Preservation Assessment of the McKinney Engineering Library
University of Texas at Austin
Helen Kuncicky
Protection and Care of Records Materials
Spring 2008
Instructor: Karen Pavelka

Table of Contents

Background	3
Survey Goals	3
Collections	3
I. Collection Materials	
II. Acquisition Policy	
III. Collection Use	
Recommendations	7
Staff	
I. Library Staff	
II. Building Employees	
III. Campus Staff	8
Recommendations	
Building and Facilities	8
Building Location and Structure	
II. Facility History	
Recommendations	
Collection Storage	
Recommendations	
Climate Control	
Recommendations	
Illumination	
Recommendations	
Pests	
Recommendations	
Security	
Recommendations	
Emergency Preparedness	
Recommendations	
Preservation Policies	
Recommendations	
Prioritized Recommendations	
I. Immediate Actions	17
II. Long-term Projects	18
III. Ongoing Tasks	
Appendices	
A: Vendors	
B: Annotated Bibliography	
C: McKinney Library Floor Plans	22

Background

The McKinney Engineering Library is the primary academic library servicing the student body of the UT School of Engineering. The School has approximately 7,000 students including 5,000 undergraduate students and 2,000 at the graduate level, and 350 faculty members. The library's student patrons are characterized by Susan Ardis, the Head of the McKinney Library, as being motivated, organized and responsible patrons with a great deal of respect and appreciation for the library's services.

According to the library's website, "The Richard W. McKinney Engineering Library collects in areas of interest to academic engineers and actively supports teaching and research from the undergraduate through the doctoral level. The fields of architectural, biomedical, civil, electrical and computer, environmental, geotechnical, mechanical, petroleum, and aerospace engineering are covered extensively through the collection of over 165,000 volumes which includes over 1800 current serial subscriptions." The library's holdings include serials, textbooks, monographs, and electronic media. The library also offers equipment for checkout such as DVD players, cameras, calculators, and flash drives.

The library has been in its current location in Ernest J. Cockrell Hall since 1974. It was the first library on campus to move to an entirely electronic cataloging system and is a US patent deposit library, giving it access to physical and electronic databases of US patents. It is considered to be one of the top academic engineering libraries in the country.

According to Ms. Ardis, the Engineering library is funded largely by endowments from alumni donations. These are worth approximately \$500,000, although they lost some 9-10% of their value in 2008 due to the economic recession. Nonetheless, the library is not in financial jeopardy and it continues to receive about \$5,000 in alumni donations each year. The endowments are used to purchase items such as collection materials, equipment, supplies, and to fund professional development for the staff.

Survey Goals

The goal of this assessment is to identify the library's current preservation policies and practices and determine whether they are meeting the needs of the collection and providing the best environment for the library materials and patrons. Because the McKinney Library is a circulating library geared toward a specific subset of students in the university, its mission is to provide high-demand materials and services to its patrons. Therefore, all recommendations made based on the findings in this survey will focus on supporting this use-driven mission.

Collections

I. Collection Materials

A large portion of the library's collections are electronic media, the majority of which are subscriptions to digital serials and databases. There is also a large collection of microfilm and microfiche, along with a smaller collection of AV materials. According to Susan Ardis, the

¹ McKinney Engineering Library Website, http://www.lib.utexas.edu/engin/

majority of these items are expected to be replaced fairly quickly. As she explains it, engineering publications have a "lifetime" that is much shorter than publications in subjects such as the humanities and even other sciences. The length of an item's relevant lifespan depends mostly on the subject matter. For example, articles in biomedical engineering will likely be outdated in a few years, while articles in civil engineering may be useful for 20 years or more. Some approximate lifetimes for various types of materials are: 10 years for conference proceedings, 15 years or more for monographs, and 4 years for textbooks, although this is largely due to the publication of new editions, not necessarily to changes in the content. Journal lifespans range from a few years to up to 50 years depending on subject. There are also some books in the collection that are over 50 years old and still in use.

It is important to note that none of the items in this collection are being held with the intent of preserving them for historical value. Items are maintained in the collection only if they remain relevant and useful to the patrons. Ms. Ardis made the point that none of the items in the collection are rare or original. The purpose of this library is to provide students access to currently useful information in their field. Consequently, everything in the collection is circulating.

The McKinney Library intentionally leaves the collection of historical materials to other libraries with more special-collections oriented missions. The exception to this is an assortment of artifacts housed in the library. Some of these are donations to the library that are put on display, however these items are typically discarded when the display is changed. The few historical artifacts on permanent display do not belong to the engineering library, but are actually the property of the university. These include two statues of Alec, the engineering school's mascot (one of which is in pieces), and two metal trophies in the conference room (see figures 1 and 2). During our site visit, it was noted that one of the trophies is very tarnished and the other had some trash inside it.



Figure 1: Artifacts displayed in case





Figure 2: Trophy and trash inside it

There is also one item that is of special value to the library; a U.S. flag that has been to the moon, donated by astronaut Alan Bean (see figures 3 and 4). Conservation treatment has been arranged due to fading of the signatures on the flag's support. The flag will be re-housed and put back on display in the library.



Figure 3: Moon flag waiting for conservation treatment



Figure 4: Original moon flag frame

II. Acquisition Policy

The library has over 165,000 volumes and the collection is still growing, but the pace of growth is slow because the collection is regularly weeded of items that are no longer in use. New items are purchased with high circulation as a primary goal. Therefore, duplicate copies are purchased of particularly high-demand items, along with new items that are relevant to the field or are requested by professors. In addition to monographs and periodicals, the textbooks for all Engineering classes are purchased to be put on reserve for student use. These are some of the most popular materials in the collection.

Roughly 60,000 volumes of the collection are currently in remote storage at the Pickle Campus. The capacity of the library itself is approximately 120,000 volumes. As the library is approaching capacity again, the plan is to send older items to the remote storage facility, mainly those catalogued under the Dewey decimal system. This will allow the library to maintain these holdings without having to re-catalog the materials into a new classification system.

III. Collection Use

All of the items in the collection can be checked out, although some of the electronic materials are for in-library use only. However, Ms. Ardis expressed that almost any item in the library could be checked out if a student had a good enough reason. This is an example of the library's consistent focus on providing excellent service to their students and striving to make the patrons happy.

The library has an average of 650-900 visitors per day and does record traffic statistics. During normal semester hours, the library is open Monday-Thursday 8am-10pm, Friday 8am-5pm, Saturday 1pm-5pm, and Sunday 2pm-10pm. Students can access all of the stacks and the entire library collection. Covered drinks are allowed in the library but food is not, however the library staff admitted freely that this policy is not strictly enforced. Students use the spaces in the library for studying using their own computers, the computer lab, physical and electronic materials, and also for sleeping (see figure 5).



Figure 5: Sleeping engineering students

Recommendations:

- The artifacts, even those that do not belong to the library directly, are in the library's care and should be maintained accordingly. All artifacts should be cleaned of dust and debris on a regular basis. The artifacts displayed and stored in the library should be catalogued in some manner.
- It is excellent that the flag is already expected to undergo conservation treatment. It is recommended that the treatment include placement under a UV filter. The glass in the frame can either be replaced with UV-filtration glass or coated with UV-filtration film. This should be specifically requested as part of the conservation treatment.
- Ordinarily, it would be recommended that food not be allowed in the library, to help prevent insect infestations, and while this is the library's policy, it is not the current practice, and students with food and drink were observed in the library during the site visit. Therefore, the library staff should ideally strictly enforce the no food or drink rule.
- However, if the ability to bring food is important to the library's patrons, it might be advisable to allow it. Given that there are some artifacts on display and food can be spilled on and cause damage even to circulating collections, the best compromise might be to allow food only in certain areas of the library. The study tables around the perimeter of the first-floor stacks could be a designated food and drink area, with signs posted to prohibit food from being taken into the stacks. It is also suggested that only drinks in sealed containers be allowed in. It should be noted that if food is to be explicitly allowed in the library at all, thorough cleaning will have to be done regularly to prevent insect infestations (see Staff section for recommendations on cleaning procedures).

Staff

I. Library Staff

The Engineering library has 7 full-time staff and between 5 and 10 part-time student workers each semester, including a graduate research assistant from the School of Information. Two of the full-time employees are directly involved with preservation activities; David Starr is responsible for serial binding and Becky Ballou is in charge of book repair. The circulation staff is also responsible for selecting items for repair and rebinding as they are returned from circulation. The final decisions about which books are repaired and rebound are made by Susan Ardis. The librarians also teach research modules in some of the introductory engineering classes

II. Building Employees

The custodial staff for the library is shared with the rest of the Engineering building. The custodians current tasks include emptying the garbage cans every few days, vacuuming occasionally (once every few months), and doing some superficial cleaning. The custodial staff does not clean near the windows, move furniture to clean underneath it, or clean the computers, collection material, stacks, or other equipment. The student workers wipe down the tables and computers during school holidays such as winter and spring break. The staff also does some dusting in the stacks and washing of the shelves, but only during large collection shifts where entire sections are relocated within the stacks.

III. Campus Staff

The building and facilities staff are employed directly through the central university system, and so are not in regular contact with the library staff.

Recommendations:

- It is highly recommended that cleaning of the library occur more frequently and be more thorough. Vacuuming should be done at least once per week, particularly if food is allowed anywhere in the library. The tables, computers, and windows should be cleaned at least once a semester, in all areas of the library. The stacks should be dusted on a regular basis.
- Special attention should be paid to cleaning the staff areas, including the circulation desk, offices, and break room. These should be vacuumed and counters wiped down regularly.
- The library staff should be very proactive in making sure the custodial staff is cleaning to a satisfactory level. The custodial manager should be informed of the necessity of thorough cleaning in the library, and any negligence should be promptly reported. Over time, this will help improve the cleanliness of the library without causing undue additional staff work.

Building and Facilities

I. Building Location and Structure

The McKinney Library is located on the first floor of the Ernest J. Cockrell Engineering Building on the north side of campus. The library has been in this location since the building was erected in 1974. The entrance to the library is on the main level of the building, and the double-door

entrance is the only way in or out of the library. The library is two stories with 19,700 square feet of space.

The stacks are located in the middle of the library on both floors, with study tables surrounding them on the perimeter. In addition to the stacks and the study areas around the stacks, there is a computer lab/periodical room to the right of the entrance, and a staff area and conference room to the left of the entrance as you walk into the library. The staff area has a break room, which also houses the book repair area. New books are stored in the break room until Fridays, when they are processed and shelved. There is also an electrical closet near the entrance labeled "Authorized Personnel Only". There are no bathrooms in the library itself, they are located down the hall.

There is one staircase leading up to the mezzanine level, and no elevator. There is a small handicapped sign next to the staircase, which is there to indicate that persons needing items on the mezzanine level should notify the circulation desk for assistance. There is a dumbwaiter system to bring books up and down between the first and mezzanine levels that is large enough to hold one book truck at a time.

Due to its location in the engineering building, there are engineering labs on the floors directly above and below the library. The labs below the library are civil engineering labs and those above it are environmental labs, which involve some chemical use. The library does have some exposed glass pipes hanging from the mezzanine ceiling that carry chemical waste from the engineering labs in the floor above (see figure 6). These have never had leak issues, however they are unsightly and could pose a hazard to patrons and materials if they were to break or leak.



Figure 6: Exposed glass pipes with chemical waste

There is a low-hanging, potentially dangerous sharp corner sticking out at head level on the mezzanine level, which has an orange construction-zone web over it to keep people from running into it. This visual barrier was designed in-house to prevent injury of patrons or staff (see figure 7).



Figure 7: Visual barrier on low-hanging corner

II. Facility History

The building has had many issues with water leaks over the years. The main issue for many years was the building's flat roof, which caused repeated leakage until 1998. The leakage mostly occurred under the patio section of the roof. In 1998, a new roof was built to solve this problem. The patio was removed and new supports, drains, and special grates were installed to allow for sufficient drainage. However, during construction a storm caused a flood within the library. There was standing water several inches deep, and this occurred over a weekend so the water was in the building for several days. Many items were damaged and had to be replaced. At that time, many print journals that had been damaged were replaced with electronic ones. There was no permanent damage to the building, but some floor tiles had to be replaced and the carpet has since been replaced as well. Some shelves in the stacks do still have rust from this incident.

Since the new roof was finished, there have been no reported leaks coming from the roof. However, there have been small leaks due to plumbing incidents, which have caused damage to the ceiling tiles (see Figure 8). The toilets and sinks have been replaced on the first floor,

however plumbing issues still exist on other (higher) floors. It was expressed during the site visit that leaks have not always been reported, especially before the roof was fixed when they occurred frequently. The staff would simply put plastic over the items and containers in place to catch the dripping water.



Figure 8: Damage from leaks in upper floor bathrooms

The library has also had some issue with the entrance doors. The doors have not been replaced since 1975 and are worn out. They sink down over time and must be raised and filed every few years. The library has not been able to convince the university to fix it permanently. Recently the library had a problem in which a patron, frustrated that the library was closed, punched the glass in the door and his hand went through glass. Due to this incident, the glass windows in the doors were replaced with safety glass, however the doors themselves were not replaced. Incidentally, the library's staff were more concerned about the safety of the involved patron than about the doors. This is yet another example of their primary motivation in action, that being to make the happiness of their patrons the highest concern.

Recommendations:

- The handicapped sign next to the staircase is rather confusing, as does not indicate how a handicapped person can obtain materials from the mezzanine level. In order to better serve handicapped patrons, an additional sign should be placed below the current one, stating that patrons needing materials from the mezzanine level should come to the circulation desk for assistance.
- The exposed glass pipes are not a serious concern, as they have never had any issues. However, covering them in something opaque would reduce their unsightliness. The library might want to contact both the building manager and university facilities to see

- about making improvements to these pipes. If possible, it would also be ideal if they were covered in something watertight in case of leaks or breakage.
- The fact that leaks were not reported for many years prior to the flood incident is of concern. All leaks and other facilities issues should be reported promptly. In addition, the library would do well to build a stronger relationship with the facilities staff.

Collection Storage

The stacks are a true stacking system, with metal supports running through the first and mezzanine levels that are supporting not only the shelves but the mezzanine level as well. There is about 6 inches of space between the tops of most books on the top shelves and the ceiling on both floors. Some of the shelves in the outer area are not stacking, but are simply free-standing shelves. These rock back and forth when pressure is exerted on them. Some of the books are leaning on the shelves, although there are hanging metal bookends to support them upright (see Figure 9). The staff does routinely go around and re-shelve items in correct order, and make sure they are shelved correctly. There is a small room next to the periodical room which houses the microfilm collection. These are stored in metal cabinets. When on book trucks, books are stored fore edge down for ease of use and to prevent them from falling over.



Figure 9: Books leaning on shelves

There is also an artifact case which holds display items. As previously stated, these are not part of the regular collection but are either university materials or donated items of interest. The library staff began to make a database of the artifacts at one point, but the database is currently incomplete. These historical items not a priority for the library, which is why there isn't a larger focus on cataloging and preserving them.

The library uses book drops for returns, including one inside the entrance and a drive-up book drop outside the building. This drive-up book drop gets heavy use, and consequently occasionally becomes overfilled. When this happens, books can easily get stolen or wet, however there are signs warning students not to overfill the drop for this reason. The book drops

are emptied two times a day. The staff has found that the spring-loaded book drops (like the drive-up one) cause more damage than the indoor drop where the books simply fall on the floor.

Recommendations:

- The free-standing shelves that sway should be replaced or further supported immediately, as this is a potential danger to patrons and staff. The easiest solution would be to extend brackets onto the ceiling to support the tops of these shelves. If necessary, the shelves could also be replaced with ones that are wider and thus have a sturdier base. However, this would reduce some of the space between the shelves and in the outer corridor.
- Books on book trucks should be stored spine-down. Storing books fore edge-down will rapidly cause damage that will likely result in loose or detached covers. This will remove those books from circulation until they can be repaired. It would better serve the library's circulation goals to practice a safer storage method for these books.
- Again, all artifacts should be catalogued for security and informational purposes.
- It would be beneficial to start emptying the book drops three times a day, particularly the drive-up one that is sometimes overfilled. This would require a minimal amount of staff time, but could result in a significant lessening of damaged and stolen books from the drop.

Climate Control

The biggest climate concerns in the library are related to patron comfort and budget constraints. The university has dictated that the thermostats should be maintained at 74 degrees for budget reasons. However, the thermostat is accessible to patrons and does get changed frequently. This is partially because the thermostat is downstairs and controls both floors, so the mezzanine level often becomes too hot for comfort. Relative humidity is not controlled within the library.

The library staff is not responsible for upkeep of the HVAC system, which is taken care of by the university's central zone maintenance. The library staff also does not test temperature and relative humidity levels in the library, as comfort is their primary environmental concern. The HVAC vents blow strong air currents within the stacks, and are aimed into the walkways rather than directly at the shelves.

During our site visit, we checked the temperature and relative humidity in several areas (see Figure 10 for the results). All of the temperatures were between 77 and 80 degrees Fahrenheit, which are certainly above the ideal temperature for both preservation and comfort. The RH readings ranged between 51% and 57%. This is a somewhat high but acceptable level for preservation purposes.

	Temperature	Relative Humidity
Location	(F)	(%)
Conference room - end of table near west		
wall	79.6	54.7
Conference room - near north facing		
window	78.2	57.2
Near middle of stacks - main floor	76.5	54.1
Mezzanine study carrel - east wall	77.6	55.4
Mezzanine stacks - near vents	78.2	53.4
Mezzanine stacks - north side	79.1	51.8
Stairwell	79.5	52.4
Circulation desk - near entrance	78.7	51.1
Periodicals/Computer room - open space		
near computers	78	54.2
Microfiche room	77	52.9
Behind circulation desk	77.7	53.6
Kitchen/Book Repair/Supply Room	77.9	51.8
Main floor - north wall study area	76.2	54.2
Main floor - east wall study area	76.2	55.1
Main floor - south wall study area	76.2	55.9

Figure 10: Temperature and relative humidity results by location

Recommendations:

- The library could do some unscientific testing to determine what thermostat setting maintains a comfortable space both upstairs and downstairs, and try to keep the thermostat on that setting. It may be necessary to maintain a lower thermostat setting than the actual desired temperature.
- An indoor thermometer would be useful for the staff to perform quick checks of the actual temperature. If two were purchased, one could be placed upstairs and the other downstairs for comparison. This would likely be more accurate than reading the thermostat temperature.
- The library would also do well to form a relationship with the central zone maintenance and learn more about their HVAC system. It is possible that there are changes or upgrades that could be made to improve the climate conditions in the library.
- The library staff should be aware that humidity is not controlled in this building and mold outbreaks, although unlikely, could occur. Staff should be on the lookout for mold both while performing circulation tasks and when doing shelf checks and straightening. Any moldy items found should be promptly removed from other collection materials and either treated or replaced.

Illumination

All lighting in the library is handled by an outside contractor. Occasionally maintenance workers come in and do testing and bulb replacement. All lights in the stacks are turned off when the library is closed. The blinds on the windows are kept down but open to let light in during the day, except for the windows near the VHS shelving where the shades are always kept

down to protect the videos. There is also a sign posted here to let patrons know that the blinds should remain down at all times.

Recommendations:

- The practices of keeping the blinds closed and turning off of the lights are both good preservation practices and should be continued.
- The display cases containing artifacts should either be replaced with UV-filtration cases or UV filters should be installed. UV filtration film can be purchased from a variety of sources, and could be applied to the walls of the current display cases to protect the items inside from UV light damage.

Pests

The library staff does not routinely test for pest presence, however they have occasionally noticed ants in the conference room and break room, and there were ants in the conference room during our site visit. This is unsurprising, as food is allowed specifically in the conference room and break room. However, the food prohibition in the rest of the library is not enforced. In addition, during the finals-week cookie serving, the cookies may be taken throughout the library by patrons.

Recommendations

- Again, this is mostly an issue with cleaning and library policies. Please see the "Staff" section for recommendations regarding cleaning practices and the "Collections" section for recommendations on food and drink policies.
- It is also recommended that sticky traps be placed around the library and monitored regularly for insect presence. This will simply help alert the staff if insects are becoming an issue.

Security

The library does have some theft, but no statistics are kept on it and the staff does not feel that it is a large issue. The method of dealing with and preventing theft is to "flood the market" by purchasing more copies of high-demand items or more items similar to those in question. The staff does routinely search the stacks for items that are missing. There is also a camera in the periodical room and another near the entrance doors, however these are not recorded and one is not actually functional. They are there simply as visual deterrents. There is a working bookstrip detector at the entrance door.

Regarding digital materials, the library does pay for access to many electronic journals, and this access has occasionally been turned off in the past due to accounting issues. The servers are for all digital materials and cataloging databases are remote, and the library itself does not control any of these. Therefore, all digital materials are subject to UT's storage, preservation, and retrieval policies.

Recommendations

- Although the library is not directly responsible for the preservation of digital materials in its collection, it would be useful for the staff to know what the UT digital preservation policies are, in order to ensure they are being followed for the McKinney Library's collections. At least one staff member should be aware of the specifics of these UT policies, and do occasionally check-ups with the appropriate departments to make sure they are being carried out.

Emergency Preparedness

The primary concern in emergency situations is for the patrons and library staff, not for the collection materials. There are plans in place for evacuation in case of a disaster (as part of the larger Engineering Building plans), but no such plans exist for safeguarding or recovery of the library collections. The library staff has an emergency contact team, although it has not been updated in several years. The single safeguard for library collections is that the doors should be locked in an emergency once all the people have been evacuated. In addition, the library does have a water emergency kit for the collection, consisting of towels, plastic, and other materials, as recommended by the central library preservation staff at the Perry-Castaneda Library.

In case of a fire, the library does not have sprinklers but does have some fire extinguishers. It is also equipped with a fire alarm, which is currently standalone but is planned to be connected to the campus system soon.

Recommendations:

- The library should update its emergency contact list regularly, at least once a semester. This list should include a phone tree of library staff, a preservation administrator from the Perry-Castaneda Library, facility services, and local vendors for water removal and supplies.
- The library should also have written disaster-response plans, with which all staff should be familiar. These do not have to be made by the library, but could be slightly altered copies of the university or other library plans. The Marine Science Library has a list of resources for creating a disaster plan² as well as links to examples of disaster plans at UT and other university libraries³.

Preservation Policies

Given that the mission of this library is geared toward use and access, preservation is not a high priority. The purpose of preservation activities is to extend the circulating life of an item, not to preserve it for future historical value. Therefore, these activities mostly center around commercial binding of serials and monographs, and a small amount of circulating repairs. The library sends some of its repairs to PCL as part of its monthly conservation quota of 13 items. Other items are treated in-house. Again, given the goal of these preservation treatments, items such as tape are used to repair problems like detached covers, rather than the more time-consuming and archival-based techniques and materials used in conservation treatments.

² http://www.lib.utexas.edu/msl/mldisas8.html

³ http://www.lib.utexas.edu/msl/disasterplan.html

The commercial binding is mostly centered on items that have circulated and are damaged, and the library does not do preliminary commercial binding when items come into the collection. All of the final decisions regarding rebinding are made by Ms. Ardis, however the circulation staff puts items on the rebinding shelf for evaluation as they return from circulation. There is no designated preservation budget, and the extent of preservation purchases is limited to materials for in-house repairs.

The library has digitized a few items, which were put in the UT digital repository. These were mostly historic items about the Engineering school and/or items by the school's professors. Any policies about data migration, server backups, and other storage of digitized materials are the responsibility of those in charge of the digital repository, and the engineering library staff has no knowledge of these policies.

Recommendations:

- All materials used for in-house repair should be archival-quality if possible. This will simply help ensure that items remain usable for their expected lifetimes.
- The staff member responsible for binding repairs could contact the Perry-Castaneda Library Conservation department about learning some more repair techniques. This would allow more repairs to be done in-house, thus increasing the number of books that could be sent to PCL for more complicated treatment.
- Again, at least one member on the library staff should be familiar with the UT policies regarding the digital repository and preservation of the digital materials, even if the library is not directly responsible for these tasks.

Prioritized Recommendations

I. Immediate Actions

- 1. The handicapped sign next to the staircase is rather confusing, as does not indicate how a handicapped person can obtain materials from the mezzanine level. In order to better serve handicapped patrons, an additional sign should be placed below the current one, stating that patrons needing materials from the mezzanine level should come to the circulation desk for assistance.
- 2. Books on book trucks should be stored spine-down. Storing books fore edge-down will rapidly cause damage that could result in loose or detached covers. This will remove those books from circulation until they can be repaired. It would better serve the library's circulation goals to practice a safer storage method for these books.
- 3. It would be beneficial to start emptying the book drops three times a day, particularly the drive-up one that is sometimes overfilled. This would require a minimal amount of staff time, but could result in a significant lessening of damaged and stolen books from the drop.
- 4. All materials used for in-house repair should be archival-quality. This will help ensure that items remain usable for their expected lifetimes.
- 5. It is excellent that the moon flag is already expected to undergo conservation treatment. It is recommended that the treatment include placement under a UV filter. The glass in the frame can either be replaced with UV-filtration glass or coated with

- UV-filtration film. This should be specifically requested as part of the conservation treatment.
- 6. The display cases containing artifacts should either be replaced with UV-filtration cases or UV filters should be installed. UV filtration film can be purchased from a variety of sources, and could be applied to the walls of the current display cases to protect the items inside from UV light damage.
- 7. An indoor thermometer would be useful for the staff to perform quick checks of the actual temperature. If two were purchased, one could be placed upstairs and the other downstairs for comparison. This would likely be more accurate than reading the thermostat temperature.

II. Long-Term Projects

- 1. The free-standing shelves that sway should be replaced or further supported immediately, as this is a potential danger to patrons and staff. The easiest solution would be to extend brackets onto the ceiling to support the tops of these shelves. If necessary, the shelves could also be replaced with ones that are wider and thus have a sturdier base. However, this would reduce some of the space between the shelves and in the outer corridor.
- 2. The artifacts displayed and stored in the library should be catalogued in some manner.
- 3. The library should have written disaster-response plans, with which all staff should be familiar. These do not have to be made by the library, but could be slightly altered copies of the university or other library plans. The Marine Science Library has a list of resources for creating a disaster plan⁴ as well as links to examples of disaster plans at UT and other university libraries⁵.
- 4. The staff member responsible for binding repairs could contact the Perry-Castaneda Library Conservation department about learning some more repair techniques. This would allow more repairs to be done in-house, thus increasing the number of books that could be sent to PCL for more complicated treatment.
- 5. The exposed glass pipes are not a serious concern, as they have never had any issues. However, covering them in something opaque would reduce their unsightliness. The library might want to contact both the building manager and university facilities to see about making improvements to these pipes. If possible, it would also be ideal if they were covered in something watertight in case of leaks or breakage.
- 6. The library would do well to form a relationship with the central zone maintenance and learn more about their HVAC system. It is possible that there are changes or upgrades that could be made to improve the climate conditions in the library.
- 7. The library could do some unscientific testing to determine what thermostat setting maintains a comfortable space both upstairs and downstairs, and try to keep the thermostat on that setting. It may be necessary to maintain a lower thermostat setting than the actual desired temperature.
- 8. Although the library is not directly responsible for the preservation of digital materials in its collection, it would be useful for the staff to know what the UT digital preservation policies are, in order to ensure they are being followed for the McKinney Library's collections. At least one staff member should be aware of the specifics of

⁴ http://www.lib.utexas.edu/msl/mldisas8.html

http://www.lib.utexas.edu/msl/disasterplan.html

these UT policies, and do occasionally check-ups with the appropriate departments to make sure they are being carried out.

III. Ongoing Tasks

- 1. It is highly recommended that cleaning of the library occur more frequently and be more thorough. Vacuuming should be done at least once per week, particularly if food is allowed anywhere in the library. The tables, computers, and windows should be cleaned at least once a semester, in all areas of the library. The stacks should be dusted on a regular basis.
- 2. Special attention should be paid to cleaning the staff areas, including the circulation desk, offices, and break room. These should be vacuumed and counters wiped down regularly.
- 3. Ordinarily, it would be recommended that food not be allowed in the library, to help prevent insect infestations, and while this is the library's policy, it is not the current practice, and students with food and drink were observed in the library during the site visit. Therefore, the library staff should ideally strictly enforce the no food or drink rule. However, if the ability to bring food is important to the library's patrons, it might be advisable to allow it. Given that there are some artifacts on display and food can be spilled on and cause damage even to circulating collections, the best compromise might be to allow food only in certain areas of the library. The study tables around the perimeter of the first-floor stacks could be a designated food and drink area, with signs posted to prohibit food from being taken into the stacks. It is also suggested that only drinks in sealed containers be allowed in. It should be noted that if food is to be explicitly allowed in the library at all, thorough cleaning will have to be done regularly to prevent insect infestations.
- 4. The library should update its emergency contact list regularly, at least once a semester. This list should include a phone tree of library staff, a preservation administrator from the Perry-Castaneda Library, facility services, and local vendors for water removal and supplies.
- 5. The library staff should be very proactive in making sure the custodial staff is cleaning to a satisfactory level. The custodial manager should be informed of the necessity of thorough cleaning in the library, and any negligence should be promptly reported. Over time, this will help improve the cleanliness of the library without causing undue additional staff work.
- 6. The fact that leaks were not reported for many years prior to the flood incident is of concern. All leaks and other facilities issues should be reported promptly. In addition, the library would do well to build a stronger relationship with the facilities staff.
- 7. It is recommended that sticky traps be placed around the library and monitored regularly for insect presence. This will simply help alert the staff if insects are becoming an issue.
- 8. The library staff should be aware that humidity is not controlled in this building and mold outbreaks, although unlikely, could occur. Staff should be on the lookout for mold both while performing circulation tasks and when doing shelf checks and straightening. Any moldy items found should be promptly removed from other collection materials and either treated or replaced.

9.	The practices of keeping the blinds closed and turning off of the lights are both good preservation practices and should be continued.

Appendix A: Vendors

- Conservation Resources
 http://www.conservationresources.com
- Gaylord Brothers http://www.gaylord.com
- Hollinger Metal Edge http://www.hollingercorp.com/
- Talas http://www.talas-nyc.com/
- University Products http://www.universityproducts.com

Appendix B: Annotated Bibliography

Applebaum, B. (1991.) *Guide to Environmental Protection of Collections*. CT: Sound View Press.

Provides discussion of storage and display conditions for cultural artifacts. Addresses light, temperature, humidity, and other conditions.

Lyrasis Library Network. http://www.lyrasis.org/

A resource for libraries providing information and links to services. The Preservation and Disaster Resources pages have detailed information and publications to assist libraries developing programs in these areas.

Marine Science Library Disaster Plan. http://www.lib.utexas.edu/msl/disasterplan.html
An example of the important components of a university library disaster preparedness plan.

Appendix C: McKinney Library Floor Plans





