

**Sign Advisory Work Group  
Minutes of the 8-9 January 2002 Meeting**

The following attended all or parts of the meeting:

Debra Stokes, New Orleans District, Chair of the Sign Advisory Work Group  
Henrik Strandskov, St. Paul District, National Sign Program Manager and  
manager of the Sign Standards Program Mandatory Center of Expertise (MCX)  
Mike Kidby, Operations and Navigation Branch (CECW-OD), co-proponent at  
HQUSACE of the MCX  
Judy Rice, Natural Resources Management Branch (CECW-ON), co-proponent at  
HQUSACE of the MCX  
George Tabb, Natural Resources Management Branch (CECW-ON)  
Kevin Baumgard, St. Paul District, Chief of Operations Branch (where the MCX is  
located)  
Tim Grundhoffer, St. Paul District, MCX member  
Dave Johnson, Pittsburgh District  
Duane Johnson, Sacramento District  
Steve Logan, Mobile District  
Greg Mollenkopf, Baltimore District  
Tom Sully, St. Paul District, MCX member  
Jim Ulrick, St. Paul District, MCX member  
Dennis Wallace, Kansas City District

George Tabb opened the meeting with a greeting from HQUSACE. He announced that changes in duty assignments in Natural Resources Management Branch mean that he will no longer have the sign program responsibility. Judy Rice will assume that duty. It is noted here that George has demonstrated outstanding leadership in the Corps sign program for twenty years.

Judy also addressed the group, expressing her pleasure at getting the opportunity to start a new program, but she will be especially busy because she has retained her regular assignments. George noted that Judy will inject new energy into the role of sign standards program proponent.

**UNICOR.**

The group discussed the new legislation that lessens the requirement that Department of Defense agencies must buy from UNICOR. George said that we should talk to Office of Counsel about this. Mike Adams is the lawyer in HQUSACE Contracting Office and is our best advisor with regard to UNICOR purchasing. Another contact is Frank Norcross, who is the HQUSACE official with special responsibility for overall coordination with UNICOR.

Dave provided a copy of a new law, which states that the Secretary of Defense will make a determination about the comparability of price, quality, and time of delivery of UNICOR products. If the product is not comparable, the Department of Defense agency contemplating a purchase may carry out a competitive bidding process in which both private industry and UNICOR may participate. The Secretary of Defense will develop guidance to help agencies comply with the new law.

There was a general discussion about how the new law would affect the sign program. For instance, concern was raised that it may now be more difficult to ensure signs are made to our precise specifications. Tom questioned whether the Secretary of Defense would determine product comparability at a national level.

There was general agreement that it was much too early for Corps sign buyers to think about changing their procedures; our supplier will continue to be UNICOR. Henrik had asked Abe Burgos, our UNICOR POC in Washington, to attend the meeting to discuss the matter. Unfortunately, he was too ill to attend but he did send a copy of an internal UNICOR memo discussing the new legislation.

It was agreed that Judy and Debra would meet with Mike Adams and Frank Norcross on 9 January after our meeting had adjourned. Based on information gathered at that meeting, and on the memo Abe Burgos had provided, Henrik would send out preliminary guidance to the field. It was anticipated that the guidance would stress that it was much too early to be changing sign buying procedures. A more formal memo, perhaps with material provided by the office of the Secretary of Defense, would be issued by HQUSACE later.

**NOTE:** On 23 January 2002 the MCX issued the preliminary memo as a direct email message to all district and division Sign Program Managers and via the "Unofficial Corps of Engineer's Park Ranger Email Network." The text of the memo follows:

"As many of you are aware, the recently passed National Defense Authorization Act of 2002 included a provision that may change the way the Department of Defense (DOD) buys products from UNICOR. The law requires the Secretary of Defense to 'conduct market research to determine whether the (UNICOR) product is comparable in price, quality, and time of delivery to products available from the private sector.' If the UNICOR product is not comparable, DOD agencies will use competitive procedures to buy the product.

The rules to be used to implement this law by DOD agencies like the Corps are a long way in the future. There is a working group sponsored by the office of the Secretary of Defense that is beginning to formulate guidelines for the DOD agencies, but nothing is expected from that group for at least a year. It is also most likely that DOD will go through the formal rule-making process to establish Federal Regulations to implement the law.

In short, everything about our process of buying signs from UNICOR remains the same for the foreseeable future. There is absolutely no permission at this time to buy signs from the private sector unless you have received a waiver from Jim Halbeisen at the sign factory in Lompoc.

If there are any questions, call me at (651) 290-5578.

- Henrik Strandskov"

*Delays at UNICOR.* There continue to be sporadic reports of delays at UNICOR, ranging from shipping delays to late credit card billing that fell over the end of a fiscal year. In most cases of

shipping problems, it was agreed that Jim Halbeisen, the factory manager, provided prompt service to correct the situation. It was recognized that lockdowns at the prison could cause unexpected delays. **Problems should be reported promptly to the MCX so that Henrik can follow up with the factory.**

*Ordering signs over the Internet.* A question has been raised as to whether the Corps could order signs over the Internet, as it does uniforms. It was noted that this would be difficult because of security concerns. One way to begin this process would be just to request quotes over the Internet. The upgraded sign software could incorporate the ability to request quotes from UNICOR; alternatively, some Corps staff could fax requests directly from their computers. Henrik will call Jim Halbeisen to ask whether requesting quotes and/or ordering via email are possible.

*Price lists.* UNICOR is not up-to-date with the price lists it is required to provide us. Henrik will discuss this with Jim Halbeisen and encourage him to provide the updated lists.

*Sign hole placement.* Sign hole placement on UNICOR-manufactured signs is not standardized. Thus, some replacement sign orders come with sign holes that do not correspond with the fastening points on the existing posts. Tim is preparing standardized specifications for hole placement. He will coordinate this matter further with Jim Halbeisen at the Lompoc Penitentiary.

### **Buying within the Corps**

Henrik reported that another issue related to sign buying came up this past year. The MCX was asked whether a Corps district could buy signs from another district's sign shop. (There are still several districts with in-house sign-making capability.) The answer is that this is a perfectly acceptable practice, and ordinary inter-district fund transfer procedures are used.

### **Sign Software Upgrade.**

Henrik reported on the status of the sign management software upgrade. The upgrade would convert the DOS-based "Sign Manager" software to a Windows-based program called "Corps SignPro."

The MCX has completed the approval process required by the Corporate Information Office at HQUSACE for the software upgrade. The process was fairly complex because the software upgrade, although not extremely expensive to purchase, will be used Corps-wide. We received final approval from the USACE Corporate Information Officer on 16 October 2001.

The contract for the upgrade was advertised by the St. Paul District's contract office in September. The only potential vendor who expressed interest in bidding was the developer of the original sign management software, Peter Reedijk, now of Studio Reedijk in Portland, Oregon. Mr. Reedijk had questions about the terms of the proposed contract, which were answered by the MCX. As of the end of the year, Mr. Reedijk was still preparing his contract proposal. We expect to receive it in January 2002.

Judy and George emphasized that the funds that have been set aside for the upgrade must be obligated and expended this fiscal year, preferably within the next four to six months.

A question was raised about compatibility problems between the "Sign Manager" software and computers that have been upgraded to operate on the Windows 2000 or Windows NT operating systems. Debra reported that we have been lucky because the program has worked so far. She said that we have been able to fix any compatibility problems with newer operating systems with relatively simple patches.

Duane noted that at his project they have dedicated a computer running Windows 95 to run the Sign Manager software and other older programs. He added that they have had a problem editing already-created signs with the older software.

Judy asked if there is a manual for the software. Debra reported that there are a few left. She has updated the manual electronically and is trying to get it on the NRM Gateway website.

Henrik will contact Mr. Reedijk to make sure he is proceeding expeditiously with the upgrade proposal.

*Helvetica font that can be used by the software.* Dave has studied the availability of a Helvetica font that could be used by the software and found none. He created his own as a True Type font. It is hoped that this can be used in the upgraded software. The characters are exact according to the manual but the created font does not have the appropriate kerning. Dave said that he needs a software program that allows him to establish pair kerning.

Tim asked whether it makes much difference given that the Lompoc sign factory, as well as Corps sign shops, has the software to make the sign correctly even if the sign shown on the order form is not quite right. Debra responded that many of those who order signs want to see exactly what the sign will look like before making their order final. Dave and Henrik will discuss the kerning problem with Peter Reedijk, and Dave will keep looking for a pair-kerning program.

*Training.* The work group discussed the need for training after the software upgrade is released. It was agreed that a "train the trainer" process would be best. Each district Sign Program Manager should receive the necessary training, and then she or he would in turn be responsible for training the rest of the district staff involved in the sign program. As far as possible the initial training on the software should be mandatory for each district Sign Program Managers.

### **Waterway Signs.**

Mike provided some background to the problems some districts have had installing compliant waterway signs. He noted that at some projects, big issues have been the potential large size of signs and the lack of property to erect the signs. The policy memo issued by Charles Hess on 4 September 2001 stated the policy of the Corps of Engineers to be that restricted areas and other hazards at our locks and dams and other waterway facilities may be marked using a combination of daymarks and marking buoys as the primary marking system. The memo does not preclude the use of worded safety signs when appropriate and necessary. Using the daymarks will save money because we can use smaller sign panels to give the same message as the larger worded signs.

Mike and Karlissa Krombein (Office of Counsel, HQUSACE) have met with the Coast Guard to get approval to use the Coast Guard symbols on daymarks. We have that approval, and individual projects that wish to begin using Coast Guard symbols now may do so. Mike and Karlissa also obtained the specifications for the symbols and passed them on to Tim and Tom in the MCX. Tim, who will prepare revisions to Section 14 of the sign manual to add specifications for the daymarks, said that he has talked with local Coast Guard personnel to get more references. Tim handed out a brief outline of what he has completed on this task and what is proposed.

Tim noted that he will also be working on sign specifications for upgrades to St. Paul District's waterway signs at locks and dams, and this work will give him a "head start" on the national specifications. Right now Tim's goal is to evaluate the Coast Guard information and give some general guidance to Corps staff. He recommends that our guidance reference the Coast Guard regulations; if we do that, any Coast Guard changes will automatically be incorporated into our guidance.

It had been estimated in the past that approximately \$150,000 would be needed by the MCX to complete the engineering work necessary to update Section 14 to incorporate the changes discussed above. Judy said that the funding for revising Section 14, so that it included the Coast Guard specifications, has not been included in the budget. Mike will discuss with Barry Holliday, Chief of the Operations and Navigation Branch, the additional details they need from the MCX about the work to provide the funding. The points of contact to provide this information are Henrik, Tim and Judy. The members of the MCX (Henrik, Tim and Tom) will meet to determine what the MCX can spend this year on waterway sign engineering, and then coordinate this information with HQUSACE.

Tim noted that part of St. Paul District's implementation of the daymark symbols would include an education program for users of our locks and dams, for many of whom the symbols will be new. Debra recommended the MCX continually update the NRM Gateway website with information on the educational programs being tried in St. Paul and then follow up with discussions of how the various efforts worked out.

Steve asked about the 2003 deadline indicated on the 4 September 2001 memo. The memo specifies that projects are expected to take action immediately to develop and install an effective hazard marking system at all sites that are not currently in compliance with the Sign Standards Program. This should be accomplished no later than 1 January 2003. Mike replied that he and Karlissa would have to work together to provide guidance to the field on how the deadlines will specifically apply to the daymarks.

Tim noted that right now anyone could use existing Coast Guard guidelines and specifications to start implementing a compliant sign plan that uses the Coast Guard markings. Tim will send us an email providing the location of all the Coast Guard guidance. (Tim subsequently provided the address of the website that contains the Coast Guard Aids to Navigation. It is: <http://www.uscg.mil/systems/gse/gse2/AtonManual.htm>.) Steve noted that there is hesitancy in his division to proceed with waterway signs until there is more specific Corps guidance on the subject. Tim responded that the memo in September was not intended to keep people from

starting now; any guidance that we ultimately provide will not be critical to implementing the program. That is possible now with the material already published by the Coast Guard.

Mike committed to publishing additional Corps guidance. It will encourage the field staff to march forward. The MCX will work with Mike to draft guidelines that clarify the earlier memos. Included in the guidance will be a list of the Coast Guard websites that contain specifications and guidance.

Duane asked whether, under the new guidelines, some existing signs would eventually be prohibited. If this were the case, some Corps project personnel would be reluctant to install signs that might eventually be considered noncompliant. There was general agreement that the answer to this question is absolutely not. All signs currently part of the national sign standards will continue to be authorized. Tim pointed out that our intent is not to change the Coast Guard requirements. Rather, our message is that the Coast Guard should be the primary marking system; if Corps signs are needed to augment the Coast Guard markings, then we should install them also.

Greg asked about the confusion that might arise if adjoining districts on the same navigation system do not use the same marking system. For example, what if one district installs big worded signs and the next district downstream uses more daymarks with symbols? The sign standards program is supposed to be about consistency across the Corps. Debra replied that from the beginning the program has acknowledged that there may be inconsistencies between districts. However, districts (or even projects) should be communicating with each other to determine the best method to use. Tim acknowledged that Greg had a good point and reminded the group that HQ OC has always had reservations about variations in the types of signs used among districts. There was general agreement that we need a specific statement from OC that affirms the 4 September 2001 memo: confirmation that the Coast Guard system is to be the primary marking system, and Corps signs will augment it. The MCX will draft a memo to convey this message; it will clarify the 4 September memo and stress the need for each project to consider all pertinent factors when devising a hazard-marking system. The memo can emphasize the Coast Guard standard is a federal standard as specified in 33 CFR 62, which covers the United States Aids to Navigation System.

*Chamber Markers.* There have been two issues raised in the past about chamber markers, the signs with digits that show the number of feet through a lock chamber that a vessel has moved. One issue is the order of the markers (e.g., increasing as you move up or downstream vs. increasing to either end from the center). The second issue is the height of the digits. The sign manual provides specifications for 9-inch and 12-inch digits only. Are 6-inch digits acceptable?

As far as the order of placement is concerned, the Corps is inconsistent among the different waterways and sometimes even within the same district. What is the best way? The final report of an earlier study that included representatives of the Corps and the towing industry was that there needed to be consistency. However, we have never gotten an answer from the industry as to what they preferred. We should determine what the industry preference is.

Concerning digit size: 6-inch letters are acceptable if they meet viewing distance criteria. But the project must consider not only the horizontal viewing distance but also the vertical distance.

If, for instance, the lift of the lock were 100 feet, then the smaller size digits would not be appropriate because they would not be legible when the vessel is down in the chamber. As with so many sign decisions, digit size of chamber markers depends on specific site conditions.

*Waiver Requests from South Atlantic Division for Freestanding Letter Signs.* In the last two years, the Work Group has seen three requests from SAD for waivers of non-compliant safety signage. This signage consists primarily of large, freestanding, electrically lit letterforms on the top of dams. Typically the legend reads "DANGER STAY 800 FEET FROM DAM." These letters were installed when the dams were built, and the waiver requests were to allow them to be retained.

Each of the three requests covered multiple facilities. In the first two cases, Henrik, as National Sign Program Manager, approved the requests after obtaining the consensus approval of the Work Group. The approvals included admonitions that the existing letters signs would continue to be used in conjunction with a comprehensive hazard marking system and/or that, should the letters require replacement, the new signage be compliant with the National Sign Standards Program.

The third request again included several existing freestanding letter signs, with each letter mounted individually across the top of a dam. But it also included two signs where the letters were contiguous and formed three stacked lines. At this point the Work Group had agreed to a moratorium on granting waivers for these types of existing signs. One of the problems is that replacing individual letters as needed could create a situation where, in effect, the "sign" as a whole never wore out, and might therefore never be replaced with compliant signage. There was also a concern that some of the existing letter signs didn't meet the viewing distance criteria.

It was agreed that the MCX should send a letter to SAD explaining the Work Group's current position on this issue.

*Arrival Point signs at locks.* The sign manual currently shows a sign on p. 14.24 with the legend "Arrival Point." This is used to mark the upstream and downstream points where the official "lock area" begins. It has been suggested by some project personnel that the legend should consist only of the letters "AP," which is the way arrival points are designated on navigation charts. Towboat pilots would understand these signs easily, and the sign panels could be much smaller and still meet viewing distance specifications. Mike will check with his industry contacts and the Corps engineering staff on the advisability of using "AP" signs.

**NOTE:** Mike subsequently reported that he had received feedback from the navigation industry concerning installing "AP" signs at our projects rather than the Arrival Point worded signs we currently specify in Section 14. The response from industry was that they would not have a problem with AP, but they had serious concerns about the casual recreational boater's reaction to seeing "AP" rather than Arrival Point. Therefore, Mike recommended that we not change the sign to read "AP" because such a change might confuse recreational boaters.

*Gate Opening signs.* Page 14.29 of the sign manual shows the gate opening sign, which informs lock users of the size of the gate opening at the next dam. A boater can use this information to

calculate the flow speed to the next lock. Personnel at some locks have questioned the need for the sign since modern communications have rendered the sign obsolete. It was suggested that we should leave the sign in the program, but individual locks could choose not to use it. Mike will consult his sources in the towing industry.

**NOTE:** Mike subsequently reported that the navigation industry does rely on the dam gate opening information sign as pilots plan ahead to the next lock and dam in the waterway. Mike therefore recommends that we not eliminate the dam gate opening sign from the sign standards program.

### **NRM Gateway Website.**

Debra discussed the Natural Resources Management Gateway and its applicability to all Corps elements. The goal of the Gateway (<http://corpslakes.usace.army.mil>) is to provide a single site where Corps employees can find out everything there is to know about our natural resources management and recreation programs. Henrik and Debra have placed material about the sign program on the Gateway, and more remains to be done. George and Judy noted that the Gateway is continually developing and has become a very important resource.

*Sign Standards Manual.* One important item to have on the Gateway will be the electronic version of the sign manual. Public access to the manual will be available at the Corps publications site.

*Nonstandard Safety Signs Legends on the Gateway.* One goal is to get graphic versions of the approved nonstandard safety signs legends available on the Gateway site. Dave has completed graphic versions of the Caution legends and will complete and forward to Virginia Dickerson at WES graphic versions of the Warning and Danger legends also.

*Sign Program Slide Show.* For the Natural Resources/Environmental Development conference in Portland last April, Henrik prepared a humorous slide show explaining the national Sign program. The slide show will be placed on the NRM Gateway site. The MCX will also send a copy on disk to Duane for use at an upcoming natural resources conference in Sacramento District.

*Waiver form.* Dave has created a .pdf form for safety sign waiver requests; the form can be filled out electronically. Dave will send the form to Debra so that it can be forwarded for posting on the NRM Gateway.

### **Stickers Vs Signs.**

The issue has been discussed before. We do not consider stickers on a piece of equipment to be subject to the sign standards program. For instance, purchased shop or playground equipment often comes with safety stickers already attached or ready to be attached. The manufacturers consider this to be an OSHA requirement. Such stickers are considered part of the equipment and do not have to be in compliance with sign standards.

To some extent this is a common-sense issue; the difference between stickers and signs should not be hard to determine. If project personnel need a more specific guidance, it might be this: It's a sticker when applied to a machine, but it's a sign when free standing.

Another area where this has come up is the need to put a warning on electrical pedestals on campsites. Campers have used adapters to hook up recreational vehicles and trailers to outlets that are incompatible with their electrical systems. Park personnel have deemed it necessary to place warning stickers on the pedestals notifying campers of their liability if this practice results in damaged electrical systems. Judy said that the approved wording for such stickers is now: "Using adapters are not permitted." Once again, such stickers are not subject to the sign standards. It was pointed out that these particular stickers should be augmented by other public information efforts, such as handouts.

### **Combined Safety Sign**

There is a request for a safety sign legend that reads, "Eye and Ear Protection Must be Used Everywhere in the Facility." Dennis affirmed that such combined signs are more effective than individual signs at individual machines. Dave has prepared sample legends that will be included in the revised sign manual. Debra will see that these are also placed on the NRM Gateway.

### **Trail Signs with Mileage and Other Text.**

Greg showed samples of trail symbol signs with text that New England District had requested. In general, the work group approved such signs, but recommended that, if the sign includes an arrow, then the arrow should be included as part of the text. Dave will prepare mockups of symbol/text/arrow signs, and sample manual page(s) that can be put on the NRM Gateway and revised manual.

A related issue was the question about how to mark trail difficulty so hikers could judge for themselves the feasibility of using a particular trail. Judy said that the Beneficial Designs group has done work on evaluating trails. (Beneficial Designs is a private consulting firm that promotes universal access through research, design, and education.) There was agreement that information about trail accessibility is best provided at trailheads using interpretive panels or bulletin board-type flyers.

### **Historic District Forbids Corps Signs.**

Greg brought up another NAE issue concerning part of a Corps road that passes through a historic district that does not allow Corps signs. A suggested solution was to place a sign on Corps property just before the road enters the historic district. The sign would have an arrow that points up and then sideways to show that the road turns some distance ahead. The group decided that a worded sign would be preferable to a "crooked arrow" symbol sign. For instance, the sign might read, "Turn right 200 feet."

### **Discrepancies Between the Sign and Safety Manuals.**

An ongoing issue has been the fact and perception of discrepancies between the Corps sign manual and the Corps safety manual, EM 385-1-1. Dennis had prepared a report outlining these discrepancies. There was general agreement that safety signs should comply with the sign standards.

A specific sign that is not currently available in the sign manual is a caution sign warning of nonpotable water in places other than the dump station. The group agreed there is a need for such a sign. Dennis will submit a formal waiver request for a Caution, Nonpotable Water sign.

Another discrepancy is the difference between "permit-required confined space" signs. The version in the sign manual reads, "Danger Confined Space – Entry by Permit Only." The one in the safety manual reads, "Danger – Permit-Required Confined Space – Do Not Enter." The work group agreed that OC should coordinate changes so neither manual contradicts the other. Dennis will finalize his report and Debra will coordinate with Karlissa.

Henrik reported on a related issue that he has been discussing with the MVP Safety Officer. Currently the Corps, as a federal agency, is required by an Executive Order to comply with OSHA regulations that reference a standard for safety signs developed by the American National Standards Institute (ANSI). Not only do our safety sign standards exceed this one, but another standard has already superseded the ANSI. Nevertheless, the existence of the Executive Order means we are technically required to comply with the obsolete ANSI standard. The solution to this is to get formal permission from the Secretary of Defense to substitute our standard for the OSHA/ANSI standard. MVP will take the lead in this effort by writing a letter to be forwarded through the chain of command to the Secretary of Defense.

#### **Temporary Signs Are Not Considered Posters.**

There have been temporary signs installed at some field locations that are intended for short-term use. These signs are not compliant in terms of format, color, text type and some of them contain both English and Spanish legends. It has been argued that these are posters, not signs. However, the work group noted that these are signs not posters. They also note that even temporary signs made of cardboard, plastic, or other materials can be made to comply with sign standards. *(It is assumed that the project either produced these signs on site or received a waiver from UNICOR to purchase them locally.)*

A formal memo will be sent the district stating that these signs are not posters. It will also remind them that even temporary signs must comply with the sign standards, including the prohibition against combining English and a foreign language on a single sign. Debra will draft the memo.

#### **Recreation Facility Closures Because of National Security.**

Recently signs have been installed at some facilities to announce special circumstances that have arisen because of national security concerns. Examples of these are "Notice – This Area Closed Until Further Notice," and "Notice – Approaching Check Station/Please Use Only Parking Lights." Because these are Notice signs, a facility can choose appropriate legends without special approval, as long as proper format is retained.

The work group feels it is important to allow local discretion. The Physical Security portion of the NRM Gateway could provide examples of good sign legends. It could also be used to remind staff of the principles of good sign writing; e.g., keep it short; omit needless words, etc.

### **Symbol Sign for Prohibition of Archaeological Digging.**

Omaha District has continued to request a symbol sign with text prohibiting digging for archaeological artifacts on Corps property. The work group has looked at this request in the past and turned it down.

A stated concern of the district is the upcoming influx of foreign visitors because of the Lewis and Clark commemoration. The district argues that it is important to have a symbol sign to alert non-English speakers about the digging prohibition. As in the past, the work group agreed that this particular symbol (a prohibition circle/slash over a man digging) does not tell the story clearly enough, and a non-English speaker would not understand what is prohibited. For instance, the symbol could easily be interpreted to be a prohibition against digging because of buried utility lines.

Dennis pointed out that there is a concern about loss of archaeological artifacts in NWO because of a big problem with eroding riverbanks. The artifacts eroding out of the banks pose a special temptation to souvenir seekers.

All agreed that the requested sign is not in keeping with the Corps sign standards – it is completely inappropriate in terms of format, and it is ineffective as a symbol sign. However, the work group wanted to be responsive to NWO's request by suggesting an alternative(s).

It was reported that the National Park Service had text signs prohibiting archaeological digging at various western parks, including Mesa Verde, Badlands, and Petrified Forest. Henrik will call NPS, the Bureau of Land Management, and the Forest Service to see whether they have signs that might be appropriate for our use. The work group agreed that it could approve a new symbol for use on such a sign if an appropriate one could be found. Another alternative to the requested sign would be the use of an interpretive brochure.

### **"Steep Drop-off" Sign.**

The list of approved non-standard safety legends includes "Danger, Steep Drop-Off"; however, the legend is approved for use only at Canyon Lake in Ft. Worth District. The work group agreed that this sign was appropriate for use anywhere it is needed. Henrik will look at the old files to see why this restriction was placed on the approved legend. If the restriction does not seem to be still valid, Henrik will coordinate with the work group and issue a memo formally approving it for use throughout the Corps.

### **Coastal Sign Issues.**

At an earlier meeting of the Sign Advisory Work Group, the Portland District made a presentation about their problems with signing the hazards on district-built jetties. In many cases, these ocean jetties are not located where Corps employees can monitor them. They pose hazards to people who are tempted to venture out on them: Occasional "rogue" or "sneaker" waves wash over the jetties even when seas are relatively calm. Someone out on the jetty could easily be forced into the water by one of these waves. Another hazard are sinkholes, hidden by washed-in sand, that develop in the spaces between the large rocks of which the jetties are built. Signing these hazards is especially problematic for non-English speaking visitors, and children too young to read, who would not understand the hazard being described by a text-only sign.

Thus the NWP is searching for a meaningful symbol sign. Dave Johnson has searched the Internet for signs about sneaker waves, but has not found any.

Joe Holmberg was working on coordinating this issue with the Great Lakes and Eastern shore districts before his retirement. Dennis has volunteered to take on this issue.

### **Standardized Federal Brown and Federal Symbols.**

George and Henrik attended an interagency meeting some time ago about standardizing the color brown used on federal recreation signs. Also discussed was the standardization of recreational symbol signs. In a previous Sign Advisory Work Group meeting, it was agreed that the Corps would be willing to consider changing the specifications for its brown color to match a color jointly agreed upon by the concerned federal agencies. (This decision was made with the assumption that the agreed-upon color would be closer to the current "Corps brown" than to the current, orange-tinted recreational brown used by NPS and many states.)

**Note:** If this change was made, it does not mean all recreation signs would have to be replaced. Only when a sign was in need of replacing would the "federal" brown sheeting be required.

The coordinating agency for this effort is the Federal Highway Administration (FHWA), and Dave has sent them copies of the recreational symbols we use. Henrik will get in touch with the FHWA to find out the status of the standardization process for both brown color and symbols.

### **Digitizing the Sign Standards Manual.**

The Sign Standards Manual is in the process of being revised and at the same time, digitizing so it can be published in the Corps electronic library. It is also anticipated that the manual will be published as an engineer manual (EM).

The text of eleven sections has been completed and proofread. A final proof of these sections is being done by the MCX, and they will be sent shortly to the Visual Production Center (VPC). The VPC is part of the Information Technology Laboratory (ITL) in the Army Engineer Research and Development Center (ERDC). The VPC is doing the digitizing for us.

Dave has been helping the VPC by preparing the graphics illustrating the signs. This effort has experienced some delays because of personnel problems at his facility, but these problems have been solved. The illustrations for Section 7 are almost complete, and Dave will now proceed with the remaining sections in Volume 1. Completing the graphics will have an added advantage because now we will have exact vector files of the signs. These will be scalable and can be downloaded in the future. This will avoid inconsistency problems between Corps sign shops and UNICOR. It would also facilitate ordering if, in the future, we were buying from other sources.

The text of Sections 9, 10, 11, 12, and 13 has not been completed. Volunteers to complete the proofreading of these sections are Duane, Greg, Steve and Dennis. The MCX will contact the VPC to get the digitized versions of these sections and pass them along to the proofreaders. Debra and Judy pointed out that, if we publish electronically, Corps procedures require us to publish both Volumes 1 and 2. Tim said there are revisions needed in Volume 2, Section B.2. These will be discussed in the MCX. It will be a big task to check Section B.2 for accuracy, and

some engineering work will be needed. This would probably involve a month's worth of work. It will not be a particularly difficult task, but it would take time to do the computations. Tim already has a spreadsheet that could be modified for the specifications.

It was proposed to set a 6-month deadline to complete the manual, including Vol. 2. It was noted that we could not complete Section 14 of Volume 1 in that time because of other MCX engineering team commitments. It was decided to reserve Section 14 rather than let that delay the overall project. The MCX will provide headquarters with an estimate of the funding need to complete work on Section 14 during the remainder of this fiscal year. It was also noted that Section 14 revisions need to make clear that examples of restricted zones and sign placement are just that, examples. Local situations dictate where restricted zones are located, where and how many signs are needed, etc.

Tim recommended leaving the sign support specifications in the 11" x 17" format of the EC that was prepared several years ago for the construction of waterway signs. Using the existing format would save time and money. The work for this could be done by the VPC under the MCX's guidance. Another way to simplify using the material in the EC would be to convert it into the format of an EM and make it an appendix of the sign manual. This would be a lot cheaper and would satisfy a headquarters desire to reduce the number of EMs. Debra and Judy will discuss the conversion of the EC to an EM with the publications people at HQUSACE; Tom and Tim will discuss this with the engineering staff HQUSACE before they leave.

**NOTE:** Although EC 1110-2-288 has expired, the technical information it contains is still useful.)

It was agreed to set a 1 May 2002 goal for a small group to get together for a final "scrubbing" of the manual (reserving Section 14). The overall goal is to submit the manual to the HQ publications review process so that it will be in the electronic library by 1 July 2002. It was agreed that a draft version of the digitized sign manual could be placed on the NRM Gateway before it is formally published.

### **Changes to the Sign Manual.**

*Color of symbol of access parking signs.* The sign manual specifies (p. 9.10a) a green and black on white symbol of access parking sign. These signs are more commonly white and blue. Dennis pointed out that Americans with Disabilities Act does not require blue and white, but sometimes state and/or local rules do. It was acknowledged that blue and white were very common throughout the country for this sign. Because of this, it was agreed that the blue and white version should be included in the sign manual as an option. Dave will provide samples for the revised manual.

*"Pack It In, Pack It Out" signs.* It is becoming more common at Corps recreational facilities to require visitors to remove their trash from the park for disposal elsewhere. Signs are therefore needed with the "Pack it in, Pack it out" legend or some variation. An alternative legend could be "Bring it in, Take it home." Dave has done mockups of the "Pack it in, Pack it out" sign for inclusion in the revised sign manual and on the NRM Gateway.

*Off-Road Vehicle Prohibition.* Creating an appropriate sign to prohibit off-road vehicles from a site or certain parts of a site is difficult because there are different kinds of off-road vehicles and different definitions of what an off-road vehicle is. A positive sign that might accomplish the purpose would read "ORVs in Designated Areas Only." Dennis recommended that we agree on a single symbol to be used with the appropriate text.

*UNISTRUT-type support posts.* At an earlier meeting it had been decided that the kind of square tube support poles made by the Unistrut Company were acceptable at Corps sites for traffic signs only. These should be added to the sign manual. At the present time this addition will be text only. The specifications and materials will be listed later in Volume B.

**NOTE:** This change does not include allowing U-channel posts or round metal posts for traffic signs. Unistrut is the brand name of the square tube post built by the Unistrut subsidiary of Tyco International Ltd. The work group does not recommend this particular brand over other, similar products that may be available.

*Fee area symbol sign.* This sign had earlier been approved by the group as a stand-alone symbol sign. Dave Johnson has completed the specifications for the sign, and it should now be added to the revised sign manual.

*Prohibition of new sirens and flashing-light warnings.* Pages 14.16a and 14.16b of the sign manual recommend against the use of new non-sign (e.g., sirens, flashing lights) warning systems at waterway projects. A question has been raised as to whether this prohibition should be modified. The subject was discussed briefly at the previous work group meeting, but no decision was reached. This issue will be researched further by the MCX.

*No-parking sign with arrow.* It was agreed that we should allow a no-parking sign with an arrow to indicate a delineated area where parking is not permitted. It was noted that because such a sign is included in the Manual on Uniform Traffic Control Devices (MUTCD), it is automatically included in the sign standards program. Some facilities already use these signs. Dave will do mockups based on the MUTCD; the legend will probably read "Between Signs."

*Plastic signposts.* Plastic posts of various composite materials are now available commercially as substitutes for wooden posts. Is the use of these posts for signs advisable on Corps facilities?

One concern is that they may be too strong, and thus unable to meet national standards on breakaway capability for traffic signposts. Tim will check on whether these posts meet the standards. Other issues:

- Their color may fade.
- They may not have the structural capability of wood (i.e., to support heavy sign panels).
- They may warp in high-temperature areas, and expansion/contraction is a concern everywhere.
- They are three to four times more expensive than wood.
- They can be used in interpretive programs as a way to demonstrate how recycled plastic can be used.

- There are several such products available, and some are better than others.
- They may become brittle in winter.

It was agreed that composite signposts might be good in one situation and not in another. They might be included in the sign manual as a reasonable alternative to wooden posts in some cases.

*Approved nonstandard safety signs.* We should make sure that all approved nonstandard safety sign legends are included in the sign manual as graphics.

### **Campsite Reservation Sign.**

Volume 2 of the sign manual includes specifications for a campsite post with a sliding component that lets the park ranger/park attendant easily change the post to show that the site has been reserved. This signpost is not shown in Volume 1. Dave has been studying how this sign could be produced. He has not been able to find an off-the-shelf source for the needed extrusion material. A representative from one company did respond to his inquiry. That company could make the die for \$600, and for less than \$1,000 we could have the die and one run of extrusions.

However, the work group questioned whether this design is really needed at Corps campgrounds. Its biggest drawback is that it does not readily allow for the placement of dates showing when the site is reserved. For instance, a camper might arrive earlier in the week when the site is not reserved and would have no way of knowing that the site has been reserved for the weekend. Debra will call Tulsa District, which had inquired about using this sign, and see if it is still something they want to pursue.

### **Carsonite Decals.**

The Corps is permitted to buy flexible posts and decals from the Carsonite Company. Carsonite has examples of different decals in its catalog that are not in our format, although the company claims them to be. The MCX will write a letter to Carsonite asking them to correct their catalog.

Duane mentioned that he has been able to order the flexible posts from UNICOR, but he warns there may be as much as a \$1.00 cost difference between Carsonite and UNICOR.

### **Corps GIS Database Format.**

The MCX has recently been in discussions with Bryan Perdue, ERDC, and a team in Mobile District that are putting sign data on a GIS database in a new format being adopted by the Corps. The MCX provided information about types of Corps signs and how the sign manual is arranged. Preliminary indications are that this GIS database format can be used to underlie the sign software with little difficulty.

### **Routed Signs.**

It was clarified that only clear heart redwood is no longer the recommended substrate for Corps routed signs. Other grades of redwood are permissible, but western red cedar is a recommended substitute. Many Corps projects are finding the aluminum substrate becoming the accepted long-range alternative to any kind of wooden signs.

There was discussion about the availability nowadays of many alternatives to wood as a substrate, including recycled products. Dave noted that routed signs have become a problem because good reflective white paint for the letters is no longer available; you must mix your own. This requires care due to the danger of inhaling the tiny glass beads.

#### **Use by Other Agencies of Corps Signage.**

The MCX has received an inquiry about use of the Corps communication mark and symbols by a state highway department on its own signs. These signs would alert motorists to recreational facilities, including those managed by the Corps.

It was determined that HQ OC should be contacted to see whether special permission is needed. Also, we should be careful that we supply other agency(s) with the artwork for the communication mark so it is used correctly.

The work group agreed that this was a welcome recognition by another agency that people seek out Corps lakes and campgrounds for recreation. It was also noted that other agencies can use our symbol signs and that they can buy from UNICOR if they choose.

#### **Other Entity Trail Signs on Corps Property.**

A question has arisen about appropriate signage when another entity's trail system (perhaps a regional trail) crosses Corps property. There was agreement that it is acceptable to use a Corps sign to identify a regional trail or point the way to one. However, there was some discussion about whether we should allow another entity's formatted trail sign on our property. Apparently this is done in more than one district. Greg said he would allow the standard marking of a trail of another agency on the trail itself – for consistency as users move along the trail. It was agreed that this was reasonable. An alternative is using an interpretive sign on the trailhead at your parking area to guide visitors to the non-Corps trail.

#### **Warning Against Vandalizing Government Property.**

There was a request to continue the use of an old sign legend that warned people they would be prosecuted if they damaged or stole government property. Use of the old legend is not authorized; sufficient legends are available within our standards. It is not necessary to explain why entrance is forbidden.

#### **Signs Put Up by the Sponsors of Special Events.**

If groups hosting special events want to put up signs – for instance, to collect event fees – then they should do so themselves. We would consider these to be incidental to the special event and not subject to the Corps sign program. The Title 36 language about signage by others on Corps property should be consulted. It was suggested to Judy that the special events task force might want to explore this subject in more detail.

#### **Lessee Signs .**

Are lessees required to use Corps sign formats for signs they erect on Corps property? Apparently, this varies from district to district according to the degree of interest of the district's real estate office. In some cases, the lease is written to require this, and the real estate office enforces that provision; in other cases, the provision is not enforced. But the national Sign

Standards Program, as a whole, cannot require lessees to use Corps formats on their signs. The reason for this is that, in general, we cannot micromanage a lessee site.

A related question was whether lessees could place their signs outside the leased area. These signs might include use of the lessee's logo or otherwise name the lessee or the products sold. The answer is no. The MCX had previously told a district they could permit such signs, though strongly discouraged from doing so. This misinterpretation of the sign standards will have to be corrected. A message will be sent to the Unofficial Park Ranger Email Network

### **Foreign Language Signs.**

Some districts continue to have concerns there is not adequate guidance on bilingual signs, particularly in light of the growing non English-speaking visitors to our projects.

The current standards concerning non-English signs are as follows: Sign Standards Manual, Page 2.2, 4) Bilingual Signs:

“In areas where a significant percentage of the population speaks primarily in a foreign language, the use of language is essential, two signs - one in each language - should be placed side by side. These signs will follow the same format: same overall size, letter size and style, color, and mounting. Because of variations in dialect, the legends on non-English signs shall be developed at the local level. Two languages should never appear on the same sign.”

The manual shows an example of this setup. If the project feels they have a need to have non-English signs, this is the way to do it. There will be no "nationwide" translations recommended because translations used in one part of the country do not necessarily fit in another part. We have long recommended projects get local help in translating any wording of signs, brochures, etc. If there is no "non-English" language expert at the field or in your district office, find a local expert who knows what he/she is doing. The use of symbol signs is highly recommended wherever possible.

If you are located close to other projects, whether in the same district or not, it makes sense to communicate with each other on how to resolve this issue locally.

*Title 36 Sign.* There will be no straight foreign language translations of Title 36 because of Office of Counsel's concerns over the accuracy of the translation(s). There are also cost considerations about printing and choice of language. However, OC does say that a foreign-language synopsis of the regulations is okay. It is felt from the safety and public relations standpoints, a park manager who puts out information in a non-English format because a high percentage of visitors at his or her project do not comprehend the rules should have the freedom to do so.

### **Work Group Issues.**

The work group discussed funding for members to attend the annual meeting, other activities and to carry out work on behalf of the sign standards program. In the past, the funding responsibility has generally been shouldered by each member's district. The MCX has on rare occasions

provided travel expenses for a member working on a special project. It is possible that the headquarters proponents could provide funds for similar purposes in the future.

It was noted that the formal process to nominate members of the group should ensure that districts are aware of and support members' activities on behalf of the work group. However, Duane and Steve, the most recent members of the work group, were not sure that formal letters of designation had been sent to their districts. The MCX will follow up on this.

**Next Meeting.**

The next meeting of the Sign Advisory Work Group is tentatively scheduled for Thursday, 13 June 2002, at HQUSACE, 441 G Street, NW, Washington, D.C. The meeting will begin at 0830 in a room to be determined.