

Recommendations for Implementation of ADA Accessibility Guidelines to UNOLS Vessels

For presentation to the Fleet Improvement Committee and the UNOLS Council

DRAFT

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A. General Description of ADA

The Americans with Disabilities Act (ADA) recognizes and protects the civil rights of people with disabilities and is modeled after earlier landmark laws prohibiting discrimination on the basis of race and gender. To ensure that buildings and facilities and certain modes of transportation are accessible to and usable by people with disabilities, the ADA establishes accessibility requirements for State and local government facilities, places of public accommodation, and commercial facilities. Under the ADA, the Access Board has developed and continues to maintain accessibility guidelines for new construction and alterations of buildings and facilities; the guidelines are known as the ADA Accessibility Guidelines (ADAAG) and accessibility guidelines for transportation vehicles.

B. Comments by Mike Prince on the Applicability of ADAAG to UNOLS vessels

I have now read the first two sections of the draft guidelines and it seems clearer that these particular guidelines will NOT apply to Subchapter U vessels or un-inspected research vessels. I have also found some information in the DOT notice that explains the relationship between the Access Board "Guidelines" and Federal Agency Regulations.

That being said, these guidelines could still be used when we are looking at ways to make our vessels "accessible".

I was concerned about the possibility of these guidelines applying to our vessels because of an earlier message I received from Paul Beatty at the U.S. Access Board that indicated the board wanted these guidelines to apply beyond Subchapter H, K, C or T vessels. That does not appear to be the case and I have a call into him to confirm.

So...for the moment these guidelines appear to NOT be directly applicable, but they would probably still serve as good guidance for any efforts to incorporate ADA accessibility into our research vessels to accommodate ³persons² with disabilities.

Here are pertinent excerpts:

V106 Definitions

V106.1 General. For the purpose of this document, the terms defined in V106.5 have the indicated meaning.

V106.2 Terms Defined in Referenced Standards. Terms not defined in V106.5 or in regulations issued by the Department of Justice and the Department of Transportation to implement the Americans with Disabilities Act, but specifically defined in a referenced standard, shall have the specified meaning from the referenced standard unless otherwise stated.

V106.3 Undefined Terms. The meaning of terms not specifically defined in V106.5 or in regulations issued by the Department of Justice and the Department of Transportation to implement the Americans with Disabilities Act or in referenced standards shall be as defined by collegiate dictionaries in the sense that the context implies.

V106.4 Interchangeability. Words, terms and phrases used in the singular include the plural and those used in the plural include the singular.

V106.5 Defined Terms: [The terms Passenger, Passenger Vessel and Vessel are not defined, so the definitions in 46 CFR would stand as far as I can tell]

From the Discussion of Provisions for Section V201.1 Scope: ... The advisory committee applied its recommendations to passenger vessels which are subject to U.S. Coast Guard regulations found at 46 CFR Subchapters H or K, and smaller passenger vessels subject to Subchapters C or T. Determining which Subchapter applies to a passenger vessel is based on the number of passengers a vessel is permitted to carry and the volume tonnage of a vessel...

Actual language of the section:

V201 Application

V201.1 Scope. All passenger areas of newly designed and newly constructed passenger vessels permitted to carry

more than 150 passengers or more than 49 overnight passengers, and altered portions of existing passenger vessels permitted to carry more than 150 passengers or more than 49 overnight passengers shall comply with these requirements.

Information from DOT's Advance Notice of Proposed Rulemaking (explains relationship of Access Board guidelines to regulations).

We should say a word about the relationship between the Access Board and DOT rulemakings. Under the Americans with Disabilities Act, the Access Board adopts, through a rulemaking process, guidelines for the accessibility of facilities and vehicles. The Department of Transportation and the Department of Justice must then adopt, in their regulations, minimum standards that are consistent with the Access Board's guidelines. For example, the Access Board has adopted the Americans with Disabilities Act Accessibility Guidelines (ADAAGs), codified at 36 CFR Part 1191. In turn, the Department of Transportation adopted these guidelines in its ADA regulations, as Appendix A to 49 CFR Part 37, the Department's ADA rules. The Department's rules require accessibility in certain situations; the Access Board guidelines that the Department has adopted define accessibility in considerable detail. With respect to passenger vessels, the draft Access Board guidelines will lead, after the conclusion of the Access Board's rulemaking process, to final guidelines for accessible passenger vessels. The Department's ANPRM will lead, following the conclusion of the Department's rulemaking process, to a regulation requiring nondiscrimination and accessibility in passenger vessel service. The Department's final rule will adopt minimum standards consistent with the final Access Board passenger vessel guidelines. Because the two agencies' rulemakings are so closely intertwined, and because they must result in regulations that are consistent with one another, the two agencies intend to work together closely throughout this project. The Department will also coordinate its proposed regulation with the Department of Justice (DOJ), which has responsibility for enforcing the Department of Transportation's ADA rules with respect to private entities (and most passenger vessel operators potentially covered by the Department of Transportation's rules are likely to be private entities). We will also coordinate closely with the Coast Guard, which is now part of the Department of Homeland Security. The Coast Guard has extensive expertise in passenger vessel matters that will be invaluable in this rulemaking, and the Department must also ensure that its rules are compatible with Coast Guard safety rules for vessels.

The Draft Guidelines are at:

<http://www.access-board.gov/pvaac/guidelines.htm>

The DOT Advance Notice of Proposed Rulemaking (ANPRM)

<http://a257.g.akamaitech.net/7/257/2422/06jun20041800/edocket.access.gpo.gov/2004/04-26093.htm>

C. Definition of Scientific Personnel on Research Vessels

Sub-chapter U talks about persons.

PART 188--GENERAL PROVISIONS--

Table of Contents Subpart 188.05--Application

Sec. 188.05-33 Scientific personnel--interpretive rulings.

(a) Scientific personnel on oceanographic research vessels are not considered to be seamen or passengers, but are considered as "persons" when requirements are based on total persons on board.

(b) Scientific personnel on such vessels shall not be required to possess seamen's documents nor shall they be required to sign shipping articles.

If we start using the term passengers we are opening ourselves up for getting thrown into the Passenger Vessel rules area where we clearly don't want to be. Additionally, by inference, Passenger indicates payment for a trip and this could cause problems with the definition of Oceanographic Research Vessel (ORV)

PART 3--DESIGNATION OF OCEANOGRAPHIC RESEARCH VESSELS--

Table of Contents Subpart 3.05--Definition of Terms Used in This Part Sec. 3.05-3 Oceanographic research vessel. ``An oceanographic research vessel is a vessel which the U.S. Coast Guard finds is employed exclusively in one or more of the following: (a) Oceanographic instruction; (b) Limnologic instruction; (c) Oceanographic research; or, (d) Limnologic research."`

J. Conceptual Guidelines to Implement ADAAG on UNOLS Vessels

Improvement of access to UNOLS vessels in the spirit of the ADA is focused to the scientific and living spaces in UNOLS vessels. This includes the working decks but actual additional safety concerns arise and must be considered carefully.

The desire to improve accessibility of UNOLS vessels with regard to ADAAG must be considered within the context of the cost of changes for existing vessels and constraints imposed by the existing configurations. For new vessels that are undergoing complete design spirals, the additional costs and the design constraints are minimized. The overall goal of improving accessibility for the disabled is the maintenance of a safe working environment and provide as much a quality experience as practical.

- 1. Existing Vessels** – Existing vessels in the UNOLS fleet offer the least opportunity for implementing changes to improve ADA accessibility. In general, the costs of modifications to existing vessels is least efficient of funds since many of the existing vessels are scheduled for retirement in the next decade. In a practical sense, there are probably very few changes that can be incorporated in the existing local class and regional class vessels.
- 2. Refitting of Vessels** – Refitting of special purpose vessels like seismic and drill ships is often much more practical than new construction. The options for including design enhancements to existing hulls that are refitted are more numerous and less costly than modifications to existing UNOLS vessels. However, the extent that ADA modifications are practical will be very dependent on the specific configuration of the vessel.
- 3. New Vessels** – New vessel construction offers the most opportunity to design and construct vessels that will provide improved access to the disabled. The general size of the vessel will still determine the extent that special ADA design features can be integrated into the vessel. As vessel sizes decrease from global class to ocean class to regional class to local class the smaller dimensions of facilities makes the range of ADA improvements more difficult, if not impossible.
- 4. Size Class of Vessels** – The size classification of research vessels will place practical limits on the extent that ADA enhancements can be incorporated into the UNOLS fleet.
- 5. Special Purpose Research Vessels** – Special purpose vessels in the UNOLS fleet such as submersibles or aircraft may not be practical for ADA improvements. The addition of ADA features will be very dependent on specific configuration of the vessel.

K. General Recommendations for Hearing Impaired

Improvements to UNOLS vessels for those that are hearing impaired are probably the easiest to implement and are the least expensive. The inability to hear a full range of sounds presents a potential safety factor since voice signals and communications are often used to alert of danger or unsafe conditions. This is particularly important with regard to ship alarms which are usually bells or claxtons that sound emergency signals. Recent technology has created wigglers that are silent alarms that can be actuated from a central location. It may be advisable to recommend that UNOLS research vessels investigate acquiring a wiggler alarm system. In the absence of specific modifications for the hearing impaired, the safety rules aboard all UNOLS vessels should include specific safety precautions for protecting persons who are hearing impaired. This may be the designation of a "buddy system" and the designation of a specific buddy to make sure any hearing impaired persons are aware of all safety signals. The science spaces and staterooms could also

be outfitted with flashing lights that respond to ship alarms. It may also be advisable to designate a special area to muster during an emergency warning.

L. General Recommendations for Visual Impaired

Improvements to UNOLS vessels for those that are visually impaired do not require major space alterations so there may not be a large cost associated with these changes. The inability to clearly see objects presents a potential safety factor since visual signals are often used to alert of danger or unsafe conditions. In the absence of specific modifications for the vision impaired, the safety rules aboard all UNOLS vessels should include specific safety precautions for protecting persons who are visually impaired. This may be the designation of a “buddy system” and the designation of a specific buddy to make sure any visually impaired persons are aware of all safety signals. The science spaces and staterooms are normally outfitted with bells and claxtons that signify an emergency conditions. It may also be advisable to designate a special area to muster during an emergency warning.

M. General Recommendations for Mobility Impaired

Improvements to UNOLS vessels for those that have mobility impairments require the most space alterations so there may be a large cost associated with these changes. The inability to move freely without assistance presents a potential safety factor since evacuation is often necessary in the case of danger or unsafe conditions. In the absence of specific modifications to improve access for mobility impairments, the safety rules aboard all UNOLS vessels should include specific safety precautions for protecting persons who cannot move freely around the vessel. This may be the designation of a “buddy system” and the designation of a specific buddy to make sure any mobility impaired persons can utilize the safest evacuation routes. The science spaces and at least one stateroom and bathroom should be outfitted to accommodate wheelchairs and other mobility impairments. It may also be advisable to designate a special area to muster during an emergency warning.

N. Specific Recommendations for UNOLS Vessels to Become ADA Friendly

1. New Vessels – New research vessels should include as many of the following accommodations in scientific workspaces and living quarters as possible to conform to ADAAG while taking into account the size of the vessel and any special circumstances. A list of suggested design features for various scientific work spaces and accommodations is given below but it should not be considered exhaustive. A more complete listing with specifications large cruise vessels can be found on the website for ADAAG (<http://www.access-board.gov/pvaac/guidelines.htm>) but it should be recognized that many of the recommendations are not practical (and not mandatory) for research vessels.

- Scientific Laboratories
 - Main Lab
 - Wet Lab
 - Chemistry Lab
 - Computer Lab
 - Electronics Lab
 - Environmental Chamber
 - Scientific Freezer
- Common Living Areas
 - Passageways
 - Public Restrooms
 - Mess Deck
 - Lounge/Library
 - Exercise Room
 - Personnel Elevator
- Stateroom
- Bathroom/Shower
- Weather Decks

2. **Refitted Vessels** – Refitted research vessels should include as many of the following accommodations in scientific workspaces and living quarters as possible to conform to ADAAG while taking into account the size of the vessel and any special circumstances. It is recognized that existing design constraints will make some ADA alterations impractical. As a minimum, one stateroom with nearby bathroom should be modified for ADAAG. It would also be desired that some alterations to the scientific workspace be undertaken to accommodate the disabled. A list of suggested design features for various scientific work spaces and accommodations is given below but it should not be considered exhaustive. Accessibility of staterooms by the disabled may be problematic because of the lack of personnel rated elevators. Items listed with a question mark may not be practical depending on the particular design of the vessel. A more complete listing with specifications large cruise vessels can be found on the website for ADAAG (<http://www.access-board.gov/pvaac/guidelines.htm>) but it should be recognized that many of the recommendations are not practical (and not mandatory) for research vessels.

Scientific Laboratories

- Main Lab
- Wet Lab
- Chemistry Lab
- Computer Lab
- Electronics Lab
- Environmental Chamber
- Scientific Freezer

Common Living Areas

- Public Restrooms?
- Mess Deck?
- Lounge/Library?
- Exercise Room?
- Personnel Elevator?

Stateroom

- Bathroom/Shower
- Weather Decks?

3. **Existing Vessels** – Existing research vessels should include as many of the following accommodations in scientific workspaces and living quarters as possible to conform to ADAAG while taking into account the size of the vessel and any special circumstances. It is recognized that existing design constraints will make some ADA alterations impractical. As a minimum, one stateroom with nearby bathroom should be modified for ADAAG. It would also be desired that some alterations to the scientific workspace and mess deck/lounge be undertaken to accommodate the disabled. A list of suggested design features for various scientific work spaces and accommodations is given below but it should not be considered exhaustive. Accessibility of staterooms by the disabled may be problematic because of the lack of personnel rated elevators. Items listed with a question mark may not be practical depending on the particular design of the vessel. A more complete listing with specifications large cruise vessels can be found on the website for ADAAG (<http://www.access-board.gov/pvaac/guidelines.htm>) but it should be recognized that many of the recommendations are not practical (and not mandatory) for research vessels.

Scientific Laboratories

- Main Lab?
- Wet Lab?
- Chemistry Lab?
- Computer Lab?
- Electronics Lab?
- Environmental Chamber?
- Scientific Freezer?

Common Living Areas

- Public Restrooms?

Mess Deck?
Lounge/Library?
Exercise Room?
Personnel Elevator?

Stateroom
Bathroom/Shower
Weather Decks?