

Blueshift - December 16, 2009

Looking Back to the Future

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Maggie: Hello and welcome to the December 16th, 2009 episode of Blueshift, the podcast brought to you from NASA's Goddard Space Flight Center. I'm Maggie Masetti.

If you watched our Halloween episode, you might be aware of all the recent changes here at Goddard. Our old space science building is nearly empty of people, many of whom have moved on to offices in the new Space Science Building, Building 34. To celebrate the beginning of the next chapter in the story of Goddard, a time capsule is being put together, to be opened 50 years from now, in 2059.

We spoke to Dr. Michelle Thaller, Assistant Director for Science Communication here at Goddard's Science and Exploration Directorate, about the time capsule and how it came about.

Michelle Thaller: It was actually Harley Thronson, who has worked on the Hubble Space Telescope program forever, that alerted me that there was going to be a time capsule in the new building, in Building 34. And Harley brought it to the attention of all of the different division managers and said, hey, let's all try to get something in this time capsule.

One of the things I thought was kind of funny is that we asked everybody in code 600, "is there anything they'd like to contribute to the time capsule" and somebody suggested making sure that we have coordinates for another older time capsule that they were afraid might be lost. And so one of the things that is in the time capsule is actually a little notice saying "at these coordinates there is a time capsule that was buried a while ago". I think that one was supposed to be a hundred [years] and they wanted to make sure that people didn't forget where it was.

Maggie: Directions to the older time capsule seem like a good idea. This one however should be easy to locate. It has a spot on the 3rd floor of Building 34, and it's marked by a mirrored sign that has the dates of 2009 and 2059 on it. We asked Dr. Thaller what things had been added to the time capsule so far.

Michelle Thaller: One of the big concerns right now is climate change, for us. And with the Earth Science people being part of Code 600, there were a lot of people who wanted to contribute books about our changing planet. Some had maps, some had imagery from satellites. Others just contributed written things. I actually said, would anybody like to contribute something, I'll just print it out on acid free paper, you know, we'll have something in there. And the predictions. What will the coastline be like in 50 years? What climate change will we be aware of? So obviously this is something in our consciousness that's really big right now. Everybody's concerned about climate change, rising sea levels. And so there seemed to be a bit of a message from scientists about 50 years in the future, how much will this really have come to pass? And there will probably be no more arguments as to whether global warming is happening.

One of the interesting things about time capsules these days is that the media that we have is quite ephemeral, I guess is a good word for it. That we're not even sure how long DVDs last. I mean, when people talk about DVD rot, I mean, CDs...are these things going to be viable in 50 years? That's one of the reasons why I had the idea of at least having some written contributions as well. I don't know if our DVDs will be usable in

50 years, I really don't.

Maggie: We walked around Building 34 and asked some of our friends and co-workers what they would put in a time capsule to represent the NASA of now to people 50 years from now. Some people had similar ideas to Dr. Thaller's about the readability of electronic media in the future.

Eric Winter: I think it would be interesting to put in a thumb drive or a hard disk now, a) to make sure important data from today is still around 50 years from now, and b) just for the challenge of seeing if they can still read it 50 years from now.

Maggie: Other people thought that the future might be amazed at the size of our computer hardware.

Steve Fantasia: One of the pieces of hardware for the web server, so they can look back and say "They needed something that big just to run a web site?"

Maggie: Most people thought they'd like to tell the future what's important to us now in science.

Tommy: So I would make some models of little earth-like planets, and I would put those in the capsule, because I think by 2059 we'll actually have found some terrestrial-type planets around other stars with new missions. And I would also put in a big question mark made out of shiny metal because for me that represents all of the really cool, exciting science that's going to happen that we can't even imagine right now. If you look back at what we knew 50 years ago, compared to what we know today, I don't think people could have imagined it then, so that's why I would put it in the time capsule.

Koji Mukai: Probably some kind of CD-ROM or some other medium containing astronomy data taken by the best NASA missions today, just to see how far we will have gone.

John Vernaleo: Some all-sky image from any of the missions we have available, just to see how that would look different with what we've got now versus what we'd have in a mission 50 years from now.

Keith Arnaud: Put in whatever our plans for what science will be for the next 50 years and they can have a good laugh when they read it.

Leonard: Garcia: Well I thought it would be funny to put a Twinkie in there, just because in Wall-E that's the only remaining food on the planet. So you might want to put that in there just that somebody who opens it will have something to eat. But no, seriously, one of the things that I thought would be good would be long-range planning documents and things where they talk about in the next 50 years we're going to have these missions. So in 50 years they can look back, and get a real good laugh at what we thought we were going to do and never got around to doing, or things we never would have thought about doing and actually wound up achieving.

Maggie: We also had some love for the NASA logo of the 1980s.

Barbara Mattson: I'd find anything I can with the worm and stick it in there. Very classic NASA, and eradicated in the late 90s. Grr...

Maggie: Lastly, we also asked Dr. Thaller, if she were to add something to the time capsule, what would it be?

Michelle Thaller: One of the more interesting things about time capsules

for me is some indication of the people that put them in. The science...the data we have now I think will be available in 50 years. I think data archives will keep continuing to have data. So I wasn't all that concerned about getting, say, the latest satellite imagery, or you know, the latest data. I think the human element is more interesting. So, to me, it was my idea to put these written prognostications, you know, what will the world be like in 50 years. I think speaking more to our hopes and our fears and our dreams as to what 50 years might be, might give people in the future a sense of a little bit of what were thinking of, what we were afraid of. I'm more interested in the human element. I think the data will be there. I think NASA will do a great job of archiving and preserving it. But I'd like there to be some indication that we were flesh and blood people that put this together. And maybe give them a little sense of what we were like.

Maggie: The time capsule hasn't actually been sealed yet, but it's due to be in a few weeks from the airing of this podcast. If you are a part of NASA's Code 600, and would like to add something to the time capsule, you can contact us through our website, and we can put you in touch with Dr. Thaller.

As always you can get ahold of us by filling out the feedback form on our website, or leaving us a comment on one of the podcast entries. Our website is universe.nasa.gov/blueshift. You can also reach us via twitter - we are @NASAb blueshift.

That's it for this episode - we'll see you next time. This is Maggie Masetti, bringing the Universe closer to you, with Blueshift.

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