

**EROS Data Center 30th Anniversary
Outdoor Stage Speeches
September 20, 2003**

R.J. Thompson

It is my great pleasure to welcome you to the 30th anniversary of the EROS Data Center. We are pleased to host visitors from Sioux Falls and the tri-State area, we're proud to be here, we enjoy being here, we love the work we do, and I think you'll see that as you go through the facility today. We called this ceremony "Three Decades of Discovery" and to us that's what it is. We have spent 30 years discovering how wonderful this Earth is through the observations that we take of the Earth that teach us about this wonderful world we live in. I think you'll see some of that as you walk the halls of the EROS Data Center. We also think of this as a rededication because we believe that every bit as much dedication is required now as was present with the people who had such a vision back in the 1960 and 1970 period of time when they envisioned what we could do with orbiting satellites, remote sensing technology, and the advent of high technology computer systems. So, for us, again, as much as we feel we've accomplished in the last 30 years, we think we have just as much to accomplish in the next 30 years above and beyond where we are today. There are too many people in the audience that I owe thanks to and a debt of gratitude to for us to begin to name names. You know who you are. You know your contribution to the history of the EROS Data Center. We want to get on with the program. We have a number of distinguished guests that we would like to have a chance to talk with you. The first of those I will introduce. We have the great pleasure of having with us the Director of the U.S. Geological Survey, our boss, a good friend of ours and a real proponent of the information technology work that we do here at the EROS Data Center. With that, let me introduce Dr. Charles Groat, Chip as we know him, Director of the U.S. Geological Survey.

Charles (Chip) Groat

Thank you, I am a friend. This is a wonderful facility and it's a pleasure to be here on behalf of the whole USGS to congratulate the people here on 30 years of wonderful accomplishments and wonderful achievements. At the start, as RJ mentioned in his talk with the community I have had the good fortune in the last day or so to hear some of the stories about how this Center was put together and the investment that the community of Sioux Falls put into this Center and the support that the community has provided it throughout its 30 years. It is truly remarkable and you should all be proud as citizens of Sioux Falls and the surrounding area of how your city fathers and mothers have supported this facility. I also have to say, as we say throughout the USGS, that we have some pretty nice facilities and good places to work but it is the people. And, this organization has also benefited throughout its 30 years with some outstanding

leadership at the top but outstanding science both from USGS employees and from the contractors that have worked so successfully here to support the science mission and the technical mission of this facility. So you ought to be very pleased to have 30 years behind you and I think you can, with great confidence, look to the future and assume there will be many more 30-year periods to look at as this science and technology advances across the country and its importance. I want to mention a few points in opening that gives you a flavor for what this Center is involved in and just reflecting on some of the things that have happened here just over the past week and it's a true indication. Clearly throughout the week, and all the weeks that go by, this Center has been extremely active in its archiving function and perhaps is best known across the country for the archive function that it carries out for remotely sensed data. That is one of the things that as you look at the images spread throughout the Center here that you see most obviously is what a great resource that is and it is valued in so many ways by so many groups. But also this week a very significant event happened – it was the second Tribal Forum. This was a gathering of a Native American initiative that started here last year with the first forum and has been strongly supported by the EROS Data Center, by the staff here and particularly by the local groups over at Sinte Gleska University. Then, in this particular Tribal Forum, tribes throughout the United States, more than 20 representatives, presidents of institutions, and other representatives of those tribal colleges, came together to see how they using geographic information systems, remotely sensed data, and all the expertise that is here at the EROS Data Center, can blend with the expertise developing at Sinte Gleska and in the other tribal colleges and use that in a way to understand the landscape in a way that is important from a science and technology point of view but more importantly it is important to the Native American peoples and their traditional knowledge and their traditional cultures. I also have to recognize, if you look at the flags here, you see the obvious ones, but you see a UN flag. There are many partners in the operation here at the EROS Data Center that have played a large role in its normal functions and in the wonderful science that it does, NASA, NOAA, USAID, and then UNEP, the United Nations Environmental Program is represented here at the EROS Data Center. I mentioned the remotely sensed data that is archived here and that is extremely important and we do provide leadership across the country in distributing, not only archiving that data, but distributing it to a wide variety of users both technical and non technical. And, as important as that is, it is an extremely important function. The Center is first and foremost a science facility. The work that is done here by scientists, as I said, from both the USGS and from contractors is on the cutting edge of the application of that remotely sensed data and technologies for using it to a wide variety of things that are extremely important to this country, not only to the area in which you sit, but also across the world. There are applications of satellite data in relating concentrated use of pesticides in cancer creates land cover and land use maps, dealing with remote sensing of fire areas and fire prone areas, and fuel loading and fuel treatment processes, looking at targeted areas for agricultural production and famine relief. It is a very broad pallet of applications of this data and it is the

science that's done here, the excellence of the science that's done here that has made that data so useful across the world. And I think another thing that happened this week here is also indicative of what the public thinks about what is done here. We provided our most prestigious communications award in the U.S. Geological Survey yesterday. We awarded the Shoemaker award to the group from the EROS Data Center that put together the Earth as Art exhibit. You see Earth as Art II displayed in the corridor here. Earth as Art I was something that was much traveled, starting out here in Sioux Falls but spread nationwide. It has appeared in the halls of Congress, the U.S. Department of Interior, and various places around the country and to rave reviews everywhere. The Earth is a beautiful place and as much as we in the science business marvel at what we can do with that imagery and that science capability to understand the Earth and the change in the Earth there are a lot of people who just look at those images and say WOW that is really spectacular, from an art and a beauty point of view. I hope you have an opportunity to see Earth as Art II in the corridor here and marvel in the same way that people did at Earth as Art I. It's of great tradition, in the strictly pleasure aspect of remote sensing, that is growing here. I can't not mention something we have been dealing with here in the past week that is a little more on the downside. As many of you may know the feature satellite system that the USGS operates, Landsat 7, which has essentially its home base here, in terms of archiving and applications, has had some difficulties lately. We were unable to fix it but we are finding that the user community that depends on that satellite imagery is making use of the image that still comes down, and it still does come down. What is there is still excellent, of first class quality, and what is lost is not as important as what is still there. We are finding that even though it suffers a little bit, it is going to continue and it will continue to be used. We are right in the middle of planning the follow-on mission that will put another Landsat-like satellite up there to pick up where Landsat 7 picked up from Landsat 5 and a whole succession of satellites. The future is not at all in doubt and this little hiccup is going to be something that is difficult to deal with but, as they have in the past in difficult times, this Center and its technology will continue on. I also want to mention an important part of what is done here and it is something that Secretary Norton mentioned at the Global Summit that was held July 31st this year and that is the distribution of the data and how important having this data in the public domain is to this country, to its science and to its society. That's not true across the world. There are lots of places where data is closely held by governments and is not distributed equally across the spectrum. The United States data policy is one of equal access and used by many and by all. That tradition is strongly upheld here and it has been a strong tradition of the EROS Data Center throughout its 30 years and it's been a strong tradition of the USGS who wants to make its information as readily available, as publically available as possible. As we enter our 125th anniversary in 2004 we are going to highlight that aspect of our tradition as you have here in your 30th that information for public good is among the highest things that we can do. Let me conclude with just a comment about the future. As good as the past has been, as good as the work that is being done here is, and as much as you can see the benefit of it as

you look at the exhibits here, the future is going to be even more exciting, as RJ said. The generations that made this work good, up to this point, is going to be succeeded by generations of scientists and technicians who really understand as these have the fully capabilities of these extremely important systems. And, as the systems mature and become more technological advanced the applications are going to become more advanced. This Center, as it has in the past, is going to be a world class facility in leading that technology, working on the cutting edge to make remotely sensed data geographic information systems useful in the science field but, most importantly, in making life on Earth better, more rich and better protected. So, think fondly of the past, think excitedly about the present, but think even more excitedly about the future, and the EROS Data Center is going to be at the fore front. Now it is my pleasure introduce as the first visiting speaker, my boss, Bennett Raley. Bennett Raley is the Assistant Secretary for Water and Science in the Department of the Interior. He is broadly experienced, in particularly, in water resource aspects of the west and in fact is coming here from one of his many trips out here to deal with those issues. My pleasure then to introduce Assistant Secretary Bennett Raley.

Bennett Raley

Thank you Chip, RJ. Senator, it is good to see you. I welcome you to this glorious day in glorious South Dakota, on behalf of President Bush and Secretary of the Interior Norton. I think USGS and the EROS Data Center got it right with 30 years of discovery. As you participate in this celebration I hope that you share what I felt when I walked inside and that is the wonder of discovery. The wonder of discovery that I've felt since I can remember. When you reach out touch and learn about the world. When you see something you haven't seen before. When you see it in a new way. Maps do that. You'll see our modern equivalent of maps inside. We know that's just the surface layer. We know that what is represented on those maps is our attempt as a society to discover and understand our world and how we interact with that. That sense of discovery that has defined our nation, the same sense of discovery, the same drive that caused President Jefferson to send Lewis and Clark west. They thought they were going to discover, and they did, the most wondrous landscapes on this planet. But, they also discovered that it had already been discovered, as we know, by Native American communities that have been here since time in memorial; and, in a sense, two societies discovered each other. And, so what you see inside, when you look at a map, when you look at a photo, you will see scientific information just as they tried to capture scientific information on the handwritten maps that they produced in that expedition. When you stare at them and you think about what's on there and the relationship of what's there to the community, to ourselves, that is the power of discovery. And, that is why this effort at the EROS Data Center is so critically important. The importance of this is underscored by the fact that in July, Secretary of the Interior Norton delivered a keynote speech to key scientists around the world at the Earth Observation Summit in Washington, DC. As Chip mentioned, open access is critical to success, it is

critical to science, and it is critical to an open society. It is a hallmark of a free society and governments that hold the data, that won't share, fundamentally, don't understand what freedom is all about. We do. We support the long tradition of open source data for this science and that it is for the world to share because we learn from their data and they can learn from us. And, together it allows us to deal with issues that have always been there. Issues of relationships between nations, competition over scarce resources, dealing with impacts of our prior actions, it allows us to do it in a better way so that we can move forward to a future that we all hope for, for our children, and it is a better world. So with that, I thank you for coming. This is a world-class facility and the data here, but more importantly the knowledge and the sense of discovery that lives within this building is critical to our nation. Thank you very much.

Charles (Chip) Groat

Thank you Bennett. One of the pleasures of this job is to be able to move around the country and visit and interact with our various facilities and programs and one of the things I've learned that when you are dealing in States that have populations the size of the South Dakotas and the Montanas and New Mexicos and so forth, there is a certain atmosphere there that you don't find in the New Yorks and Illinois, the family of political leadership at the local level, and the State level, and the Federal level is very closely connected with each other, but more importantly they are very closely connected with the public. You all knew who they are. They come to events that you are involved in. It is truly more of a family of citizens and political leadership. That is a very comfortable environment to work in. So, that's why it is very much a pleasure to see State leadership and Federal leadership here representing those elements here today and for me not to have to say an awful lot about them because you know a lot more about them than I could ever tell you. So, let me start then with our first speaker from the political leadership of the State and Federal Government, Lt. Governor Dennis Daugaard. He is here representing the highest level of State Government and, as has the local level, has been strongly committed to this Center and its mission. Governor Daugaard

Dennis Daugaard

Good morning. I was sitting up here and maybe some of you were sitting out there, when the wind took one of the flags down and you notice that it broke off one of the eagle's wings and Senator Johnson, as quick witted as he is, said, well thank god it is the right wing that broke off. So, I'm going to steal his joke, his joke. I thought the wind had died down a little bit, but Linda, my wife Linda is out here and she said when I get up here it usually picks up a little bit. But, hopefully it won't be too windy. I'll try not to be too windy. It is a beautiful day today here in South Dakota. You look at the blue sky, a little scattering of cirrus clouds, you can see the horizon, and it goes on and on. Out here on the prairie we have a long and wide view. At night you can look up, see the stars. You

don't have to worry about the city lights getting in the way where I live. And you can see the Milky Way; you can see Orion in the winter time, Leo. We can see the broad spray of the Milky Way. We can see the big picture out here. It took me all of about 5 minutes to get here today. Some of you might know I live about 3 miles that way on the farm where I grew up. In fact, my Dad is sitting down right here in front and that is the farm where he grew up, where he was born 89 years ago. In fact, I was joking with my Dad and said we could walk over but he wasn't really excited about that idea. I also want to say, at this point, a thank you to the USGS. Char Johnson called or emailed, I forget, yesterday, or the day before, and said that there would be an interpreter for the deaf and my Dad is deaf. And so, it wasn't something I asked for but it was something that they knew and thought about and for the deaf community and for my Dad, I appreciate that. So, Chip and RJ, thank you for thinking of us and of him. You know, another reason it feels like home, because I'm so close to home, but another reason it feels like home is because of the people here. And, RJ talked a little bit about the people. But they are my neighbors and friends. I was trying to list down just a few of them and I was adding to that list today some of the people that I see even here in the audience, Jim Sturdevant, his sister and I were in high school together; Char Johnson; Denny Hood; Joy Hood, was one of my high school classmates though she won't admit that very publically; Ron Parsons; Terry Pfannenstien; Gayla Evans. The people of EROS are the people of South Dakota. Volunteers. Volunteers from EROS went to Children's Home Society in Sioux Falls where I work and helped install computers there. Volunteers from EROS helped raise money for the expansion of the battered women's shelter at Children's Inn in Sioux Falls. EROS employees, whether they are working technically for the Department of the Interior, USGS, or working for Science Applications International, the major contractor here, they are our neighbors and friends and I'm glad they are here. You know, when I was growing up on this farm here, about 3 miles away, my closest neighbor was a family called the Sittigs, and they had a little boy that was my age, Steve was his name, and when we were growing up together, we played together. I'd get on my bike and pedal over to Steve's house, he lived about a half mile away and right by his place there was a little pond surrounded by reeds and there were frogs in that pond. And, we would lay on our stomachs and catch frogs. We'd lay there and wait, and wait, and just snatch out and catch these frogs and we'd put them in 5 gallon buckets. And, I remember one time we caught about 10 frogs one day, it was an especially good frog catching day, that day, and we caught about 10 frogs, put them in a 5 gallon bucket and we took them up to Steve's house and we went up and put the frogs in his Mom's bathtub, and we put about this much water in them in the bathtub and the frogs were jumping around and they'd jump up to the edge of the tub and slip back down and we thought that was just outstanding. We were having a great time watching those guys and then Steve's Mom came in and she wasn't real impressed. She didn't think it was a good idea to have those frogs in the bathtub. We said they were good for fish bait but she said we should get them out and I thought she talked unnecessarily loud that day, but it was a great time. You know the pond we used to lay beside is gone now. In

fact, many of our wetlands have been converted to agriculture. In this area, and in many of our surrounding Great Plains States, we are the breadbasket of the Nation, maybe of the world, some people would say, and that's good. What's also good though is to be conscious of the impact that we have on our land. You know when you get further away from some things you can see the big picture and sometimes you can see things that you otherwise missed. Lin and I have some good friends that live near Dell Rapids, Dan and Cathy Richardson are their names, and they were building a workshop, a large workshop on their property one time, and we went over there to help them shingle the roof. They had a nail gun and they had Linda and me, and Dan and Cathy, and a couple of other friends were up on the roof putting these 3-tab asphalt shingles, you probably put them on your own roof, some of you, laying those shingles down using the nail gun and we were making good time because we were having some lay down, some hammer with the nail gun, and we were making good time and the light started to fade. But, we were doing so well we kept going. And then, about as far as we could go, we got off the roof, got a little bit further back and looked at what we had done in the fading light and it wasn't so good. It wasn't so good. In fact, I know Dan and Cathy had ripped several rows of the shingles back off again. So, we really didn't help them. But, I think it demonstrates again that when you get further away from something you can see the big picture and sometimes you can see things that you otherwise miss. It's true whether you are talking about wetlands on the prairie or whether you are talking about shingles on a roof, or whether you are talking about seeing the forest or just some of the trees. It is also true when you are talking about urban sprawl, the spread of vegetation, the removal or destruction of vegetation, river delta formation, the spread of desert, or countless other things that EROS can tell us about, can see further away. You can see the forest and not just the trees. For this reason, the satellite imagery and the archives of the EROS Data Center are a very precious resource. Not only can you tell what the situation in the world is today, but because the EROS archives go back at least 30 years, and maybe you have some archive things that go back further back than that, you can tell what things were like 30 years ago and how they've changed. You know, I'm jealous of Ed Gibson, the former astronaut here at EROS who went into outer space. Although he is back on the ground now like the rest of us and I just saw him Thursday, he had the privilege of seeing the Earth from outer space. I'm told that there are parts of the Earth that when you are an astronaut you can look out the window and the lights of the cities create a little glow in certain parts of the continent the planet is so developed. Imagine what it would be like to look out the window of a space capsule or a space shuttle and see the Earth below. It would be incredible. Thankfully, EROS can be our eyes in the sky. Through EROS we too can travel into orbit, look back at mother Earth, and see all her beauty. About 3 weeks ago, my son Chris, who is 16, and I took a canoe trip. We had talked about doing it in May, but that didn't work out. Because of my work, I'm coming and going and Chris, he is busy in school activities, summertime he is working a couple of different jobs sacking groceries and working at a movie theater and he is coming and going and we just weren't spending time together so I said to

Chris, let's take a canoe trip. So we decided we were going to take a canoe trip down the Missouri river. We started just below the dam at Pickstown and canoed 35 miles down the Missouri river. We started on a Saturday morning about 9 o'clock, put in the water, after about 5 miles downstream we saw, and I counted them, 19 eagles perched on a fallen tree in the Missouri River. We went on and on down all the rest of that day. At 8 o'clock we pitched a tent on a sandbar island, slept overnight. The next day we got up at 6 and got on the river again and we didn't know where we were going to get out. We had some friends from Armour that I was going to call on my cell phone. Then I realized my cell phone battery was dying and we also didn't have any plans on where we were going to take out because we didn't know how fast we would go, we hadn't done this before. We were kind a scrambling, not knowing where we were, finally got to a place, and we took out about 1 o'clock on Sunday afternoon. But, I resolved to myself that I wasn't going to do that again without a map. I thought to myself, where can I get a map of the Missouri River. Well, I'll tell you where you can get a map of the Missouri River, at USGS. And EROS has a web site where I got on, and the next time we go down the Missouri River we are going to have a map from EROS to tell us where we are, how fast we are going. We'll know. We can track ourselves down that river. Maybe some day we will have a little device that can tell us where we are because it'll see us and tell us where we are. A GPS device would do that today wouldn't it? EROS can help us know not only where we are but if we are taking care of ourselves. EROS can see how widespread is draught clear across the world and how it is affecting vegetation, especially food crops, and forecast food shortages before they become critical. You know, for some people that's a life and death thing, a life and death thing. EROS can also help us know if we are safe. I don't know, as long as I have lived here and driven through EROS, there's always been a part of EROS that the public can't get to and I always wondered if that had something to do with the Department of Defense, and I believe it does. EROS' eye in the sky can help us maintain and improve homeland security, and I'm sure it does. EROS has a part in our nation's defense. Anywhere geographic data applications are used, EROS can play a part. 30 years ago, 30 years ago, some farsighted people turned a shovel of dirt right here on some rural farm ground and began a project that turned a cornfield into what is today's EROS. For all the jobs EROS created for my friends and neighbors, I'm grateful. For being a good neighbor and being a good corporate citizen to me and my family and my community I'm also grateful. Most of all though I'm grateful for that eye in the sky providing the information we can all use to take care of our planet, our home, Earth. Congratulations to EROS on 30 years of progress and success and here's to 100 more. Congratulations.

Charles (Chip) Groat

Thank you Governor, you covered the spectrum of applications very well. I can assure you, those of you that care about the EROS Data Center as much as we do that whenever there is a problem or an opportunity, your Congressional delegation is right there to talk about it. We've had many interesting discussions

with them about matters relating to this and they are strong advocates for this program and for its importance to the people of South Dakota and for its importance to the country. So, we are very pleased today to have with us one of those strong advocates, the Honorable Tim Johnson, Senator from South Dakota. Senator Johnson.

Tim Johnson

Thank you, Chip, thank you. My wife, Barbara, is with me here today. For Barbara and me this is a little bit of coming home, in particular it always is to be home in South Dakota. But I grew up, in part, down the road in Flandreau; Barbara is a big city girl from Sioux Falls. This is a real sense of coming home for us. I want to thank the Geological Survey, the Department of the Interior, everyone at EROS for the extraordinary work that you have done here for 30 years. You have served our Nation; you have served the world, in such a profound way. I also want to commend you on this 30th anniversary celebration going on here today. I think it was very appropriate that EROS chose to tie in a theme involving the Lewis and Clark expeditions across our part of the country, almost 200 years ago perhaps the world's most famous mapping expedition. It is now followed in turn, in our generation, in our era, by this extraordinary effort with the Geological Survey and EROS here outside of Sioux Falls, South Dakota, where again not just America, but the world benefits from the technology, from the mapping that they are doing with a level of sophistication that would have been unimaginable to Lewis and Clark. But, while they do that and while this celebration goes on commemorating the EROS Data Center's 30 years and the Lewis and Clark experience, EROS has never lost sight of the context that it exists in here in South Dakota. Its ongoing work with our colleges and universities has been a great asset, has enhanced the quality of the research and work that they do, and, now more recently, it is an outreach to our Tribal Colleges. With a particular relationship now with Sinte Gleska but also other Tribal Colleges, I think is something that is enriching that union in a way that we never dreamed of before as well. Now, we know that we've had some challenges recently with the Landsat 7 and that we need to deal with that. I want to commend Interior, USGS, and EROS for all working hand-in-hand to try to get around some of those complications. Senator Daschle and I, as well as, Congressman Janklow, have been working to see what we can do to try to find some resources that would further enhance our ability to get through this rough patch. But, I think all working together, the future of EROS here is very bright and is extremely valuable for the entire world and we want to continue to have that kind of hand-in-hand relationship that I think has characterized many of the best things we do here in South Dakota. As Chip was noting, we are a small State, relatively small population and there are advantages and challenges that go with that. But one of the advantages of that is that we all know each other pretty well, we all stay on the same page pretty well, and when it comes time to coordinate and do things together, and we are pretty good at it. That's the way we do things in South Dakota and we want to make sure that those values and that

character continues to apply to the circumstances here. I know working with Governor Rounds and Lt. Governor Daugaard, we have a great partnership, as well, at the State level. Everybody in South Dakota is concerned that we continue to build on what has been this extraordinary success out here on our eastern prairie. I had an opportunity some days ago to share my enthusiasm about EROS with my colleagues on the floor of the United States Senate. And, I wanted to share with you very briefly a couple of comments that I made there relative to all that is going on here. I said that within the EROS Data Center lies a computer room that was associated with NASA's Earth Science Enterprise Initiative. The robotic mass storage system within this room hold approximately 920,000 separate images and make much of EROS Data Center's NASA satellite information immediately available to scientists working at desktop workstations both in South Dakota and around the world. A major part of NASA's Earth Science Enterprise Initiative is the Earth Observing System, which will collect data required to measure changes in the Earth's system. Beginning in 1999 and running at least for the next 15 years the EOS will collect data through a series of satellites and field experiments to observe the Earth. In addition, since 1991 the EROS Data Center has supported the United Nations Environment Program Global Resources Information Database making environmental data available to developing countries. While EROS Data Center's mission has changed and grown over the years, its original mission which was to receive, process, and distribute data collected and transmitted, still holds true. It is my belief that the Center will keep on growing and continue to make a large impact within the Department of the Interior. It is a small State. South Dakota can be extremely proud of the impact such a Center has, not only on the State, but on the United States, and on our neighbor throughout the world. And, so I think it goes without saying that while we in South Dakota have a particular fondness, a particular pride in EROS here, what goes on, on this acreage here and on the prairie of South Dakota, has enormous ramifications, not only for the Nation but for the whole world. The whole world is watching to see what happens here and whether we are able to continue to build on what has been such an extraordinary success already. It has been noted the resources are here and that is all important. But the great secret of EROS' success, over the years, has been not the brick and mortar but it has been the people, the people who are committed to high quality science and the sharing of that science with the entire world. Our world is a better place because of what happens right here and every morning that our EROS personnel get up and look at themselves in the mirror they have got to feel proud of what they do and the role that they play in the world. The heritage they are leaving for future generations is something that few other people have the honor or the opportunity ever to engage in. And, so we have a great team here at EROS. We can be awfully proud of what they do. Sometimes the best thing we in Government can do is to get out of their way but there are other times when we need to continue to partner in very constructive fashion and that will be our goal with Senator Daschle, myself, and Congressman Janklow, on the Washington side, to make sure that we continue to have the resources to do the extraordinary things that happen here. Not only for our sake, but for the

sake of a better world. And so, thank you again for an opportunity to share a few thoughts with you. Best wishes to EROS. Congratulations on a wonderful 30th anniversary. I would like to present to RJ this statement from the floor of the United States Senate honoring all that has gone on at EROS and wishing it a very good wonderful future. Thank you, so much.

Charles (Chip) Groat

Thank you, Senator Johnson. Senator Daschle, I made a comment about how supportive the South Dakota Congressional delegation had been to the EROS Data Center and its mission, and looking over and seeing an empty chair, I said, and one of the Senator's is here today. Then I looked over and saw it was full. So let me introduce a man who is clearly a master of good timing, Senator Tom Daschle, Senator from South Dakota.

Thomas Daschle

Thank you very much, thank you very much for that kind introduction, for your warm reception. Senator Johnson, Lt. Governor Daugaard, Mr. Thompson, distinguished guests, members of the dais. I understand that Don Lauer and Al Watkins are here somewhere and I'm delighted that they are back here. What a reunion. I join with all of those who have already spoken to congratulate the men and women of EROS, in this great celebration of 30 years of remarkable achievement. The noted historian, Will Durant, once said some dream, grow limbs, and walk. Thirty years ago I was an Air Force officer. My job at that time was to analyze satellite imagery. I never dreamed at the time that we would be able to use the extraordinary opportunities that satellite imagery have provided to do the things that go on in that building today. I can remember with great clarity the excitement that I had in knowing that the dream of applying satellite photography to peaceful purpose was growing limbs and it was doing so in my State of South Dakota. After I got out of the Air Force and had the opportunity to work for Senator Jim Abourezk, I asked for that specific legislative assignment because it intrigued me so. Thirty years later, we now know, with far better confidence and understanding what an extraordinary impact the people who work in this building have had on our daily lives. The services and the tools provided to businesses, to Government, to research, to agriculture, to forestry, to other governments, to the military, for things we could only dream of doing a half a century ago. Through triumph as well as through difficult times you have not only survived you have flourished. We now face, as Senator Johnson noted, another difficult time with the loss of Landsat 7. But I am confident of this, I am confident that because of what you do and because of how well it is being done, these invaluable services will go on and this effort will flourish for decades more to come. And so, 200 years after Lewis and Clark the need to better understand our Earth, its land, and water, and our resources continue. The need to share that information with the rest of the world is now greater than ever. The spirit and the mission of Lewis and Clark lives in the hearts and the minds of the men and

women of EROS, through triumph, as well as true adversity, because some dream, grow limbs, and walk. Thank you all very much.

R.J. Thompson

I don't have to tell you that this morning is a very humbling experience for me and for the staff here at the EROS Data Center. Chip, Assistant Secretary, Lt. Governor, Senator Johnson, and Senator Daschle, we are so honored that you have taken time out of your schedules and your busy days to spend a few moments with us and enjoy and appreciate the work that we do. But, it would be wrong for us not to recognize that this is not yes we do good work, we are proud of the work we do, we think it has contribution, but we also have to recognize the partners that we work with. The partners within the U.S. Geological Survey, that are so important to us, all of the four disciplines of Geography, Geology, Hydrology, and the Mapping Program, Water Resources and Biology, all of those discipline activities are important to us in our cooperative work. Our relationship with NASA has been a long one, a strong one, and a rewarding one, and you will see the results of that. The satellites that we operate are complimented heavily by the satellites that NASA operates. So, I hope you enjoy your visit. Again, thank you to the guests that have spoken on behalf of the Data Center. We are thrilled that you are here and that you are able to share our experiences and we want you to enjoy the day. All the people that are around here wearing orange shirts are here to help you. They are volunteers from the Data Center and the Data Center family. So enjoy, stick around, have a good time, have some food. Make sure you experience the Native American village that is set up here on the premises and some of the experiences inside. You can go outside, behind the building and do a little panning for gold. It is probably not real gold or, at least if it is, there is not much of it. We hope you enjoy your stay. Thank you very much for coming.