

Co., Ltd., Sumutprakan, Thailand for the purpose of enhancement of the species through education.

Applicant: Duke University Primate Center, NC, PRT-006845

The applicant requests a permit to re-export thirty blood samples at 4ml each sample and twelve tissue samples of mongoose lemur (*Eulemur mongoz*) to Switzerland for the purpose of beneficial management of both wild and captive populations.

Applicant: Kerri A. McCoy, Birmingham, AL, PRT-011869

The applicant requests a permit to export six captive-born scarlet chested parakeets (*Neophema splendida*) to Canada for the purpose of enhancement of the species through captive propagation.

Applicant: Angel A. Rodriguez, Corinth, MS, PRT-012820

The applicant requests a permit to import the sport-hunted trophy of one male bontebok (*Damaliscus pygargus dorcas*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Applicant: The Dallas World Aquarium Corporation, Dallas, TX, PRT-013173

The applicant requests a permit to import two red-billed curassows (*Crax blumenbachii*) for the purpose of enhancement of the species through captive propagation.

Written data or comments should be submitted to the Director, U.S. Fish and Wildlife Service, Office of Management Authority, 4401 North Fairfax Drive,

Room 700, Arlington, Virginia 22203 and must be received by the Director within 30 days of the date of this publication.

The public is invited to comment on the following application for a permit to conduct certain activities with marine mammals. The application was submitted to satisfy requirements of the Marine Mammal Protection Act of 1972, *as amended* (16 U.S.C. 1361 et seq.) and the regulations governing marine mammals (50 CFR 18).

Applicant: Richard B. Nilsen, Ft. Lauderdale, FL, PRT-013054

The applicant requests a permit to import a polar bear (*Ursus maritimus*) sport-hunted from the Lancaster Sound polar bear population, Northwest Territories, Canada for personal use.

Applicant: Phares W. Fry, Auburn, PA, PRT-013056

The applicant requests a permit to import a polar bear (*Ursus maritimus*) sport-hunted from the Lancaster Sound polar bear population, Northwest Territories, Canada for personal use.

Written data or comments, requests for copies of the complete application, or requests for a public hearing on this application should be sent to the U.S. Fish and Wildlife Service, Office of Management Authority, 4401 N. Fairfax Drive, Room 700, Arlington, Virginia 22203, telephone 703/358-2104 or fax 703/358-2281 and must be received within 30 days of the date of publication of this notice. Anyone requesting a hearing should give specific reasons why a hearing would be appropriate. The holding of such a hearing is at the discretion of the Director.

Documents and other information submitted with these applications are available for review, *subject to the requirements of the Privacy Act and Freedom of Information Act*, by any party who submits a written request for a copy of such documents to the following office within 30 days of the date of publication of this notice: U.S. Fish and Wildlife Service, Office of Management Authority, 4401 North Fairfax Drive, Room 700, Arlington, Virginia 22203. Phone: (703/358-2104); FAX: (703/358-2281).

Dated: June 11, 1999.
Kristen Nelson,
Acting Chief, Branch of Permits, Office of Management Authority.
[FR Doc. 99-15398 Filed 6-16-99; 8:45 am]
BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Letters of Authorization To Take Marine Mammals

AGENCY: Notice of issuance of Letters of Authorization to take marine mammals incidental to oil and gas industry activities.

SUMMARY: In accordance with section 101(a)(5)(A) of the Marine Mammal Protection Act of 1972, as amended, and the U.S. Fish and Wildlife Service implementing regulations (50 CFR 18.27), notice is hereby given that Letters of Authorization to take polar bears and Pacific walrus incidental to oil and gas industry activities have been issued to the following companies:

Company	Activity	Date issued
Western Geophysical	Exploration (seismic)	May 17, 1999.

FOR FURTHER INFORMATION CONTACT: Ms. Rosa Meehan or Mr. John W. Bridges at the U.S. Fish and Wildlife Service, Marine Mammal Management Office, 1011 East Tudor Road, Anchorage, Alaska 99503, (800) 362-5148 or (907) 786-3800.

SUPPLEMENTARY INFORMATION: All Letters of Authorization were issued in accordance with U.S. Fish and Wildlife Service Federal Rule and Regulations "Marine Mammals; Incidental Take During Specified Activities" (64 FR 4328) January 28, 1999.

Dated: May 28, 1999.
Gary Edwards,
Acting Regional Director.
[FR Doc. 99-15210 Filed 6-16-99; 8:45 am]
BILLING CODE 4310-55-M

DEPARTMENT OF THE INTERIOR

Geological Survey

Federal Geographic Data Committee (FGDC); Public Comment on the Proposal To Develop a "Standard for a Universal Grid Reference System for Spatial Addressing"

ACTION: Notice; request for comments.

SUMMARY: The FGDC is soliciting public comments on the proposal to develop a "Standard for a Universal Grid Reference System for Spatial Addressing." If the proposal is approved, the standard will be developed following the FGDC standards development and approval process and will be considered for adoption by the FGDC.

In its assigned federal leadership role in the development of the National Spatial Data Infrastructure (NSDI), the Committee recognizes that FGDC standards must also meet the needs and recognize the views of State and local governments, academia, industry, and the public. The purpose of this notice is

to solicit such views. The FGDC invites the community to review the proposal and comment on the objectives, scope, approach, and usability of the standard; identify existing related standards; and indicate their interest in participating in the development of the standard.

DATES: Comments must be received on or before August 15, 1999.

CONTACT AND ADDRESSES: Comments may be submitted via Internet or by submitting electronic copy on diskette. Send comments via Internet to: gdc-ugrs@www.usgs.gov.

A soft copy version on 3.5-inch diskette in WordPerfect, Microsoft Word, or Rich Text Format (preferred) format and one copy of a hardcopy version may be sent to the FGDC Secretariat (attn: Jennifer Fox) at U.S. Geological Survey, 590 National Center, 12201 Sunrise Valley Drive, Reston, Virginia 20192.

SUPPLEMENTARY INFORMATION: Following is the complete proposal for the "Standard for a Universal Grid Reference System for Spatial Addressing."

Project Title

Standard for a Universal Grid Reference System for Spatial Addressing.

Date of Proposal

May 24, 1999.

Type of Standard

A data presentation standard specifying the representation of two-dimensional spatial addresses.

Submitting Organization

The Public X-Y Mapping Project, 8013 Hatteras Lane, Grid: 18SUH06949701 (NAD 83), Springfield, VA 22151.

Point of Contact: N.G. "Tom" Terry, Jr., The Public X-Y Mapping Project, E-mail: neri@erols.com, Pager: 703-457-0451.

Objectives

The objectives of this standard are to provide the community with:

1. A presentation format to enable the use of large-scale paper and digital maps with Global Positioning System (GPS). Persons using different commercial brands or types of maps will be able to communicate with each other because they will all use the same grid reference system.

2. An unambiguous, geodetically referenced, and mathematically uniform system for a two-dimensional address to supplement conventional street addresses. It will also serve as a spatial address away from the road network.

3. A single system which can be taught to all citizens in the school system, and which can be used in any community across the nation.

4. A system that is seamless at political boundaries and can be uniformly truncated at various levels of precision.

5. A basis for building a street and feature index database referenced to the UGRS which can be accessed and used by any member of the community.

Scope

This standard will define a Universal Grid Reference System (UGRS) for use in spatial addressing type applications. It is intended to serve as a preferred system that is easier to use than latitude and longitude by the average citizen. It is intended for use in mapping at scales from approximately 1:5,000 to 1:1,000,000. Technically, it will be the same as the Military Grid Reference System (MGRS), taking advantage of that public domain system's use of the Universal Transverse Mercator (UTM) grid and truncation and variable precision features. The standard will address other issues pertinent to civil mapping, such as recommended grid spacing.

This standard is not intended to change how coordinates are stored in computers. It is not intended to replace the use of latitude and longitude on nautical and aeronautical charts or on maps at scales smaller than approximately 1:1,000,000. It is not intended to replace the State Plane Coordinate System (SPCS). SPCS will continue to be used where jurisdictions prefer it for property descriptions, mapping at scales larger than 1:5,000, or other more technical uses such as manual surveying.

Justification/Benefits

Today Americans have many sources of geographic information to support their day-to-day activities. Commercial street and highway maps are a major source of this information for the community. These commercial products typically carry a system of proprietary zone grids, unique to a particular map or map brand. Zone coordinates consist of an alphanumeric code that locates places within a cell of a given spatial extent.

A Community may have a variety of large-scale maps available that use disparate coordinate systems. In a sample of the Washington, DC area conducted this year, four years after the Global Positioning System (GPS) reached full operational capability, 25 different large-scale street maps were found to be commercially available, and

on these maps, there existed 21 different coordinate systems. Of these grids, none worked with readily available, low-cost consumer GPS receivers. Some commercial mapmakers claim their maps (and zone grids) are the de facto standard in some communities, because in some cases, local governments have adopted one of these proprietary zone grids for use as a spatial address system.

Often organizations with a local focus have not recognized problems inherent in the use of disparate grid systems or the need for preferred system that is national in scope. Consumers and businesses that must routinely cross interstate and local government boundaries require a solution national in scope. In an emergency scenario where time is precious and understanding communicated locations or positions in a non-conflicting manner is critical, it is operationally best for all to use a standard reference systems. When a local government accepts the use of a proprietary coordinate system as a "de facto" standard, it grants a monopolistic license to a specific commercial map vendor, thereby inhibiting competition in that community's marketplace. The UGRS will provide commercial map vendors who choose to adopt it a preferred coordinate system that enhances their products by enabling the exchange of spatial address information.

Addressing Schemes

Americans have traditionally used postal or street addresses to locate a destination in their day-to-day activities. In 30 of the 50 States, the Public Land Survey System (PLSS) is another system often used to describe a piece of property. Traditional addressing schemes have served well, and will continue to be used. Nonetheless, these systems are flawed by their lack of mathematical uniformity. Additionally, they often lack the ability to provide an address for any point in the nation.

These different systems do not work with GPS, or are unreliable for work with GPS and digital maps. With the advent of GPS, the average citizen can purchase access to a \$10 billion source of precise positioning information for the price of a good watch. In the near future, vehicles will routinely come equipped with GPS driven digital maps. Mobile wireless communications have become pervasive, allowing community members to cheaply communicate with one another from any point on the globe. When people communicate, one of the fundamental pieces of information they need to exchange is location. In view of these technological advances, there

exists a need to support the community in its use and communications of geospatial information with a preferred spatial address system.

Computer Translation Versus a Preferred System

Some have suggested that because high-speed digital computers can easily translate between mathematically uniform transformations, there is no need for a preferred system for spatial addressing. They contend that computer systems will simply translate a provide coordinate value from any one of an infinite number of coordinate systems used by the community into one the operator can understand or use. In the real world, this is a flawed concept. First, it will be some time before every citizen has a lap/palm top computer to use for routine navigation. Secondly, it will not be possible to keep every citizen's computer updated with the infinite number of coordinate systems that can be produced. It is analogous to cartographic anarchy, where there are no recognized conventions.

Some say the day of the paper map is over, but we have not achieved the "paperless environment." Paper will continue to be a critical medium for portraying and using geospatial information. While digital systems information such as GPS, the Internet, and print on demand paper maps will increase the ability of the community to use geospatial data, paper maps will continue in widespread use. Maps required a common coordinate system if people are to exchange useful positioning information. A *preferred* spatial addressing convention is required just as a preferred set of street names is used for street addresses. Street addresses simply would not be useable if there were multiple names for each street. Accordingly, a preferred convention is necessary if the community is to have a useable and workable spatial address system.

Truncation and Variable Precision

The Universal Transverse Mercator (UTM) system most closely meets UGRS requirements and is:

- A plane coordinate system, which is far easier to use than latitude and longitude for large-scale work.
- A geodetically referenced, mathematically uniform system in the public domain.

• National and international in scope. However, UTM does not provide a convention for truncating coordinate values, nor does it allow for variations in precision of information. For example, although the UGRS will support 1-meter precision, many users

do not need spatial resolutions finer than 10 meters for location and navigation and do not require that coordinates be shown to all the decimal places to which they are stored in computers. In fact, users find it easier to remember fewer digits. This is analogous to memorizing and recalling telephone numbers.

The Military Grid Reference System (MGRS) is a mature, widely used, off-the-shelf system based on the UTM that also provides a method to truncate coordinates and offers various levels of precision. It is proposed that the UGRS use this existing technical standard.

Development Approach

This standards development effort will make use of existing standards and specifications to the greatest possible extent. The MGRS meets the basic requirements for a UGRS. The Public X-Y Mapping Project has nearly completed a draft of the proposed UGRS that will be presented to the FGDC as a starting point for development of this standard. It is proposed that the FGDC form an ad hoc working group or subgroup of the Standards Working Group to review The Public X-Y Mapping Project Draft and prepare it for public review. The need for a more permanent group will be reevaluated based on initial public comment.

Implementation and acceptance of a preferred spatial addressing standard will require demonstration of the usefulness of the standard. Therefore, there is a need to plan and carry out demonstration projects once the technical specification has stabilized.

Development and Completion Schedule

Completion of initial draft: August 1999.

Public Review: September–November 1999.

Final Draft: TBD—dependent on public comment—December 1999.

Demonstration Projects: 2000–2003.

Resources Required

A working draft of the UGRS will be provided by The Public X-Y Mapping Project. No new resources are needed to prepare the working draft. An ad hoc working group of the Standards Working Group will be needed to assist The Public X-Y Mapping Project in preparing the draft for public review according to FGDC directives. The Public X-Y Mapping Project expects this group to assist in the adjudication and resolution of comments received during the public review.

Administrative and financial resources will be required from FGDC

members and outside organizations to carry out the demonstration projects.

Potential Participants

- Major Federal land map producers.
- Commercial map producers.
- The GPS industry.
- Representatives of map users such as E-911 service providers (see examples).

Related Standards

- This proposal relates to ANSI X3.61–1986, Representation of Geographic Point Locations for Information Interchange, which standardizes representation of UTM coordinates for computer representation, since the proposed UGRS is based upon the UTM.
 - ISO 15046–16, Positioning Services, provides an interface for real-time GPS receiver output (and output from other positioning technologies). The UGRS standards project should follow the progress of ISO/TC 211 Work Item 16 and harmonize with the requirements of ISO 15046–16.
 - ISO 15046–11, Spatial Referencing by Coordinates, provides a conceptual schema for the description of coordinate reference systems. The UGRS standards project should follow the progress of ISO/TC 211 Work Item 11 and harmonize with the requirements of ISO 15046–11.
 - It is not clear how this proposal relates to the linear referencing standard being proposed by the Intelligent Transportation community in the U.S. and the U.S. representatives to ISO/TC 204, the international road informatics standards committee. This will be investigated during the preparation of the public review draft.
 - This proposal may be related to the NSDI Framework Transportation Identification Standard being developed by the FGDC Ground Transportation Subcommittee. Overlaps will be investigated during the preparation of the public review draft.
 - The UGRS standard will drawn NIMA Technical Manual (TM) 8358.1, Datums, Ellipsoids, Grids, and Grid Reference Systems, which describes the basic principles of the Military Grid Reference System
- ### **Other Targeted Authorization Bodies**
- If it is determined that this standard could benefit from or would require changes to ANSI X3.61, then NCITS L1 (custodian of ANSI X3.61) would be another target organization.
- Although initially targeted for adoption in this country, the UGRS could be applied worldwide. If this is determined to be desirable, ISO/TC 211

would the appropriate standards body to consider it.

Addendum—Example Applications of the UGRS

UGRS is intended to be preferred method for designating point positions for numerous activities, particularly vehicle/land navigation. It will supplement conventional street addresses in the community and will provide a virtual address for any point away from the road network.

1 Enhanced 9-1-1

The spatial address (in the form of UGRS coordinates) will appear along with the caller's street address on the screen of 9-1-1 system operators in Public Safety Access Points (PSAP). The UGRS address can be used by officers on the street, who may be equipped with either paper or digital maps.

2 Disaster Relief Operations

In the aftermath of Hurricane Andrew, the devastation was so great, that street signs were blown away, making it difficult for outside agencies to navigate to places in need of assistance. UGRS will provide a nationally uniform method for describing a position that will allow outside assistance providers to "hit the ground running" with GPS equipment and to make use of commercial street maps that may be readily available.

3 Search and Rescue (SAR)

The advent of technologies such as medical evacuation helicopters and wireless communications (i.e. radios, cellular phones) has increased the need to precisely and unambiguously identify places away from the road network. For example, medical evacuation helicopter crews have cited difficulties (while often flying in dangerous environments, i.e. mountainous terrain at night) in understanding SAR team descriptions of where they are supposed to fly. A preferred spatial address system would eliminate this communication interoperability problem.

4 Digital Maps

Digital maps from sources such as CD ROMs for use on desk/lap top computers and Internet information vendors are coming into widespread use. The UGRS has greater suitability for these digital mapping systems than conventional street addresses because it affords greater accuracy and ensures confidence that the point indicated is the correct location. Today, it is possible to quickly access a source of maps on the Internet. With a UGRS spatial address, the user precisely designates

the point of interest by entering the address as if it were a phone number (This has important implications for future cellular phone operations and GPS/car navigation systems). The information provider can quickly respond with a map of that location. The UGRS also provides a coordinate system that can be portrayed on these maps when they are printed ("print on demand"), thereby ensuring a geodetic reference for later use of the map with GPS when driving to the location.

5 Locating Small Business Features

Quite often, it is necessary to locate a small feature such as an Automated Teller Machine (ATM), the drop off box for a package delivery service such as FedEx or United Parcel Service (UPS), or post office box. Today, automated sources of information provided by the Internet or by telephone indicate the location of the closest ATM or drop-off box, but finding these small features can prove to be a difficult task. UGRS spatial addressing will greatly ease a customer's task by unambiguously communicating a point position of higher resolution than possible with conventional street addresses and will maximize current and future capabilities of GPS.

6 Locating a Street Address Number

Locating a street address number of buildings or homes can be a difficult task that greatly adds to the workload of a vehicle deliver. This is especially true at night during heavy traffic. Many times a driver is confounded that street address numbers are small, poorly placed, or missing altogether. A virtual address defined by UGRS enables the use of GPS or a map with a UGRS grid and greatly eases the workload of a driver trying to located a specific and precise location.

7 Identifying Multiple Businesses Locations

A business with multiple locations in a community can add the spatial address for its establishments in telephone or Internet directories (or other sources of information). This information, coupled with commercial street maps that portray the UGRS grid, will allow potential customers to quickly determine which establishment is closet to them. Customers will easily see the relative location of each store.

8 Outdoors Recreation

A great deal of outdoors recreation, such as backpacking, kayaking, hunting, fishing rock climbing, cross-country skiing, snowmobiling, mountain-biking, and horseback riding, takes place away from the road network and the

conventional street address system. The widespread availability of low cost wireless communications (i.e. cellular telephones, Family Radio Service [FRS] transceivers, etc.) has increased the need for a spatial address system that people can use to identify their location in a simple, uniform manner without ambiguity during these activities. For example, in the event of an accident requiring medical assistance, UGRS will provide a standard method for communicating unambiguous location of the accident to responding organizations. Likewise, backpackers and others can report their UGRS spatial address for a pickup point after a long hike, adding flexibility to their plans. The UGRS will provide a universal means for identifying the location of shelters, cabins, trail heads, springs, camping areas, parking areas, and other features in journal entries, magazine articles, guide books, and other source of recreational information. A UGRS will provide a universal coordinate system and grid for outdoor recreation maps which ensures the exchange and compatibility of spatial address information across many different sources to include the use of GPS.

9 Agriculture

There is a need in agriculture to uniformly identify particular parcels of land for various work tasks. For example, a farmer communicating with a mechanic by cellular phone may need to clearly identify in which field a tractor has broken down. Another example is where the farmer has to instruct a deliverer of some commodity about where to stage the material.

10 Tourism

The tourist is one who is new to an area and unfamiliar with its features, but is looking for specific places of interest. A preferred spatial address for a place of interest will be found on brochures and in other others of tourism information to enable tourists to quickly and unambiguously locate a place of interest.

Dated: June 4, 1999.

Richard E. Witmer,

Chief, National Mapping Division.

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