## **CLOSING REMARKS**

JOE WHITE (U.S. Naval Research Laboratory): Well, we made it through another year. It has certainly been an interesting year. I think there is an old curse that says "May you live in interesting times," and probably the last few months have been more interesting than most of us would have liked.

I am certainly very pleased to see all of you here today and through this week. Some people asked what the attendance change was. I have it on a slide here, but while I am waiting for them to put up the slide, I will just tell you. Last year, I think we ran around 175 and this year, when we get everything all counted up, we are probably close to 150. So all things considered, we are really very pleased with that and certainly very pleased to have seen all of you this year.

Other than that minor detail, it has been a pretty good year. We received a number of compliments on the program. I think probably it has been one of our better programs.

One of the nice things we have this year is a record number of exhibitors; in fact, I think we might have even had more than we did, but it worked out very well. We are very pleased to have had them.

Credit cards: Gee, I wish I could tell you we had that problem solved. We tried a new tack this year, and while we had no problem with it, very few people have used it; I don't blame them, it was kind of cumbersome. But one of these years we will actually succeed in being able to take your credit card.

Proceedings: We did see new Proceedings last year. I am pleased with the result. We had one glitch in the process when the vendor made the CDs for us. Instead of giving you a nice collection of PDF files, one per paper, you got one big one. But it works and it is readable. We are still working to get the prior Proceedings on CD, and also on the Internet. Progress is slow, but we are steady at that, and I think that will succeed fairly soon.

As usual, there are a lot of people to say thanks to for making this meeting work. I have the list up there. There are a few names I need to say besides letting you read them. Andy Wu certainly has done an awful lot of work this year, and I am very thankful to you, Andy, for all your work.

The other person that always makes this meeting work every year that we cannot neglect is Sheila, the meeting planner, who finds these hotels, makes the hotels do what we want, and makes everything work at once. So I am also very happy with her work.

Nikki, who you all met at registration, does a tremendous amount of work every year to get all these pieces together. She has a staff.

Also, there is one more person: Paul Kuhnle retired from this job of AV chairman a couple years ago, but we don't let him go away. Harold is now the chairman, but Paul has shown up every year and done a tremendous amount of good work for us. Thank you very much, Paul.

[Applause].

And also all the other people that go to put this program together and keep the meeting running.

This year, in addition, we did the tutorials. And that was another one of these things that almost got caught up in the mess of earlier this year. We have had Navtech do tutorials for us in the past; they do excellent work, but they are a business and they like to know that a number of people will actually show up. Last year we looked at doing tutorials with them; they sent out their e-mails, and I think after all the e-mails went through, they had two people that had signed up. So it just was not practical for them to do.

The Executive Committee really likes the idea of tutorials. We think it is very important to teach the people who are new to the business what this is all about, and to give people who are in the business a way of learning about what else is going on besides in their own area. So we always thought it was very important to do. A couple times in the past, we have done them on our own, and we just decided this year, let's do it.

Clark Wardrip took that job over, and he organized an excellent set of tutorials this year. And again, we started out with one or two people, but by the time we are done, I think we had 15. And I was pleased to see that many people come. You can see the list of people who did them; these are world-class people. I am very thankful to them for their participation for helping us out.

So now it's your turn. What did you like this year? What didn't you like this year? I cannot guarantee I will fix whatever you don't like, but I will try anyway. So I'll open it up to the floor. What would you like to see done differently, and what did you like that we did differently this year? Or did right again this year?

TOM CLARK (NASA/Goddard and Syntonics): I would encourage you to continue the tutorials. I was not able to come myself this year, but I wanted to. And my little company will want to send people in the future. So I am sorry I wasn't able to make it, but I encourage you to continue that.

WHITE: Okay, I think we probably will. We will be back in Washington next year where it is a little easier to do.

CLARK: On the tutorials, I was going to comment that just the timing schedule of Thanksgiving holiday and trying to get out here for Monday for the tutorials was not the most convenient thing to do. And I am sure that that limited your attendance.

WHITE: It probably does and it is one these East Coast/West Coast things that if you live on the West Coast, being here Monday was not a problem, but if you didn't, it was. And we think that if we can do them again on the East Coast, we will probably be able to pick up the people that could not do it here.

That is one drawback to this week. If you talk to Sheila, she will tell you that this is the most wonderful week in the world to have a conference, because the hotels have trouble filling this week. So it is part of what allows us to give you these great room rates and low registration fees. It is a trade off.

Let's talk a little bit about out-years. Coming up next year – yes, sir?

DEMETRIOS MATSAKIS (U.S. Naval Observatory): The poster sessions: I think there were some good discussions there, but one thing that we could have done to have even more discussions – this may have been a suggestion I made before – is to give all the poster people one short block of time where they come up and show one viewgraph summarizing their talks, just giving their abstracts maybe. And then that would generate more interest to have more discussions during the poster sessions.

WHITE: I think that is a very good idea. It is one we tried to do this year; it didn't work out. But next year's program chairman is Jay Oaks.

MATSAKIS: And we had enough no-shows, that even if you can fit it in before, maybe tell the poster people to bring their one viewgraph just in case we have a lot more.

WHITE: Okay. Next year, we will back in Washington at the Hyatt Reston Town Center, where we have been several years before. This will probably be our last year in Reston for a while, not because we don't like the place; but, after a while, people do get tired of going back to the same one over and over again. So probably in 2004, we will be in a different Washington location.

2003 is not settled yet, but more than likely it is going to be in San Diego. The Executive Committee has turned Sheila loose, and I think she will probably work all that out.

Do you all have any places that you would like to go that we have not gone or that you think would be a good place to have the meeting? Now is a good time to make a suggestion. Places you don't want to go?

UNIDENTIFIED: Baltimore, Inner Harbor would be nice.

WHITE: We looked at that. It is a nice place. We have trouble getting in there at our kind of rates. But yes, it is a good idea and we are going to keep looking at that.

UNIDENTIFIED: Boulder might be nice.

WHITE: That would not be a bad idea as well if you like to ski. We are trying to stay away from the Northern latitudes, at least when we're out of Washington. But yes, Boulder is a nice place; there is certainly a good base of people there with the NIST and University of Colorado folks around.

UNIDENTIFIED: Pasadena.

WHITE: We have been to Pasadena. We went to the Ritz-Carlton, actually, in Pasadena in '91.

MICHAEL GARVEY (Datum TT&M): One comment on behalf of some of the speakers, and it is a problem that I think we are still as an industry working on in meetings of this sort. And that is: when are the electronic presentations closed for modification? Most people, I think, would like to revise them up to the last minute, and the degree to which I think we could support and allow that would be welcome on both sides.

WHITE: Harold brought that up in the Executive Committee meeting yesterday evening. As you know, this year we have requested a 1-week-in-advance prep in giving it to Harold so he would be able to get it in. Harold says he can do it with less. And that started an argument. Because, there were some people who have done this before besides us who said it is hard to do. But we do agree that we would like to give our authors more time to prepare and get more recent data. Plus, we all procrastinate anyway. And, yes, we are working at that, Mike. I agree it is a problem.

The problem Harold has, and it is kind of an odd one, happened just in my slide just a few minutes ago; it happened when Edoardo got caught earlier. Things just don't work the same on one computer as they do on another. And what we try to do by getting them in early is to find some of those things. And even then, we

don't find them all. But that is the logic behind it: try to get as organized as we can, keep the shuffling up front down to a minimum. And as you can see, we still have got a lot of shuffling, but it is probably less than if we swap laptops.

MATSAKIS: About the 1 week early, this may actually have been in the original thing that we got saying, "Congratulations, your paper is accepted." But most people, including me, just filed that away. If we had gotten another reminder 2 weeks before this meeting, then maybe a few people might have come in 1 week early. Of course, I would have because I was writing mine just before I got on the plane.

WHITE: It is kind of a tradition, I think, for a lot of us. But, yes, I agree.

UNIDENTIFIED: This is my first time to this conference, and I was very enthusiastic about meeting all these experts. However, one thing that I see is that the Proceedings will not be available for quite some time.

WHITE: Ah, you have hit another sore spot, yes. This same procrastination that keeps us from getting the presentations in a week in advance keeps us from getting the written papers to Lee Breakiron who does all the editing work on them in a timely fashion. It is a long-standing problem, I agree with you.

UNIDENTIFIED (continued): Yes, maybe you should look into it because at most conferences they do provide the Proceedings at the time of the conference.

WHITE: Some do, some don't. That is a real tradeoff. The tradeoff there is how fresh the information is. If we say we are going to give you – well, of course, handing you a CD today doesn't help you much – at least, not during the meeting; it helps you when you go home. Printed Proceedings: it is nice to be able to sit there with a book in front of you, go through the author's paper, mark it up as you go and make notes. The tradeoff to that is that if you start backing the dates out, that means the author really has to have the paper done 3 to 4 months before the conference.

VICTOR REINHARDT (Boeing Satellite Systems): One compromise, and one thing I would like to see, which would be relatively easy, is if we could post at least the viewgraph presentations on the Web, or some sort of place like that. So until the Proceedings come out, you could at least get copies of viewgraphs, since you already have them electronically.

WHITE: Well, we have a fraction of them electronically. Yes, that is possible. We have looked at the idea of actually producing a CD of those and making it available at the conference. But it logistically turned out to be difficult, if for no other reason that we weren't getting all those things a week in advance.

REINHARDT: So post whatever you have afterwards, until you get the full Proceedings.

WHITE: We will take that up as a suggestion. That is a good idea.

CLARK: Especially since Harold has all the stuff on a laptop right now – if he would go back to the USNO and on Monday put it on the USNO Web page, it would be very convenient for all of us.

WHITE: I will take that up with the Executive Committee; we have another meeting coming up in January. I don't know that we will get this year's on, but I think we can certainly look at it in the out-years.

REINHARDT: So that means we're not going to get it until at least January?

WHITE: That is my guess is, yes, it is not going to show up on the Web site before January, just due to lack of organization and bureaucracy.

HAROLD CHADSEY (U.S. Naval Observatory): We have enough problems with getting the electronic presentation. Getting them loaded on the computer is the next headache. Trying to get them all on one CD is a huge headache. And then trying to send that out is as monstrous as sending out the Proceedings. I have already checked on it.

REINHARDT: You didn't listen; I asked for something a lot simpler, and I think Tom is asking the same thing. On the USNO Web site, you just load the files as they are, that you have got in the computer, so we can download them.

CHADSEY: In all honesty, we have discussed this. I have mentioned it with Joe and with Hugo and a couple others. We worked out some logistics on it. We have got a little more sophistication to go on the logistics of it, and it turns out that there may be some legal problems with doing some of that. So we have to work out a couple details.

As far as the presentations go, a comment on the date on getting them in, that will be revised; I am not sure by how much yet. It depends on a couple things that we are going to work on over the next few months.

SIGFRIDO LESCHIUTTA (Politecnico di Torino and Istituto Elettrotecnico Nazionale): I was just going to add one point there, which is if you are going to post them on the Web, they should transformed to PDF form; I don't think you want to post them –

WHITE: You definitely want to them as PDFs, I agree. So it's not quite as simple as just putting the PowerPoints on.

ROBERT LUTWAK (Datum): Just another suggestion in this mix is that we, since we are producing a CD of the Proceedings anyway, if we could put the PowerPoint presentations in the Proceedings as well since there is often color content in the presentations.

WHITE: Then you take away one of the author's primary abilities to revise his remarks like the people in Congress do.

LUTWAK: I am not suggesting we do this in lieu of allowing him to write a paper.

WHITE: What I am saying is he will often contradict himself in the written paper from what he presented because he learned from the questions.

LUTWAK: That is going to happen if you put them on the Web anyway.

GARVEY: Just one other comment and that is that I think it should be clear to the authors when they put the presentations together whether they are going to be viewed for 3 minutes or whether they are going to be put in some permanent location.

WHITE: Yes, that is kind of what Harold was getting to: the things we put up here to go by quickly aren't necessarily things we might want to publish to the world. So it takes some thought.

HUGO FRUEHAUF (Zyfer, Inc.): One more thing about posting the presentations. If you really look at the papers and the presentations, you find there is rarely a real tight match. So I kind of like the papers independent for the reasons we have mentioned.

WHITE: Right, and there is another problem with the slides too. And that is – certainly I do it and a lot of others do it – the slide is an outline. And what we actually present is usually detailed well beyond what is on the slide. So the fact that you have the slide doesn't necessarily mean that you really have the content of the presentation.

CLARK: I am going to comment to the authors: Don't use yellow lines on white backgrounds and green lines on blue backgrounds. Out here in the audience, you cannot see them. Also, make sure that the fonts use labeling axes have big enough characters that you can actually read them out in the middle of the room for folks who are already on their fourth n-focal glasses.

WHITE: I will tell you another interesting thing that Andy and I noticed this year that I hadn't noticed in the past, but I'm sure it has happened. When the presenter is standing up here with the machine in front of him, it is very tempting to start pointing things out on your chart like this – I don't how we solve that one. Touch screens maybe.

REINHARDT: There is a technical solution; we have them at work. You have a pointer that has a pointer and also controls the slides. And so that way, your tendency is to look at the screen and you don't have to go back to the computer every time you want to change something.

WHITE: Actually, our other projector has one, but we wound up swapping projectors at the last minute. But unfortunately, there are extra buttons on that little remote. You noticed Harold covered up all the buttons on the projector to keep us out of trouble. It is easy to press the wrong one and wind up with something you didn't expect.

CHADSEY: In comment to Victor on the buttons, we have investigated the idea of the remote control and everything else. One of the major problems is the compatibility of the projector, the computer, the remote, and the sophistication of the operator. As we pointed out, we have covered that up and we still have problems with the vendor presentations. That computer happens to be unique in that you can see it both on the screen and on the projector. There are some computers that you can choose such that if you plug in the projector, that is the only place it will come out. So these are technical things that we are still learning about, we are still trying to work out, and get through. And as soon as we find the projector with the matching computer and keep it working and keep it matched, and be able to get it on time, we will start using it. We were having a little bit of a problem with shipping this year. It turns out that the company that we shipped this stuff to closed down all of last week. So it was shipped 2 weeks ago and it didn't arrive until Monday afternoon. So we were scrambling trying to get things adjusted.

REINHARDT: By the way, I think all these comments are minor. I would like to thank Harold again; he did an absolutely outstanding job.

JORJE GONZALES (Jet Propulsion Laboratory): If we are going to be in Washington next year, would it be possible to arrange some sort of field trip to USNO or something like that?

WHITE: We usually try to do one of those as part of the Washington meetings. Now the problem we may have is security is tight this year. Whether that will calm down by next year or not, I don't know. Their normal tours have been cancelled, I think, indefinitely.

Okay, we'll see you all again December 3-5 at the Hyatt Reston. Thank you very much for coming.