



**University of North Carolina at Chapel Hill  
Morehead Planetarium and Science Center  
Section 504 Compliance Report**



**Office of Diversity and Equal Opportunity**

**February 2013**

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## 1. Executive Summary

As a recipient of Federal grants (including grants by NASA), the Morehead Planetarium and Science Center (“MPSC” or “the Center”) is subject to Section 504 of the Rehabilitation Act (“Section 504”), which prohibits discrimination against qualified persons with disabilities.<sup>1</sup> This report reviews MPSC’s compliance with Section 504 and identifies related promising practices.

During the course of the compliance review, NASA reviewed a variety of materials and documents provided by MPSC and its parent organization, the University of North Carolina at Chapel Hill (“UNC” or the “University”). NASA also conducted an onsite review in February 2012 that included interviews with MPSC and University staff as well as an architectural inspection of the MPSC building and grounds to determine if any barriers to accessibility existed.

Based on the information detailed in this report, NASA has determined that the University and MPSC are in compliance with NASA’s Section 504 regulations.<sup>2</sup> With respect to compliance issues found by NASA during the course of the review, NASA found that the University and MPSC acted to rectify several compliance issues shortly after NASA’s onsite visit and made commitments to rectify other outstanding compliance issues by February 28, 2013, with still others to be completed by September 30, 2013. NASA will continue to monitor UNC and MPSC to ensure the compliance issues are addressed. In general, NASA’s compliance review found as follows:

- **Policies and Procedures.** Both UNC and MPSC have detailed non-discrimination policies and complaint/grievance procedures as required under NASA Section 504 regulations. These policies and procedures cover program participants with disabilities and MPSC is currently developing separate grievance procedures for program participants as well.
- **General Program Access.** MPSC has a number of promising practices for serving program participants with disabilities, especially through children’s education and special needs programs, but NASA found that a number of program access issues needed to be addressed in this area. Since the onsite, MPSC has expanded the content of its web page on accessibility to improve access to key information for program participation. MPSC is currently creating a Guide for Visitors, which includes accessibility information to foster independent access for program participants with disabilities.

MPSC also has developed detailed emergency evacuation procedures for persons with disabilities. Furthermore, both UNC and MPSC will augment their upcoming accessibility training based on suggestions presented by NASA to better serve participants with disabilities. Lastly, MPSC expanded its offerings of auxiliary aids to include programming, its Science Stage presentation area and various classrooms.

- **Effective Communication.** The NASA review team found that MPSC strives to ensure effective communication with its program participants in person, through the expanded content of its accessible web site and in MPSC’s forthcoming Guide for Visitors. In addition, procedures to request auxiliary

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<sup>1</sup> 29 U.S.C. § 794 (2008).

<sup>2</sup> 14 C.F.R. 1251, Nondiscrimination on the Basis of Handicap.

aids are being documented, and new technologies for accommodations are being explored. These efforts should be encouraged to continue.

- **Architecture.** As an older facility, MPSC faces architectural challenges that affect people with disabilities. At the same time, UNC has demonstrated an ongoing commitment towards improving accessibility throughout its campus, including MPSC. This report includes “punch lists” that itemize specific elements to correct. MPSC plans to correct the most critical items for safety and program access in its existing facilities *by September 30, 2013*. Looking to the future, MPSC anticipates making significant changes to its facilities with a comprehensive renovation and 20,000 square foot addition. While this project has temporarily been placed on hold, MPSC will incorporate into its renovation plans the changes listed in this report when the plans are updated just prior to construction

The following summarizes: 1) **Compliance Requirements:** Required actions to correct policies, procedures, practices, facilities that do not currently meet Section 504 compliance standards; 2) **Recommendations:** Suggested actions to enhance or strengthen policies, procedures, practices, and facilities that have achieved basic Section 504 compliance, that have been or will be addressed; and 3) **Promising Practices:** Actions that demonstrate both an advanced level of Section 504 compliance and informal education program delivery that can be shared with and emulated by other science museums:

- **Compliance Requirements**

- Implemented since the February 2012 Onsite Visit:
  - UNC and MPSC have created emergency evacuation procedures for people with various disabilities and MPSC has purchased an evacuation chair that may be used to evacuate visitors from the second or third floors. It also has created a staging area for rescue assistance on the basement level. MPSC conducted emergency procedures training on September 17, 2012 for all full-time and student staff. This training will be on ongoing.<sup>3</sup>
  - MPSC has purchased assistive listening devices for its Sound Stage and classrooms. In addition, MPSC and UNC finalized a form for requesting sign language interpreters and other auxiliary aids.
- To be implemented in 2013 and beyond:
  - UNC and MPSC are developing grievance procedures for program participants, which will be finalized by February 28, 2013 and will disseminate these regularly.<sup>4</sup>
  - MPSC has plans to correct exterior path of travel deficiencies previously identified by NASA in the “punch lists” in this report by September 30, 2013 with plans to address all interior architectural deficiencies listed in NASA’s draft Compliance Report are currently underway. Repairs and changes will be completed by February 28, 2013.<sup>5</sup>

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<sup>3</sup> Neera Makwana Skurky, Assistant University Counsel, UNC, letter to Robert Cosgrove, EO Compliance Manager, NASA re: Comments of Draft Section 504 Compliance Report (Sept. 6, 2012) (hereafter “Sept. 6 letter”).

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

- **Recommendations**

- Implemented since the February 2012 Onsite Visit:
  - MPSC has responded to NASA’s observation that accessibility training for Section 504 Coordinators and staff should be improved by integrating additional training into the work plan for its Section 504 Coordinator. Other MPSC staff also will receive training in disability issues.
  - MPSC disseminated a revised Visitor Survey to improve available feedback mechanisms for program participants. The survey is available on the web site and in hard copy at MPSC’s gift shop and other locations. Feedback will be systematically tracked and analyzed by MPSC.<sup>6</sup>
  - MPSC’s renovation plans provide that all exhibits will be in accessible locations.
  - MPSC has responded to NASA’s recommendation for more information on accessible services on its web site by posting improved and expanded accessibility content on its web site.<sup>7</sup>
- To be implemented in 2013 and beyond:
  - MPSC currently has a draft Guide for Visitors, which includes: a map; general information regarding its facilities for all visitors, including those with disabilities; and information about available auxiliary aids. The Guide for Visitors will be finalized and available both in hard copy and as a link from MPSC’s web site by February 28, 2013.<sup>8</sup>
  - MPSC has responded to NASA’s observation that documented processes for the provision of auxiliary aids should be implemented through formal processes for program participants who wish to request sign language interpreters and other auxiliary aids and services. Specifically, a form for requesting sign language interpreters and other auxiliary aids will be completed or approved by September 30, 2013.<sup>9</sup>

- **Promising Practices**

- Both UNC and MPSC have non-discrimination policies that cover non-student and non-employee program participants that are widely and regularly disseminated.
- UNC and MPSC have active accessibility committees, and a clear focus on transition planning.
  - MPSC has taken a proactive approach to focusing on visitor needs, particularly in its work with the autism spectrum community.
  - UNC's architectural review process is an effective model for similar organizations.
  - UNC's proactive approach to accessibility appears to extend beyond code compliance and considers potential impact on program participants.

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<sup>6</sup> Ibid.

<sup>7</sup> <http://www.moreheadplanetarium.org/index.cfm?fuseaction=page&filename=access.html>

<sup>8</sup> Sept. 6 letter.

<sup>9</sup> Ibid.

## 2. Background

MPSC is a planetarium and science center that is a unit of UNC. The most popular feature of MPSC is its full dome theater (originally built in 1949), which attracts approximately 145,000 visitors annually and seats 229 visitors. In total, MPSC hosted 166,072 visitors in 2010.<sup>10</sup> MPSC employs 36 full-time staff plus between 60 and 100 UNC students (approximately three quarters are work study students and the remaining one quarter are paid student employees).<sup>11</sup> MPSC staff informed the NASA review team that, unlike many science museums, it does not have volunteer staff (docents) to carry out MPSC duties and tasks, such as exhibit interpretation or other visitor services. Instead, student employees perform these tasks.

MPSC has an annual budget of approximately \$4 million.<sup>12</sup> Roughly \$1 million comes from ticket and gift shop sales, \$800,000 comes from UNC, \$600,000 from other grants and contracts, and the remaining \$1.5 million comes from other sources (e.g. fundraising, etc.).<sup>13</sup> As part of its financial planning, MPSC does not allocate a separate budget for accessibility improvements or providing accommodations for program participants with disabilities.<sup>14</sup> Instead, funds are allocated to different sections of MPSC, and each section determines how to use these funds. Significant capital improvements too large to be absorbed by MPSC generally may be handled at the University level.<sup>15</sup> These improvements are referred to UNC's Budget Committee (which reviews requests for larger or "out of budget" items at the University).<sup>16</sup>

The MPSC Director is Dr. Todd Boyette. He has served in this capacity since 2006. He reports to Dr. Carol Tresolini, the Vice Provost for Academic Initiatives, who is responsible for administrative oversight of the various centers and institutes that report to UNC's Office of the Executive Vice Chancellor and Provost. While there is an MPSC Advising Board, it has no administrative authority.<sup>17</sup>

In 2010, NASA conducted a desk audit of Section 504 practices at MPSC. This was followed by a full compliance review, with an onsite phase on February 14-16, 2012. The onsite included an architectural review of MPSC as well as interviews with the MSPC and UNC staff.

This report is based on the NASA site visit (including interviews, documents collected during and after the site visit, and a physical review of MPSC). This report also includes information provided by UNC

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<sup>10</sup> Neera Makwana Skurky, Assistant University Counsel, UNC, letter to Miguel A. Torres, Director, Program Planning and Evaluation Division, ODEO, NASA re: Response to Information Request for Section 504 Compliance Review (Oct. 3, 2011) (hereafter "Oct. 3 letter").

<sup>11</sup> Onsite interview with Todd Boyette (Feb. 14, 2012)

<sup>12</sup> Ibid., Onsite interview with Susan Durham (Feb. 15, 2012).

<sup>13</sup> Onsite interview with Todd Boyette (Feb. 14, 2012)

<sup>14</sup> Onsite interview with Susan Durham (Feb. 15, 2012).

<sup>15</sup> Ibid. (Feb. 15, 2012).

<sup>16</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>17</sup> Neera Makwana Skurky, Assistant University Counsel, UNC, email to Robert Cosgrove, EO Compliance Manager, ODEO, NASA, re: Section 504 Review Update and Question (June 11, 2012).

and MPSC to NASA both prior to and after the onsite portion of the review. Throughout this review process, UNC and MPSC have cooperated with NASA and the review team. MPSC is operated as a unit of UNC.

As an educational facility, the obligations of Section 504 extend to the entire university when any of its individual programs receive Federal financial assistance.<sup>18</sup> While this report is limited to MPSC operations, UNC may consider aligning all of its programs, services, and activities to be consistent with this report in order to support its Section 504 efforts. In addition, where MPSC relies on UNC for preventing or addressing discrimination against program participants with disabilities, UNC policies or practices will be specifically addressed.

### 3. Analysis

Section 504 prohibits discrimination on the basis of disability. Specifically, Section 504 requires that,

*No otherwise qualified individual with a disability ... shall, solely by reason of her or his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance....*<sup>19</sup>

This “program access” requirement has been adopted by the NASA nondiscrimination regulations, which itemize specific prohibitions against forms of discriminatory conduct.<sup>20</sup> While program access is a broad concept, the report breaks this analysis down into the following categories:

- Policies and procedures of UNC and MPSC that may affect program participants with disabilities.
- Program accessibility of MPSC onsite and off-site programs, including additional steps that may augment those programs.
- Effective communication to program participants with disabilities, including those with hearing or vision impairments.
- Architectural accessibility, both for MPSC’s current facility and its planned upcoming renovations.

#### 3.1. Policies and Procedures

Section 504 and the NASA implementing regulations require grantees to adopt policies and procedures that help effectuate Section 504 compliance. In addition, Section 504 requires grantees to provide notice of these policies and procedures. A number of these requirements will be discussed in this section.

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<sup>18</sup> 29 U.S.C. § 794(b) (2008). In fact, Congress deliberately expanded and clarified the reach of Section 504 as part of the Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, 102 Stat. 28 (1988), in order to reverse the narrower interpretation of “program or activity” in *Grove City College v. Bell*, 465 U.S. 555 (1984).

<sup>19</sup> 29 U.S.C. § 794(a) (2008).

<sup>20</sup> 14 C.F.R. § 1251.103.

### 3.1.1. Section 504 Coordinators and Accessibility Committees

The NASA Section 504 regulations require grantees to designate a responsible employee for coordinating their compliance with Section 504.

*(a) Designation of responsible employee. A recipient that employs 15 or more persons shall designate at least one person to coordinate its efforts to comply with this part.<sup>21</sup>*

Section 504 provides relatively little specific guidance for implementing this requirement. Technical assistance materials developed for comparable requirements under Title IX of the Education Amendments of 1972 and Title II of the Americans with Disabilities Act (ADA), however, provide additional assistance in interpreting this requirement. References to Title IX below are intended to shed light on policy guidance issued by the Departments of Justice and Education in a context similar to Section 504 (i.e., a civil rights law intended to ensure equal opportunities in federally funded programs).

The Department of Justice and NASA regulations under Title IX of the Education Amendments of 1972 include roughly similar requirements for a designated responsible employee (DRE), that is, a coordinator of equal opportunity efforts, as well as internal grantee complaint or grievance procedures. Outside the formal regulatory process, the Department of Education has developed technical assistance material to further inform grant recipients on how to fulfill their Title IX obligations.<sup>22</sup> The Department of Justice has recommended that fund recipients abide by these recommendations and has summarized the responsibilities and job requirements for the DRE, or coordinator.<sup>23</sup> These responsibilities include:

- Providing consultation and information to potential complainants,
- Distributing and receiving grievance forms,
- Notifying parties, scheduling hearings, moderating procedures, monitoring compliance and timeliness, maintaining records, and training staff regarding grievance processes, and
- Providing ongoing training and technical assistance.

The core competencies of the DRE include:

- In-depth knowledge of Section 504 and general related knowledge of Federal and state non-discrimination laws,
- Knowledge of the recipient's grievance procedures and personnel policies/practices, and
- Ability to prepare reports on compliance activities, make recommendations to appropriate decision makers, and diagnose and mediate differences of opinion.

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<sup>21</sup> 14 C.F.R. § 1251.106(a).

<sup>22</sup> Department of Education (Office of Civil Rights), *Title IX Grievance Procedures: An Introductory Manual* (2d ed. 1987), available at <http://www.eric.ed.gov/>.

<sup>23</sup> Department of Justice, *Questions and Answers Regarding Title IX Procedural Requirements*, available at <http://www.usdoj.gov/crt/cor/coord/TitleIXQandA.htm>.

According to the Department of Justice, for the DRE to be effective:

- The functions and responsibilities of the DRE must be clearly delineated and communicated to all levels of the entity, employees, and program participants, and
- The DRE must be provided all information and authority and access necessary to enforce compliance requirements.

Because these requirements are not specifically included as part of Section 504, they should be used as rough guidelines for Section 504 compliance and not as strict requirements.

### 3.1.1.1. MPSC

At the end of 2010, MPSC has established a DRE, creating a formal role for a Section 504 Coordinator<sup>24</sup> and identifying Adam Phelps (Guest Relations Manager) as the person who serves in this role.<sup>25</sup> All of the individuals interviewed as part of the NASA site visit uniformly recognized Mr. Phelps as the Section 504 Coordinator and their primary contact within MPSC for all accessibility issues.<sup>26</sup>

The review team found that Mr. Phelps previously spent relatively little time on formal accessibility issues; instead, he addressed these issues as they arose in the context of MPSC's overall approach to visitor services. For example, Mr. Phelps arranged for auxiliary aids and accommodations in response to visitor requests received both before and during their visits to MPSC. Following the site visit, Mr. Phelps has spent a greater portion of his time attending training on accessibility outreach and response, advising on formal accessibility matters and addressing program participants' accessibility needs identified by NASA.<sup>27</sup> As the Guest Relations Manager, he also spends his time on general visitor services, including coordinating field trips from local schools (which comprise the vast majority of MPSC's visitors) during the school year as well as working with all visitors once they arrive.<sup>28</sup> During the summer months, he also works with the summer camp program.

Mr. Phelps has received increasing amounts of training specific to accessibility issues and will continue to do so in the future.<sup>29</sup> Training on accessibility issues is now a component of the work plan for the Guest Relations Manager at MPSC.<sup>30</sup> Prior to the onsite phase of this review, he attended training provided by the UNC Section 504 Coordinator.<sup>31</sup> While MPSC has not conducted formal outreach to disability groups

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<sup>24</sup> Onsite interview with Adam Phelps (Feb. 15, 2012). Previous to this time, MPSC did not have a formally designated Section 504 Coordinator other than UNC's Section 504 Coordinator, Ann Penn. Informally, MPSC directed accessibility concerns to Adam Phelps or to Ann Penn as appropriate under the circumstances. *Id.*

<sup>25</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>26</sup> Onsite interviews with Todd Boyette (Feb. 14, 2012), Denise Young, Jeff Hill, Ron Risch and Richard McColman (Feb. 14, 2012) and Adam Phelps, Karen Kornegay, Crystal Harden, Susan Durham and Lindley Barrow (Feb. 15, 2012).

<sup>27</sup> Sept. 6 letter.

<sup>28</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>29</sup> Mr. Phelps's previous lack of extensive training may be due to the fact that the Section 504 Coordinator role was only recently formalized by MPSC as well as the high demand for Mr. Phelps's time in providing general guest services. Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>30</sup> Comments from UNC on Draft Report (Sept. 6, 2012).

<sup>31</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

(other than the autism community), the Section 504 Coordinator's role in overseeing all guest services enables him to interface frequently with program participants with disabilities.<sup>32</sup>

MPSC's Accessibility Committee (the "Committee") was established in the summer of 2011 and had its first meeting in January 2012.<sup>33</sup> The Committee includes representatives from each department at MPSC, faculty members, accessibility experts, representatives from the North Carolina Rehabilitation Commission, and a parent of a program participant with a disability.<sup>34</sup> Early on, the Committee toured the facility to better understand accessibility issues and investigated audio description for the planetarium and exhibits.<sup>35</sup> The Committee has also provided input on updating MPSC's non-discrimination policy.<sup>36</sup> Bringing together stakeholders and decision-makers is a good step for helping to ensure program access.

### 3.1.1.2. UNC

Completely apart from MPSC, UNC also has a Section 504 Coordinator, Ann Penn, for the entire campus. Ms. Penn serves as the Director of the University's Equal Opportunity /ADA Office. In this capacity, she provides leadership and guidance on all equal opportunity and ADA issues, including oversight and coordination of accessibility throughout the University. Ms. Penn ensures compliance with the University's equal opportunity policies and procedures (for example, the University's Policy Statement on Non-Discrimination, Policy on Prohibited Harassment Including Sexual Misconduct and Discrimination, and ADA Reasonable Accommodations in Employment Policy) by providing campus-wide training<sup>37</sup> and guidance on issues such as disability and accommodations. She also coordinates the provision of reasonable accommodations in employment and works with UNC's Office of Accessibility Resources and Service as well as UNC's Facilities Planning Department. In addition, she oversees UNC's administrative review process for complaints of discrimination, harassment, and retaliation. Overall, she spends about 20-30 percent of her time formally addressing accessibility issues.<sup>38</sup> Those interviewed also noted that accessibility issues relating to MPSC can be escalated to Ms. Penn, as appropriate.<sup>39</sup>

Ms. Penn, as UNC's Section 504 Coordinator, regularly attends meetings, training and workshops on accessibility issues.<sup>40</sup> For instance, she serves as the president of the Triangle Industry Liaison Group and receives training from the National Industry Liaison Group, the U.S. Equal Employment Opportunity Commission, and the American Association for Affirmative Action. She also attends training at the state level that includes accessibility issues.

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<sup>32</sup>Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>33</sup>Onsite interview with Todd Boyette (Feb. 14, 2012); Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>34</sup>Onsite interview with Todd Boyette (Feb. 14, 2012).

<sup>35</sup> Onsite interview with Adam Phelps (Feb. 15, 2012). The Accessibility Committee is working with the PlayMakers Repertory Company at UNC, which currently uses this technology.

<sup>36</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>37</sup> UNC's Office of Human Resources also offer training on ADA and Section 504 issues on a regular basis. See Sept. 6 letter.

<sup>38</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>39</sup> Onsite interview with Jeff Hill (Feb. 14, 2012) and Adam Phelps (Feb. 15, 2012).

<sup>40</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

Implementation of Section 504 tends to take a “top down” approach; consequently, certain major “units” within UNC have employees designated to address ADA and Section 504 issues. In the remaining units, deans, department heads and directors who become aware of accessibility issues bring those issues directly to Ms. Penn. Ms. Penn also is available to consult with other employees.<sup>41</sup> While they work to proactively address accessibility issues, Ms. Penn and UNC’s Disability Advisory Committee, described below, are sometimes consulted on an ad hoc or after-the-fact basis about accessibility issues.<sup>42</sup> In addition, deans, department heads and directors at UNC may not share Ms. Penn’s wealth of accessibility knowledge or training opportunities. Therefore, UNC is taking steps to increase the amount of time spent on accessibility issues during its upcoming mandatory training for managers. UNC continues to offer voluntary training on a regular basis to all employees specifically regarding accessibility issues. Notifications about this training are sent to the campus community on a regular basis. These enhancements should help to better ensure that employees have the requisite skills and knowledge to handle accessibility issues when they arise, through appropriate coordination and other means.

Separate from MPSC’s Accessibility Committee, UNC also has a Disability Advisory Committee (DAC) that includes students, staff, and faculty.<sup>43</sup> MPSC now is a part of the DAC through the participation of its Section 504 Coordinator. UNC’s DAC has a project review subcommittee that reviews new construction or alteration projects at UNC’s Chapel Hill Campus. This subcommittee, which generally meets once a month, has reviewed the proposed renovation plans at MPSC from inception.

As part of the NASA site survey, the NASA team interviewed Michael Pierce, the chair of the Project Review Subcommittee,<sup>44</sup> who works as a facilities planner at UNC’s Facilities Planning Department.<sup>45</sup> While his budget varies each year, in the last six years approximately \$1.3 million was used for independent accessibility improvement projects at UNC.

### **3.1.2. Non-Discrimination Policies**

To further ensure program access, NASA’s Section 504 regulations include a requirement to provide notice of its nondiscrimination policies. Specifically,

*(a) A recipient that employs 15 or more persons shall take appropriate initial and continuing steps to notify participants, beneficiaries, applicants, and employees ... that it does not discriminate on the basis of handicap in violation of section 504 and this part. The notification shall state, where appropriate, that the recipient does not discriminate in admission or access to, or treatment or employment in, its programs and activities. The notification shall also include an identification of the responsible employee designated pursuant to §1251.106(a)...<sup>46</sup>*

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<sup>41</sup> Ibid.

<sup>42</sup> Ibid.

<sup>43</sup> Onsite interview with Lindley Barrow (Feb. 15, 2012).

<sup>44</sup> Onsite interview with Michael Pierce (Feb. 16, 2012).

<sup>45</sup> Michael Pierce has particular expertise in accessibility codes and is a licensed architect in the state of California. Onsite interview with Michael Pierce (Feb. 16, 2012).

<sup>46</sup> 14 C.F.R. § 1251.107.

UNC has a non-discrimination policy<sup>47</sup> that is sent annually to all students, staff, and faculty.<sup>48</sup> The NASA review team found that this policy applies to all programs, services, activities and facilities of UNC, including the MPSC. The policy is administered by UNC's Equal Opportunity/ADA Office (the "EO/ADA Office"),<sup>49</sup> which is overseen by UNC's Section 504 Coordinator. MPSC also has a separate non-discrimination policy, which states as follows:

*Morehead Planetarium and Science Center ("MPSC"), an educational unit of The University of North Carolina at Chapel Hill (the "University"), is committed to providing an inclusive and welcoming environment for all guests, University students and employees. MPSC does not discriminate in offering equal access to its educational programs and activities or with respect to employment terms and conditions on the basis of an individual's race, color, gender, national origin, age, religion, creed, disability, veteran's status, sexual orientation, gender identity or gender expression.*

As currently written, these policies apply not only to students and employees but also to individuals who are not students or employees of the University but participate in UNC's programs or visit its facilities, including the MPSC.<sup>50</sup> Moreover, publications by the MPSC include the following statement:

*Morehead Planetarium and Science Center does not discriminate in offering access to its educational programs and activities on the basis of race, color, gender, age, national origin, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. Visitor inquiries about Morehead's accessibility should be directed to Morehead Guest Relations Manager (mhplanet@unc.edu; 919-962-1236; 250 E. Franklin Street, Guest Relations Office) or to the University's Equal Opportunity/ADA office (equalopportunity@unc.edu; 919-966-3576; 100 E. Franklin Street, Unit 110).*

With respect to the MPSC policy, NASA found that it is widely disseminated. NASA obtained an MPSC brochure card that briefly described MPSC's programs and services and contained the above statement at the bottom of the document.

### **3.1.3. Grievance Procedures**

The NASA Section 504 regulations also require grantees to develop adequate grievance procedures.

*(b) Adoption of grievance procedures. A recipient that employs 15 or more persons shall adopt grievance procedures that incorporate appropriate due process standards and that provide for the prompt and equitable resolution of complaints alleging any action prohibited by this part. Such procedures need not be established with respect to complaints from applicants for employment or from applicants for admission to postsecondary educational institutions.<sup>51</sup>*

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<sup>47</sup> A copy of this policy was provided to NASA as part of this review in February 2010 (the policy is accessible at <http://www.unc.edu/campus/policies/nondiscrim.pdf> and attached as Exhibit A.

<sup>48</sup> Oct. 3 letter.

<sup>49</sup> Ibid.

<sup>50</sup> Sept. 6 letter; UNC's policies are available at <http://www.unc.edu/campus/policies/harassanddiscrim.pdf>.

<sup>51</sup> 14 C.F.R. § 1251.106(b).

These regulations are based on the Department of Justice Section 504 regulations. These regulations and accompanying materials provide only general details about the requirements for a grievance procedure. Title IX regulations are not particularly instructive in this regard either. As the Department's Title IX enforcement manual states, "Title IX regulations do not specify a structure or format for the grievance procedures. Instead, each recipient must develop grievance procedures that most effectively provide for prompt and equitable resolution of complaints."<sup>52</sup> Nonetheless, as with the regulatory provisions on Section 504 coordination, the Department of Education's Title IX technical assistance material provides useful benchmarks for an adequate grievance procedure under Section 504.<sup>53</sup> While recognizing that institutions may be required to adopt unique grievance procedures, the Department of Education materials do outline the basic information sought in a complaint process:<sup>54</sup>

- Name, address, and signature of the complainant;
- A sufficient description of the alleged discrimination to let the organization know what occurred;
- Identity of the injured party;
- Name and address of the institution alleged to have discriminated;
- Approximate date(s) on which the alleged discrimination took place; and
- Provide sufficient background information to permit the organization to commence an investigation.

The review team found that UNC has separate grievance processes for students and employees that apply UNC-wide.<sup>55</sup> The U.S. Department of Education's Office for Civil Rights (OCR) previously requested that UNC make revisions to its student policies<sup>56</sup> and UNC has provided copies of these procedures as part of this compliance review.<sup>57</sup> Under these procedures, the UNC Section 504 Coordinator has responsibility for disposition of complaints involving people with disabilities.<sup>58</sup> The procedures, which were last updated in September 2011, require UNC's Section 504 Coordinator to address the complaint either directly or by referring it to someone in her office.<sup>59</sup> In addition, UNC has a specific procedure for

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<sup>52</sup> Questions and Answers Regarding Title IX Procedural Requirements, available at <http://www.usdoj.gov/crt/cor/coord/TitleIXQandA.htm>.

<sup>53</sup> Department of Education (Office of Civil Rights), Title IX Grievance Procedures: An Introductory Manual (2d ed. 1987).

<sup>54</sup> Id. at p. 16.

<sup>55</sup> Onsite interview with Ann Penn (Feb. 15, 2012). This is confirmed by a review of the UNC web site, which identifies several grievance procedures for employees, (<http://www.unc.edu/campus/policies.html>), and one for students. ([http://deanofstudents.unc.edu/index.php/component/docman/doc\\_download/12-student-grievance-policy-and-procedures.html](http://deanofstudents.unc.edu/index.php/component/docman/doc_download/12-student-grievance-policy-and-procedures.html)).

<sup>56</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>57</sup> Oct. 3 letter.

<sup>58</sup> Oct. 3 letter.

<sup>59</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

the provision of auxiliary aids and other accommodations, in the event that accommodations for students with disabilities are inadequate or not provided.<sup>60</sup>

However, during the course of the compliance review, NASA found that there was no written grievance procedure for MPSC (NASA was informed during the desk audit phase of the compliance review that formal complaints by program participants would be referred to UNC's Section 504/ADA coordinator). NASA also found that UNC did not have a grievance procedure specifically for non-student, non-employee program participants, nor did its current procedures list non-student, non-employee program participants as a covered group. UNC and MPSC informed NASA that they currently have draft grievance procedures that cover program participants. Since UNC's Policy on Prohibited Harassment, Including Sexual Misconduct, and/or Discrimination already includes grievance procedures for students and employees, this new separate policy will provide grievance procedures only for program participants. MPSC's policy will cover program participants and will refer to UNC's Policy on Prohibited Harassment, Including Sexual Misconduct, and/or Discrimination for complaints by students and employees. UNC and MPSC informed NASA that they will distribute these procedures once they are completed and approved by February 28, 2013.<sup>61</sup> Links to these procedures will be posted on MPSC's and UNC's web sites.

The review team also found that, in general, MPSC previously relied on informal mechanisms for soliciting and collecting feedback from program participants.<sup>62</sup> MPSC staff informed NASA that complaints are almost always verbal,<sup>63</sup> and in general, MPSC tries to resolve informal complaints on the spot.<sup>64</sup> If accessibility complaints cannot be resolved immediately, they go to the MPSC Section 504 Coordinator (Mr. Adam Phelps).<sup>65</sup> If the complaints cannot be resolved at that level, they typically escalate immediately to the Director rather than Mr. Phelps's immediate supervisor.<sup>66</sup> Complaints may also get escalated from Mr. Phelps or from the Director to the UNC Section 504 Coordinator, as note above.<sup>67</sup>

While this process tended to facilitate good customer relations, MPSC lost the opportunity to track issues because complaints and other feedback were undocumented. Therefore, MPSC will implement its

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<sup>60</sup> <http://disabilityservices.unc.edu/about-us/our-policies/grievance.html>

<sup>61</sup> Sept. 6 letter.

<sup>62</sup> Onsite interview with Denise Young (Feb. 14, 2012).

<sup>63</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>64</sup> For instance, in the gift shop (a frequent area for interacting with customers), the gift shop manager will try to resolve customer complaints as they arise. Onsite interview with Ron Risch. (Feb. 14, 2012); Onsite interview with Richard McColman (Feb. 14, 2012).

<sup>65</sup> Onsite interview with Jeff Hill (Feb. 14, 2012); Onsite interview with Richard McColman (Feb. 14, 2012); Onsite interview with Adam Phelps (Feb. 15, 2012). Relatively few accessibility complaints are raised to Adam Phelps's level. The only complaints that Mr. Phelps recalled were general complaints about the lack of an internal accessible path connecting different elements within the facility. He also recalls complaints about the lack of an indoor eating area; however these complaints are common to all types of guests and do not appear to be related to accessibility or lack thereof for individuals with disabilities. Onsite interview with Adam Phelps (Feb. 15, 2012); Comments from UNC on Draft Report (Sept. 6, 2012).

<sup>66</sup> Onsite interview with Jeff Hill (Feb. 14, 2012).

<sup>67</sup> Onsite interview with Adam Phelps (Feb. 15, 2012). During Mr. Phelps's tenure as Section 504 Coordinator for MPSC, however, no complaints have ever been escalated to this level.

grievance procedure, which is currently under development, as well as a more formal written survey soliciting feedback from guests. MPSC also will increase the prominence of its existing online guest survey. Furthermore, MPSC now has a tracking system both for feedback derived from its guest surveys and feedback provided to staff members. MPSC's staff continues to have regular staff meetings in which accessibility issues can be shared, discussed, and resolved.

However, staff members also are expected to notify the Section 504 Coordinator of any issues immediately. The Section 504 Coordinator then enters this information into the tracking system in addition to addressing the issues. As a consequence, trends can be easily identified, and the significance of even minor feedback (both positive and negative) can be quantified. Other NASA funded museums and planetariums rely heavily on all feedback and have electronic systems (e.g., databases) for tracking this information with the goal of improving customer service. The review team found that the previous lack of a formal complaint process apparently had not been an issue as no complaints had escalated within the six months prior to the onsite visit.<sup>68</sup> This may largely be attributable to the fact that MPSC usually receives advanced notice of visitors with disabilities (especially from school districts conducting field trips), and the Guest Services section (and, specifically, MPSC's Section 504 Coordinator) advises MPSC's staff when visitors with disabilities will be arriving.<sup>69</sup> In addition, MPSC's staff attempts to be highly proactive and anticipate visitor needs.<sup>70</sup> MPSC has, however, received informal complaints from visitors about the inaccessibility of the NASA exhibit in the basement hallway<sup>71</sup> and this is an issue occasionally discussed at staff meetings.<sup>72</sup>

#### ***3.1.4. Self-Evaluation and Transition Plan***

NASA's Section 504 regulations require fund recipients to conduct a self-evaluation within three years of becoming a recipient.<sup>73</sup> Further, these Section 504 regulations also require fund recipients to create a transition plan for taking the necessary steps for ensuring program access.<sup>74</sup>

NASA found that UNC has developed and implemented a self-evaluation and transition plan. During NASA's initial desk audit of MPSC, NASA learned that UNC developed and implemented a self-evaluation plan that was coordinated by the Section 504 Coordinator and UNC's sub-504 coordinators.<sup>75</sup> In addition, NASA confirmed through a UNC online library search that the University had developed and implemented both a self-evaluation and transition plan when the Title II ADA regulations were

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<sup>68</sup> Complaints have been voiced concerning issues apart from accessibility. Onsite interview with Jeff Hill (Feb. 14, 2012); Onsite interview with Ron Risch (Feb. 14, 2012). For instance, because the gift shop and planetarium are not connected with the rest of MPSC through an internal accessible route, MPSC staff frequently has to direct guests on the exterior accessible route connecting elements of MPSC. Onsite interview with Jeff Hill (Feb. 14, 2012). In addition, there have only been 3-4 complaints specifically regarding accessibility at UNC, none involving MPSC. Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>69</sup> Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>70</sup> Onsite interview with Ron Risch (Feb. 14, 2012); Onsite interview with Richard McColman (Feb. 14, 2012).

<sup>71</sup> Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>72</sup> Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>73</sup> 14 C.F.R. § 1251.105(c).

<sup>74</sup> 14 C.F.R. § 1251.301(d).

<sup>75</sup> UNC/MPSC, Response to Section 504 Inquiry from the Equal Opportunity/ADA Office (April 2010) (hereafter April 2010 response)

promulgated 20 years ago.<sup>76</sup> UNC has long had a transition plan for program access.<sup>77</sup> UNC treats this transition plan as a “living document” and UNC’s Disability Advisory Committee regularly reviews it.<sup>78</sup> UNC has provided NASA with a copy of the “ADA Projects” that includes a listing of architectural changes for improving accessibility throughout the Chapel Hill campus.<sup>79</sup> UNC’s commitment to continuing its barrier removal program throughout the UNC campus (including MPSC) is documented in the architectural accessibility section below.

As noted above, Section 504 requires that Federal fund recipients ensure “program access” to program participants regardless of disability. The remainder of this report addresses these program access requirements.

Section 504 prohibits discrimination against qualified persons with disabilities. In general, this means that people who would otherwise be qualified to participate in a program cannot be discriminated against based on their disability. This obligation prohibits discrimination in the forms of segregation, denial of participation, discriminatory eligibility criteria, and other possible forms of discrimination. It also requires active steps to ensure equal participation by people with disabilities, such as making reasonable modifications of policies, removing architectural accessibility barriers that limit access to programs and activities, and providing accommodations and training employees on how to ensure that programs, services, and activities are accessible to individuals with disabilities.

Like other science centers, MPSC provides basic accommodations to program participants with disabilities. For instance, loaner wheelchairs are made available and chaperones accompanying visitors with disabilities are admitted without charge.<sup>80</sup> Section 504’s program access requirements, however, require substantially more.

This section analyzes program access at MPSC from two perspectives. First, it will review the diverse set of programs operated by MPSC and consider how MPSC provides program access in each of these contexts. Second, this report will examine other steps that MPSC has taken following the onsite visit to further augment program access. Both sections overlap significantly and each will identify promising practices and areas previously identified for improvement within MPSC. More specialized areas of program access (e.g. effective communication, training, and architectural accessibility) are discussed elsewhere in this report.

## **3.2. Program Access**

### **3.2.1. MPSC Programs**

NASA found that MPSC provides program access to program participants with disabilities. The nature of enrollment for these programs, which must be done in advance, provides MPSC with advanced notice of visitor needs so it can be proactive in meeting those needs. Because almost all of the visitors to the MPSC

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<sup>76</sup> <http://www.lib.unc.edu/mss/uars/ead/40029.html#d1e7946>

<sup>77</sup> According to Ann Penn, UNC’s Section 504 Coordinator, the creation of this document predated the start of her employment at UNC in 2006. Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>78</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>79</sup> April 2010 response.

<sup>80</sup> Onsite interview with Ron Risch (Feb. 14, 2012); Onsite interview with Adam Phelps (Feb. 15, 2012).

make reservations ahead of time, MPSC is able to be proactive in meeting the needs of program participants.<sup>81</sup> Reservations<sup>82</sup> can be made online and MPSC's online forms ask about special needs or requests; reservations can also be taken over the telephone, and MPSC's staff always asks about special needs or requests.<sup>83</sup>

MPSC operates a number of programs that serve the community. These include both programs located onsite and throughout the state of North Carolina. NASA found that the educational programs detailed below represent a significant portion of MPSC's overall mission of providing informal science education.

### *3.2.1.1. Onsite School Programming*

MPSC provides a substantial amount of onsite programming for students throughout North Carolina. For local schools, these programs include field trips, science demonstrations, and planetarium demonstrations.<sup>84</sup> To ensure that their programs meet teachers' educational needs, MPSC's staff members stay abreast of state educational standards and work with teachers to build their curricula according to these requirements.<sup>85</sup> Audio and visual content in these modules is also made accessible by MPSC.<sup>86</sup>

Apart from serving local schools, MPSC also offers after-school programs, Scout camps and summer camps that are paid for by parents. The summer camps, in particular, are very popular. Summer camps operate from the second or third week in June through the third week in August and generally include about 15 hours of programming.<sup>87</sup> Summer camps serve approximately 2,020 students of different age groups and focus on aeronautics, astronomy, and chemistry.<sup>88</sup>

In all onsite programming, MPSC provides accommodations for program participants with disabilities. For planetarium and science demonstrations, MPSC allocates space as needed for students with mobility impairments. Because the vast majority of programs require signing up in advance, MPSC requests advance notice of special needs through application forms, MPSC's web site, and phone contact with parents and teachers.<sup>89</sup> Because forms are generally required at least two weeks in advance, MPSC has ample opportunity to thoroughly understand any special needs—and take steps to prepare and meet these needs.<sup>90</sup>

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<sup>81</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>82</sup> Reservations can be made with as few as 10 guests. This permits for reserved events as well as educational programs for home school children. Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>83</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>84</sup> Onsite interview with Denise Young (Feb. 14, 2012).

<sup>85</sup> Onsite interview with Denise Young (Feb. 14, 2012).

<sup>86</sup> Although these accommodation requests are not common, MPSC has staff ready to provide materials in an accessible format. On at least one occasion, transcripts were provided for audio materials. Onsite interview with Denise Young (Feb. 14, 2012).

<sup>87</sup> Summer camps are each one week long and operate in half-day sessions. At peak, MPSC currently can run seven current sections with 16 students in each section. Onsite interview with Denise Young (Feb. 14, 2012).

<sup>88</sup> Onsite interview with Lindley Barrow (Feb. 15, 2012).

<sup>89</sup> Onsite interview with Denise Young (Feb. 14, 2012); Onsite interview with Lindley Barrow (Feb. 15, 2012).

<sup>90</sup> Onsite interview with Lindley Barrow (Feb. 15, 2012).

During the review team’s visit to MPSC, staff highlighted for NASA their ability to serve the needs of children on the autism spectrum. MPSC attributes this to the low student–faculty ratio, its proactive approach to identifying needs early, and its ability to draw on resources from UNC’s Office of Accessibility Resources & Service (previously known as the Department of Disability Services).<sup>91</sup> MPSC has become well known within the local autism community based on the successes of autistic children in its programs, and parents have commented that MPSC has been willing to successfully accept their children in its programs when other places have rejected them.<sup>92</sup> These programs, which include some students who are low functioning (i.e., unable to speak) on the autism spectrum, regularly include about 30-40 students who are higher functioning on the autism spectrum, including those with Asperger’s Syndrome.<sup>93</sup> MPSC staff members attribute their success in this area to their proactive approach that focuses on identifying needs ahead of time and tailoring resources to meet these needs.<sup>94</sup> Specifically, they have worked with parents to identify helpful strategies (such as providing one-on-one educators, quiet or “time-out” areas, private listening headphones, or rearranged age groups). Most recently, they have brought in a teacher with many years of experience working with children on the autism spectrum to provide a training module for MPSC staff specific for meeting the needs of autistic students.<sup>95</sup> The feedback on the onsite programming is generally very positive and the only notable concern is the availability of general parking (not limited to accessible parking).<sup>96</sup> MPSC now tracks such feedback.

### *3.2.1.2. Off-Site School Programming*

In addition to the programs conducted onsite at MPSC and UNC, MPSC also offers a number of off-site programs to school children in the nine counties surrounding Orange County (where UNC’s campus is located). All of these programs are offered free of charge to parents because they are sponsored by local companies.<sup>97</sup> These programs focus on three main activities:

- **Off-Site Summer Camps.** In Wake and Durham Counties, MPSC runs two off-site camps at local Boys Clubs and Girls Clubs that serve approximately 400-500 students.<sup>98</sup> MPSC also runs a larger program in all nine counties (at local libraries) that serves approximately 2,880 students.<sup>99</sup> To run these programs, MPSC hires temporary teachers and high school students.
- **Mobile Labs.** MPSC also owns two 40-foot Bluebird school buses that it has converted into “mobile labs”. These labs include two lab benches and a closed circuit television system that enable students to conduct scientific experiments and watch scientific demonstrations. These labs,

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<sup>91</sup> Onsite interview with Todd Boyette (Feb. 14, 2012).

<sup>92</sup> Onsite interview with Jeff Hill (Feb. 14, 2012); Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>93</sup> Onsite interview with Lindley Barrow (Feb. 15, 2012).

<sup>94</sup> Onsite interview with Crystal Harden (Feb. 15, 2012); Onsite interview with Lindley Barrow (Feb. 15, 2012).

<sup>95</sup> Onsite interview with Lindley Barrow (Feb. 15, 2012).

<sup>96</sup> Feedback on onsite programming usually comes online. Relatively little is received in paper form. Onsite interview with Denise Young (Feb. 14, 2012).

<sup>97</sup> By contrast, most onsite programs (except for those organized by school groups) are charged to parents. Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>98</sup> This program, called “Minds On,” initially served 400 students through the second grade. In 2012, it will be expanding to 500 students through the ninth grade. It is a free program sponsored by a local cable company. Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>99</sup> This program also uses some of MPSC’s buses. It is also a free program sponsored by Glaxo Smith Kline. Onsite interview with Crystal Harden (Feb. 15, 2012).

which focus on middle and high school students, are in constant use throughout the state. Each bus can accommodate up to 24 students, plus an educator and driver. Each of the buses is equipped with a wheelchair lift to enable access by students with disabilities.<sup>100</sup>

- **Mobile Planetariums.** MPSC also owns mobile planetariums that focus on K–12 students. Each of the planetariums is inflatable and accessible by students using wheelchairs. The mobile planetarium program serves approximately 170 schools and 7,000 students annually.<sup>101</sup> This program is also in constant use, performing three shows a week throughout the school year.<sup>102</sup>

As with their onsite programming, MPSC staff members develop their educational programming to align with teachers' educational programs.<sup>103</sup> MPSC's staff includes four educators with a science background (two are former teachers who have an understanding of disability issues in working with individualized education plans). In addition, because these programs rely heavily on using temporary teachers in delivering content, there is a strong focus on working with local teachers and ensuring that state educational requirements are met. Also, because they work closely with local teachers, MPSC staff members do not have any difficulty accommodating students with disabilities (normally, accommodations are already being provided by the local schools ahead of time).<sup>104</sup>

Also similar to its onsite programs, MPSC's off-site programs can provide services and accommodations for children on the autism spectrum and those with other disabilities.<sup>105</sup> MPSC staff members work with parents and educators to identify the specific needs of the student (e.g. special seating, successful mediation strategies for outbursts, etc.) and identify specific strategies for meeting those needs. This is communicated to the teachers, who focus on the interaction needs and special challenges of their students.

MPSC has also worked with the Governor Morehead School for the Blind (the Morehead School). This relationship started when a teacher at the Morehead School attended one of MPSC's mandatory training programs.<sup>106</sup> She then requested that MPSC provide programming at the School. To make this program successful, MPSC worked with the Morehead School and ensured that printed materials were available in large print and that MPSC could provide one-on-one accommodations.<sup>107</sup>

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<sup>100</sup> Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>101</sup> Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>102</sup> In addition to its other off-site programming, MPSC also coordinates the North Carolina Science Festival throughout the state of North Carolina. Onsite interview with Karen Kornegay (Feb. 15, 2012). The Festival, which was started in September 2010, includes approximately 400 activities statewide over a two-week period and includes approximately 77,000 participants. Other museums, parks, and other organizations run their own events as part of the festival and MPSC serves as a clearinghouse for these activities.

<sup>103</sup> Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>104</sup> Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>105</sup> Onsite interview with Crystal Harden (Feb. 15, 2012). As a consequence, MPSC's off-site programs makes specific accommodations for about 10 students with autism a year.

<sup>106</sup> MPSC requires that schools that are interested in participating in MPSC's programs have teachers successfully complete training offered by MPSC before requesting a school visit by MPSC. Onsite interview with Crystal Harden (Feb. 15, 2012).

<sup>107</sup> This program, which started with only five students, has grown. While this would have been the third year for the program, budget cuts have temporarily paused this program.

As with its onsite programming, MPSC provides program access for off-site school programs. These programs leverage local resources and temporary teachers in the communities where students live throughout the state of North Carolina. This means that MPSC can take advantage of accommodations provided by a student's school and, particularly for students with disabilities, resources that are already being provided by schools under the student's individualized education plan (IEP).

### *3.2.1.3. Onsite Programming for the General Public*

With respect to onsite programming for the general public, the Planetarium Fulldome Theater is the most-visited attraction at MPSC. In 2006, MPSC removed little-used seating in the southeast quadrant of the planetarium theater that offered substandard views of the increasing forward-focused planetarium programs. A 2009 renovation involved removing all of the seats to face in one direction towards the front of the theater (similar to a movie theater) in a concentric pattern. The theater was substantially modified to "full dome" digital<sup>108</sup> technology in 2010.<sup>109</sup> In 2011, the seats were reupholstered and the number of designated companion seats for wheelchair users was reduced.<sup>110</sup>

While MPSC focuses its planetarium shows for school groups, about one half of its visitors are from the general public.<sup>111</sup> Seating at each show is first offered to school groups and any leftover seats at each show are sold to the general public. In addition, the planetarium has shows for the general public on weekends and during holidays. Almost all of the tickets sold to the general public are sold in MPSC's gift shop and not online.

MPSC informed NASA that it has not had significant difficulties ensuring program access for these events. MPSC understands its obligations to provide effective communication<sup>112</sup> and has received no complaints in these activities.

### *3.2.1.4. Exhibits and Other Facility Issues*

Unlike many science centers, MPSC has very limited exhibit space. MPSC plans to substantially expand its exhibit space from 800 to 10,000 square feet during its planned renovation. Because of the very limited space currently available for exhibits, its experience in accessible exhibit construction and design is quite limited.<sup>113</sup> The current exhibits were renovated in 2007, however, and MPSC did focus on incorporating universal design principles to ensure that exhibit space was accessible and appealed to different modalities of learning.<sup>114</sup> Ironically, during the NASA physical review of the facility, the most

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<sup>108</sup> Older non-digital planetarium systems rely on a centrally located large mechanical projector to display star images on a painted dome ceiling. In MPSC's digital full dome theater, content is projected from different locations around the perimeter of the theater. In addition to standardizing the design of planetariums, the newer technology has also standardized the content—enabling planetarium shows to be more easily bought and adapted to a specific planetarium.

<sup>109</sup> Onsite interview with Richard McColman (Feb. 14, 2012).

<sup>110</sup> Older accessibility codes required a minimum of four designated companion seats for wheelchair visitors in a theater with 229 seats. Later accessibility codes reduced this number to two designated companion seats. After these changes went into effect, the planetarium reduced the number of designated companion seats to the minimum number required. Onsite interview with Richard McColman (Feb. 14, 2012).

<sup>111</sup> Onsite interview with Jeff Hill (Feb. 14, 2012).

<sup>112</sup> Onsite interview with Jeff Hill (Feb. 14, 2012).

<sup>113</sup> Onsite interview with Denise Young (Feb. 14, 2012).

<sup>114</sup> Onsite interview with Denise Young (Feb. 14, 2012). For example, the exhibits include displays at lower heights

inaccessible exhibit was the NASA-funded exhibit of the astronaut training for the Gemini program. This exhibit is located in a hallway between the main exhibit space and the planetarium wing; it is set lower than the exhibit space and can only be accessed from the planetarium wing through a set of stairs. UNC informed NASA that it would be technically infeasible to eliminate the stairs due to the structural elements of the building. MPSC has guidebooks that include photographs and descriptions of the exhibit elements available in accessible locations.<sup>115</sup>

MPSC is creating a Guide for Visitors to make it easier for program participants with disabilities to independently access different areas of MPSC. While MPSC trains students and employees on directing visitors through the facility,<sup>116</sup> this kind of resource will make MPSC's programs, services, and activities more open and available for visitors with disabilities. This resource will also help address other customer concerns, such as providing directions between the main campus entrance and the gift shop.<sup>117</sup> In addition to reducing the burden on the staff, the accessibility Guide for Visitors will foster independent access for program participants with disabilities.

In addition, MPSC is anticipating making substantial architectural changes during the upcoming renovation of the Morehead Building, which houses MPSC and other units of UNC. MPSC will use its upcoming renovation as an opportunity to ensure that all of its exhibits (including the NASA exhibit and other elements in inaccessible locations) are relocated to fully accessible locations.

#### *3.2.1.5. Other Onsite Programs*

Like other science centers, MPSC hosts special events.<sup>118</sup> Most of these events take place in the large open areas on the third floor of MPSC. In hosting these events, MPSC has assisted a number of visitors with disabilities. Recently, for instance, a wheelchair user attended a gala event and, in order to meet the visitor's needs, MPSC conducted a walk-through with the attendee's assistant. MPSC relocated furniture and installed a temporary ramp to ensure that the event was a success.<sup>119</sup>

As with its other onsite programs, MPSC's Guest Services department is able to be proactive by developing an understanding of visitor needs well ahead of time. While it generally achieves program access, these other events and programs should include the recommendations discussed elsewhere in this report.

### **3.2.2. Additional Steps and Considerations for Ensuring Program Access**

#### *3.2.2.1. Brochures, Web site, and Feedback*

The NASA regulation provides that a "recipient shall adopt and implement procedures to ensure that interested persons, including persons with impaired vision or hearing, can obtain information as to the existence and location of services, activities, and facilities that are accessible to and usable by

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and fewer audio features.

<sup>115</sup> Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>116</sup> Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>117</sup> Onsite interview with Jeff Hill (Feb. 14, 2012).

<sup>118</sup> While it hosts special events, MPSC only hosts two major gala-type events, which attract 175 to 300 attendees, each year. Onsite interview with Jeff Hill (Feb. 14, 2012).

<sup>119</sup> Onsite interview with Jeff Hill (Feb. 14, 2012).

handicapped persons.”<sup>120</sup> With respect to the notification of accessible programs and services, key components of providing such notification include the provision of signage, informational media and training of museum staff. Museum web sites are a critical avenue for reaching program participants and visitors to MPSC are likely to use MPSC’s web site not only for planning their trip, but also for providing valuable feedback to MPSC. UNC informed NASA that MPSC’s web site is frequently visited by its customers, as indicated by MPSC’s own surveys, which revealed that approximately 60 to 70 percent of the people who visited MPSC also visited MPSC’s web site.<sup>121</sup>

With respect to recommended improvements for dissemination of information regarding accessible MPSC programs and services, the review team initially found that there were no brochures with specific information for people with disabilities. While all printed brochures have general information about MPSC’s nondiscrimination policy, these publications direct visitors to MPSC’s web site or to the Guest Relations section. NASA found that during the course of the compliance review and desk audit that MPSC has improved access to information key to program participation by expanding the content of its web page on accessibility. The site now includes a link to the non-discrimination policy discussed above in order to bolster compliance with Section 504. It will also include a more prominent link to the visitor survey in the near future. Finally, MPSC informed NASA that much of MPSC’s web site is now fully accessible to people with disabilities, including people who use screen readers.<sup>122</sup>

With respect to the MPSC’s web site, it previously, included basic information on the site, such as how to obtain an assistive listening device (ALD) headset for planetarium shows, the best accessible entrances for different areas of the facility (including locations of ramps), where to park, details about the provision of wheelchairs, and contact information for visitors; however, accessibility information was not consolidated.<sup>123</sup> Prior to NASA’s onsite visit, MPSC took steps to better consolidate its accessibility information. Following the onsite visit, MPSC also has added information to its accessibility page and continues to do so in order to provide visitors with additional relevant accessibility information.

In the past, MPSC has conducted surveys of school group visitors to better appreciate visitor needs and concerns.<sup>124</sup> Between 2003–2008, paper-based surveys were used after ticketing and before planetarium

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<sup>120</sup> 14 C.F.R. § 1251.302(e)

<sup>121</sup> Onsite interview with Jeff Hill (Feb. 14, 2012). MPSC manages the content of its web site, but outsources its development. To enable MPSC to rapidly make changes, however, MPSC’s web site is based on a customized content management system and updating content is simply a matter of completing an online form. Onsite interview with Karen Kornegay (Feb. 15, 2012). MPSC undertook a review of the accessibility of its web site in early 2012. Based on the results of this review, MPSC engaged a contractor to make accessibility improvements to the web site. (See Sept. 6 letter).

<sup>122</sup> Comments from UNC on Draft Report (See Sept. 6 letter). See, e.g., *Martin v. MARTA*, 225 F. Supp.2d 1362 (N.D. Ga. 2002); U.S. Dept. of Justice, *Accessibility of State and Local Government Web sites* (available at [http://www.ada.gov/publicat.htm#anchor-web site](http://www.ada.gov/publicat.htm#anchor-web%20site)). In general, web accessibility standards have changed. An excellent resource for web developers in web accessibility is the World Wide Web (W3C) Consortium’s *Web Content Accessibility Guidelines (WCAG) 2.0*, available at <http://www.w3.org/TR/WCAG/>.

<sup>123</sup> Onsite interview with Todd Boyette (Feb. 14, 2012); Onsite interview with Jeff Hill (Feb. 14, 2012); Onsite interview with Karen Kornegay (Feb. 15, 2012). Witnesses interviewed by NASA stated that the information previously was located in the FAQ section of the web site and not compiled into a single location devoted to accessibility. Onsite interview with Karen Kornegay (Feb. 15, 2012).

<sup>124</sup> Onsite interview with Jeff Hill (Feb. 14, 2012). As noted earlier, however, school groups only comprise approximately one half of the visitors to MPSC’s planetarium. Because almost all of the tickets for the general public are sold in the gift shop, MPSC has had more trouble surveying the needs of program participants from the

shows. Within the last three to four years, MPSC has transitioned to online surveys.<sup>125</sup> The Guest Services staff also solicits feedback from teachers,<sup>126</sup> which is highly effective because student groups make up the majority of MPSC's program participants. Additionally, MPSC monitors social media (e.g. Facebook, Yelp, etc.) to better understand user experiences at MPSC.<sup>127</sup> Any feedback concerning disability issues will always go to MPSC's Section 504 Coordinator.<sup>128</sup>

MPSC plans to make surveys and other feedback mechanisms more readily available for program participants. In addition, MPSC has improved methods for tracking and analyzing the information derived from its surveys and feedback mechanisms. MPSC has created a spreadsheet on its internal shared drive onto which the Section 504 Coordinator inputs information about both informal and formal feedback derived from surveys. Like other museums and science centers, MPSC will have survey forms readily available at its information desk and public entrances—and will actively encourage feedback (both positive and negative) from all visitors.<sup>129</sup>

### 3.2.2.2. *Emergency Evacuation*

One area touching on program access that required MPSC's immediate attention was emergency evacuation. For example, NASA initially found that MPSC did not have an emergency evacuation chair that can enable individuals with mobility impairments to be evacuated from upper floors of the facility. NASA has also determined that three areas of MPSC's facility can only be accessed by stairs or elevators and this presents unique challenges for program participants with mobility impairments in the event of emergency evacuation. These three areas are:

- The basement area, which includes a small exhibit space (approximately 800 square feet). It also includes the NASA Exhibit (located in a hallway), which highlights the historic contributions of MPSC in NASA's space program.
- The second floor of MPSC, which includes three popular venues for educational programs: The Green Classroom is used for preschool programs, the Blue Classroom focuses on after school programs, and the Science Stage is used for demonstrations and presentations.<sup>130</sup>
- The third floor of MPSC, which includes areas that are primarily used for dining and special events.

Emergency evacuation is frequently included as part of the training given by each section within MPSC.<sup>131</sup> Students and employees are each responsible for ensuring the complete and safe evacuation of

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general public.

<sup>125</sup> MPSC uses an online survey tool (Zoomerang), a link to which is found on its web site. MPSC will enhance the prominence of this link to increase the amount of feedback provided in the survey. See Sept. 6 letter. These surveys are open-ended and request general feedback on MPSC.

<sup>126</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>127</sup> Onsite interview with Adam Phelps (Feb. 15, 2012). Feedback can also come directly on MPSC's web site.

<sup>128</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>129</sup> The need for the survey forms is particularly true for capturing feedback from the general public. See n. 112.

<sup>130</sup> During the NASA onsite visit, we saw each of these facilities in use by local school programs.

<sup>131</sup> Onsite interview with Denise Young (Feb. 14, 2012); Onsite interview with Ron Risch (Feb. 14, 2012); Onsite interview with Richard McColman (Feb. 14, 2012); Onsite interview with Adam Phelps (Feb. 15, 2012); Onsite

designated areas within MPSC. For instance, in the planetarium (the most popular attraction at MPSC), backup lighting and evacuation signage indicates where to go.<sup>132</sup> Staff is trained to ensure that visitors with disabilities are safely evacuated despite physical barriers. In addition, the Section 504 Coordinator and Manager of Guest Services also perform a final walk-through of the facility to ensure that everyone has been successfully evacuated.<sup>133</sup> Similarly, MPSC has developed analogous procedures for emergency lock-downs (e.g., in the event of tornadoes).<sup>134</sup> Many key members of MPSC's staff (including planetarium technicians, Science Stage personnel, gift shop employees, and Guest Services staff) carry portable radios that enable them to be in constant contact during emergencies.<sup>135</sup>

Following the onsite visit, MPSC enhanced its evacuation procedures for program participants with mobility impairments. MPSC now has an evacuation wheelchair and is training staff on how to use the chair to evacuate mobility-impaired visitors from the second and third floors.<sup>136</sup> MPSC purchased the evacuation chairs in part because the age of the facility means that there are no fireproof and smoke-safe areas that can serve adequately as "areas of rescue assistance"; however, MPSC has created a staging area for rescue assistance on the basement level. MPSC also has considered visitors with other disabilities (e.g., autism) who have different needs in the event of emergencies in its revised emergency evacuation plan.

### 3.2.2.3. Training

A key element for achieving program access is training. MPSC achieves its success, despite its small size, through its excellent staff. The NASA onsite review suggested, however, that MPSC had room to improve its training in accessibility and disability issues. MPSC staff had one specific accessibility training session provided by the UNC Section 504 Coordinator, given shortly before the NASA site visit.<sup>137</sup> Some individuals at MPSC also had received additional specialized training, including the following: Todd Boyette (Director), who took a workshop on universal design in exhibits sponsored by the National Science Foundation,<sup>138</sup> Denise Young (Director of Education and Planning), who participated in a seminar on universal design in 2010 and also recalled that several members of her staff had attended a program focused on accommodating autistic students within the six months prior to the onsite visit,<sup>139</sup> and Susan Durham (Director of Finance and Administration), who recalled that she may have had disability training as part of her human resources job duties.<sup>140</sup>

MPSC previously provided and continues to provide staff orientation training each year. This is conducted by each of the sections within MPSC and focuses on a general orientation to MPSC, visitor

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interview with Lindley Barrow (Feb. 15, 2012).

<sup>132</sup> Onsite interview with Richard McColman (Feb. 14, 2012).

<sup>133</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>134</sup> Onsite interview with Ron Risch (Feb. 14, 2012); Onsite interview with Richard McColman (Feb. 14, 2012).

<sup>135</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>136</sup> See Sept. 6 letter.

<sup>137</sup> Onsite interview with Richard McColman (Feb. 14, 2012); Onsite interview with Adam Phelps (Feb. 15, 2012); Onsite interview with Karen Kornegay (Feb. 15, 2012); Onsite interview with Crystal Harden (Feb. 15, 2012); Onsite interview with Susan Durham (Feb. 15, 2012). This training focused on what constitutes a disability, federal disability rights laws, etc.

<sup>138</sup> Onsite interview with Todd Boyette (Feb. 14, 2012).

<sup>139</sup> Onsite interview with Denise Young (Feb. 14, 2012).

<sup>140</sup> Onsite interview with Susan Durham (Feb. 15, 2012).

relations, and other details specific to individual student job responsibilities.<sup>141</sup> Because of the high turnover among student workers, training is seen as an ongoing process.<sup>142</sup> Training also includes general nondiscrimination training and is intended to ensure that staff understands that the Section 504 Coordinator is the central point of contact for accessibility issues.<sup>143</sup> In addition, UNC provides voluntary training for staff and mandatory training for managers.<sup>144</sup> Some of this training touches on accessibility, but none of the interviewees during the NASA site visit could recall an accessibility portion of this training. UNC offers but does not require refresher training.<sup>145</sup> UNC also reminds all staff via annual email of its non-discrimination policy.<sup>146</sup>

Following the NASA site visit, MPSC planned a more focused training program that will cover issues of accessibility and disability, including how to receive and direct accessibility requests and information about both MPSC's and UNC's Section 504 Coordinators.<sup>147</sup> In addition, UNC will enhance the accessibility portion of its mandatory training for all managers.

Despite its past lack of general accessibility training, MPSC's success in meeting the needs of students with autism is yielding the development (in conjunction with the Autism Society) of a training module specific to the needs of students with autism. This is an example of leveraging specific successes with disabilities and memorializing them to become an integral part of the fabric of a grantee's services. At a central level, UNC appears to have training resources specific to disability issues, as well as a willingness to create new ones. UNC's Section 504 Coordinator has conducted other accessibility training sessions similar to the training she recently led at MPSC. UNC also uses online training modules currently for sexual harassment and employment discrimination—and UNC is open to expanding these online offerings to include disability training.

While these are excellent first steps, additional training is strongly encouraged. MPSC (and also UNC) plan to create training opportunities that focus both on Section 504 compliance and the practical needs of people with disabilities. This is particularly important because of MPSC's unique challenges (including, but not limited to, the emergency evacuation challenges discussed previously) and the high turnover of student workers from UNC. Some options for a regular training program include:

- **In-Person Training Courses.** The UNC Section 504 Coordinator is an excellent resource who focuses much of her time on keeping abreast of the latest developments in Section 504 and related accessibility laws. In-person training, such as the one conducted shortly before the NASA site visit, is an excellent way to introduce and reinforce accessibility training each year to MPSC staff.
- **Online Training Courses.** UNC has indicated having success with online training courses—and accessibility training courses can be developed and are available from third parties. Given the

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<sup>141</sup> Onsite interview with Denise Young (Feb. 14, 2012); Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>142</sup> Onsite interview with Ron Risch (Feb. 14, 2012).

<sup>143</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>144</sup> Onsite interview with Ann Penn (Feb. 15, 2012).

<sup>145</sup> Onsite interview with Adam Phelps (Feb. 15, 2012).

<sup>146</sup> Onsite interview with Karen Kornegay (Feb. 15, 2012).

<sup>147</sup> Onsite interview with Lindley Barrow (Feb. 15, 2012).

breadth of programs and services offered by UNC, mandatory online training has already been made available and may be expanded to provide a more cost-effective way of managing the demands of ensuring that everyone understands the requirements of Section 504 and related accessibility laws.

- **Disability Panel Presentations.** Other grantees have reached out to groups such as different sectors of the disability community to share their views in panel presentations with their staff. Learning directly from people with different disabilities— each with different first-hand experiences— is a very powerful tool because it reduces abstract principles to their practical impact on people’s lives.
- **Disability Awareness Training.** Understanding legal obligations is clearly important for compliance, but it does little to ensure that students and staff are comfortable with disabilities. While our society has gone a long way towards successfully integrating people with disabilities into mainstream society, unseen barriers still remain. Direct experiential disability awareness training led by a trainer with a disability can often break down these barriers immediately.

### 3.3. Effective Communication

A key component in providing program access is ensuring effective communication with program participants. This section analyzes this vitally important requirement. The NASA regulations provide that,

*Recipients shall take appropriate steps to ensure that no handicapped individual is denied the benefits of, excluded from participation in, or otherwise subjected to discrimination in any program or activity receiving Federal financial assistance because of the absence of auxiliary aids for individuals with impaired sensory, manual, or speaking skills.*<sup>148</sup>

This “effective communication” requirement means that federal fund recipients must take steps to ensure that people with disabilities are not excluded based on disabilities that affect communication. This requirement may include providing sign language interpreters, transcripts, Braille or audio information.

The term “auxiliary aids” is not specifically defined in the NASA Section 504 definitions. The Department of Justice Section 504 regulation, which agency regulations must conform with, defines “auxiliary aid” as:

*Auxiliary aids means services or devices that enable persons with impaired sensory, manual, or speaking skills to have an equal opportunity to participate in, and enjoy the benefits of, programs or activities conducted by the agency. For example, auxiliary aids useful for persons with impaired vision include readers, Brailled materials, audio recordings, telecommunications devices and other similar services and devices. Auxiliary aids useful for persons with impaired hearing include telephone handset amplifiers, telephones compatible with hearing aids,*

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<sup>148</sup> 14 C.F.R. § 1251.103(b)(3).

*telecommunication devices for deaf persons (TDD's), interpreters, note takers, written materials, and other similar services and devices.*<sup>149</sup>

Because meeting the “effective communication” requirement is essential for program participants in deriving equal opportunities and benefits from MPSC’s programs, it is essential for meeting MPSC’s overall program access requirements under Section 504.

One such auxiliary aid is an assistive listening system, which is required in all assembly areas. Under the older Uniform Federal Accessibility Standards (UFAS), an assembly area included only rooms or spaces accommodating 50 or more individuals. The new ADA 2010 standards, however, removes this limitation and defines “assembly areas” as

*Assembly Area. A building or facility, or portion thereof, used for the purpose of entertainment, educational or civic gatherings, or similar purposes. For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers.*<sup>150</sup>

In developing the 2010 amended regulations for state and local governments under Title II of the ADA, the U.S. Department of Justice reviewed the relatively low cost and high benefit of providing assistive listening systems in its decision to require such systems generally in all assembly areas. This factor, together with the option to choose the 2010 ADA Standards for Federal grantees, suggests that assistive listening systems need to be provided in all assembly areas, regardless of size.

The NASA review suggests that MPSC understands its obligation to provide effective communication to program participants. Because it is part of a much larger academic community (UNC), MPSC can take advantage of resources such as UNC’s Equal Opportunity/ADA Office and Department of Disability Services, now called Accessibility Resources & Services, when sign language interpreters are needed. Like most organizations, MPSC requires advance notice in order to reserve sign language interpreters. The review team found that documented procedures for providing auxiliary aids at MPSC did not exist. Since the onsite visit, NASA learned that MPSC and UNC are developing documented procedures for obtaining sign language interpreters and other auxiliary aids and services.

In other contexts at UNC, requesting accommodations follows standardized procedures. For instance, requesting a change in classroom assignments for students with disabilities follows a specific procedure. For more informal, ad hoc communications, MPSC trains students and staff on how to effectively communicate using a pen and paper. Using written notes for simple and short interactions is generally deemed “effective communication” in such contexts.

MPSC provides assistive listening devices (ALDs) on request for planetarium shows. The gift shop, which is located immediately outside the planetarium entrance, includes signage indicating that ALDs are available. In addition, gift shop staff, including all students who work in the gift shop, are trained on how to meet requests for ALDs. Apart from its planetarium, MPSC also has a lecture hall and a number of

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<sup>149</sup> 28 C.F.R. § 39.103.

<sup>150</sup> U.S. Department of Justice, 2010 ADA Standards, Chap. 1, §106.5.

other classrooms. All classrooms and lecture halls are “assembly areas” vital to MPSC’s programs. NASA found during the onsite visit that these areas did not have ALDs installed, but UNC subsequently informed NASA that each of these areas now has an assistive listening system.

Apart from ALDs, providing other means of effective communication in MPSC’s planetarium shows is challenging. MPSC has used a red light to enable sign language interpreters to interpret content for visitors with hearing impairments while causing minimal distraction for other visitors. For school groups (which usually bring their own interpreters and provide advance notice), this system has worked well and is used several times each year. In addition, MPSC has also been successful in using this approach in the past with no advance notice. Effective communication in planetarium shows is challenging throughout the planetarium field. For instance, technology such as rear window captioning is currently only being used by approximately three planetariums in the country. The situation is no less complicated for visitors with vision impairments. Digital content is rarely audio-described (much of it is pre-recorded when bought). MPSC has shown an interest and commitment to continue innovating in this area and is encouraged to stay abreast of developments that would assist program participants with disabilities.

### **3.4. Architectural Accessibility**

The NASA Section 504 regulations distinguish between existing facilities and newly constructed or altered facilities. Newly constructed facilities and alterations must be “readily accessible to and usable by” people with disabilities. In general, this means that such facilities and alterations must meet the stringent UFAS. By contrast, for existing facilities, NASA fund recipients must ensure that their programs or activities are accessible “when viewed in their entirety.” This requirement does not mean that every physical feature of a facility must meet the UFAS standards, although the UFAS standards generally provide a useful benchmark for those portions of a facility that are used for programs, services, or activities. Instead, the recipient may choose to redesign equipment, reassign services to accessible locations, or choose other methods that ensure accessibility for people with disabilities. As stated in the regulations: “In choosing among available methods for meeting the requirement of paragraph (a) of this section, a recipient shall give priority to those methods that offer programs and activities to handicapped persons in the most integrated setting appropriate.”<sup>151</sup> The UFAS standards generally provide a useful benchmark for those portions of a facility that are used for programs, services, or activities.

#### **3.4.1. Background and Current Practices**

Most of MPSC’s facility was part of the original building created in 1949 and was constructed to the North Carolina’s 1936 building code. In 1972, the structure was substantially expanded by the Morehead Foundation (now Morehead–Cain Foundation).

In 1991, the Office for Civil Rights of the U.S. Department of Education initiated an investigation of UNC’s campus for alleged violations of Section 504. This investigation, which concluded in 1996, required UNC to make architectural changes throughout the Chapel Hill campus including MPSC. At MPSC, these changes included lowering thresholds, modifying toilets, providing handrails, creating an entry ramp (at the West entrance), and lowering elevator controls. Even after the conclusion of the OCR investigation, UNC has continued to remove barriers at MPSC. For instance, in 1998, bathrooms serving

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<sup>151</sup> 14 C.F.R. § 1251.301(b).

the planetarium were upgraded with accessibility improvements. In addition, in 1999, accessible doors were installed at the planetarium. Recently, modifications to the restrooms on the Ground Floor of the Science Center and the renovation of a single-user public restroom at the Gift Shop to be fully compliant offer alternatives to the inaccessible and small public restrooms throughout the facility.

MPSC is planning substantial renovations in the near future. In 2009, the North Carolina State Construction Office approved an addition and renovations that would substantially modernize its facility and greatly improve visitor flow. The planned renovations will also focus on making MPSC into a modern science center by improving lab and classroom space and expanding exhibit space from 800 square feet (currently) to 10,000 square feet (planned). Because of state budget cuts, this planned renovation has not been initiated. The renovation is budgeted at approximately \$73 million. Of this total, \$58 million will be focused on structural changes that will be funded by the state. The remaining \$15 million is a fundraising goal for exhibits, programming, and other nonstructural elements.

As noted earlier, UNC has a careful review process in which any planned renovations at UNC must be reviewed by the project review subcommittee of the Disability Advisory Committee. This committee, which has particular expertise in accessibility standards, also reviews the programs that will occur at each portion of the facility. While this is done in order to ensure that “path of travel” obligations are met under the ADA, it also helps ensure that program access is maintained after all new construction or alterations.

In reviewing plans, the project review subcommittee uses the 2010 ADA Standards (at a minimum) for all projects initiated after September 15, 2010. For purposes of Section 504, this is permissible because the U.S. Department of Justice has advised Federal agencies that their grant recipients can use the 2010 ADA Standards as an acceptable alternative to UFAS. Minor changes (such as changing a door or fixing masonry) are often also required by the subcommittee in order to improve program access. This can usually be done within a week and may involve other entities outside of MPSC. For instance, masonry fixes on the brick sidewalks outside MPSC is handled by the masonry shop because the brick sidewalks and trees surrounding the building are of strong historic significance to UNC. Additionally, the Chair of the Project Review Subcommittee conducts regular physical inspections of existing facilities on UNC’s campus. When he identifies accessibility problems, he works to ensure that they are corrected.

The evidence gathered during the NASA site review suggests that UNC and MPSC perform regular monitoring of physical accessibility issues. As noted earlier, UNC regularly updates its transition plan and treats it as a living document. In addition, the Chair of the Project Review Subcommittee appears to have extensive expertise in accessibility standards and his reviews go beyond simple blueprint reviews, as his subcommittee conducts regular inspections of existing facilities, helps in the planning phases of new projects, and works with the project teams throughout the process. UNC’s accessibility review process—and the Chair of the Project Review Subcommittee’s commitment and understanding of accessibility issues—are examples of the oversight required for Section 504 compliance that can serve as a model for other organizations.

### **3.4.2. NASA Architectural Review**

As noted above, Section 504 requires MPSC to make architectural changes for two separate reasons. First, MPSC must ensure that all new construction or alterations fully comply with UFAS. Second, MPSC must ensure that its programs or activities are offered in accessible locations, which may entail making architectural changes to existing spaces.

The following analysis was undertaken both from an architectural and programmatic perspective. It is divided into New Construction/Alterations and Program Access Barriers "punch list" subsections and considers each area of the facility with respect to the UFAS accessibility requirements. The New Construction/Alterations analysis is intended to help MPSC avoid problems in its upcoming expansion and is based on a review of architectural drawings provided by UNC. It also includes a review of several recently constructed projects that fall within the ambit of Section 504 and ADA Title II. By contrast, the Program Access Barriers "punch list" is a review of the facility with respect to UFAS and is intended to highlight significant or important barriers that may directly affect program participants.

#### **3.4.2.1. New Construction and Alterations "Punch List"**

There has been no "new construction" at MPSC since the August 7, 1984 publication date of the UFAS standards. The only "punch list" item associated with the alterations to this facility is the need to install accessible U-shaped pulls on the interior side of the new accessible toilet stalls in the Men's and Women's Restrooms on the ground floor of the Science Center. The interior pulls will be added to all accessible toilet stalls within 120-180 days following issuance of this Report.

The new seating layout in the Planetarium provides for seven accessible wheelchair seating areas along the open sides of the two main aisles in this auditorium of 229 seats. The existing historic double doors do not allow a wheelchair user to pass through a single leaf, but there is an accessible alternate route between the Gift Shop/Ticket Sales area to the Planetarium - exiting next to the control booth and offering an accessible route to each of the available wheelchair seating areas along the two main aisles. There is no UFAS based requirement for emergency egress in older facilities such as this, but Section 504's program access requirements mandate a more complete plan for evacuating patrons with disabilities in the event of an emergency. MPSC has developed such a plan and will continue to train responsible staff in order to reinforce this plan.

In terms of the upcoming changes planned at MPSC, the following recommendations are made resulting from a review (based on the 2010 ADA Standards) of the architectural drawings provided by MPSC:

#### **Accessible Parking and Passenger Loading Zone**

1. Revise the two specified "van accessible" parking spaces to conform to the 2010 ADA Standards provision that access aisles be 5' wide and vehicular spaces be 11' wide. (Sheet C:9.01 - ADA Stds. 502)
2. Revise accessible parking space sign drawings to have the lowest sign at least 5' above the pavement or ground. Note that the Landscape plans do not show a post mounted sign for the accessible parking space closest to the new addition. (Sheet C:9.01 - ADA Stds. 502.6)

3. The passenger loading zone on the north side of the new addition lacks the required 5' wide by 20' long marked access aisle to designate the portion that is accessible to disabled visitors. (Sheet C:3.01 - ADA Stds. 503.3)
4. The 2010 ADA Standards omitted the truncated dome detectable warning provision related to curb ramps and the flush transitions along the edges of the passenger loading zone shown on the Landscape drawings. Therefore, the specified detectable warning treatments that can be very uncomfortable for wheelchair users to bump over may be omitted from the design. (Sheet L:1.01 - ADA Stds. 403 & 28 CFR 35.133(c))

### **Accessible Approach**

1. The  $\frac{3}{4}$  high "raised granite pavers" specified to be placed under the overhanging Gnomon of the Sundial are likely not adequate to alert blind pedestrians of the potentially dangerous 21'-9" long cantilevered metal Gnomon hanging over the route to the building. The cantilevered metal arm will not be cane detectable to blind pedestrians walking along the designated accessible approach route from the public bus stop on Franklin Street to the new entrance of MPSC's addition. Consider an alternate accessible cane detectable railing under the overhanging Gnomon. (Drawing 8:L-5.04 & 11:L-5.02 - ADA Stds. 307)
2. Reconstruct the existing brick walkway which leads from the plaza in front of the west entrance of the building to the new concrete approach ramp structure at the southwest corner of MPSC - there is a section here that has a running slope steeper (at 10.9%) than the maximum 5% allowed without accessible ramp features such as handrails and edge protection, and the intersection of these walks creates cross slopes that exceed (at 4.7%) the 2% maximum. (Sheet L:1.01 - ADA Stds. 403.3)
3. The granite trench drain specified at the Sundial plaza has  $\frac{3}{8}$ " wide slots that are positioned so they are parallel to the direction of pedestrian traffic and are required by the ADA Standards to be positioned so the slots are perpendicular to the direction of pedestrian traffic. (Sheet L:3.04- ADA Stds. 302.3)
4. The proposed brick walkway that will be re-graded and reconstructed along the northwest corner of MPSC and which leads from the new north entrance area to the west entrance area is specified to slope more (at 1:18 or 5.6%) than the maximum 5% allowed without ramp features such as handrails and edge protection. Alteration projects must provide accessibility to the maximum extent feasible given the existing project constraints. (Sheet C:5.01- ADA Stds. 403.3)
5. The lowest ramp run of the new ramp at the southwest corner of MPSC is specified to have a slope greater (at  $(481.71' - 479.03')/25.75' = 0.104$  or 10.4%) than the maximum specified 8.3% for ramp running slopes. (Drawing 10:A0.15 - ADA Stds. 405.2)
6. The review team found no specified work associated with the need to repair the exterior side of the existing metal threshold on the main west-side Science Center Lobby entrance which has an un-beveled  $\frac{1}{2}$ " lip. (ADA Stds. 404.2.5) UNC will correct this existing threshold within 120-180 days following issuance of this Report.

## Accessible Public Space

1. Correct the new 3rd Floor Lobby ramp, which has a running slope specified that exceeds (at  $(513.11-511.35)/21' = 0.0838$  or 8.4%) the maximum specified 8.3% for ramp running slopes. UNC will address this item within 120-180 days following issuance of this Report. (Drawing 1:A1.05 - ADA Stds. 405.2)
2. The existing sconces lights flanking the opening at the bottom of the stairs leading to the State Dining Room are scheduled to be refurbished and replaced, but these fixtures project more than 4" into the circulation route between 27"-80" AFF. A cane detectable element will be added below the sconces within 120-180 days of the issuance of this Report. (Drawing 8:A4.02 - ADA Stds. 405.2).
3. The 7" overhang of the bar counter at the kitchenette in the Scholar's Room (Room 2004) projects more than 4" into the circulation route between 27"-80" AFF and needs to be protected by a cane detectable element below. (Drawing 15:A4.06 - ADA Stds. 405.2)
4. The Coat Room hanging rods are not cane detectable for blind visitors. Provide solid, full height end panels to create alcoves into which the rods may be placed as shown. (Drawing 19:A4.25 - ADA Stds. 307)
5. Confirm that the wall mounted light sconces specified to be mounted 48" above the stair nosings at the monumental stair do not project further than the maximum allowed 4" from the wall. Confirm that all specified wall mounted light sconces do not project further than the maximum allowed 4" from the wall or are mounted above 80" AFF. (Drawing 1:A4.25 - ADA Stds. 307)
6. The Star Theater (Room G004) is shown with 195 seats of which five are designated accessible wheelchair seating spaces and the wheelchair seating spaces shown are not proposed to be dispersed for horizontal lines of sight comparable to others. Wheelchair seats are required to be positioned in the second and third quartile of the rows in the seating layout and these are set at the extreme ends of rows. (Drawing 2:A4.31 - ADA Stds. 221.2.3.1)
7. The underside of the lowest level stairs (Stair 2 N-S) lack cane detectable elements so blind visitors do not hit their heads. (Drawing 5:A5.02 - ADA Stds. 307)
8. The existing West Lobby reception desk specified to be refurbished lacks a lowered (36" high max. and 36" long minimum) accessible portion to serve disabled visitors of MPSC. (Drawing 2:A6.52 - ADA Stds. 227.3)
9. Regarding signage, the typical 3" horizontal installation position specified from the adjacent door casing for room designation signs is closer to the door jamb than the 9" centerline specification for the horizontal position of the sign from the door jamb in the ADA Standards. In addition, consider adding the accessible approach routes and designated accessible entrances on the 3"Wayfinding Maps" shown on Sheet A11.23.

### **Accessible Public and Common-Use Staff Restrooms**

1. In the Basement Level Men's and Women's public restrooms, there are no 36" wide ambulatory accessible toilet compartments with parallel grab bars and out-swinging doors as required for restrooms with six or more toilets (seven proposed in the Women's Restroom) and urinals (three toilets and three urinals in Men's Restroom). (Drawing 1:A4.41 - ADA Stds. 213.3.1)
2. In many of the public and common-use restrooms, the wall-mounted, folding baby diaper changing station is proposed to be mounted within the 60" wide by 56" deep toilet or toilet compartment clear floor space and it is not an acceptable restroom accessory allowed to overlap the toilet clear floor space. (ADA Stds. 604.3.2)
3. For all public and common-use restrooms with wall-mounted, electric hand dryers - confirm that the units specified do not project more than 4" into the circulation route between 27"-80" AFF and if so, ensure that the protruding objects are protected by a maximum 27" high cane detectable element below. (Drawing 8:A4.02 - ADA Stds. 405.2)
4. Lavatories are not acceptable restroom accessories allowed to overlap the 60" wide by 56" deep toilet clear floor space and are shown within the toilet clear floor space in many of the restrooms in this set of plans - reconfigure and relocate the lavatories as required. (Drawings 1:A4.42, 1:A4.43 & 11:A4.44 - ADA Stds. 604.3.2)
5. The newly proposed 30" x 60" shower in the Accessible Guestroom bathroom (Room 2104A) is not allowed to have a glass enclosure (as specified) that prohibit wheelchair users from transferring onto the shower seat and roll-in showers such as this are not allowed to have curbs or thresholds higher than 1/2" - this shower has a 4' high curb. Additionally, there are no grab bars shown on the elevations of this shower as required. (Drawing 13:A4.44 - ADA Stds. 608.8, 608.7 & 608.3)
6. The 60" wide accessible toilet stall with full height partitions in the Women's restroom (Room 2002W) on this drawing lacks the additional 6" of width required in accessible stalls to accommodate toe clearance for wheelchair users and the stall door swings illegally into the clear floor space of the toilet. Consider removing the partition to make this a single-user restroom without a toilet compartment and the 60" wide toilet clear floor space will suffice. (Drawing 1:A4.44 - ADA Stds. 604.8.1.4 & 604.8.1.2)

#### *3.4.2.2. Program Access Barrier Removal "Punch List"*

For those areas of the facility that were constructed before the effective date of the UFAS standards, the NASA regulations require that an existing facility analysis be based on the "program accessibility" provisions such that all programs, services and activities offered by MPSC are accessible to individuals with disabilities when those programs are viewed in their entirety. There are a few architectural barriers within this facility that must be modified to ensure program access, but the most significant architectural barriers that prevent program access exist at the site arrival points and along the pedestrian approach routes to the Gift Shop and Science Center Lobby entrances. After analyzing comments from staff and management regarding the full range of programs, services and activities offered, the following

architectural barriers should be corrected per UFAS or the 2010 Standards (UNC and MPSC must choose one standard for alterations to MPSC) to ensure program access.

UNC informed NASA that it has used the 2010 Standards for all new construction and alterations to existing buildings since September 15, 2010. UNC advised NASA that on September 1, 2011, the 2012 North Carolina Building Code went into effect. After a six-month transition period, compliance with the North Carolina Building Code will become mandatory on June 1, 2012. Both the North Carolina Building Code and the 2010 Standards are based on the 2009 International Building Code (the North Carolina Administrative Code has state amendments), but there may be some differences in minimum dimensions. The accessibility standards referenced are the 2009 American National Standards Institute (ANSI) A117.1 Standards for Accessible and Usable Buildings and Facilities. Future renovations and additions to MPSC's facilities will comply with the latest version of the North Carolina Building Code and the Accessibility standards referenced therein. NASA recognizes MPSC's and UNC's obligation to comply with Federal and State accessibility standards. However, NASA notes that accessibility standards are minimum standards. In order to ensure compliance with both accessibility standards, NASA recommends that where one standard offers less accessibility for a particular design feature than the other, that MPSC design and construct accessible building and facility elements to the *most* accessible of the two standards, and document the use of a different standard.

For those areas of the facility that were constructed before the effective date of the UFAS standards, the NASA regulations require that an existing facility analysis be based on the "program accessibility" provisions such that all programs, services and activities offered by MPSC are accessible to individuals with disabilities when those programs are viewed in their entirety. There are a few architectural barriers within this facility that must be modified to ensure program access, but the most significant architectural barriers that prevent program access exist at the site arrival points and along the pedestrian approach routes to the Gift Shop and Science Center Lobby entrances. After analyzing comments from staff and management regarding the full range of programs, services and activities offered here, the following architectural barriers should be corrected per UFAS or the 2010 Standards to ensure program access.

**Accessible Parking** - There are two existing designated accessible parking areas in the public parking lot immediately North of the building (i.e., on the Sundial side). Each of these designated accessible parking areas has surface slopes greater (at up to 5.5% at the east pair of spaces and up to 6.1% for the western space) than the maximum allowable 2% specified in UFAS.



**Figure 1 -- Designated Accessible Parking**

Approach Routes from Designated Accessible Parking - The curb ramp serving the east pair of designated accessible parking spaces has a running slope greater (at 15.8% ) than the maximum allowable 8.3% and a cross slope greater (at 7.2% ) than the maximum allowable 2% per UFAS. The cross slopes of the brick pavers between this curb ramp and the entrance to the Gift Shop exceeds (at up to 7.6% near the Bus Loading Area) the maximum allowable 2%. The curb ramp serving the other (western) designated accessible parking space includes a running slope greater (at 9.5% for the asphalt portion and 10.5% for the brick portion) than the maximum allowable 8.3% and includes an inaccessible asphalt lip at the bottom that exceeds (at 1/2") the maximum allowable 1/4" per UFAS. The brick path leading from this single designated accessible parking space to the front entrance to the Science Center also includes sections that exceed the maximum 2% (i.e., 3.5% at the intersection of the walk along the north side of the building and the walk along the west front of the building). Significant surface slope problems exist where the front entrance ramp meets the main brick walks at the northwest corner of the Quad fronting the Howell Building (with inaccessible 10.9% approach route slopes and 5.1% cross slopes). Lastly, there is a 1/2" high unbeveled lip at the exterior side of the metal threshold at the main Science Center front doors on the west side of the building that will need to be modified to include a maximum 1:2 sloped bevel.



**Figure 2 – Inaccessible Eastern Curb Ramp**



**Figure 3 – Inaccessible Western Curb Ramp**



**Figure 4 - 7.6% Cross Slope on Approach Walk**



**Figure 5 - 10.9% Approach Walk Slopes**

**Gift Shop** - The stanchion mounted tape barriers, with only one retractable tape, used as aids for queuing visitors at the entrance of the Planetarium, create a protruding object for blind and visually impaired visitors prohibited by UFAS 4.4.1 and are positioned too close to the wall to allow the minimum required 32" clear passage width between the weighted bases and the face of the wall opposite. The use of tape barrier systems with two parallel retractable tapes including one at or below 27" set at least 32" away from the walls will correct this problem (See Figure 6).



**Figure 6 - Gift Shop Tape Barriers**

**Science Center Exhibit Areas** - The current route visitors take between the Gift Shop/Planetarium and the Exhibit areas of the Science Center leads down inaccessible steps to the basement level and upstairs on the west side of the building. This basement level (also housing the Vending Room and NASA exhibits) is the only public portion of the building that is not on an accessible route. Currently, disabled visitors exit the Gift Shop/Planetarium through the accessible automatic entry door and travel on the inaccessible brick walks around the north and west sides of the building until they ascend the ramp at the main Science Center entrance doors on the first floor. After the physical approach route barriers identified above are corrected, management must be extra sensitive to those patrons with disabilities who are required to go around the exterior of the building to meet up with others in their tour group to complete a tour of the facility. Recognition of this alternate exterior accessible route has been included in the Guide for Visitors and will be mentioned in other orientation materials made available to the public, especially those with disabilities, until future accessible building additions are completed and correct this issue.



**Figure 7 – Steps at NASA Basement Exhibits**

**Interior Accessible Routes in the Science Center** - The current inaccessible historic door hardware on the various classrooms, Science Stage and upper level Lounges appear critical to the historic character of the interior design of the beautiful facility and as long as staff are available to open these door, or will

leave them open during events, the historic door hardware may remain. There are however, a few wall mounted fire extinguishers that project into hallways and circulation routes further than 4" between 27"-80" high which creates protruding hazards for blind and visually impaired visitors. These elements may be lowered so the bottom edge is at or below 27" or there is a cane detectable element installed below the protruding objects. This condition also applies to the hi/low drinking fountains on the Ground Level Lobby (near the accessible Men's and Women's restrooms), which need cane detectable elements to be installed. The wall mounted television monitor in the West Lobby of the Science Center projects 8" out from the wall with the bottom higher (at 47") than the maximum detectable 27" height. This condition also applies to the wall mounted sconce lights in the second floor lobby that flank the arch at the bottom of the stair leading up to the third floor spaces. Additionally, on the route down to the Basement level from the curving Ground Level exhibition halls, there is an exposed stair underside that lacks (at only 76") the minimum 80" head height and must be screened off from cane users.



**Figure 8 - Protruding TV in West Lobby**



**Figure 9 - 9.7% Portable Wood Ramp**

**Lounges on the 3rd Floor** - The current pair of Dining Lounges on the third floor include an inaccessible 3 1/2" high step at the entrance doors. There is an inaccessible portable wooden ramp that slopes more (at 9.7%) than the maximum 8.3% and is not at least 36" wide (only 30" wide) which must be disposed of and replaced with an accessible ramp for each room until the proposed renovations to this level include making the floors flush with the central dining rotunda on this level.

**Science Stage** - This interactive science laboratory offers accessible wheelchair spaces by removing portable chairs on the front row of the tiered seating structure that houses 79 seats. The presentations offered here include audio/visual components as well as live demonstrations where a public address system is used, but there is no assisted listening system present to accommodate hard of hearing participants.

School Group Picnic Shelter - The current fabric tent used to shelter the picnic tables for school groups is not located on an accessible route from the designated accessible arrival points (bus stop and designated accessible parking spaces) due to the lack of any paving along the route to the tables. The picnic tables also lack any accessible wheelchair seating areas – 5 percent of the seating should be accessible to ensure program accessibility for disabled visitors.



**Figure 10 - Inaccessible Picnic Shelter**

Apart from these compliance issues, two accessibility features throughout MPSC are noteworthy because they demonstrate UNC’s and MPSC’s commitment to accessibility. First, the two designated accessible exterior entrance doors include automatic door openers to aid with disabilities to enter the facility. Secondly, many of the room identification signs include both raised letters and Braille characters. MPSC’s and UNC’s approach towards architectural accessibility extends beyond simply compliance with standards and considers impact on program participants.

## **4. Implementation Strategies**

This section identifies a number of key recommendations for bolstering Section 504 compliance as well as deficiencies that must be corrected by MPSC and UNC. These recommendations and compliance requirements are listed in the Executive Summary section of this report and described throughout this report.

The following hierarchy represents the relative priority of actions requiring implementation.

### **4.1. Actions Requiring Immediate Action**

**4.1.1.** Incorporate recommendations from NASA’s independent review of upcoming MPSC renovations into blueprints using applicable accessibility standards.<sup>152</sup>

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<sup>152</sup> UNC informed NASA that the current construction documents for the addition/renovation were approved by the North Carolina (NC) State Construction Office under the previous NC Building Code and ADA Standards. When funding is allocated by the State Legislature to construct the project the documents will be brought into compliance

## **4.2. Important Actions to be Completed in 120-180 Days**

- 4.2.1. Develop UNC and MPSC grievance procedures to include program participants with disabilities.
- 4.2.2. Publish the Guide for Visitors, which includes information for visitors with disabilities.
- 4.2.3. Continue to improve content for accessibility portion of MPSC's web site.

## **4.3. Additional Actions Recommended for Completion in One Year**

- 4.3.1. Continue to improve accessibility training for all employees, students, and volunteers furthering UNC or MPSC programs.
- 4.3.2. Distribute forms (electronic and paper-based) for capturing participant feedback and continue tracking this feedback.
- 4.3.3. Create documented processes for requesting sign language interpreters and other auxiliary aids and services.

## **5. Exhibits**

### **Exhibit A**

#### ***UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL POLICY STATEMENT ON NON-DISCRIMINATION***

The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals' abilities and qualifications. Consistent with this principle and applicable laws, it is therefore the University's policy not to discriminate in offering access to its educational programs and activities or with respect to employment terms and conditions on the basis of race, color, gender, national origin, age, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression.\* Such a policy ensures that only relevant factors are considered and that equitable and consistent standards of conduct and performance are applied. A copy of the University's EPA and SPA Equal Opportunity Plans are available on the University's web site <http://www.unc.edu/depts/eoada/>.

Any University unit that publishes materials that contain the University's non-discrimination statement should include all bases of non-discrimination (race, color, gender, national origin, age, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity, and gender expression) in that material, as follows:

*For educational materials:*

The University of North Carolina at Chapel Hill is committed to equality of educational opportunity. The University does not discriminate in offering access to its educational programs and activities on the basis of race, color, gender, age, national origin, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. The Equal Opportunity/ADA Office (100 E. Franklin Street., Unit 110, CB #9160, Chapel Hill,

NC 27599-9160 or (919) 966-3576)has been designated to handle inquiries regarding the University's non-discrimination policies.

*For employment materials:*

The University is an Equal Opportunity Employer. The University reaffirms its commitment to equality of opportunity and pledges that it will not practice or permit discrimination in employment on the basis of race, color, gender, national origin, age, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression.

If you need assistance in reviewing your materials or have additional questions, please contact the Equal Opportunity/ADA Office at 919-966-3576 or the Office of University Counsel at 919-962-1219.

Any inquiries regarding the University's non-discrimination policies should be brought to the attention of one of the following administrators, as noted:

Discrimination in employment or educational programs and activities	University EEO/ADA Officer CB# 9160, 100 E Franklin St., Unit 110 Chapel Hill, NC 27599-9160 919-966-3576
Discrimination in employment	Vice Chancellor for Human Resources CB #1045, 104 Airport Drive Chapel Hill, NC 27599-1045 919-962-1554  Academic Personnel Office CB# 8000, 218 South Building Chapel Hill, NC 27599-8000 919-843-6056
Discrimination involving students	University EEO/ADA Officer CB# 9160, 100 E Franklin St., Unit 110 Chapel Hill, NC 27599-9160 919-966-3576
Sex discrimination in educational programs and activities	University Title IX Officer CB# 9160, 100 E Franklin St., Unit 110 Chapel Hill, NC 27599-9160 919-966-3576

The University's Counseling and Wellness Services (919-966-3658) is available to provide confidential assistance to students. The University's Ombuds Office (919-843-8204) is available to provide confidential assistance to employees.

This matter deserves our careful attention and our shared commitment to ensuring the University remains free from discrimination and harassment in all aspects of its activities and operations.

Last revised: June 2008, August 2008

Revised: February 2012

*Related University Policies*

Policy Statement on Non-Discrimination  
Official Recognition of Student Organizations Non-Discrimination Policy

\* The University's policy prohibiting discrimination on the basis of sexual orientation, gender expression and gender identity does not apply to the University's relationships with outside organizations, including the federal government, the military, ROTC, and private employers.

## **Exhibit B**

### ***MOREHEAD PLANETARIUM AND SCIENCE CENTER POLICY ON NON-DISCRIMINATION***

Morehead Planetarium and Science Center ("MPSC"), an educational unit of The University of North Carolina at Chapel Hill (the "University"), is committed to providing an inclusive and welcoming environment for all guests, University students and employees. MPSC does not discriminate in offering equal access to its educational programs and activities with respect to employment terms and conditions on the basis of an individual's race, color, gender, national origin, age, religion, creed, disability, veteran's status, sexual orientation, gender identity or gender expression.

MPSC adheres to all applicable University policies, including the University's Policy Statement on Non-Discrimination, the Policy on Prohibited Harassment and Discrimination, the ADA Reasonable Accommodations in Employment Policy and the policies of the Department of Disability Services.

MPSC welcomes requests from guests with special needs and/or requests for accommodations. Such requests may be made by contacting:

Guest Relations Manager  
Morehead Planetarium and Science Center  
The University of North Carolina at Chapel Hill  
250 East Franklin Street  
CB #3480  
Chapel Hill, North Carolina 27599  
(919) 962-1236 or 711 NC Relay  
mhplanet@unc.edu

Comments or complaints by guests regarding the accessibility of MPSC programs and activities, or questions or concerns regarding the University's policies prohibiting harassment, discrimination and retaliation, may be addressed to MPSC's Guest Relations Manager. The Guest Relations Manager shall notify the University's Equal Opportunity/ADA Office regarding any complaints alleging prohibited harassment, discrimination or retaliation within five (5) calendar days of receipt. The Equal Opportunity/ADA Office shall, in accordance with the University's Policy on Prohibited Harassment and Discrimination, provide for resolution of all such complaints.

University students or employees with questions, concerns, or complaints regarding harassment, discrimination, or retaliation should contact:

Equal Opportunity/ADA Office  
The University of North Carolina at Chapel Hill  
100 East Franklin Street, Unit 110  
CB # 9160  
Chapel Hill, North Carolina 27599  
(919) 966-3576 or 711 NC Relay  
equalopportunity@unc.edu