



All the Best Podcast
Episode 45: “Silver Linings”
*Featuring Chairman of the Board and Founding Director for Challenger
Center for Space Science Education, June Scobee Rodgers*

June: May 2nd, 1991. Dear June, thanks very much for your letter and update on the work of the Challenger Center. I do appreciate your support for our education goals, particularly the effort to make the United States first in the world in math and science by the year 2000. I understand the Vice President has recently been able to be of assistance with respect to your good work. He is doing an outstanding job on space policy, and I'm delighted that he's now serving as honorary chairman of the Challenger Center. Warm, personal regards. Sincerely, George H. W. Bush.

George: In the first place, I believe that character is a part of being President.

Barbara: And life really must have joy.

Sam: This is "All the Best." The official podcast of the George and Barbara Bush Foundation. I'm your host, Sam LeBlond, one of their many grandchildren. Here, we celebrate the legacy of these two incredible Americans through friends, family, and the foundation. This is "All the Best."

George: I remember something my dad taught me. He said, write your mother, serve your country, and he said, tell the truth. And I've tried to do that in public life. All through it.

Barbara: You are a human being first and those human connections with children, with friends are the most important investments you will ever make.

George: We stand tonight before a new world of hope and possibilities for our children. A world we could not have contemplated a few years ago.

Sam: On behalf of our family and the George and Barbara Bush Foundation. This is "All the Best."

June Scobee Rodgers is a PhD and a founding chair of the Challenger Center. As the widow of Challenger Space Shuttle Richard "Dick" Scobee, June has dedicated her time and energy to continuing the crew's educational mission.

She founded Challenger Center for space science education to foster a new generation of "Star Challengers," young people who will reach for the stars no matter their circumstances. Each year, Challenger learning centers around the globe engage hundreds of thousands of students and tens of thousands of teachers in dynamic, hands-on exploration and discovery opportunities that strengthen their knowledge in science, technology, engineering, and math.

June is also an author and, together with international best-selling author Kevin Anderson, she created the "Star Challengers," science adventure books for young readers. June, welcome to "All the Best".

June: Thank you. It's my pleasure to be here.

Sam: Well, thank you, June. We're so excited to have you. We have so much to cover with you, but let's start at the beginning. So much of what you and the Challenger families have done is to honor your loved ones. Tell us about Dick Scobee and what it took for him to become an astronaut.

June: Dick Scobee grew up in a little town, Auburn, Washington, not far from Seattle. As a child, he worked in the fields picking beans and so forth to earn money to buy school clothes. He graduated from high school at the top of his class and wanted to work with airplanes. So close to him in Auburn was Boeing aircraft company, and he went there to work. But then he decided, "Gosh, I need to be closer to these airplanes. Rather than just assembling them, I want to be around real airplanes." So he joined the Air Force, came to San Antonio, Texas as an enlisted man, and I met him at my church for a little teenage hayride and picnic.

I was a senior in high school, and he was now 18 years old, going on 19. We met and then got to know each other, became best friends, and the next year we married as really young people. He had gained two stripes on his shoulder by then. And by the time he had three stripes, he said, "You know, there's got to be a better way. I want to fly the airplanes."

So we looked at options of college. He knew he had to go to college, and eventually joined the AFIT program, Air Force Institute Technology, and was assigned to the University of Arizona in Tucson. We moved there where he

studied to be an aerospace engineer and graduated after a couple of years. And in that time, I became a mother.

We were then assigned to go to Georgia for him to go through his pilot training, and he went to the base there in Valdosta, Moody Air Force Base where he got his pilot's license. And Moody Air Force Base is where your uncle, George W. Bush, went.

After his pilot training, we were assigned to Charleston Air Force Base, and he was flying everything. Flying all kinds of large aircraft and small aircraft. Eventually was assigned to be a test pilot at Edwards Air Force Base in California. In California, we now have two children, and I went ahead to get my master's degree in college. As a test pilot, he flew all kinds of aircraft—multi-engines, single engines—and loved it.

And he was pretty good with his hands, so he wanted to build his own airplane. You know, he was military. We couldn't afford an airplane, but he got the plans for a VariViggen and started working on a home-built aircraft.

Soon we saw in the Los Angeles Times an ad that said, "Space shuttle pilots needed, and we want test pilots. We want women scientists, we want men engineers, and all different cultures of people, all different religions." You know, it was open to everyone. So I said, "Well, there you go." And he said, "Ah, there are so many smart people applying for these jobs. There's no way I could make it." And I teased him. I said, "How would you ever know if you don't apply?"

So I was kind of suckered into, "Yes, you can go fly those dangerous aircrafts and shuttles," but, yes, he was accepted and it was pretty exciting to go to Houston then and meet... There was 35 new astronauts, and men and women. And it was wonderful to be a spouse as a part of that group. We all grew very close to each other.

After a year of training at Johnson Space Center, he was assigned to fly Flight 41-C that was fairly important. It would repair the Solar Max aircraft in space. There was walking in space and different trajectories. All kinds of interesting things. When he came back, I asked him what it was like to fly in space, and he said he wanted to tell me first before he talked to reporters and neighbors and so forth. So we slipped away to a favorite restaurant, and with wide eyes like that schoolboy that I married, he told me all about what it was like to be in space and shared the weightless activities. And a part of that was losing his napkin because he thought it would float away at the dinner table and dropping camera equipment because he still felt like he was weightless in space.

But something that was very interesting that tells you a lot about his personality, I said, "But didn't it make you mad that Pres. Reagan on national television talked to all the crew and mentioned all their names but forgot your name." And he said, "No, June, what was important was the mission. We had a great, successful mission." And that stuck in my mind. More important than his own identity and his self-awareness of who he was on that mission, it was the teamwork and they were successful, so that stuck with me a great deal.

He was modest, humble, loved his family very much, a wonderful dad, and by the time he flew in space, I had received my PhD at Texas A&M University. I'm proud to be an Aggie. And with that, we were both moving along on our careers, very excited on our path that we had both selected in life.

Sam: Every generation has a moment they knew exactly where they were. The Challenger tragedy 1986 was one that will never be forgotten. And then the aftermath of that accident, you met my grandfather when he was still Vice President. Can you tell us about that first meeting taking place under such traumatic and extraordinary circumstances?

June: I have seen him many times at Johnson Space Center and Barbara. We worked together on projects in Houston, but after the loss of Challenger, within an hour or so, all the families are gathered in the crew quarters at Kennedy Space Center. I felt like standing at attention when the Vice President of the United States walked in to greet the families, to embrace us, and tell us about his sorrow of the loss of our loved ones. Everyone was quiet. They said no more.

The families all looked to me to say something. You know, only the day before, the commander of the space shuttle 51-L flight, Dick Scobee, would have welcomed the Vice President. I spoke up and thanked him for joining us and sharing the loss with us and asked him to respond to the country that we shared that loss with the space pioneers. And I asked him if he would help to keep space flight alive, and he thanked me. And he gave us his business cards. He wrote phone numbers down for family members and said, "Call. Call if there's anything that I can do." It was wonderful.

Sam: How soon after the challenger shuttle accident did the idea for Challenger Centers emerge? What was the initial concept and how involved were the other Challenger families?

June: I was very involved with all of the Challenger families including all the astronauts, especially Christa McAuliffe and Barbara Morgan, the backup who was going to fly on the mission.

Sam: And of course you're referring to Christa McAuliffe, the teacher and astronaut aboard the Challenger.

June: I was a teacher, had taught every grade level. So Christa and I had so much in common talking about education and our love for teaching. So I was very much connected with that mission—my husband is the commander and a new friend flying aboard. Just a couple of days after the accident, we were all back in Houston at a memorial service with Pres. Reagan and Nancy Reagan. They were wonderful to speak with us and to share their loss and sorrow for our loved ones. I was seated next to Nancy Reagan and she next to her husband, the President.

She was comforting in many ways. And when the missing man formation flew over, it dawned on me that the mission was lost. I remembered how important the mission was to ol' Scobee, Scobe as the astronauts called him. And I thought at that time NASA will continue space flight, but who? Who will continue Christa's mission of reaching all the children around the world who were waiting for lessons from space, so many wonderful things about Christa and her wish to gain respect and honor for teachers, and I wanted to do something that would continue that mission.

Within a few days after that, the families were brought together, and I asked them what they would think about continuing that mission. Each of us talked about our loved one and what they loved and their hobbies and interests were, but to a person we agreed the mission in space flight was important to them. So then we thought what would be better than building a monument, some kind of statue, would be to build an opportunity for students to fly missions, to have fun doing something that our loved ones loved so much that they were willing to risk their lives for.

So even though the space station wasn't up and orbiting Earth, I asked the families if we could make our center a space station so we could get a classroom of students aboard. And we came up with a concept of a mission control, and a space station, and scenarios that taught math, and science, and reading so that the students could fly their own mission. So they don't always know that it's a loving tribute to our loved ones, but they're doing something our loved ones loved so much that that was their life and their own mission had become missions for students.

And it's quite clever because it's grown. Our first Challenger Center was built in Houston where we were, and there was a competition to see who could build it. And then when people saw it, they all wanted one for their cities, so in Maryland, and then in Florida. They started growing out to California. Just one after another started growing.

The original concept was to reach middle-school students before they lost their curiosity and love for science, and then it evolved down to working with preschool and kindergarten children. We called those activities the Micronauts. And it's precious to see those little children on their own space mission, learning the concepts that their kindergarten teachers are accountable for teaching them.

And then now we've created something besides for the upper middle schools for the grades in between these little children and the older children. And those programs are classroom adventures, and they are sent into the classroom with a teacher to be a flight director. So it's all teachers. The classroom teacher becomes a spaceflight director. In the Challenger Centers where they all meet together with this beautiful simulator and mission control, the teachers there are called flight directors.

So it's all about education. It's all about the concepts that teachers are accountable for teaching and the skills that the children apply in life so that they can learn and be motivated to go into study more into these fields and learn about the careers available to them.

So many children that we work with are from inner city or they're from rural areas, and they're not aware of career options. But at the Challenger Center, they all have important missions. They're not just astronauts. They are actually filling the jobs of what a medical team does or what a navigator does, the robotic team and what they do with robots and handling dangerous materials behind the glass. They build a probe in the clean room so to speak. They have all different kinds of careers and opportunities to work with the technology. So these youngsters are seeing opportunities for careers in which they may want to work someday.

Sam: It's so great seeing the living legacy that you have with the Challenger Center. It's very similar to the living legacy that my grandfather has with his Bush School of Public Service. What's it like for you to have that living legacy?

June: It is definitely a living legacy that was a gift to us from our loved ones who were lost on the last Challenger flight, but I am also proud of your grandfather, Sam. Having been an Aggie, I visit Texas A&M University

frequently. I always go into the Presidential Library at A&M University in College Station, Texas. I have learned much about his legacy and his work and also about your grandmother's legacy, Barbara. She's all about the literacy programs. That is so important. Any teacher or parent is always the first teacher. When they see the spark when a child puts letters together, and it becomes words, and then they read the words, and they become sentences, and they have meaning, that is a beautiful, beautiful sight and there's so much effort that goes into sharing that job with literacy.

And the same thing at the Challenger Centers. Every anniversary of the loss of the Challenger, I want to be in a Challenger learning center because there I see the mission of the Challenger is continuing with those children on their own mission, on their own mission to learn. And when they pick up a science concept or they say, "Oh, that's what I learned in that lesson, oh, and this is how you do it," they're so excited, and they're working together as a team. And that's what a space mission is about is the collaboration of the astronauts, and mission specialists, and payload specialists all working with mission control. And that's what those students do. They are working a team effort and the chairs, when they land on the moon, they scream and holler and shout just like you see in mission control when it's a successful mission.

I'm proud of these centers. We have over 40 around the world, youngsters that have been to a Challenger Center, 5.5 million of them, hundreds of thousands of youngsters who have attended annually, and tens of thousands of teachers. And it's for boy scouts, girl scouts, birthday parties. There's all kinds of events. And some exciting things for me is to see when a community brings in children who are disadvantaged and partner them with people of advantage so that they can work together, and learn, and help each other, and support the schools from which they come.

Sam: What about the Challenger Center alumni? You started this mission to inspire more kids to get into math and science and expose them to our space program. Can you tell us about the kids you've inspired?

June: We have inspired tons of students, and we know because they send us letters of thank yous and pictures of themselves. And they kind of grew up with us. Many of them want to share with us their successes and they say, "It was because of my trip to the Challenger Center that I learned about this career, and I wanted to go into it." So we hear from youngsters that have gone into the space program, youngsters that have gone into the military and to technology fields.

Tess Caswell was from Alaska Challenger Center, and she's a capsule controller for Origin's new Shepard missions. She had a jump there.

France Jackson said she would not be the person I am today had it not been for the Challenger learning center, and she is one of the first two African-American women to earn a PhD from the Computer, Information, and Systems Engineering Department at the University of Florida. She works for intel now.

A personal story. My own dermatologist when I went into see this young, new woman doctor, she said, "You're Dr. Scobee. I went to the Challenger Center. I was the physician at Challenger Center."

Sam: Wow.

June: "I was inspired to be a doctor and now I'm your doctor."

Sam: What a small world.

June: You are right. And one of my favorite stories is when we opened the Challenger Center in Northern New York. The teacher brought in all of your students except put one in the hallway and said, "He couldn't come in because he always misbehaves." And I encouraged. I said, "No, it's something for all students." So she hid him away in the probe room where he couldn't be with anyone else, but this youngster was really good with his hands and he put together that probe in lightning fashion and what the teacher didn't know is the student who assembled the probe was the hero. And so once that was assembled and launched, all the other students in the learning center cheered him on. He had won. He had made their mission successful. And I heard later from his teachers that he had a new interest in being an engineer and that he was still trouble but it was because he wanted to know where the best college of engineering was. He wanted to win a scholarship to go there, having grown up in poverty, and I was told he made it. So they're great stories.

Sam: This year we have seen a revitalization of the U.S. space program. How has that impacted your numbers?

June: Well, to begin with, it certainly has increased our engagement on our social media platforms around this SpaceX launch and teachers have been in touch with us to help them with programs for the schools. If you go to our website, challenger.org, you'll see the myriad of lists of opportunities that we offer to teachers to help their students. So many of them are the hands-on team effort of youngsters working with real-world problems. So it's not just textbook exercises. It is the textbook lessons the teacher wants to teach, but it's activities

for those teachers. We're getting a lot of comments from the teachers, and the flight directors are all helping them. Some of them weren't able to work the computer programming, and our flight directors in each of the communities helped them. It's been rewarding all around.

So once our doors open again and we start flying that simulator to Mars where the youngsters drive the Mars rover, oh, my goodness, bar the door, Katy, these kids will be so excited to see all the new software. It's so real. I love it. I've seen it. I can't wait for the students to see it.

Sam: Well, that's great. And you mentioned SpaceX. There's a couple private space companies, Blue Origin and Virgin Galactic. Are these companies raising the excitement and raising all waters? Is that something that you've seen kind of get people to reengage into space and all that comes with your centers?

June: I'll begin with Virgin Galactic because I've been very involved with them, and I've been a keynote speaker for them at their national events. Virgin Galactic is a leader in wanting to create opportunities for people to have this chance to fly like an astronaut, to fly weightless, and they are on the cutting edge of making all that happen.

Blue Origin is a tremendous company. They work with us to help us create some of the software. So we're partnered with Blue Origin, and we have some of their executives at our international conferences speaking to all of our flight directors. And SpaceX is out there making it all happen.

It's so important for me to see that not only these wonderful aerospace companies are making the Orion capsule that will go to Mars and building the rockets that will take it to Mars, but they are partnering with private industry for space program. So a space program I'm certain will be better than ever. And, as you know, Vice President Bush was very much involved with the space program, and that's where I met him, when he would come to Johnson Space Center when I first met him.

But now Vice President Pence is very involved in the space program, and he has been with the Challenger families at Arlington cemetery, and he's talked to us and encouraged us with our Challenger Center work. It continues that folks inspire us and then we turn around and motivate these youngsters. Thank you so much for asking.

Sam: Well, it sounds like the future is bright. If you had the ultimate authority to do one thing to help our country build a stronger future, what would that one thing be?

June: Well, you ask the toughest question anybody could ever possibly answer, but I do want to share. Everyone knows Christa McAuliffe was the teacher on Challenger, and I talked to her about her lessons. She was a history teacher. She wanted me to talk with her about the science lessons. We shared great stories. But I asked her one day, "Christa, what is your dream? What is your vision for when you return?" and she said, "I want to make a difference for classroom teachers. I want for them to gain respect and honor so they can see that teachers, too, have the right stuff." She was writing her own journal and she was going to share great stories about the joy of teaching.

And that's what I want. We can grow more teachers in the field of education, but they can also join in identifying themselves with Christa to know that, yes, they should have self-respect. They should be honored. I want everyone to know honor your teachers. And there can possibly be skallywags in the class, which I have had, but they come back years later and they apologize. So it takes patience and persistence to be a teacher but also the honor.

From that joy is to share the joy of what we see on the missions at Challenger Center when the youngsters go to the moon or go to Mars, or save planet Earth or rendezvous with a comet. All that joy springboards back to the teacher. The teacher brought them to the center. The teacher introduced a program in the classroom. The teacher introduced these students to opportunities for them to think about careers and their future, to learn about the skills that they may need, and to continue with that curiosity that they had as a young person. So that joy can spread. That's what teachers do. They inspire.

I will share one story about your granddad that has to do with this. When I had first built with the Challenger families only one Challenger learning center in Houston, he asked me to come to Washington to say he wanted to help us. Some of us went to Washington.

And as I sat there with him, he said, "Why aren't you making this program national?" and I said, "Well, we're local with a local board of directors." And he said, "No, it needs to be national. You need a national board of directors, and you need to build these centers all over the country." And I said, "I can't pull together a board of directors of that caliber." And he said, "Well, you need senators, you need presidents of universities?" I said, "Oh, yes, how would I be the chairman of the board of having people like that sit around my table?"

And he laughed. And he said, "June, you're a teacher. You're a teacher. You're not a college professor." He said, "What do you do with your students? You inspire them with the lessons that they're going to learn. You motivate them to

study, and then you work with them with the goals and objectives of what you're all about, and then you test them." He said, "That's what you do with a board of directors. You test them and say, 'Okay, did you bring in that money that we need to build more learning centers?' "

He was wonderful. You cannot imagine sitting there with the Vice President of the United States and listening to him tell me how I could lead a board of directors like that and, by golly, I did with some wonderful staff who helped me. But then when he was President of the United States, oh, my goodness, he continued to work with us. he invited us to the White House. He invited us to come to special events. He and Barbara were keynote speakers for us. they were tremendous to continue that support.

One last wonderful story about your granddad, about four years before he passed away, he invited me to meet him in Houston in his office and he wasn't well. He wasn't going to the hospital, and I said, "Well, you continue to be our honorary chairman." And he said, "As long as I'm on the top of the earth, yes, I will continue to be your chair." Wasn't he great?

Sam: Oh, it's so funny.

June: But then it's a wonderful opportunity for me to have a photograph. He shouted, "Get me a camera. Get me a camera. I want a picture." And he hugged me and believe me I have that picture hanging on the wall as well as one that I have with Barbara Bush.

Sam: Do you have any favorite memories of my grandmother you could share with us today?

June: I'd love to tell stories about Barbara and the Pres as she called him. We invited her to come to our five-year anniversary. It was at a Challenger center in Maryland. She joined us and didn't think it would bring out much media for coverage or what have you but they did show up. And she very jokingly helped us cut the five-year anniversary cake, and it was difficult because we couldn't have a real knife and she had a little plastic knife. And in that process, it got icing all over her fingers. We weren't prepared to give her napkins or anything. She just licked that icing off, and she said, "Okay, let's go."

And she saw a mission. She went in where all the students were working, and they had on their headphones and they were capsule communicators and so forth. She said, "I can't believe they're all on task like this." And one of the reporters that was in there said, "Don't you see that your First Lady is here? Don't you want to reach up and shake her hand and say hello?" This little girl

put her finger on the spot navigation, put her finger right there, and she reached up and said, "Thank you, Mrs. Bush, for coming, but if I look away, I'll lose my place in space." She said, "I'd never seen students on task like that." And that was in the newspaper article as well. It was a tremendous honor. Both of your grandparents were wonderful to be with us and share these opportunities.

Sam: Well, June, thank you so much for sharing these amazing stories about my grandfather, my grandmother, but also telling us all about the amazing things you're doing with the Challenger Centers across the country. I was so happy to hear your answer about teachers because I too believe into how education are the basis for all things that can be accomplished in life. And without teachers, it's hard to learn. It's hard to do all those things. So thank you so much for sharing with us today.

June: You're kind. Thank you very much.

Sam: I'm Sam LeBlond reminding me to listen, share, and subscribe to all the best on Apple Podcast, Spotify, and everywhere great podcasts are found. Thank you for joining me as we celebrate all the best.

Barbara: Both George and I believe that while the White House is important, the country's future is in your house. Every house, all over America.

George: Preparedness, strength, decency, and honor. Courage, sacrifice, the willingness to fight, even die for one's country. America, the land of the free and the brave. And God bless the United States of America. The greatest country on the face of the Earth.

