Geographic Names in the U. S. Coast and Geodetic Survey

THE COAST SURVEY was first authorized by Congress in 1807 and began active field surveys in the late 1830s. In 1878 its name was changed to Coast and Geodetic Survey, with added functions of triangulation and precise leveling for the entire United States. The survey is now charged, among other duties, with the preparation and publication of nautical and aeronautical charts for all domestic territories of the United States, and with numerous other functions pertaining thereto, such as Coast Pilots, Tide Tables, Magnetic Variation, etc.

As the oldest mapping agency of the Federal Government, the Coast and Geodetic Survey has always devoted much attention to geographic names, and has always tried to attain a high degree of correctness in their form and in their application to its various publications. In all coastal areas of the United States its early field surveys, and the nautical charts based thereon, usually represent the initial recording of names found on occasional older maps or ascertained to have been in local use. The Bureau has always had a representative on the U. S. Board on Geographic Names since its establishment in 1890; in many earlier years it contributed as many as one-third of the cases of name conflict in which the Board rendered decisions; and it has been second to no other mapping agency in faithfully applying those decisions on its charts and maps.

Among the outstanding accomplishments of the Survey's earlier years may be cited the work on names of the Pacific Coast by George Davidson between 1850 and 1895, embodied in his monumental Coast Pilot (in final form in 1889). William Healey Dall and his associate, Marcus Baker, did a like service to the names in Alaska between 1871 and 1880, the latter's "Geographic Dictionary of Alaska" being still the "Bible" of Alaskan names existing prior to 1905. On the east coast, the first coast pilots published by the Survey in 1875 and 1879 covered the area between Eastport, Maine, and New York City. They were compiled by J. S. Bradford and contain

a wealth of information about a coastal area that formerly enjoyed the most intensified coastwise navigation of any part of the United States. In more recent years, the "Geographic Dictionary of the Virgin Islands of the United States" (by James W. McGuire, 1925) was a scholarly study of the names in the last territorial acquisition of this country.

Names are essential to any map intended for general use. Maps without names may be acceptable for a limited number of purposes for use by expects or specialists, but to the ordinary user they are lifeless if they lack the familiar and human touch of names. Hence, if names are important, it necessarily follows that they should be as correct as possible, without purely typographical errors, and in agreement with the most widely accepted usage. In the case of maps for a special purpose, such as nautical charts, it is important that names be accurate, since carelessness in this respect may give rise to a doubt of the dependability of the really vital and fundamental portions of the charts relating to navigation.

The published charts and maps of the Survey range in scale from 1:2,500 to 1:4,860,700, with by far the greater portion at scales larger than 1:80,000. For many areas important to sea or air navigation there may be as many as five charts of varying scales, for which uniformity in name usage must be secured and maintained. There are also Coast Pilots, Tide Tables and other publications dealing with navigation which must be brought into agreement with the charts. Finally, there are planimetric maps, topographic surveys and maps, and hydrographic surveys on which the names must conform to the approved usage. It is believed that the methods employed by the Survey in meeting this problem of name correctness will be of interest to the readers of NAMES.

The essence of the present names work of the Survey is to concentrate in one office a centralized and specialized control that is available to all of the various divisions that make use of names in any manner. With uniform and approved names immediately available for any map or mapping project, the various draftsmen need spend no time on names investigation or selection, as was required of them before the establishment of the present system. The Survey is fortunate in being able to make frequent name corrections on its various charts since other requirements necessitate periodic issuance of new prints or new editions. Many other maps can be revised only at long intervals.

Intensified names work in the Survey began in the early 1930s, in connection with a comprehensive program of large-scale planimetric maps of the coastal areas. Many regions had never been adequately mapped so that a great many new names found to be in local use were recorded for the first time. At first the results of the names investigation by the field parties were filled with the report on each individual survey sheet. It soon became evident that such scattered information was too difficult to locate with ease at some subsequent time. Consequently a form was devised and adopted on which a permanent record of all available information about the names in any region could be easily accessible at all times.

This form is shown in the illustration. It is known as a "section sheet," the section adopted for filing convenience being one-tenth of a degree, or a rectangle 6 minutes of latitude by 6 minutes of longitude. Thus, section sheet No. 425708 covers the area of lat. 42° 30′ to 36′ N., long. 70° 48′ to 54′ W. This 6-minute unit is used for all of the coastal areas except Alaska. For Alaska and for the interior of the United States a larger "section" of 30′ by 30′ has been found adequate for our purposes. Whenever longitude exceeds 99 degrees the extra digit is dropped, so that section No. 380075 covers the area of lat. 38°00′ to 30′ by longitude 107°30′ to 108°.

A standard practice was adopted for entering the names in each section according to the principal locations of the features, i.e. centers of bays, coves, islands, lakes, shoals or banks, and the confluences of streams with larger streams or larger bodies of water. Only one entry is made for a feature, regardless of its size or length. The number of names in a section varies widely, according to the topography and degree of human habitation. With space for twelve names on each sheet, the number of sheets varies from one to as many as ten or twelve. Ten ordinary filing drawers hold all of the sheets for the entire country and its outlying possessions on the present basis of 6-minute and 30-minute sections.

On the left-hand side of the form are entered all of the charts, surveys (old and new), and maps of the Survey as well as the Coast Pilots and Light Lists (the latter published by the U. S. Coast Guard), in order to have together all of the publications used by the navigator. On the right-hand side is shown the name usage on all other available published maps, such as topographic quadrangles, Post Route Maps, State and County Highway Maps, County

GEOGRAPHIC NAMES FILE No. 425708 #1 LOCALITY Marblehead, Mass.

CHART USAGE

C.P. Section A, 1933 a 240 Print 10/3/39 d 1107 Print 12/15/39

LL. N. Atl. Coast, 1938 b 1207 " 7/3/39 e 1106 " 5/4/39

c 50 " 8/3/39 f

COMPARISON WITH OTHER SOURCES

1 U.S.G.S. "Salem" 1893-1927 5 Vol. III, Mass Geod. Survey Town Maps 1938
2 Post R. Map 1933 6 Coast Pilot Inves. 1940
3 Rand McNally 1939 7 Texaco Road Map 1940
4 U.S.E "Salem" 1919 8 Gulf of Maine C.P. 1875

Names underlined in red approved by L. Heck on 9/29/41

* USGB. Decision
R-Referred to USGB.
Q-Local inquiry made
Revision notes in red

Hydro.	Topo.	C.P.	LL.	Charts	Decisions	Previous Survey	Local Information	Revison Date	1	2	3	4	5	6	7	8	Conflicting Names	Remarks
		16,20,217, 220, 222		abcde	Marblehead	H413, T2603 T3766			a	a	a		a	a	a	a		1930 pop. 10,173 pp 759, 779 of 8. Map #181 of 5.
					City of Marblehead	T305												
		217-20 222/3	322	ab	Marblehead Harbor	T305 T2603, T3766			a				a			a		pp. 729, 769, 779 of 8. Map #181 of 5.
		217-19 221, 223/4	321	ab de	Cat Island *	H284, T303, T3766 H2206, H2226								a		a		
									✓		✓	✓					Lowell I.	p. 752 of 8 = Cat or Lowell I. p. 763 of 8 = generally Lowell I. since erection of Lowell House. R-10/19/40: Cat I. adopted Apr. 7, 1942
		217-19	321	ab	Cat I. Channel									a		a		pp. 752, 763 of 8. (Name depends upon Board's decision for Cat I.)
				a	Midchannel Rock													
			321		Mid-Channel Rock											✓	Mid-Channel Rock	p. 766 of 8.
					Mid Channel Rock	H284												
		220/1	321	~~a~~	Beverly Creek	T2603										a		p 753 of 8. Map 30W of 5. R - 7/26/40: Bass River approved by Board April 7, 1942.
				ab	Bass River *				✓				✓	✓			Bass River	
		220/1	320	abc	Danvers R. *	T3765			a				a	a				p. 573 of 8. Map 272 of 5 = Essex R.; Map 30W of 5 = Danvers R. 6th Report: (Not Essex Branch)
					Essex Branch	T304							✓				Essex River	
					Bass River	T 2603										✓	Essex Branch	
				~~a~~	Roder Hill													Powder Hill correct per City Engr. of Beverly, 4/3/40.
					Powder House Δ	H284			✓								Powder Hill	
				a	Powder Hill			7/26/40										
		224		a	Tuck Point				a							a		pp 753, 785 of 8. Map 30W of 5.
					Tucks Point	T304 H284, T2603							✓				Tucks Point	
			320	a	Pride Rock											a		p. 751 of 8 = Pride Rock or Ober Ledge.
					Leibers Rock	H284												
			321	a	Hardy Shoal													p. 757 of 8.
					Hardy's Rocks	H284												
																✓	Hardy Rock Shoal	
		217-19 221, 223/4		ab	Eagle Island	H284 T303			a		a					a		p. 763 of 8.

Soil Maps, oil company road maps, Rand McNally Atlas, and any other maps of a local nature. On this form conflicts in name usage are immediately manifest. Decisions of the Board on Geographic Names are marked by an asterisk, and the substance of the decisions is usually entered for future reference. Any other pertinent information can also be recorded. In order to use this form, it is necessary to know only the approximate latitude and longitude of any feature under consideration, and all of the listed information about its name may be immediately drawn from the files.

This form has not been modified since its adoption in 1938. The left-hand side has proved adequate in size, but it could be advantageously changed on the right-hand side to permit entry of more sources of comparison, which may number twelve or more. In addition to its many current uses, this form has proved to be very helpful in preparing name lists or gazetteers from multiple sources. The varying name usage can be seen at a glance for possible cross references. Its workability was demonstrated in the preparation during the war of a gazetteer of the Philippine Islands which contains some 45,000 names and about 2,000 cross references, taken from fourteen sources.

The work on geographic names in the Survey is handled by the Geographic Names Section of the Chart Division. Two geographers have been enough to carry on all of the necessary activities, except for occasional special projects. The duties of this section will be outlined to show what it contributes to the accomplishment of the various functions of the Survey.

Nautical Charts: The initial task was to bring into uniformity the names appearing on all of the charts of varying scales. For several years all new prints or new editions of these charts passed through the section in order that name corrections might be marked on the proofs. As a greater degree of name accuracy was reached, only a limited number of corrections became necessary. At present, a card index is now kept in the main office dealing with nautical charts, showing the corrections that are still to be made. If no card is found for a chart that is to undergo other changes or revision, the cartographer need pay no further attention to the matter of name corrections. Nautical chart corrections now arise principally from new decisions by the U. S. Board on Geographic Names, from information received from the field through coast pilot investigations,

names reports from ships or from field survey parties, letters from regional offices, or letters written by private individuals or groups calling attention to inaccuracies, or failure to comply with established local usage. All reconstructed charts, enlarged new editions and new charts are, of course, checked for name accuracy, usually just before going to reproduction, so that possible errors in stickup may be eliminated.

Coast Pilots: Proofs of all new editions of coast pilots, ten in number, are read for name accuracy and for conformity to the nautical charts, with which they are used by the navigator. An important need in this connection is to make certain that name usage is the same throughout the text. Apart from the principal entry for each name, it may also be found on other widely scattered pages. Particularly in the case of names changed by a Board decision it is essential to be sure that the new name or new spelling is used in every case where it appears. With a view to securing complete uniformity in the various tools employed by the navigator, the U. S. Coast Guard of the Treasury Department has cooperated with the Survey by having the proofs of its most recent Light Lists read for agreement with the nautical charts.

Topographic and Planimetric Maps: The Division of Photogrammetry makes all planimetric, topographic and shoreline maps produced by the Survey, and all of its work is on a large scale, so that all known names in any given area are required. Since 1941 the Division has prepared many topographic quadrangle maps of coastal areas (published either by the Army Map Service or the Geological Survey), often in regions where there was no previous large-scale coverage or else the existing quadrangles or county soil maps were old. The procedure followed for such mapping projects is for the names section to prepare a set of preliminary name sheets, using the best available older maps. Employing the section sheets of the project area as a source, on these name sheets are marked all known names or name conflicts. The field parties use these preliminary name sheets as the basis of local investigations, during which they interview numerous local residents best qualified to supply information about names, whether these have already been published or are entirely new—but in well established use. Non-commercial road signs, purely local maps, and county legal records are also used as sources. Sometimes even cemeteries are visited in order to check on disputed spellings of family names.

All names, old and new, must be verified by at least three local residents. Whenever name conflicts or varying usage are found to exist, a larger number of local sources are consulted. All of the information thus obtained in the field is assembled in a names report for the entire project. These reports are then processed in the Washington office, and are entered on the section sheets. Finally, a set of final name sheets containing the approved names for the entire project is prepared, to be followed by the drafting offices in applying names to the final maps. Nearly two hundred of such names reports are now on file.

A careful field investigation in many instances brings to light the fact that although all published maps may agree on a name, it is still not the one in everyday local use. Another interesting discovery is that local residents, especially along the coast of Maine, still use or prefer some names found on the earliest surveys but replaced for some reason by other names on current maps. The number of entirely new names, not previously shown on any published map, varies according to the adequacy of the earlier map coverage. For example, along the northern section of the west coast of the Florida peninsula, a sparsely settled area northward from Tarpon Springs, the older maps had only 186 names. Of these 67, or 35%, were not known to nor used by the local residents. The field investigation produced more than six hundred new names, in well established current local use, that had never been published. Even in more thickly settled regions many new names are brought to light. There have also been interesting instances of the persistance of names. In Maryland and Delaware the first surveys were made about 1845 to 1850, and on them a number of names of minor features are shown that have never been placed on a printed map. The field names investigation in this region, conducted around 1941, showed that local residents still use these same names that have been kept in existence for a century only by word of mouth.

Aeronautical Charts: The charts used for air navigation fall into two principal categories. The first consists of approach and landing charts for individual airfields, covering only a limited area and showing only the natural features close to the fields. The other category includes large-area but small-scale charts. The continental area of the United States is covered by 87 sectional charts (scale 1:500,000), each usually 2 degrees of latitude by 6 degrees of longi-

tude. The United States portion of the World Aeronautical Charts are at the standard scale of 1:1,000,000, as are also the strip flight charts. There are also some seventeen local charts at the scale of 1:250,000 for the principal cities and the areas immediately surrounding them.

All names found on these various types of aeronautical charts have been checked on the section sheets with maps of similar scales, such as the Post Route Maps for each state, State Highway Maps, Rand McNally Atlas and Census Reports on Population. The main problem is to make sure that the names of inhabited places are correctly shown, that obsolete names are not used, and that town or village symbols and type are in agreement with the latest population figures. Only major natural features are named on these charts. When a conflict is found to exist the available large-scale maps are consulted. As an indication of what still remains to be done, on the Huntington, West Virginia, sectional chart alone were found more than sixty instances of name variation among the limited number of maps of approximately the same scale. Considering that the names shown on a map at 1:5000,000 represent only a fraction of all the names existing in the same area, it becomes manifest that a vast amount of work is still to be done in order to bring about a reasonable degree of uniformity in name usage.

Gazetteers: From time to time the Survey has compiled name lists or gazetteers of special regions, such as the coastal areas of the Pacific Coast and of Alaska, and the Philippine Islands. At present there exists an unpublished gazetteer of the coastal areas of the Gulf States, from Key West to the Rio Grande. As an example of the result of much increased large-scale map coverage, it may be cited that an original names list for this particular area, compiled from maps that had been published up to the late 1930s, contained approximately 6,000 names. The new list has more than 12,500 names.

General: Other duties of the names section include the preparation of all cases of name conflict submitted by the Survey to the Board on Geographic Names, as well as maintaining a complete card file of the Board's decisions; the preparation of replies to the frequent inquiries received from the public or from other branches of the government about geographic names, and research into all questions of a geographic nature.

It may well be advanced by anyone not initiated into the details of names work that through the exercise of steady care over a period of years all errors and conflicts can be completely eliminated, and that ultimately the names in any group of publications ought to be as correct as it is humanly possible to make them. Such an assumption fails to allow for the fact that names are not static but are dynamic, subject to constant change. The scope of work on names may change, but there will always be need of continuous efforts to insure their correctness. In many aspects of name work only the surface has been scratched.

The above article was submitted by Lewis Heck, chief of Geographic Name Section, Chart Division, U. S. Coast and Geodetic Survey. Its publication was approved by the Office of Public Information of the Department of Commerce.

I most certainly do agree that NAMES fills a definite gap in American culture.

—William Saroyan

Local names—whether they belong to provinces, cities, and villages, or are the designations of rivers and mountains—are never mere arbitrary sound, devoid of meaning. They may always be regarded as records of the past, inviting and rewarding a careful historical interpretation.

—Isaac Taylor

Some fifteen years ago a man in Oklahoma City, believing that the communistic millennium was just around the corner, bestowed upon his son the names Stalin Marx. In a communistic commonwealth these names would have stood him in good stead. In our democratic society they did not help him a bit when he confessed to nine burglaries. He was sent to the reformatory despite his names.