DATE: April 1999

TO: HPS Oral Presenters, 1999 Annual Meeting

FROM: HPS Program Committee

You may find useful much of the following material. It is patterned after that used by the Geological Society of America.

NOTE: Only 35 mm slides are allowed for presentation. All speakers are required to check in at the Ready Room in the Pennsylvania Convention Center.

It is important that you notify your session chair if there is a change of any kind in your scheduled presentation. If there is some last minute difficulty, please arrange for someone else to present your oral presentation rather than canceling it.

A preliminary program complete with registration forms for the meeting activities and for hotel accommodations will be sent to you in April. Hotel reservations are on a first-come, first-served basis.

For changes in speaker or program prior to the meeting, please call the HPS Secretariat, (703) 790-1745 or FAX (703) 790-2672.

h:amoguid.doc
INFORMATION FOR ORAL PRESENTATIONS

This information has been prepared by the HPS Program Committee to help make your presentation as successful as possible. Our experience is that most problems arise from a speaker's lack of understanding of the system. Please help yourself and your fellow scientists by planning to work within the following guidelines:

Time

Unless you have been notified otherwise, your presentation is limited to twelve minutes.

Projection Facilities

Projection facilities will be provided for 35-mm slides mounted in 2" x 2" frames only. One projector and one screen will be provided in each session room.

OVERHEAD PROJECTORS WILL NOT BE AVAILABLE.

We will use Kodak Carousel projectors for all sessions. Slide trays will be available in the Ready Room. Make duplicates of all slides that are to be repeated during your presentation. Projectors will not be reversed. Create your slides from good, sharp, camera-ready images. (International presenters please notify the Secretariat if you will be using glass slides.)

Ready Room

The Ready Room will be located in the Pennsylvania Convention Center. The hours will be as shown below. **YOU MUST SIGN IN AT THE READY ROOM WHETHER OR NOT YOU HAVE SLIDES TO DELIVER.** Projectors will be provided for slide review. Speakers are required to arrange and review their slides with a member of the Program Committee. **Slides are to be brought to the Ready Room according to the following schedule (or earlier):**

<table>
<thead>
<tr>
<th>Presentation Time</th>
<th>Check in Time</th>
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<tbody>
<tr>
<td>Monday PM</td>
<td>7:00-11:00 AM Monday</td>
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<tr>
<td>Tuesday AM</td>
<td>1:00-4:00 PM Monday</td>
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<tr>
<td>Tuesday PM</td>
<td>8:00-10:30 AM Tuesday</td>
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<tr>
<td>Wednesday AM</td>
<td>1:00-4:00 PM Tuesday</td>
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<tr>
<td>Wednesday PM</td>
<td>8:00-10:30 AM Wednesday</td>
</tr>
<tr>
<td>Thursday AM</td>
<td>1:00-3:30 PM Wednesday</td>
</tr>
</tbody>
</table>

Preparing On-Site

- Check in at the Ready Room according to the above schedule and obtain a slide carousel labeled for your session from the representative.

- Preview your slides using the projectors in the Ready Room. This is not the place to practice your presentation or compose a talk. Facilities are limited and must be shared by many.

- Have your slides reviewed and approved by a member of the Program Committee.

- Turn your carousel over to the Program Committee representative. He/she will see that it is delivered to your session room projectionist prior to the start of the session.

- Turn over any handouts with your slides. The handouts will be brought to the session room at the end of the session and placed in the back of the room.
• Sign the program sheet mounted on the wall to indicate that you have checked in and delivered your slides. Go to your session room at least 15 minutes before the session begins to meet with your session chair.

• Pick up your slides from the Ready Room or the HPS Registration Desk after your session. The slides will be removed from the carousel and placed in an envelope for you. Slides not claimed by the end of the meeting will be available through the HPS Secretariat.

Organizing Your Slides
To organize your slides, here is a procedure that can be used to avoid confusion and to make your presentation a success:

1. Lay out your slides.
2. Mark each slide with a 'thumb spot' in the lower left corner of the frame when the slide is held in the correct reading position. Then rotate the slide 180° so that the thumb spot is in the upper right-hand corner.
3. Now number the slides so that you can read the number when the slide is in the carousel ready for projection. Number the slides consecutively, each number appearing only ONCE in the slide set.
4. If you wish to show the same slide more than once during your talk, make duplicates of it, and give each its own number. Again, do not repeat numbers.
5. If the screen is to be blank, insert a blank slide into the series.

EFFECTIVE SLIDES
Good slides amplify and clarify the message, stimulate interest, and help the speaker keep "on the track." They merit the same care in preparation as the commentary.

Ideally, the speaker should work with a specialist who can translate information into effective visuals, and who will instruct an artist and a photographer in making slides.

Whether or not such assistance is available to you, here are some of the ways to make effective lecture slides.

Avoid Errors
✓ Most errors in slide-making stem from the mistaken assumption that legibility in one form assures legibility in another.

✓ A person ordinarily reads printed material at a distance of 12 to 14 in. (305 to 356 mm), but frequently at a slide presentation the image projected is only 4 x 6 ft. (1.2 to 1.8 m); the rear seats are 70 ft. (21.3 m) from the screen! Reading the text of a 4 ft. high (1.2 m) image at 70 ft. (21.3 m) is like reading a 1.25 x 1.25 in. miniature version of this page. Only the titles would be legible. The rest of the text would be a visual jumble of tiny black spots.

✓ Plan line weights of charts and graphs carefully for greatest legibility. Make curves prominent. Construct axis and grid lines so they are clearly visible but relatively inconspicuous.

Important Points
⇒ FORMAT
⇒ Neat, legible 35mm, 2" x 2" slides.
⇒ Computer generated or typed slides are recommended.
⇒ Limit each slide to one main idea.
⇒ Generally, there should be no more than one slide for every minute of presentation time.
⇒ Limit slide material to essential highlights.
⇒ Present a single, unified idea per slide.
A few simple, important slides are more effective than many detailed ones.
Use several simple slides rather than one complicated one, especially if you must discuss a subject at length.
Use a series of slides for progressive disclosure; it clarifies greatly.
If photos are used, be sure the picture was properly exposed and has adequate color density for large size projection.
Use duplicates if you need to refer to the same slide at several different times during your talk. It is impractical for the projectionist to search for and re-show a slide.
Include titles to supplement, not duplicate, slide data.

COLOR
Use 2 x 2 in. (50 x 50 mm) color slides—they are effective, easy to make, and inexpensive. Color film is also convenient for making slides from black and white copy.
Color adds interest.
Limit the number of colors to avoid a distracting or 'circus' effect.
Keep in mind one in twenty men and one in 100 women are blind to red, green or both.
As a guide, color readability (from greatest to least) is:

1. black print on yellow;
2. green print on white;
3. red print on white;
4. blue print on white;
5. yellow print on blue.

Most people prefer blue. Stark black on white (or white on black in some cases) can be eye-tiring. White lettering on blue background achieves excellent legibility. Also, consider a light blue, green, or yellow (not red) background. Other combinations are considered less readable.
Maintain a consistent use of color throughout your presentation.
Use contrasting colors that harmonize.

LETTER SIZE
Use a good, plain, vertical, readable alphabet style (Gothic type sans-serif is recommended).
Letters should be as wide as they are high.
Avoid script and italics which are hard to read.
Three to five lines per slide are recommended.
Limit each slide to 15 to 20 words, or 25 to 30 elements; no more than you will discuss. Crowded tabular data should be avoided.
Limit table columns to 4 (6 maximum) and 10 lines—the audience cannot rapidly assimilate too much tabular information.
Use upper and lower case letters rather than just upper case.
Allow 1-1/2 letter width space between words and three widths between sentences. Leave space at least the height of a capital letter between lines.
Be certain that lines and lettering can be read from any point in the room.

An easy test is that if you can read all the information on the slide with an unaided eye, it will project properly: This test can be applied only after the slide is prepared. In copy preparation, you can assume that you will achieve this if you confine yourself to a 7 x 10 in. sheet of paper, leave a 1 in. blank on all sides, use no lettering less than 5 mm high and no line width less than 1 mm, avoid serif or italic type, and keep your lettering on the horizontal.
⇒ PRESENTATION
⇒ Plan your slides for a good visual pace in your presentation. Don't leave a slide on the screen after discussing its subject. Insert a blank slide if necessary.
⇒ Thumb-spot all slides in the lower left corner when the slide reads correctly on hand viewing. Add sequence numbers.
⇒ Rehearse your slide presentation several times so that you will be familiar with the sequence and timing of the slides.
⇒ On your trip, carry your slides with you. Don't trust them to your baggage if it is checked.
⇒ Use the Ready Room to review the order of slides.

Technical Session Room Arrangements

♦ 35 mm projector
♦ electric or laser pointer
♦ three-light timer
♦ lectern with light and microphone on a riser
♦ head table with two chairs for session chairs
♦ projectionist
♦ session assistant
♦ sign at room entrance to indicate session in progress
♦ table at the room entrance for handout material

Not provided: 16mm or video projectors.
PHOTOGRAPHING YOUR OWN SLIDES
adapted from an article by Bruce A. Schell Senior Geologist,
The Earth Technology Corporation, Long Beach, CA

Have you taken your own photographs of maps, illustrations, or samples for a slide presentation only to discover that the slides are so dark or out of focus that they are virtually unreadable? The large number of unintelligible slides at meetings suggests that this is a common occurrence. Several very basic and simple methods can be used to avoid poor slides.

One of the most frequent problems, dark or murky slides, generally stems from a lack of understanding about how a camera's light meter works. Most modern 35 mm cameras have through-the-lens metering with built-in light meters. These meters measure the light from either the entire field of view or from only the central portion of the field of view and are calibrated to render the metered area a medium shade of gray. Therefore, if your subject has a large amount of white or light pastel colors such as a map, a simple line drawing, or a small sample against a white background, the meter reads the light background and tells the photographer to adjust the lens opening to render the white a medium shade of gray in the photograph; any medium- or dark-colored objects will turn out even darker. Such a photograph will be unreadable when projected to a screen across a large dark room. To get a photograph with whiter whites and brighter colors, the picture must be overexposed. That is, the camera lens must be opened to a larger aperture. Rather than haphazardly estimating the correct amount of "overexposure," a simple, virtually foolproof method is to use an 18% gray card. These cards are a standard photographer's tool and can be purchased at any camera shop for very little cost. Before taking your photographs move in near the object to be photographed with the gray card in hand. If your camera has a match-needle-type light-metering system, simply place the gray card several inches in front of the lens, making sure it is illuminated by the same light and is at the same angle to the light as the object to be photographed. Then take the light reading and set the f-stop to the indicated setting, remove the card, compose your picture, focus, and take the photograph. Ignore any impulse to reset the f-stop once you remove the card, because the meter now gives you a false reading; trust the card reading. If your camera has automatic exposure control, you must set the camera on manual mode so you can control the aperture setting yourself. Some variations can be expected due to brightness and angle of lighting.

To be absolutely certain of a good photograph, bracket your exposure; that is, take three photographs, one at the setting indicated by the gray card, one at the next higher full f-stop, and one at the next lower f-stop. When photographing small rock samples or fossils, use the gray card as your background and you will get a perfect exposure.

In addition to the light metering, there are several other aspects the photographer should be aware of to make better slides. One of these is depth of field. When you are taking close-ups of a printed page or map, the edges of the photograph may end up out of focus. To ensure complete focus across the entire slide, you need as much depth of field as possible. To get this depth of field, use a small lens opening (f-11 or f-16). This smaller aperture will require a slower shutter speed, which in turn may necessitate the use of a tripod. The end result will be a sharp slide from border to border.

Another important aspect is the type of lighting. When photographing indoors with outdoor film (most common films are balanced for natural outdoor sunshine) your slides will take on a greenish pall if the light is from fluorescent bulbs or a yellowish-red cast if the lights are regular tungsten-filament bulbs. These color discrepancies can be corrected by color compensating filters, but a cheaper way is to move outdoors and shoot your pictures in the light for which the film was intended.

Another common problem, especially in outdoor lighting, is shadows caused by wrinkles, folds, or bulges when you photograph large maps or illustrations. To get an even, shadowless exposure, the object must be flat. The easiest way is to tape it to an outside wall, but if the sun is high in the sky, every slight fold or wrinkle will cause a shadow. Shadows will be less severe on cloudy days, but the light colors and whites may turn out much duller. The best way is to tape the object to a sheet of stiff plywood that can be tilted to receive the light at the most direct angle and also allow the map to lie flatter. The resulting photograph will have an even illumination and bright colors and be much more readable.

These few simple hints should provide some insight on how to make better slides for your presentations. If your audience realizes you took your own photographs, then your slides are probably inadequate or marginal. Not only will better slides make your talk more informative and enjoyable for your audience, but they will likely give your talk more credibility.