Background

Rare, historic and modern books, documents and parchment scrolls pertaining to the Iraqi Jewish community were found in the flooded basement of the Iraqi Intelligence (Mukhabarat) headquarters in Baghdad in early May 2003. Upon removal from the basement, the wet materials (known as the Iraqi Jewish Archive) were packed into sacks and transported to a nearby location where they were partially dried. Dr. Harold Rhode, expert in Middle Eastern and Islamic Affairs, Department of Net Assessment, Office of the Secretary of Defense, provided a general review and initial sorting of the contents during the retrieval process, after which the materials were placed in 27 metal trunks. The Coalition Provisional Authority (CPA) arranged for the materials to be frozen, which served to stabilize the condition and eliminate further mold growth.

At the request of the Coalition Provisional Authority, conservators from the US National Archives and Records Administration (NARA) traveled to Baghdad June 20-23 to assess the condition of the materials and develop recommendations for their preservation. The following report outlines the preservation action plan and funding requirements for preserving this important collection.

Description of the Iraqi Jewish Archive

The Iraqi Jewish Archive contains 16th-20th century Jewish rare books, correspondence and document files, pamphlets, modern books, audio tape and parchment scrolls. Languages represented in the Archive include Hebrew, Judeo-Arabic, Arabic and English (a few items).

The following descriptive information, provided by Hebraic and Arabic area study specialists at the Library of Congress, was gleaned from the photographs taken of the frozen materials in the open trunks. Once the materials are dried and have had the mold remediated it will be possible to provide a clearer and more detailed assessment of the contents.

- Hebraic materials. The Hebraica includes an eclectic mix of materials, ranging from holiday and daily prayer books, Bibles and commentaries, sections from a damaged
Torah scroll, books on Jewish law, as well as children's Hebrew language and Bible primers. The printed books were published in a variety of places, including Baghdad, Warsaw, Livorno, and Venice, and most are from the late 19th and early 20th centuries. Rare works include:

- the 'Ketubim' volume of the monumental Third Rabbinic Bible that was published in Venice by Giovanni di Gara in 1568; and
- what appears to be Abraham Brudo's 'Birkat Avraham,' which was published in Venice in 1696.

**Arabic materials.** The Arabic materials include both hand-written and printed items pertaining to the Jewish community of Iraq, some produced by the Jewish community and others from official governmental sources. In addition, there are items that do not appear to have any connection to the Jewish community at all. The materials include:

- a handwritten document, dated September 5, 1966, which appears to be a request for names for a board of directors of the Jewish community;
- a school roster Madrasat Furnak (second part unclear) with both male and female names, which dates primarily to August-September 1966-67;
- a collection that includes the law of the Jewish community #77 for 1931 and the organization of the Jewish community #36 of 1931, published by the Jewish Charitable Organization in 1932;
- an official Iraqi report to the Minister of Interior (and various directorates) reporting on important events, dated 16/2/2000.

**Condition of the Collection**

In the haste necessary to quickly gather and secure the collection, materials were packed somewhat haphazardly and the books’ text blocks and groups of documents were not aligned to conform to their original shapes. As a result, many gatherings of loose documents and bound text blocks are distorted, crumpled, and similarly damaged. Many boards are detached from their bindings, and it appears that during the weeks that the records were submerged under water the leather covering many books became detached with the result that bare binder’s board is now exposed. In addition, there are many loose pages and fragments that became disassociated from their original locations. The damage that resulted from handling and packing the wet materials likely can be remedied in most instances, though it will add more time to the project and it will not always be possible to eliminate the evidence of past damage.

After the collection was removed from the water, approximately three weeks elapsed before the collection was frozen, which resulted in varying degrees of mold growth. This may result in some permanent staining, though it does not appear that in most cases the mold was sufficiently advanced that the paper was severely affected or weakened. The books and documents also have numerous rust stains, as a result of contact with the interior of the metal trunk as well as the rusty metal components of the mechanical binders (similar to ring binders) that were used to hold loose documents together.
Overall the collection is in moderate to poor condition. While some pamphlets, books, and document files appear to be intact and complete, many others exist as fragments with loose and/or missing components. There is much physical distortion that can likely be remedied via conservation treatment. Most inks and media appear to be in stable condition -- legible with no evidence of feathering or bleeding -- despite their long period of submersion in water. The exceptions are the inks on the scroll fragments, where there is evidence that ink has bled. The text, however, is still legible.

**Preservation Action Plan**

The following action plan outlines the steps needed to ensure the collection’s preservation so it can be made available for future generations. Careful decisions will be required to select treatment options that will minimize costs, yet support the needs for preservation and future use. Further information regarding the preservation steps is provided in Appendix A.

1. Dry the collection to stabilize the condition and halt further damage. (Freeze-drying is complete)
   - Remediate for mold to allow personnel to be able to handle the materials.
   - Determine the contents of the collection, and its historical, archival and curatorial importance.
   - Determine the conservation and reformatting needs of the items within the collection, based on curatorial/archival and preservation assessments.
   - Conserve individual items deemed to have artifactual importance.
   - Conserve to the degree necessary to permit handling and/or duplication of items deemed to have research but not artifactual significance.
   - House the collection so it can be stored properly and used in the future.
   - Microfilm materials as appropriate.
   - Develop an exhibition.

Due to the lack of trained personnel and technical resources presently available in Iraq, as well as the costs and time that would be required to establish the necessary infrastructure and staffing for conserving the collection, the collection has been transferred to the United States to undergo the preservation work in an expeditious, technically qualified and cost efficient manner.

**Project Goals and Expectations**

On an item by item basis it will be necessary to determine how much treatment should be given to each particular item, based on its relative value, importance, future use and availability of funding. In most cases conservation treatment will not eliminate the evidence of the damage that has occurred, including staining, bleeding inks and distortion. In some cases the improvement will be minimal and in other cases the item will be significantly improved. Overall it is expected that the majority of the collection
can be treated so the items will be useable, though given the damage that has been sustained and the number of fragments and detached leaves, some items may be incomplete following treatment.

**Project Plan**

As Custodian for the Iraqi Jewish Archive, the Coalition Provisional Authority is responsible for ensuring the protection and final disposition of the documents pending election of a sovereign Iraqi government and for fund-raising to support the project fully with non-governmental funds.

The US National Archives and Records Administration will provide the leadership in executing the preservation project and in identifying the subject matter experts who can provide the historical and language knowledge required for assessing the contents and curatorial needs of the Archive. NARA is well equipped to provide leadership and technical oversight and guidance to assure preservation of the Iraqi Jewish Archive. Archival and preservation staff can assure that preservation tasks are carried out in conformance with existing international standards. Under the Economy Act, funds that are donated to other agencies can be transferred to NARA to support the necessary preservation work, which can be carried out under NARA direction. NARA is also well positioned to provide the necessary physical security for the collection.

**Resource Requirements**

Due to the inaccessibility of the records in their frozen state, as yet there is insufficient information to determine the full cost for completing this project. Before a complete preservation assessment and cost analysis can be developed, vacuum freeze drying, inventory, mold remediation, curatorial assessment and conservation condition assessment must be completed. These first steps are expected to cost $450,000-725,000. For the purposes of providing a general understanding of the costs involved in undertaking the full preservation project, a rough budget estimate for the project as a whole was developed: $1,525,000- $3,000,000. It is important to emphasize that there are still numerous elements that will need to be determined and analyzed before finalizing the budget.

In-kind contributions: NARA will cover overhead costs for administrative functions, lab use, storage and utilities as an in-kind contribution to the project. The US Military provided the courier and transport for the collection to come to the United States.

- Courier transport to freeze dry facility in the US $100,000 - 100,000
- Commercial vacuum freeze drying, security, transport to NARA $200,000 - 400,000
- Mold remediation

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- Inventory, Curatorial and Conservation Assessment $150,000 - 225,000

  **Subtotal for First Steps** $450,000 - $725,000

- Conservation Treatment $500,000 - 1,000,000
- Rehousing $25,000 - 25,000
- Microfilming/Reformatting $300,000 - 700,000
- Project Oversight $200,000 - 500,000
- Supplies and equipment $50,000 - 50,000
- Lab facilities, long term storage with security, utilities at NARA, general oversight NARA (In-kind)

  **Total Preservation Budget Estimate** $1,525,000- $3,000,000

**Exhibition** To be Determined
4 Freezing for Stabilization (Completed)
Freezing the water and mold-damaged Iraqi Jewish Archive has been accomplished. This important first preservation step has served to stabilize the material and inhibit additional mold growth that will flourish under conditions of high temperature and high relative humidity. If not frozen, wet organic materials—including paper, leather, and parchment—provide a perfect host for mold, and water sensitive or soluble inks will continue to feather and bleed.

4 Drying the Collection (Vacuum freeze drying is completed)
Vacuum freeze-drying is the technique recommended for drying the wet paper material in this collection. This drying method results in the least amount of distortion to records and also minimizes the feathering and bleeding of water soluble inks and other media. Materials must be in a frozen state when entering a vacuum freeze-drying chamber and remain frozen throughout the drying process. The vacuum freeze-drying process causes frozen water to sublimate to a vapor without passing through a potentially reactive liquid stage. The parchment scrolls and fragments that are especially vulnerable to shrinkage if dried incorrectly need to be individually air dried under restraint by trained conservators.

It is important to note that the books and other materials that exhibit physical distortion as a result of being submerged under water and then being packed quickly in trunks will retain their distorted shapes at the conclusion of the drying process. Subsequent conservation treatment will be necessary to return materials to their original shapes and formats, to the degree that this is possible.

• Inventory
At the earliest stage possible, an inventory will be undertaken to be able to maintain accountability for the materials during the preservation process and thereafter.

• Mold Remediation
Exposure to mold and microorganisms is a documented health hazard that can cause respiratory irritation or more severe reactions, depending on the individual, the type of mold present, and the duration of exposure. After the collection is dried, the mold will be rendered inactive, if maintained in an appropriate temperature and relative humidity environment. However, the mold residue will need to be mechanically removed in order for the collection to receive conservation treatment and ultimately to be studied and handled by researchers and others.

For paper-based and other porous materials, mold remediation is essentially controlled surface cleaning using a vacuum cleaner equipped with a HEPA filter, which minimizes the possibility of mold spores and debris from becoming airborne. To prevent contamination of other collection materials, the work is carried out in a fume hood with trained personnel wearing protective clothing such as gloves, goggles, and respirators. If the mold damage is severe, the mold can greatly weaken and essentially digest the paper;
in other cases the mold can cause sheets of paper to block or stick together. In archival contexts, where information is more important than cosmetic improvement, staining from mold is usually not removed or reduced since techniques to minimize stains can also weaken paper.

Mold remediation should be carried out after the Iraqi Jewish Archive is dry, by qualified personnel in a conservation facility outfitted with the appropriate equipment and environmental controls. The work will need to be managed so that original order of the files and any associations that now exist by proximity in a given trunk between fragments, detached leaves, and text blocks are not lost. Maintaining these intellectual links during mold remediation will expedite the conservation treatment phase of the project.

- **Curatorial and Conservation Assessment**
  Since conservation treatment is even more time-consuming and expensive than mold remediation, it is normally reserved for materials of known value and research interest. The curatorial/archival assessment of the content and relative values of items in the collection will need to be carried out by subject matter experts with the relevant historical, archival/curatorial and language expertise. Treatment strategies will be developed based on this assessment. For materials that should be microfilmed, it may be possible to minimize the need for extensive conservation treatment and instead focus on stabilizing the materials for filming and assuring that a legible microfilm copy can be achieved. Selected items in the Archive that have high intrinsic or artifactual values that would warrant more complete treatment.

  The conservation assessment is a collaboration that merges curatorial perspectives with conservation information on the physical and chemical condition of the collection and available treatment options. This assessment will focus on the content, research importance, scarcity, uniqueness, and value of the collection items. Curatorial review and recommendations will form the basis for developing conservation treatment options. The National Archives and Records Administration will provide physical security and conservation oversight during the curatorial review.

- **Conservation Treatment**
  Conservation treatment will be required to ensure that the Iraqi Jewish Archive is in sufficiently stable condition to permit anticipated handling and use as well as microfilming when that is desired. Specific treatments selected will depend on the format, condition, and value of individual items in the collection and could range from stabilization through full treatment. As appropriate, the following treatment steps will be performed:
  - surface cleaning or aqueous bathing (to reduce staining),
  - deacidification (to deposit alkaline salts in the paper to extend its usable life),
    humidification and flattening (to minimize distortions and creases in paper and text blocks),
  - mending and filling losses in paper, and
  - rebinding and re-casing bound volumes (to replace damaged or detached boards).
Whenever possible, treatment steps will be minimized by using protective housings and enclosures. For example, weak or damaged paper sheets will be placed in stable plastic sleeves to avoid extensive mending, and bound volumes will be placed in protective boxes to avoid the need for rebinding. Of the materials examined, the Torah scroll fragments have the most critical and complex treatment needs and will require separate handling and treatment. Overall, appropriate housing of the collection will be achieved as one of the end products of conservation treatment, which will enhance the ultimate secure and safe storage and handling of the materials.

- **Microfilming/Reformatting**
  Microfilming is an important preservation tool that is used to reduce or eliminate handling of fragile original records. It also provides a mechanism for enhancing research access by students and scholars by making copies of the film widely available. To meet long term preservation requirements, collections to be microfilmed must be adequately arranged and described. In addition, international standards must be followed in selecting film stock, processing the film, and in creating preservation master and duplicating copies, which must be stored under specified environmental conditions. Other reformatting methodologies may be utilized as appropriate.
Photographs

Removing the Iraqi Jewish Archive materials from the flooded Mukhabarat basement. May 2003

Photos by Harold Rhode
Books and documents after removal from the Mukhabarat basement. May 2003

A Torah scroll laid out for partial drying.
The sacks were used to transport the materials from the basement.

Photos by Harold Rhode
Frozen books and documents in the Iraqi Jewish Archive

Photos by Doris Hamburg
Assessing the condition of the Iraqi Jewish Archive June 2003

Iraqi Jewish Archive in trunks in the freezer truck

Photos by Doris Hamburg