

Developing International Cataloging Standards for Archival Holdings: Rosarkhiv-RLG-Hoover Project, 1994-1997

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Abstract

This article describes the first joint international cataloging project designed to develop mutually acceptable standards of exchanging Russian archival descriptions through the Research Libraries Information Network (RLIN) using MARC AMC format. The participants in the project were the Federal Archival Service of Russia (Rosarkhiv), which selected appropriate archival repositories and supervised the project's implementation in Russia; the Hoover Institution Archives, which performed quality control for all RLIN records created by Russian archivists; and the Research Libraries Group, which provided a wide range of technical support and the RLIN database to host the created records. The authors discuss project standards and methodology, work organization and implementation, as well as the need to develop mutually acceptable international bibliographic and subject standards to facilitate information exchange through the international multiscript databases.

Improving intellectual access to archival holdings is one of the most challenging tasks facing the Russian archival community today. Before the collapse of the Soviet centralized system, the main responsibility of Russian archivists was to preserve, organize, and describe archival materials using the standard procedures and methodology imposed by the highly centralized state archival administration.¹ This agency maintained the Central *Fond* Catalog² and exercised control over practically all federal archival hold-

¹ Glavnoe arkhivnoe upravlenie SSSR (GLAVARKHIV SSSR)-Main Archival Administration of the USSR. For its history, functions, and activities, see Patricia Kennedy Grimsted, ed., *Archives in Russia 1993: A Brief Directory*, preliminary English version (Washington, D.C.: International Research and Exchanges Board, 1993), Part B: B-0. Also available at <<http://www.iisg.nl/~abb/>>.

² *Tsentrnyi Fondovyi Catalog* (TsFK) [Central *Fond* Catalog]. The Central *Fond* Catalog is a card catalog that presently contains over 900,000 descriptions of archival holdings in Russia and the former Soviet Union. It is an inventory control mechanism that includes all initial *fond*-level descriptions and updates. Unfortunately, this unique source is not accessible to the public in its present form.

This article is dedicated to the memory of Alan Tucker who conceived and inspired this project from the very beginning, but sadly did not live to see its completion. The authors are very grateful to Anne Van Camp, Elena Danielson, James Haug, and Molly Molloy for their comments and suggestions on earlier versions of this paper. We also wish to express our appreciation for their help to Francis X. Blouin, Jr., Michael Fox, La Vonne Gallo, Jaap Kloosterman, Igor Kiselev, James Michalko, R. Michael McReynolds, Charles G. Palm, Abby Smith, and to the National Endowment for the Humanities for their generous financial support of this project.

ings. With the unprecedented opening of the Federal Archives after August 1991, Russian archivists' tasks and scope of responsibilities have dramatically expanded. Increased informational demands require a new system designed to provide adequate public access and to maintain efficient management and control. There is an urgent need to create an on-line national bibliographic database that will store information on all archival holdings and allow the exchange of data on both national and international levels. A large-scale technological overhaul of the existing archival system in Russia, however, requires substantial experience with automated systems, knowledge of modern technologies, and financial support.

Background

In April 1993 the Hoover Institution on War, Revolution, and Peace at Stanford University, in cooperation with the Research Libraries Group Inc. (RLG), proposed to the newly created Federal Archival Service of Russia (Rosarkhiv) organizing a joint cataloging project to enter archival bibliographic data into the Research Libraries Information Network (RLIN). Rosarkhiv enthusiastically accepted the proposal. The Russian archivists believed that participation in the project would allow them to gain experience in creating a national bibliographic database, obtain state-of-the-art computer equipment, and make the necessary changes in their methodology and descriptive practices. Furthermore, Rosarkhiv would become an RLG member and gain access to the RLIN database.

During two planning meetings held in California (May 1993) and Moscow (October 1994), the scope, goals, and parameters of the project were determined and the roles of participating institutions defined. Rosarkhiv was to select appropriate archival repositories and supervise the project's implementation in Russia. Hoover was to act as the U.S. base, providing quality control for all RLIN records created by Russian archivists. The role of the RLG was to provide a wide range of technical support, while the RLIN database was to host the created records.

Following the planning meetings, Rosarkhiv selected two central-level and two regional-level repositories to participate in this pilot project.³ The first two repositories were the State Archive of the Russian Federation (GARF) and the Russian Center for Preservation and Study of Records of Modern History (RTsKhIDNI) in Moscow. Their holdings include records of the highest state and Communist party agencies and personal papers of the Soviet state and Communist party officials and leading members of Russian

³ Gosudarstvennyi Arkhiv Rossiiskoi Federatsii (GARF) [State Archive of the Russian Federation]; Gosudarstvennyi Arkhiv Tverskoi Oblasti (GATO) [State Archive of the Tver' Region]; Rossiiskii Tsentr Khraneniia i Izucheniia Dokumentov Noveishei Istorii (RTsKhIDNI) [Russian Center for Preservation and Study of Records of Modern History]; Tverskoi Tsentr Dokumentov Noveishei Istorii (TTsDNI) [Tver' Center of Records of Modern History].

and Western socialist movements. The two regional repositories, the State Archive of the Tver' Region (GATO) and the Tver' Center of Records of Modern History (TTsDNI), contain documents on the structure, cadres, and activities of the state and Party agencies at the local level. This project received generous support from the National Endowment for the Humanities in 1994.

In February 1995 the project's International Advisory Board, composed of prominent Russian, American, and European scholars, archivists, and librarians, met to discuss the project's objectives and its impact on future international archival cooperation. It was decided that the primary goal would be to test MARC AMC format in RLIN against different types of archival material: Communist party, government, and institutional records (at the central and local levels), and personal papers. Given the experimental nature of the project, the advisory board suggested limiting the selection of materials to those created during this century. The board further identified three long-term objectives: a) the creation of international standards and methodology for exchanging information electronically through RLIN, b) the promotion of a common database of archival descriptions from repositories throughout the world in order to enhance access for scholarly research, and c) the encouragement of international cooperation in the archival and historical professions.

One of the unique goals of this project was to allow Russian archivists to perform bibliographic description and indexing in Cyrillic using MARC AMC format and to incorporate Cyrillic Rosarkhiv records into the multi-script RLIN database. Attainment of this goal was made possible by two earlier events: the addition of nonroman scripts to USMARC format in 1984 and the implementation of Cyrillic capability for cataloging (input/update and searching) materials in RLIN in 1986.⁴ The challenge, however, was to develop the joint cataloging standards and methodology that would suit the specific needs and practices of Russian archivists and would make Cyrillic Rosarkhiv records comprehensible to Russian, European, and American users within the context of the RLIN environment. Project archivists defined the joint standards during a two-week training session⁵ and continued to work on the methodology over the course of the project.

Parallel Fields

Since the majority of RLIN customers are English speaking, the default script for RLIN MARC format is Latin, and the dominant rules of biblio-

⁴*The Research Libraries Group News* 10 (May 1986): 3-4.

⁵ The training session was conducted in December 1994 by Michael Fox of the Minnesota Historical Society at the RLG headquarters, Mountain View, California.

graphic description are the *Anglo-American Cataloguing Rules (AACR2(r))*.⁶ All nonroman scripts are integrated into RLIN, which allows users to input and search nonroman data.⁷ Unfortunately, the majority of on-line public access catalogs in American libraries do not have the capability to display nonroman scripts. To overcome this deficiency, RLG added parallel fields to the structure of the nonroman MARC record (for example, one field for a Cyrillic title; and another, linked to the first one, for the romanized title).⁸ The concept of parallel fields was also used for this project to ensure that Cyrillic Rosarkhiv records in RLIN would be found in as wide a searching environment as possible.

There is a big difference, however, between this project and other nonroman cataloging in the United States. All materials cataloged in nonroman scripts in the United States have the major elements of bibliographic description romanized, using the Library of Congress romanization tables,⁹ and all access points are formulated according to *AACR2(r)*.¹⁰ In contrast, Rosarkhiv Cyrillic records were created by Russian archivists according to local cataloging standards. After comparing Russian and American cataloging principles, it became apparent that mere romanization of Rosarkhiv access fields would not be adequate. According to *AACR2(r)*, the LC romanization tables should be used to create headings when there is no well known English form of a name. Such well-known English forms of a name may exist in English translation, or quite frequently, in a different romanization scheme. For example:

Russian cataloging rules	Москва
	Троцкий, Л
<i>AACR2(r)</i>	Moscow (Russia)
	Trotsky, Leon, 1879-1940

Also, the *AACR2(r)* subordination principle in formulation of corporate names does not exist in Russian cataloging tradition. For example:

Russian cataloging rules	МИНИСТЕРСТВО ВНУТРЕННИХ ДЕЛ СССР
<i>AACR2(r)</i>	Soviet Union. Ministerstvo vnutrennikh del

In order to fully integrate Cyrillic Rosarkhiv MARC AMC records into the RLIN database it was, therefore, necessary to supply the roman parallel

⁶ *Anglo-American Cataloguing Rules*, 2d ed., rev. (Chicago: American Library Association, 1988).

⁷ All functions of RLIN's on-line system, including all formats and modules (except authorities) are supported for Cyrillic.

⁸ Alan M. Tucker, "Nonroman and Multi-script Bibliographic Databases: Basic Issues in Design and Implementation," in *Automated Systems for Access to Multilingual and Multiscript Library Materials: Problems and Solutions*, IFLA Publications 38 (Munich, New York: K.G. Saur, 1987).

⁹ *LC Romanization Tables and Cataloging Policies* (Metuchen, N.J.: Scarecrow, 1990).

¹⁰ "Authorities" is the only RLIN module that does not support nonroman scripts.

access fields created according to the *AACR2(r)* and *APPM*¹¹ standards. These fields were added by the project cataloger at Hoover. The hybrid approach allowed Russian users to search RLIN in Cyrillic using Russian indexing, and American users to search RLIN regardless of provenance, location, or language of materials, using *AACR2(r)* and *Library of Congress Subject Headings*.¹²

Fond-Level Description

There are several fundamental differences in the way archival records are arranged and described in Russia and America. In Russia the documents are organized by *fond* (plural - *fondy*) and *delo* (plural - *dela*) where *fond* serves as the largest organizational unit and *delo* as the smallest one. (Unlike American archivists, Russian archivists describe materials on the *fond*, *delo*, and document level.)

The closest equivalent to *fond* in Western archival practice is "record group" or "collection," the closest equivalent to *delo* is "archival file." There are several types of *fondy*: Agency *fond*, Personal *fond*, Artificial Collection, and United *fond*. An Agency *fond* is usually composed of the records that an agency creates and accumulates during the course of its activity. A Personal *fond* is composed of personal papers of a particular family or individual. An Artificial Collection is assembled by archivists by subject or type of material. A United *fond* is also assembled by archivists and comprises similar types of records by different agencies.

Delo, as the smallest organizational unit, may be an individual manuscript volume or a folder of documents. *Dela* may be arranged by types of document, subject matter, geographical area, chronology, and other characteristics.

The basic finding aid for the *fond* is *opis'* (plural *opisi*). *Fond* may include one or several *opisi*. *Opis'* also serves as an inventory list of all *dela*. It is often incorrectly translated as "record series." As opposed to "record series," *opis'* consolidates the internal arrangement of *dela* within the *fond*, but does not define its structural organization. According to American archival practice, for example, newly acquired material must be added to an existing record series (such as correspondence, biographical information, photographs, etc.), with renumbering of only the folders of that series. In Russia, new documents may be included in the existing *opis'(i)* (in which case the files of the whole *fond* are renumbered) or the new *opis'(i)* may be created to accommodate these materials. Thus, more often than not, *opis'* serves as a search mechanism, rather than as a meaningful structural division of the *fond*.

Each *fond* and *opis'* has its own unique number. Once assigned, the *fond*

¹¹ Steven L. Hensen, *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries*, 2d ed. (Chicago: Society of American Archivists, 1989) (hereafter *APPM2*).

¹² *Library of Congress Subject Headings*, 19th ed. (Washington, D.C.: Library of Congress, Cataloging Distribution Service, 1996).

and/or *opis*' number should remain permanent. Occasionally, much to the confusion of researchers, the *fond* and/or *opis*' number might be changed due to the *fond*'s rearrangement and/or transfer of documents from one archival repository to another.

Project participants decided to create only *fond*-level MARC AMC records. The *fond*-level descriptions could be composed for all types of *fond* where a *fond* could be described as a whole unit (one record per *fond*) or in parts (several records linked to the appropriate *fond* description). Thus, separate records could be created for each agency that forms part of the United *fond*; a large *fond* with complex structure and extensive chronology could be described by *opis*'i.

Project Standards

Once parameters of Rosarkhiv records in RLIN were established, the next step was to find a way to transcribe the elementary rubrics of the Russian *fond*-level description using the fields of the MARC AMC format. The principal elements of the Russian *fond*-level archival description correspond to the main descriptive fields used in MARC AMC format: title and inclusive date (245 field), volume and physical characteristics (300 field), general organization and arrangement (351 field), historical or biographical note for the creating agency(ies) or individual(s) (545 field), scope and content notes (520 field), finding aids (555 field), access restrictions, acquisition and provenance notes (541 field), and indexing terms (1xx, 6xx, 7xx fields). Because of the differences in archival practices, however, it was necessary in some cases to redefine the content of the data element that comprise the MARC AMC record, and both sides were required to accept certain compromises.

Fond Title, Main Entry, Added Entries

Project archivists deliberated at length over the definition of the *fond* title and main entry/added entry. Unlike Russian archivists, American archivists draw a clear line between the provenance statement—main entry (USMARC field 1xx) and the type of archival collection—title (USMARC field 245). According to *APPM*:

Record a term that most specifically characterizes the form of material in the unit being cataloged....For collections, record groups, or series containing multiple forms of material, use the following general terms: *Papers*, for collections of personal papers; *Records*, for the archives of corporate bodies or groups; *Collection* or *Collection of papers*, for any group of materials that was formed artificially around a person, subject, or activity and that otherwise lacks integrity and unity of provenance.¹³

¹³ *APPM*2, 14 (Rule 1.1B4. Form of material).

The main entry, however, should bear the name of a person or agency that has primary responsibility for the described materials. *APPM* instructs: "Enter a body of archival materials, on the basis of provenance, under the name of the person, family, or corporate body chiefly responsible for its creation."¹⁴

By contrast, in Russia, the term "*fond*" is used for all types of archival material, whether they are personal papers, agency records, or artificially assembled collections. *Fond* title, therefore, contains the full and short version of the latest name of the agency (or individual(s)) responsible for creating, organizing, and maintaining the described material, including the dates of founding and abolishing (or dates of birth and death); geographical location (occupation and sometimes additional relevant information). For example:

I. Agency *Fond* Title: Бежецкий окружной комитет Всесоюзной Коммунистической партии (большевиков), окружном ВКП(б) г. Бежецк, Московская область. 1929–1930 [Bezhetsk District Committee of the All-Union Communist Party (Bolsheviks), District Committee of the VKP(b), city of Bezhetsk, Moscow region. 1929–1930]

Agency's full name: Бежецкий окружной комитет Всесоюзной Коммунистической партии (большевиков), [Bezhetsk District Committee of the All-Union Communist Party (Bolsheviks)]

Agency's short name: окружном ВКП(б) [District Committee of the VKP(b)]

Geographical location: г. Бежецк, Московская область. [City of Bezhetsk, Moscow region]

Dates of Agency's creation and abolishment: 1929–1930

II. Personal *Fond* Title: Семевский Василий Иванович, историк, литератор, доцент Петербургского университета (1882–1886 гг.), член редакции журнала "Голос Минувшего", сотрудник журналов "Отечественные записки", "Русское Богатство", "Вестник Европы", член партии Народных Социалистов (с 1906 г.). 1848–1916. [Semevskii Vasilii Ivanovich, historian, writer, associate professor of St. Petersburg University (1882–1886), member of the editorial board of the journal *Golos Minuvshago*, contributor to the journals: *Otechestvennye Zapiski*, *Russkoe Bogatstvo*, *Vestnik Evropy*, member of the Popular Socialists Party (1906–). 1848–1916.]

Full name: Семевский Василий Иванович, [Semevskii Vasilii Ivanovich]

¹⁴ *APPM*2, 38 (Rule 2.1. Basic Rules).

Additional information: professional occupation, activities, etc.: историк, литератор, доцент Петербургского университета (1882-1886 гг.), член редакции журнала "Голос Минувшего", сотрудник журналов "Отечественные записки", "Русское Богатство", "Вестник Европы", член партии Народных Социалистов (с 1906 г.). [historian, writer, associate professor of St. Petersburg University (1882-1886), member of the editorial board of the journal *Golos Minuvshego*, contributor to the journals: *Otechestvennye Zapiski*, *Russkoe Bogatstvo*, *Vestnik Evropy*, member of the Popular Socialists Party (1906-).]

Birth and Death Dates: 1848-1916.

Given the above indicated differences between American (APPM and AACR2(r)) and Russian archival practices, guidelines for the *fond* title and main/added entry were accepted by project archivists to record:

- Cyrillic and romanized *fond* title in field 245: subfield a
- Cyrillic and romanized *fond* number in field 245: subfield n
- Cyrillic and romanized *fond* inclusive dates in field 245: subfield f
- Cyrillic and romanized *opis'* title in field 245: subfield p
- Cyrillic and romanized *opis'* number in field 245: subfield n
- Cyrillic and romanized *opis'* inclusive dates in field 245: subfield f
- Cyrillic form of the person(s) or agency(ies) responsible for the creation of records (described in the Cyrillic field 245: subfield a) in field 79x¹⁵ created according to Russian cataloging standards; romanized form of the person(s) or agency (ies) responsible for the creation of records (described in the romanized field 245: subfield a) in field 1xx¹⁶ created according to AACR2(r).

For example:

Fond as a single unit description:

110 1 Russia.|bGlavnoe tiuremnnoe upravlenie.

245 00 Glavnoe tiuremnnoe upravlenie pri ministerstve Iustitsii. 1879-1917.|nFond 122.|f1856-1917.¹⁷

245 00 Главное тюремное управление при министерстве Юстиции. 1879-1917.|nФонд 122.|f1856-1917.

797 2 Главное тюремное управление при министерстве Юстиции.

a [*fond* title], n [*fond* number], f [*fond* inclusive dates], g [bulk dates] (if appropriate)

¹⁵ 796: Rosarkhiv Added Entry-Cyrillic Personal name; 797: Rosarkhiv Added Entry-Cyrillic Corporate Name.

¹⁶ 100: AACR2(r) Main Entry-Personal Name; 110: AACR2(r) Main Entry-Corporate Name.

¹⁷ The Main Prison Administration of the Ministry of Justice. 1879-1917.|nFond 122.|f1856-1917.

Fond-level description by *opis*'(s):

- 110 1 Russia.|bGlavnoe tiuremnnoe upravlenie.
245 00 Glavnoe tiuremnnoe upravlenie pri ministerstve Iustitsii.
1879-1917.|nFond 122.|p1-oe deloproizvodstvo.|f1856-1917.¹⁸
245 00 Главное тюремное управление при министерстве
Юстиции. 1879-1917.|nФонд 122.|p 1-ое
делопроизводство.|f1856-1917.
797 2 Главное тюремное управление при министерстве Юстиции.

a [*fond* title], n [*fond* number], p [*opis*' title, if appropriate], n
[*opis*' (*opisi*) number (numbers)], f [*opis*'s inclusive dates], g [*opis*'s
bulk dates] (if appropriate)

Moreover, the concept of title-added entry also had to be expanded. The 740 field (Added Entry-Uncontrolled Related/Analytical Title) was used to record the changes in the *fond* and/or *opis*' number, United *fond* titles, and changes in the name of the creating agency. In the beginning, project archivists decided not to describe changes in the name of the creating agency both as an added entry (7xx¹⁹) and as an added entry-variant title (740). This decision was partly based on the hope that archivists and researchers would be able to find historical information on the agency in the RLIN authorities file,²⁰ such as a detailed list of previous names and dates of founding and abolishing. Yet, during the course of the project, we came to appreciate the usefulness of the 740 field as an important access point and suggested including it in the project standards.

Fond Category

USMARC field 035 (System Control Number) was used to record the *fond* category. All *fonds* are divided into three categories: first, second, and third. There is no adequate equivalent to the *fond* category in American archival theory. The *fond* category is used primarily by archivists for archival control and is not relevant to most users. The concept of "*fond* category" was defined by Russian archivists in the 1960s, reflecting the notion that different types of agencies generate different types of materials. For instance, information contained in the documents created by industrial agencies (such as factories, machine-tractor stations, etc.) is different in nature and scope from the information contained in the documents created by government agencies (such as ministries, directorates, committees, regional Soviets, etc.).

¹⁸ The Main Prison Administration of the Ministry of Justice. 1879-1917.|nFond 122.|p 1 office.|f1856-1917.

¹⁹ 710: AACR2(r) Added Entry-Corporate Name; 797: Rosarkhiv Added Entry-Corporate Name.

²⁰ Project archivists did not supply authority records.

According to the Russian archival theory, the *fonds* of the first category should comprise more significant and diverse information than the *fonds* of the second and third categories. It should be noted, however, that these divisions into *fond* categories are somewhat arbitrary and depend primarily on the hierarchical/geographical level of the archival repository. For example, a *fond* of the third category in the central archive, if it were to be transferred to the regional archive, might become the second or first category, and vice versa.

Subject Cataloging

There are two types of card catalogs in Russian archives: the *fond* catalog and the subject catalog. The *fond* catalog is arranged by *fond* number and describes the type of materials included in the *fond*: latest *fond* title, previous *fond* title(s), inclusive dates, provenance, type of materials, etc. Usually it contains very little or no subject description. The subject catalog, on the other hand, is arranged by subject categories and includes references to the appropriate *fond* number and/or *delo* number. For this project, Russian archivists combined both bibliographic and subject description of the *fond* in one MARC AMC record.

Russian archivists assigned subject headings²¹ using several subject Russian thesauruses.²² The Hoover project cataloger also added *LCSH* in order to match closely the Russian subject rubrics with the controlled subject vocabulary used by libraries and archives in the United States. Unfortunately, it soon became clear that *LCSH* was limited, and in some cases inadequate, in its ability to characterize Russian and particularly Soviet archival material. For example, a broad subject heading

610:2 :Vsesoiuznaia kommunisticheskaia partiia (bol'shevikov) | xParty work

is used to describe materials dealing with a variety of activities of the All-Union Communist party between 1925 and 1952. But this approach makes it virtually impossible to find appropriate information on a specific action of the Soviet Communist Party of that time. Thus, the experience acquired during the work on this project suggests the need to develop flexible interna-

²¹ 690: Rosarkhiv Subject Added Entry-Topical Term; 691: Rosarkhiv Subject Added Entry-Geographical Name; 696: Rosarkhiv Subject Added Entry-Personal Name; 697: Rosarkhiv Subject Added Entry-Corporate Name; 698: Rosarkhiv Subject Added Entry-Meeting Name.

²² *SEK (Skhema Edinoi Klassifikatsii dokumentnoi informatsii v sistematicheskikh katalogakh gosudarstvennykh arkhivov SSSR. Sovetskii period.* [Moscow, 1983]. *TPD (Tipovoi Perechen Dokumentov).* The *SEK* was designed and developed by *Glavarkhiv SSSR* and *VNIIDAD*. The first edition of *SEK* was published in 1976. The second updated edition was published in 1983. *SEK* includes the general subject categories and concepts. It serves as a basic tool for creation of specialized subject thesaurus. In addition to *SEK* and *TPD* archivists used *Slovar sovremennoi arkhivnoi terminologii sotsialisticheskikh stran. vypusk I*, (Moscow, 1982 [2d ed., 1988]) and *Kratkii slovar arkhivnoi terminologii*. (Moscow, 1968). Party archives used the *SEK* for the party archives edited by the Marx-Lenin Institute.

tionally acceptable thesauri of descriptors in order to provide more adequate subject access to Russian and particularly Soviet documents.

Work Organization and Implementation

The group of archivists that was selected to carry out the project in Russia included two specialists from Rosarkhiv, who compiled training materials, manuals, guidelines, and rules for converting records into machine-readable format, and four professional archivists responsible for the implementation of the project in each participating repository using the project's cataloging standards and methodology.

In the beginning the Russian archivists tried to catalog directly into RLIN from their respective sites in Moscow and Tver'. Only a few records could be entered directly from Moscow, however, because it turned out to be very difficult to initiate and maintain the long-distance Internet connection. To compensate for these technical inadequacies, it was decided to create descriptions on stand-alone personal computers. RLG specialists suggested using a PC-based cataloging software, MicroMARC,²³ with Cyrillic overlay.

Each Russian repository organized the work on the project in accordance with its own resources and preferences. While RTsKhIDNI and GARF were able to assign only one specialist, GATO and TTsDNI established a joint group of specialists that included professional and paraprofessional archivists. Professional archivists were responsible for selecting *fonds*, converting data from the *fond* control file (*delo fonda*) and finding aids into MARC AMC format, and for assigning added entries and subject headings. Paraprofessional staff were responsible for entering records into MicroMARC. This division of responsibilities allowed Tver' archivists to increase productivity and to use the time of their professional staff more effectively.

Every few months, Cyrillic MicroMARC records were sent on floppy disks to RLG. RLG developed a conversion program that automatically romanized every descriptive field before entering records into the RLIN database. The purpose of parallel presentation, in Cyrillic and Roman characters, was to ensure that the records would be found in as wide a searching environment as possible. Once in RLIN, the records were enhanced by the project cataloger at Hoover who provided AACR2(r) headings in romanized form for all names appearing in access points (1xx, 6xx, 7xx), added LCSH, and, where appropriate, linked *opis(i)* records with *fond* level description.

²³ MicroMARC was developed at the Michigan State University specifically for archival cataloging and was successfully used as a cataloging software for the Vatican Archives project. See the report on this project by Frances X. Blouin Jr., "A Case for Bridging the Gap: The Significance of the Vatican Archives Project for International Archival Exchange," and Elizabeth Yaker, "Pushing MARC AMC To Its Limits: The Vatican Archives Project," in *American Archivist* 55 (Winter 1992): 182-201.

Conclusion

Undoubtedly, a major accomplishment of this project was the development of mutually agreed-upon archival descriptive standards and a methodology designed to share Russian archival data internationally through the multiscript RLIN database. It can be argued whether or not the MARC format is the ideal tool for describing Russian archival collections. What is clear, however, is that the real power of the MARC format is how it facilitates information exchange on a large scale. The experience of the project clearly demonstrates that there is a great compatibility between the practices and systems of archival description in both countries and that the MARC format is a useful and flexible tool that has the capacity for enhancements within its established structure.

As the world is drawing together and relying increasingly on the efficient interchange of information, there is a strong need for uniform formats and bibliographic standards. Mutually acceptable international bibliographic and subject standards need to be developed in order to facilitate information exchange through the international multiscript databases. This project represents an important step—but only the first—toward the accomplishment of this goal. The lack of such standards impedes the international electronic exchange of bibliographic data and will, undoubtedly, continue to be a stumbling block in any future efforts to incorporate foreign records into RLIN or any other North American bibliographic network.

Participation in this project allowed Russian archivists 1) to gain a better understanding of the MARC AMC format; 2) to acquire firsthand experience in the creation of an archival bibliographic database; 3) to work on the methodology to convert *fond*-level descriptions into machine-readable format; 4) to learn more about archival theory, practice, and trends in the United States; 5) to use modern archival technology and on-line systems; and 6) to purchase computers for their local needs. As a consequence of this project, a team of Russian archivists and computer specialists is currently working on the design and implementation of an automated database of national archival holdings. The system will, to a large extent, rely on the experiences and lessons of the Rosarkhiv-RLG-Hoover cataloging project.

Finally, the project has enhanced the bibliographic access to a sizable body of twentieth-century Russian archival material. The ability to search across many types of material from different repositories using one database is of the greatest importance to researchers. With the inclusion of *fond* level descriptions from selected Russian archives in the RLIN database, users around the world can verify the existence and exact location of specific material and identify its scope with greater detail and precision.