parties and other governmental officials.

To assist in promoting this kind of communication, it is recommended that the names authority develop a special reporting form for names in conflict. Such a form should specify the kind of information needed for research and decision-making.

Name change requests

The expression "name change" needs to be defined. It is useful to confine its meaning to situations in which there is a request or action to change formally a well-established or official name for a specific reason. Perhaps the reason would be to eliminate duplicate or derogatory names, or to

suit some personal, political, cultural or administrative purpose. Whatever the reason, special research is required by the staff to gather information, including supporting and opposing evidence, which can be submitted to the names authority for a decision.

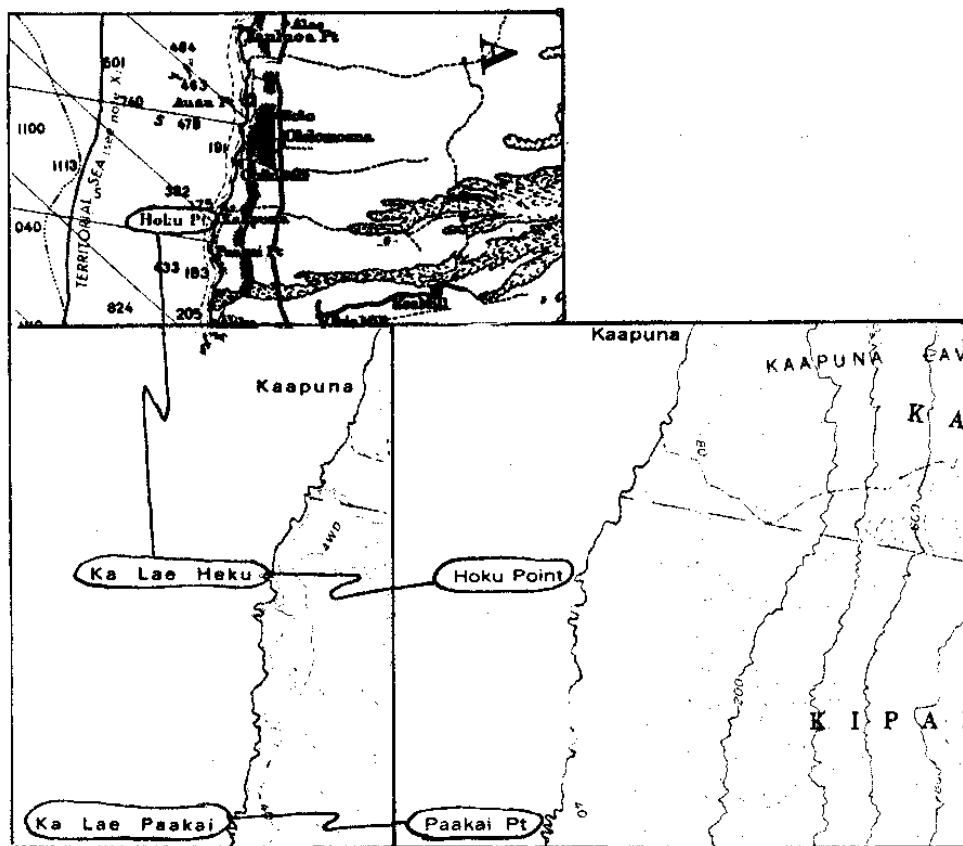
New name proposals

A national authority is often asked to name officially a feature that is thought not to have a local or published name. Special procedures for submitting and handling proposals of this kind are useful. The staff is obligated to see that the procedures are followed. Research in a variety of documents and maps and communication with local officials and committees are recommended in each case in order to ascertain that the feature indeed does not have a current name in published or oral usage, and whether the proposed name would be acceptable to the local citizens and the local and national Governments.

8. Research procedures

Staff research procedures vary from case to case. The procedures are dependent on the nature of each case, such

Figure 11. An example of name conflicts between official maps and chart



as whether it is a name conflict, name change request or new name proposal. In simple terms, a researcher must investigate, collect and evaluate evidence relevant to the case and will provide the necessary information to members of the names authority so that the best decision can be made.

Each name conflict or proposal is always referenced to the particular place, feature or area involved. Major mistakes can be made if references, such as descriptions and co-ordinates, are made to names instead of the features that are involved. This rule is particularly applicable when the same name is applied to two nearby features, according to two or more published sources.

Although it is possible and efficient to use the official name cards for case research, their small size limits the amount of toponymic information that can be recorded. For complex problems involving considerable research, special printed research or case brief forms can be useful. Their

larger size allows easier recording of data in an organized way to assist in the evaluation of a case problem. Forms also ensure that primary evidence is collected and not accidentally overlooked. The research forms can be filed individually in alphabetical order in the subject file for future reference. Only selected information need be transferred to the official name cards, which also provide cross-references to the research forms in the subject file.

Actual research involves the review and evaluation of names used on maps, charts and other appropriate publications, and research into the use and meanings of names and their written forms in more than one language, whenever necessary. It entails the evaluation of field and other names reports, the co-ordination of research and investigative activities with regional and local committees, the solicitation and checking of information with local informants and the preparation of name problem reports for submission to the

Figure 12. Example of a name-report form

DOMESTIC GEOGRAPHIC NAME PROPOSAL		Proposed name	
Reason for Proposal: Check appropriate box(es)		Controversial name ☐ ☐ Name change Changed application ☐ ☐ Other	Is name in local use? No ☐ ☐ Yes If Yes, approx. No. of years _____
Location of Feature	Latitude ° ' "		
	Longitude ° ' "		
Meridian			
Brief description of feature:			
MAPS USING PROPOSED NAME		VARIANT SPELLING OR OTHER NAME	MAP SHOWN ON
Available information as to origin, spelling, and meaning of the proposed name and/or statement concerning nature of difference in usage or application:			
AUTHORITY FOR NAME	ADDRESS		OCCUPATION

[illegible]

national names authority. A good researcher will attempt to gain considerable understanding into the nature of each name problem:

- (a) The toponymic history of the geographical entity involved;
- (b) The languages involved and their written forms;
- (c) The sources of all variant names and spellings;
- (d) Special ethnic, cultural and political interests;
- (e) Local usage and local preferences;
- (f) Degree and reliability of name usage;
- (g) Options with regard to standardization.

9. Name problem and proposal reports

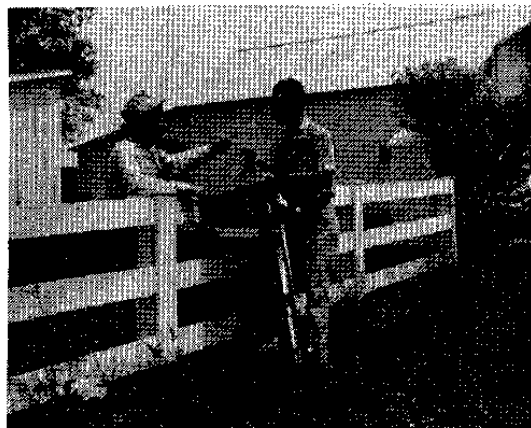
Clear and sympathetic communication between the research staff and the names authority is not only important but vital. The only way members of the authority can make intelligent decisions is to have access to appropriate information collected during research. The appropriate evidence in each case must be submitted to the members of the authority in such a way that it is complete and unbiased. This can be done best by means of standard reports or by a name information brief with the pertinent information for each case in a fixed format. A qualified staff person should attend all names authority meetings and be prepared to answer detailed questions and clarify information about each case. The staff person should also be able to provide technical advice on the languages involved and, if asked, offer recommendations concerning a case.

I. FIELD TREATMENT OF GEOGRAPHICAL NAMES

The ideal method for obtaining information about the local use of geographical names and their applications is field investigation carried out by knowledgeable persons. In fact, field investigation is the only way some information can be obtained. This applies particularly to discovering conflicts between official published names and local oral usage, and in collecting linguistic information. In general, the field treatment of geographical names involves the investigation of toponymic information by direct, personal inquiry with a select number of local informants who normally have an opportunity to use the geographical names on a regular basis in their everyday language. It also includes the local investigation of the written forms of names, such as those which are used on signs and in local records.

Field investigation is an expensive procedure. Except on a limited basis, few names authorities will have the resources to carry out such investigation. National standardization, however, is a co-operative programme. It is generally possible to enlist the help of surveyors, field mapping personnel, and available local and regional names committees whose work may already include the collection of map names. With a little training, and with comparatively little added cost, they can assist in the collection of information required for the standardization programme. Field assistance may also be provided by university and governmental linguists, geographers and geologists who periodically work in the field. In some cases, trained college students have been successfully used to obtain field information. Such work can be part of a class project. Whenever possible, local or

Figure 14. Surveyors and field mapping personnel can assist with toponymic field investigations



regional names committees should be called upon to assist in all phases of the field treatment of names.

The work of obtaining field information can be divided into three phases, of which the first and last are often best performed in the staff support office regardless of what group does the field work (see figure 14). These phases are:

- (a) Pre-field preparation;
- (b) Field investigation;
- (c) Field information review.

1. Pre-field preparation

An important, if not critical, phase of toponymic field investigation is the preparation carried out in the office before field assignments are made. Proper field preparation can reduce considerably the time and cost of field work and ensure that the work is accomplished more completely. It can greatly assist the work of the field investigators by:

- (a) Identifying name questions and problems;
- (b) Identifying local informants, providing introductions to local leaders;
- (c) Assembling the appropriate map and aerial photo coverage, and other materials and supplies the field investigator may need;
- (d) Planning the logistics needed for travel and recommending the most feasible and economical routes for meeting and interviewing informants.

It is useful to prepare a field work map or series of maps that covers the area to be worked and a set of instructions for the fieldworker's guidance. The field work map and instructions are sometimes prepared by the person doing the field work. However, they are generally best prepared in the office, where an in-depth geographical, cultural and language study of the field work area can be made. The instructions prepared to accompany the field work map normally will require the fieldworker to verify all the published nomenclature on each map—the names, their spellings and their applications relative to their use by the local people.

The instructions will also list questions and potential problems that have been identified by office research. Each question can be keyed to annotated numbers or letter symbols on the field work maps (see figure 13). It is also possible to pose these questions by annotation on the map border, with lead lines to features and names shown or annotated on the field work map by office personnel.

Since time and travel in the field entail considerable expense, the more that can be done in the office to make things easier or simpler for the field investigator, the better. This is particularly true if the field people are employed by other governmental organizations, such as surveyors or field engineers who are doing the toponymic investigation as part of a co-operative effort in addition to their regular duties. Some of the information that may be useful for the field person to know in advance is:

- (a) Logical or appropriate contacts in specific areas with a list of possible informants based on cultural and linguistic criteria;
- (b) Locations of interpreters;
- (c) Recommended number of informants to be interviewed;
- (d) Possible places of lodging;
- (e) Special protocol matters;
- (f) Known administrative/linguistic divisions in the area to be worked.

Another pre-field job for the office staff is to bring to the attention of the fieldworker all toponymic questions and possible problems learned from documentary research. Certainly those names that are found to be in conflict between primary maps and other publications should be identified so that information may be collected to help resolve the conflicts. The field investigator can also be asked to:

- (a) Determine whether places, features and areas not named on available maps and other publications are named locally;
- (b) Indicate the limits or extent of large and indiscrete features that are named according to local usage (plains, mountain ranges, ridges);
- (c) Clarify generic usage and meaning when it is not obvious;
- (d) Identify and record duplicate names and, if valid, how they are differentiated in everyday conversation;
- (e) Indicate on the work map or map overlay boundaries between named areas;
- (f) Record languages involved and name meanings;
- (g) Identify and record the numbers, ages and ethnic/language backgrounds of local persons using particular names;
- (h) Identify and record locally used written forms of names found on signs and in records.

After the pre-field preparation work has been completed, the work maps, report forms and other materials are assembled for easy use. If possible, and if appropriate, it is useful for the field investigator to be able to review the work done by the office personnel before going in the field in order to resolve possible questions about the pre-field material.

2. Field investigation

The purpose of toponymic field investigation is to learn how local people use geographical names. It involves ver-

ification of names and their applications already published on maps and the collection of names in local use which are not found on maps. A visit to an area or community can be brief (part of a day) or longer in time (several days). The length of time spent in an area depends on the nature of the assignment or assignments. In many cases the names investigation will be done in conjunction with other field work, such as mapping. If the names investigation is limited in time or is carried out in a sparsely populated area, the job of interviewing is less involved than normal. Only a few people need be contacted and, in most cases, the fieldworker will randomly interview whoever can be found. A larger, more extensive field programme, however, requires greater organization. In such a case, initial community contacts are made before interviewing in order to learn about the community, its people and geography and, more important, the names and locations of persons to interview.

Field investigation training

It would be ideal if the verification and collection of geographical names in the field were carried out by persons expert in field interview techniques and toponymic studies. This, however, is not always possible. Because of practical considerations, such work is more often done by persons with little training in either subject. They may be surveyors, topographers or administrators who have been delegated to investigate name usage as an adjunct to their regular duties. Nevertheless, good field work can be done by those people if they take an interest in the work, have a professional attitude and are provided with appropriate guidelines as to interview and recording procedures and the kind and amount of information needed by the names authority. This can be done best by concise field instructions prepared by the names authority office staff. Whenever possible, a short training course also can be provided by experienced persons in the office or at a college or university.

Initial contacts

Upon arriving in the area, it is well, if possible, to have a letter of introduction to an important or well-known person in the village or community. The list of possible contacts prepared by the staff support office also will help establish initial introductions to the people who may help identify good local informants. Without these, knowing nobody, it is best to find someone (teacher, physician, librarian, postmaster, town officer) who knows the area and its people. In villages, one of the best sources of information is the general store. This is often not only the centre for local news but the meeting-place of many of the local people as well. In some places, because of the social/administrative structure of the area, it may be best protocol to first contact the local head person, such as a mayor or a chief. In sparsely populated areas, the fieldworker may not be able to be selective and often must rely on individuals found at a farm or ranch for toponymic information.

Selection and number of informants

After initial contacts have been made, when enough helpful information about the geography of an area and its people has been gathered, and with a list of possible good informants, the field investigator faces what is probably the most

Figure 16. Steps in the field treatment of names. Toponymic information is accomplished in these basic steps, plus pre-field preparation, the actual field investigation and field information review.



A. Prefield Preparation: field work map and a set of instructions are prepared in the staff office to assist field-worker.



B. Going into the field.



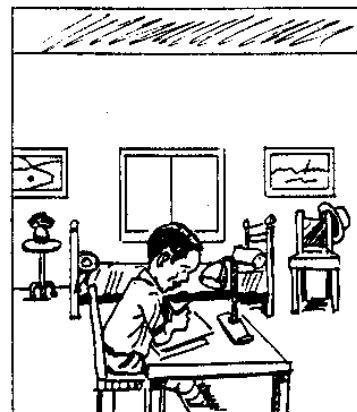
C. Initial contacts: preliminary introduction to local people and getting acquainted with area.



D. Interviewing in the home, school, or office.



E. Interviewing in the field.



F. Preparing field reports and checking completeness of work.



G. Field Information review in the staff office for processing.

exacting part of the job: the selection and meeting of individual informants. Because of the cost involved in field investigation, the selection and number of people interviewed are important. In many cases older women often have a greater knowledge of an area's geography and history and are familiar with the geographical names. Of course, the selection of younger women as informants can be important in order to learn of possible shifts in name usage between generations of local inhabitants who may have different professions and life-styles. Men also often have knowledge of local places, features and areas.

The number of informants needed to get a good sampling of the local use of geographical names depends on the size of the area being investigated, its population density, the size or extent of the geographical entities under consideration, the nature of the name problems, the number of cultural groups and languages involved, and the money allocated for the work. The number of informants for verification of names and for resolving most name selection and application problems need not be large. From two to five good informants often can provide information on a large number of names. One or two area administrators, hunters, forest rangers, game wardens or mine operators may be the only informants available who use geographical names in areas of sparse population. In any case, the number of people interviewed depends mainly on whether the field investigator feels confident that he or she is getting reliable information, information that reflects the usage of the community instead of one individual or a small group of people. This sense of completeness cannot easily be taught to a person and must be learned through experience.

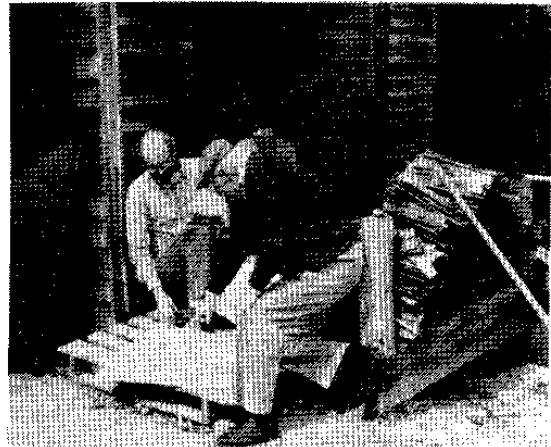
In general, informants are picked with several qualifications in mind. Under most circumstances it is important for them to be:

- (a) Natives of the village or community;
- (b) Intelligent enough to understand the purpose of the interview;
- (c) Able to communicate well with regard to describing the location of features (or read a map confidently) and the extent of name usage;
- (d) Capable of a good memory of the local geography;
- (e) Hospitable;
- (f) Honest;
- (g) Not easily led by the fieldworker's questions;
- (h) Not arbitrarily improving on some names used locally because of considerations of delicacy and elegance.

Asking the questions

As was mentioned before, the purpose of toponymic field investigation is to obtain information on the local use of geographical names from competent persons who can be interviewed personally. The success of an interview depends on several factors, some of which are not easily controlled, because the process involves a dialogue between persons who are generally unfamiliar with each other and where personality can play a role. Personal interviewing requires tact. The qualitative selection of informants, however, is planned to help reduce problems based on personalities or the informants' lack of knowledge about the local use of geographical names. The fieldworker also should make it clear in the beginning that the purpose of the visit is not to

Figure 17. Fieldworker interviewing at residence of an informant



sell anything, get involved with any official or social issue which may be controversial, or have motives other than to learn how each individual interviewed refers to the geographical entities within the geographical area in which he or she is most familiar.

In conducting the interviews, each fieldworker develops his or her own procedure. Some may push forward at each meeting as quickly as possible, and thereby sacrifice certain social courtesies and small talk. Another field investigator may attempt to establish a more intimate relation with the informant and his or her family. A method sometimes used, especially if the fieldworker is dealing with someone of another culture and language, is first to meet the informant and explain the purpose of the visit. Then another meeting at a different time is arranged for the interview. This procedure reduces the element of surprise and possible anxiety that may result from meeting a stranger, evaluating the request and getting involved with an interview, all at once. When the fieldworker returns, the informant is generally ready and often much more co-operative than if it were a one-visit event.

Regardless of the technique used, however, the goal of the fieldworker admits of little variation. In every case, a quick evaluation must be made of the informant's toponymic knowledge, veracity and ability to read a map or clearly explain the identity of the places, features and areas being discussed that are not within view. Care must be taken to ensure that the person is not influenced by map usage. Local names are sometimes considered to be trivial and unimportant when compared to published names. The informant should be made aware in the beginning that map names are not necessarily correct when compared to local names. In some cases it may be possible to travel about in an area and have the informant point out features directly.

It is important that the fieldworker ask questions without bias, not lead the informant when asking questions and not make assumptions because of prior knowledge of information received from previous interviews. In an English-language context, for example, the interviewer may ask, "What is the name of the creek that flows through the pond at the south end of the village?" If the response is "Ajax", and the fieldworker then writes down "Ajax Creek", the name may be partly wrong. The local name could really be "Ajax Branch". The question should be posed in such a way that the generic element of the name used locally is clearly understood. Some field investigators occasionally ask questions using incorrect names, to test the informant's knowledge of local names. Such a practice, however, must be handled with skill to avoid unnecessary embarrassment.

The information is obtained from each informant by direct questioning; but to learn the use of names within the context of everyday language, the questions should not always be straightforward requiring only "yes or no" kinds of answers. Getting the informant to use names in sentence context is often helpful in arriving at an understanding of actual usage.

Name application

Determination of the written forms of names is only part of the standardization process. Equally important is an understanding of the association between the names and the geographical entities they identify. That association includes:

- (a) The location of the place, feature or area to which each name applies;
- (b) A description of the extent of each named feature;
- (c) An explanation of the hierarchical relationships between associated entities, when necessary.

Locating a named entity according to each informant is normally done by marking or coding the field work maps or aerial photographs by the informant's identification number, as described below. The procedure is simple and provides the best means of communicating feature identification. Care should be taken by the fieldworker to prevent crowding and misleading marks on the maps. Although field conditions often are not conducive to careful pen and pencil annotation, the effort to do neat and accurate printing and line work on the maps can save time and prevent errors in the office, where the information is collected from the field work maps. It is generally impossible to go back to the field in order to clarify indistinct work. Named geographical entities not symbolized on the field work maps or identifiable on the aerial photographs can be carefully annotated on the maps or photographs in their approximate locations, relative to shown features, using standard map symbols.

The majority of geographical names apply to relatively discrete features that can be logically defined and described. However, no two entities are alike and the limits or extents of some named features are often vague. The question involved is simple: Exactly what is named and to what does the name apply? Perhaps one of the reasons many have difficulty understanding—indeed, even recognizing—a problem of name application is that cartographic and other specific reference needs are more rigid than local usage. For example, persons living in an area or region may agree on

names for deserts, ridges, mountains or bays but not be able to agree on their precise limits. The mouth of a named stream is generally a discrete point, but its heading is often not locally defined unless it is at the confluence of two named branches. A named point of land may be defined by fishermen as applying just to the tip of land, while local farmers may use the same name to refer to the whole peninsula that forms the point of land.

A field investigator must determine and identify the local applications of names and, just as important, report when local usage is either definite or indefinite about the extents or limits of features. Such information is important to the national names authority when deciding on the application of an approved name. In many cases, the names authority may decide to define features logically and arbitrarily in order to provide uniform guidance for names placement and specific geographical identification for purposes of record reference.

Another factor to be considered when collecting information on name application is the matter of how local people perceive feature relationships. In certain cases, names applied to associated features have an informal hierarchical relationship to each other. This relationship is often revealed in the way people use the names in everyday language, particularly by the generic terms used in the names. This hierarchical process varies among languages, depending on how each sorts out parts of the landscape for reference purposes. In American English, for example, many of the generic terms used in names carry hierarchical meaning. Absolute size is not always a factor. It is the size relationship and association between features that are carried in the generic meaning. For example, in American English, coves can be very large, but when associated with named bays, they are generally considered subsidiary. In the same way, named peaks standing alone can be as large as or larger than nearby mountains, but when in association, a peak is always a part of a mountain, not the other way around. Although generally not a critical factor, knowledge of hierarchical relationships can be helpful in the decision process. Such knowledge may be useful when trying to decide between two forms of a name, when other factors are equal.

Recording and reporting field information

The purpose of a field programme is to provide information that can be used to help decide on the selection of official names for a particular area. The field investigation is a critical link between the real world of local name usage and the standardization process. Toponymic data given by each informant needs to be understood, evaluated for accuracy and recorded by the fieldworker in a notebook and on maps at the time of the interview.

It is good field procedure to record information about each interview in a notebook. If possible, it is useful to record each person's name, address, sex, approximate age, occupation and years lived in the area. This information can assist in evaluating local name usage. For example, people with different occupations may use different traditional names for the same feature. A difference in name usage between older and younger informants may indicate a name change in progress.

Each person interviewed in a project area should be given a unique identification number. This number is a shorthand reference that can be used in association with information and map name confirmation provided by the particular person. Simple alphabetical and/or numerical codes or other writing symbols also can be used to note standard replies to routine inquiries and to evaluate the performance or reliability level of each informant. The use of such shorthand codes can reduce the time spent recording data during an interview and reduce the space used making annotations on the work maps. The names authority office may wish to establish a standard coding system for use by all fieldworkers.

During an interview, short answers to the questions and other brief name information can be annotated directly on the map, sometimes using different-coloured pens or pencils so that office and field annotation may be distinguished from each other. The best procedure, however, is to prepare report sheets or cards keyed to a sequence of annotated numbers or names on the map. The report sheets provide adequate space for describing each name situation and problem, along with information pertaining to the informants contacted, language matters and name meanings. A name overlay sheet on see-through paper or other material is a useful tool for associating names with map symbols. The places, features and area referred to in the reports can be drawn or outlined on the overlay sheets for easy reference.

The value of a field investigation project is judged not only on good interview and recording techniques but also

on how well the information collected is conveyed to the names authority office. Every effort should be made to transfer to the office information that is:

- (a) Factual;
- (b) Clearly stated (unambiguous);
- (c) Appropriate;
- (d) Adequate.

Seldom can all the toponymic data recorded at the time of an interview be passed directly to the office staff. Those data, recorded in the form of hastily written, often cryptic notes, normally need to be transcribed so that the information can be clearly understood by persons in the office. It is recommended that the transcription of field-collected data into a standard report form be done at the end of each day. The longer the fieldworker waits to transcribe notes and map annotations, the greater the risk of forgetting significant details of the interview or confusing information obtained from several interviews.

Multilingual conditions

In most countries throughout the world, geographical names are found in more than one spoken language. Multilingual conditions affect field investigation procedures. The range and variety of multilingual conditions are great. At one end of the spectrum are those countries that are essentially unilingual, where a large majority of the people speak and understand one language, even though various groups of people also speak other languages. At the other end are those countries composed of several cultural groups

Figure 18. Example of a field annotated map. The numbers associated with each geographical name refer to the identification numbers of the informants listed in the field notebook. The ⊕ is a code symbol that indicates all informants interviewed agree with the name.

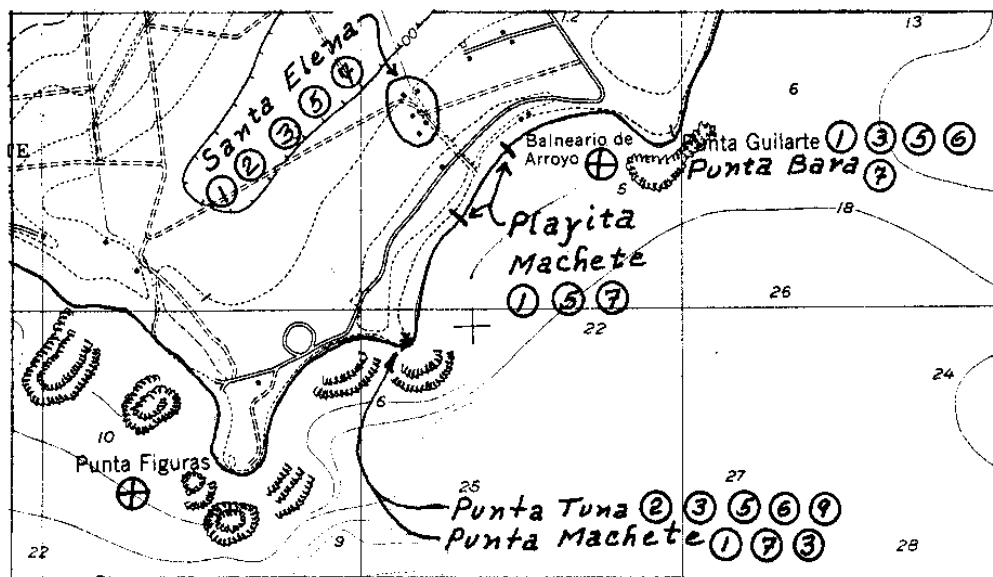


Figure 19. Interviewing in the field



in which over a hundred languages are spoken. Since standardization programmes are normally based on the principle of local usage, most countries must take into account the treatment of names derived from minority languages. How this is done is a matter for consideration by the national names authority. The field investigator is responsible for the collection of all names in the field, and must not be selective in the process. Selection, if there is any, is the responsibility of the names authority and its support staff according to established principles, policies and procedures.

The effect of multilingual conditions on interview procedures depends on the ability of the fieldworker to communicate with the person being interviewed and an ability to record names in a manner acceptable to the names authority and the staff support office. If the fieldworker and informant do not speak a common language, other procedures are necessary. For example, it may be possible to use a competent interpreter—one who understands the purpose of the interview and is able to deal easily with orthographic and geographic matters. Such service may be furnished by a local school teacher, an administrative official or any other knowledgeable person who is able to converse freely in the two languages involved.

Recording names from other languages

When working with other languages in the field, the procedures for recording names can differ depending on whether the names are derived from languages that have a written form or languages that do not have a written form. In the first case, the names are recorded using the standard orthography of the language from which the name is derived. The written forms of those names are either accepted by the names authority as they are or, if necessary, converted into an acceptable orthography according to established procedures. The field investigator, however, normally is respon-

sible for collecting the names in the locally used script. If a language involved does not have writing systems, the names collected must be transcribed into an acceptable orthography. Most field personnel are not qualified to hand-record names from languages with which they are not familiar. Linguists aware of the standardization processes can do the job in co-operation with the field investigator, who must make sure that the correct applications of the names also are recorded properly. A geographer or field cartographer who qualifies as a linguist is also able to record the names properly. People knowledgeable in linguistics, however, are not always available. If this is the case, it is strongly recommended that the local spoken forms of names and their meanings, if known, be recorded on tape and number-coded to the appropriate symbols on the field work map or images on the aerial photographs. It is good procedure to have each name repeated twice and used in context within a sentence. The names on the tape can then be transcribed in an acceptable orthography in the office or university by qualified linguists. The tapes can also be used to develop pronunciation guides for the names. In all cases, the meaning of each name, if known by the informant, should be recorded in order to assist in the correct interpretation of the name.

Use of local names committees

The field investigator should not overlook the possible assistance that existing regional and local names committees can provide in the introduction and selection of people to be interviewed. If such a committee exists within or near an area being worked, it also may be possible to rely on persons from that committee to do the field interviewing with or without the supervision of a field investigator working for the national Government. The work can be done in co-operation with the national names authority as an integral part of the standardization programme. Such a procedure allows local communities to be directly responsible for the collecting and recording of their own names. Local committees also may be able to handle multiple language situations more easily than someone from the outside who is unfamiliar with the languages involved. Local and regional committees normally operate with essentially the same principles, policies and procedures followed by the national authority for the treatment of geographical names.

At a more informal level, it is possible for a government fieldworker to organize an *ad hoc* local committee to assist in the interviewing and recording of names. An *ad hoc* committee can help overcome language barriers that may exist. A reverse of this procedure can be effective in some cases. That is, it may be possible to have selected informants come together as a group, at which time the area nomenclature can be discussed and recorded. This method, of course, may lead to somewhat biased information because it is based on group agreement. Information collected this way, however, does provide a form of name selection accomplished democratically by local citizens. It also reduces the time and cost of a field operation.

3. Field information review

Although the goals of field investigation are simple and straightforward, it can be seen from the above that the pro-

cedures and methods used in the field are subject to considerable variation. This is because many different conditions exist in the field. The process of obtaining specific and sometimes complex and subjective toponymic information from local people with different cultural attitudes, personalities and languages requires flexibility in procedures and methods used. The final result of a field operation is an organized collection of annotated field work maps, map overlays, report sheets and other material related to the collection and recording of geographical names that cover a specific area. This material is submitted to the staff support office for processing. The field material is reviewed and evaluated for relative completeness, accuracy and adherence to standards. The selected names and their applications are then processed and recorded according to established procedures for official adoption by the names authority.

J. PUBLISHING OFFICIAL NAMES INFORMATION

The dissemination of principles, policies, procedures and standard names information is crucial to a standardization programme. The work of the names authority will have limited success if persons in governmental offices and in private organizations do not fully understand the purpose of the programme or are unable to obtain official name information quickly and easily.

If possible, information on official standard names can be furnished to a community of users by a combination of official maps and an official gazetteer or gazetteers. Both types of publications are needed, because user requirements vary. For example, those who need the official name of a specific feature or wish to have all the official names in a limited area can best obtain such information from a map. A standard map series, published by the national mapping organization, is one of the best methods available to most countries for the dissemination of official names. If, however, a name is already known but the location of the feature is needed, a gazetteer is the better reference.

A national gazetteer, along with a dictionary of words used in the language or languages of a country, a national atlas, a large-scale map series and a national encyclopaedia provide a basic set of reference publications that can be the pride of any country. A gazetteer is a publication or series of publications that list in alphabetical order the geographical names found within an administrative division of a country, or in the whole country itself. The purpose of a gazetteer is to list not only official names but information that identifies the kinds of geographical entities named, their locations, variant names and spellings, and sometimes additional information such as elevations and populations. Publications that include a great deal of information on name meaning and/or history and geography are normally called "geographical dictionaries". Gazetteers for an area or country are generally compiled and published after a relatively complete collection of names and attendant information is assembled. The official card file in the staff support office generally provides the data source. If the office maintains its official name records in machine-readable form as a computer file, the publication of a gazetteer becomes a simple matter. The computer is capable of printing out whatever information it contains in any order desired for publication

purposes. A names authority contemplating the publication of a national gazetteer should review those already published by other countries.

Of course, both maps and gazetteers become out of date shortly after they are published. The time gap can be bridged by use of a special information sheet or periodical which would keep users informed on a regular basis of changes and new names. If the official name records are part of a computer file, the information maintenance problem is easily solved. The special periodical and up-to-date gazetteers in various formats can be printed out with very little preparation cost.

K. CONCLUSIONS

Geographical names are used by almost all people almost every day of their lives. They are the language of maps and charts and provide the main geographical reference in all forms of written documents. Establishing a geographical names authority and carrying out a national standardization programme need not be costly or complex. If planned and organized carefully and undertaken with moderation, such a programme will provide a country's governmental system, its industrial, commercial and business organizations, and its citizens considerable savings in time and money along with other tangible and intangible benefits. Over-organization, especially in the beginning, should be avoided because the added complexity may burden the programme and lead to unnecessary costs.

The process of giving names and their use in everyday spoken language is a dynamic process. A workable standardization programme requires continuous and careful attention to the details of the process and an effective system of information dissemination. It is particularly important that the names authority exercise responsibility for control of name usage, at least at the highest level of government, in order to accomplish its mission of the national standardization of geographical names.

NOTES

¹ *Report of the Fourth United Nations Conference on the Standardization of Geographical Names, Geneva, 24 August-14 September 1982* (United Nations publication, Sales Nos. E.83.I.7 and E.86.I.21).

² "Report of the United Nations Group of Experts on Geographical Names on its tenth session" (ST/ESA/RT/C/GN/8).

³ United Nations publication, Sales No. E.85.I.23.

⁴ *Report of the United Nations Conference on the Standardization of Geographical Names, Geneva, 4-22 September 1967* (United Nations publication, Sales No. E.68.I.9).

ANNEX

Training course on the standardization of geographical names

The three-week course outlined below is intended to provide both beginning and intermediate instruction on methods and procedures used to undertake the standardization of geographical names on a national basis. The course can be expanded one more week in order to allow more time for an in-depth review of methods, procedures and problems or a field investigation project. It can also be condensed to a two-week course by elimination of a few topics and special projects. The course is given in

[English] and includes lectures, seminars, open discussions and reports, special projects and, when appropriate, field investigation work. Special educational tours are planned.

Admission requirements are broad and flexible. Persons taking the course, however, must be able to understand and speak [English]. An educational background or experience in the fields of geography, cartography, history, linguistics and administration is useful. Although no ex-

aminations or grades will be given during or at the end of the course, all persons are expected to attend lecture sessions and participate in the seminars, open discussions, special projects and field programmes (when given). Some weekend and evening study will be necessary.

Reading and seminar assignments are tailored to the lecture topics before each topic is to be discussed. Special project assignments will be based on prior experience and the particular circumstances of each student.

Session		Subject
<i>First week</i>		
Day 1	a.m. <i>Lecture:</i>	Introduction and description of course; its goals.
	<i>Tour:</i>	Office and research facilities.
	p.m. <i>Lecture:</i>	Purpose and advantages of a national programme for the standardization of geographical names.
	<i>Discussion:</i>	Getting acquainted; each student's reasons for taking course.
Day 2	a.m. <i>Lecture:</i>	Toponymic terms and their definitions.
	p.m. <i>Lecture:</i>	History of international standardization and international organizations that have contributed to the standardization of geographical names.
	<i>Lecture:</i>	The standardization of geographical names within the framework of the United Nations; toponymic guidelines.
Day 3	a.m. <i>Lecture:</i>	The nature of geographical names; their role in spoken and written language; domestic and foreign names; conventional names; cartographic applications.
	<i>Lecture:</i>	Transformation of writing systems; transliteration, transcription and conversion.
	p.m. <i>Seminar:</i>	The nature of geographical names and their use in each student's area.
	<i>Lecture:</i>	The scholarly study of geographical names and its relationship to a standardization programme; the International Congress of Onomastic Sciences and other organizations devoted to the study of names.
Day 4	a.m. <i>Lecture:</i>	Introduction to national standardization; what standardization means; methods and procedures; relationship between national and international standardization.
	p.m. <i>Seminar:</i>	Current standardization programmes in various countries.
	<i>Project:</i>	Assignment of an exercise on map reading and the comparison of names and their applications on maps of different scales, including manuscript maps.
Day 5	a.m. <i>Lecture:</i>	Beginning a standardization programme; methods of approach; geographical, political and social factors.
	<i>Seminar:</i>	Previous and current programmes in each student's country or area; factors that encourage or inhibit domestic names standardization in his or her country or area.
	p.m. <i>Project:</i>	Map names exercise.
<i>Second week</i>		
Day 6	a.m. <i>Discussion:</i>	Review of previous week's sessions.
	<i>Lecture:</i>	Establishing a permanent national geographical names authority; organization and membership; sources of authority; use of regional authorities.
	p.m. <i>Lecture:</i>	Staff support; central geographical names office; staff support duties; communication and relationship between staff and names authority.
	<i>Seminar:</i>	Report and evaluation of map names exercise.
Day 7	a.m. <i>Seminar:</i>	A suggested standardization plan for each student's country or area.

<i>Session</i>		<i>Subject</i>
	<i>Lecture:</i>	United Nations recommendations, i.e., resolution 4, First United Nations Conference on the Standardization of Geographical Names.
	p.m. <i>Lecture:</i>	Establishing standardization criteria; principles, policies and procedures for a national programme; standardization criteria for programmes in Canada and the United States.
Day 8	a.m. <i>Lecture:</i>	Socio-linguistic issues associated with national standardization; the treatment of minority language names; multiple language names for a geographical entity; possible solutions to plural naming situations.
	p.m. <i>Seminar:</i>	Treatment of minority language names in various countries.
	<i>Project:</i>	Assignment of a controversial names research exercise.
Day 9	a.m. <i>Lecture:</i>	Boundary names; problems and solutions.
	<i>Lecture:</i>	The nature of other geographical names problems; conflicting names, spellings, applications and generic usage; name changes.
	p.m. <i>Lecture:</i>	Documentary research methods; finding source documents.
	<i>Project:</i>	Controversial names research exercise.
Day 10	a.m. <i>Lecture:</i>	Introduction to field and office treatment of geographical names.
	<i>Seminar:</i>	Field collection and investigation of geographical names information; methods of accomplishing field inquiry; pre-field preparation; qualifications of field personnel; informant selection; local community approach; methods of inquiry; and methods of recording information.
	p.m. <i>Project:</i>	Controversial names research exercise.
<i>Third week</i>		
Day 11	a.m. <i>Discussion:</i>	Review of previous week's sessions.
	<i>Lecture:</i>	Special field problems and possible solutions.
	<i>Lecture:</i>	Field and office record keeping.
	p.m. <i>Lecture:</i>	Name application and place identification.
	<i>Discussion:</i>	Report and evaluation of controversial names research exercise.
Day 12	a.m. <i>Seminar:</i>	Special name problems; name duplication, offensive names, long/nonfunctional names, historical/legal usage vs. current local usage, numbers in names, politically imposed names, unique generics and commemorative names.
	p.m. <i>Lecture:</i>	Symbiotic relationship between a national mapping programme and a names standardization programme.
	<i>Project:</i>	Assignment of automated data processing applications exercise.
Day 13	a.m. <i>Lecture:</i>	Automated data processing and the national standardization programme; demonstration and "hands on" instruction.
	p.m. <i>Lecture:</i>	Application of principles, policies and procedures in the standardization process.
	<i>Project:</i>	Automated data processing applications exercise.
Day 14	a.m. <i>Lecture:</i>	Editorial treatment of geographical names.
	p.m. <i>Lecture:</i>	Promulgation of information about the national standardization programme and official names; publication of official gazetteers and reports.
	<i>Seminar:</i>	National name standardization and the public; avoiding political and ethnic conflicts; obtaining public co-operation.
	<i>Project:</i>	Automated data processing applications exercise.

Session	Subject
Day 15 a.m.	<i>Lecture:</i> Updating/maintenance of the official geographical names file and other records.
	<i>Lecture:</i> Developing a toponymic research library and a system of professional and local/regional information contacts.
p.m.	<i>Lecture:</i> Gazetteer information, layout and preparation.
	<i>Seminar:</i> Review and evaluation of course and open discussion of particular issues of concern to each student.
	<i>Project:</i> Completion of all projects.

NOTE: A field exercise would involve a single student or a team of students to verify in the field, by local inquiry, the choice, spelling and application of names on an assigned topographic map, or set of maps, and the collection of names not shown on the map, or maps. The students would apply procedures on pre-field preparation, the selection of informants, methods of inquiry and methods of recording information. The exercise would also require research at the local records office and libraries.