Stepping Up in Space

Guests: Barry and Deanna Wilmore
From the series: Back on Solid Ground (Day 2 of 2)
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Bob: Most of us have never had the opportunity to see God’s creation the way Butch Wilmore has been able to see it—from outer space.

Butch: As you look back at the earth, in a span of like eight hours you can see Baja, California—the desert contrasted with the blue Pacific and the sun gleaning off the entire ocean—the mouth of the Amazon River, the red deserts of Australia / these unbelievable lakes in Uzbekistan—just sensory overload. I saw a lightning storm, Dennis, over central Africa that I guestimate was 15,000 lightning strikes in about a five-minute span. Just amazing! And it all screams of the glory of God.

Bob: This is FamilyLife Today for Friday, December 23rd. Our host is the President of FamilyLife®, Dennis Rainey, and I'm Bob Lepine. The heavens declare the glory of God but only a few of us have had the opportunity to see it from a heavenly perspective.

We'll hear more about that today. Stay with us.

And welcome to FamilyLife Today. Thanks for joining us on the Friday edition. I was just here thinking about—who is it?—Elon Musk, who will sell you a seat aboard his rocket launch to go into outer space—like it's a quarter million dollars or something?

Dennis: Is that round trip, Bob? [Laughter]

Bob: It better be! [Laughter] Leave you out there for a quarter million! But, if—

Dennis: Read the fine print on the ticket, Bob!

Bob: —if you were fabulously wealthy, would you spend a quarter million dollars to go—

Dennis: No.

Bob: —on a trip to outer space?

Dennis: No; no. But I—if I had been younger, I might have applied at NASA to have been an astronaut.
Bob: We are going to hear today a conversation that you had with a guy who did apply to be an astronaut. His name is Butch Wilmore. The first time he applied, NASA turned him down; but later, the window reopened.

He got another chance to sit down and talk about why he wanted to be an astronaut. It led to the point that he was eventually the commander of the space station.

In fact, we had the opportunity to talk to Butch while he was onboard the space station. Come to find out that he is a *FamilyLife Today* listener—he and his wife Deanna listen to this program regularly.

Dennis: I think they’re Legacy Partners too.

Bob: I think they do help support the ministry. When he came back to earth, you sat down with Butch and Deanna and got their story. He shared with you about the second chance he got—the call he got from NASA, giving him a second chance at a face-to-face interview to see if he would possibly have the opportunity to go into outer space.

[Recorded Interview]

Butch: The first interview, I had less than a week’s notice because it was the first interview.

They called me, literally, six days before I had to be in Houston. This next—

Deanna: And he had never interviewed before in his entire life.

Butch: That’s true. I never had interviewed. [Laughter]

Dennis: So the interview to be an astronaut— Huh?—[Laughter]

Butch: The truth!

Deanna: — was the first! [Laughter]

Butch: I’ll tell you Dennis—the second interview—I had three months! I had three months’ notice because we were moving / we were in the process of moving. I just couldn’t get there until like the fourth or fifth week of the interview process. I did not want to memorize a list of things, but I wanted to be more prepared; because I “Uh’d” and “You know’d” and that type of thing on the first interview. You get an hour with the selection board and you get to tell them anything you want.

Deanna: Tell—tell them the one question they ask.
**Butch:** Oh they say: “Yes; tell about yourself since high school,”—that’s the question.

**Deanna:** That’s the—

**Butch:** And then—and then off you go! [Laughter]

**Deanna:** —only question.

**Butch:** And then off you go. [Laughter]

**Butch:** The second time I—I sat down. We were in California. I was on an exchange tour with the Air Force. I just talked about me to her 40 times—I think it was the number—before I finally went for the interview.

I came away from it—I wasn’t like: “Oh I wish I’d have said that!” “Oh I wish I hadn’t said that!”—I wasn’t that way at all on that second interview. The Lord allowed it and prepared, and I give Him the glory for the—for even that part of it.

**Deanna:** Yes.

**Dennis:** The key word is “prepare”—

**Deanna:** Yes.

**Dennis:** —because you were accepted, and there were how many guys in the astronaut program?

**Butch:** In that class—

**Dennis:** —men and women; yes.

**Butch:** Yes, there was—there were 17 selected that—that selection. Again, there was like 6,000 or so that applied.

**Dennis:** And that year was?

**Butch:** 2000.

**Dennis:** 2000.

**Butch:** Right.

**Dennis:** It’d be nine years before—

**Butch:** Almost.
Dennis: —you went to outer space. I want you to give us just a little glimpse of the nine years of training. I want you to for sure tell about the training you received on surviving a crash in a Russian Siberian winter [Laughter]—a crash landing—because you had to go somewhere outside of Moscow; right?—

Butch: Sure.

Dennis: —in a forest—

Butch: Yes.

Dennis: —in January—

Butch: True.

Dennis: —to go through training.

Butch: They picked the coldest time of the year: “When is it going to be the coldest? Okay. Let’s go that week.” And they send you off.

Yes.

Then you’re survival training in the—for the Soyuz—preparation for that launch. You launch at 51.6 degrees north latitude. You launch all around the calendar year. You’re launching over mountains—and so you could have an abort situation and you wind up in those situations—and you have to survive. So yes; that’s part of it. Yes; surviving—building lean-tos, building tents, making fires out of nothing—so that’s—that’s just the survival training.

But the training, itself, for flying in space—oh my goodness!—for the space shuttle?—I can’t tell you the number—the thousands of hours in simulators that I had. Most of the simulators that you do are not everything works great. As a matter of fact, you had one / there was one—an ascent launch, when you first get all your different systems learned—that they gave you a launch that was what they call “nominal” / without a problem. Every other launch, they’d throw malfunction after malfunction.

I’d have—I’d be working five major malfunctions in a shuttle ascent sim, all at the same time.

Dennis: You were—you were the commander, for a number of months, of the International Space Station.

It was called “Expedition 41.” You took over and you were the commander of “Expedition 42.”
**Butch:** Yes.

**Dennis:** There are tons of experiments going on that are taking place. Was there a crowning achievement? Was there something you look back on—in terms of something that was done under your command—that you go: “That was really satisfying. That was really a treat to have participated in that”?

**Butch:** I couldn’t pick out one. I can name several things, but I could not pick out one. It’s just—I had the fortune / the good fortune of doing four space walks while I was up there. The work that we’re doing—outfitting the station for future crew / U.S. vehicles to dock to the station—that is certainly gratifying—but a lot of the work / there’s massive amount of work done by teams on the ground—preparing all the systems, the cables, the training—outlining all that. It just—the work in orbit doesn’t even come close to taking place without those people on the ground doing their jobs.

**Dennis:** What was that first spacewalk like?—to step outside of the International Space Station and look down below your legs to a million feet? [Laughter] I mean, I’ve stood on some ledges before, and I’ve repelled off of mountains for 200 feet but—

**Deanna:** Ooh.

**Dennis:** —in outer space? Stepping out? What was that like?

**Butch:** A long fall. Honestly, my first thought, because of the orientation of my position—my feet came out first—but as soon as I come out, and I grab the handrail that’s outside there, and I see—it was dark—and I see my crewmate, Reid Wiseman—and it’s black—and I’m like: “Oh, my Lord! I cannot believe that I am here!”

I mean, this is—the so few people have had an opportunity to do this—go outside the space station and work like that on a spacewalk. Here I am—little me—getting the opportunity to do it. It was—it was a moment where I just praised my Lord.

I don’t know why—but there I was—because it’s such a unique place to be.

**Dennis:** I’ve read what you did so I know where you’re headed with my next question. I’m finding that I’m grabbing my legs even as you’re talking [Laughter] because every move you make is grabbing hold of one handrail, and thinking where your next one’s going to go, and making sure you’re tethered appropriately;—

**Butch:** Right.

**Dennis:** —because if not, it could be fatal.
Butch: It can be—yes; true. We walk across the room—we don’t think about walking—you just do it. It’s not something you’re cognizant of; but on a spacewalk, every single movement you make, you are thinking of it. You don’t let go of one hand until you’ve got the other one moved and grabbing. Then you let go and you’re thinking all of this / all of the time.

You get to your worksite: “My local tether—got to get my local tether down,”—sometimes I used two to keep me stabilized. You’re always rechecking / always checking. You have a safety tether—85’ on a reel—that you’re making sure that you don’t get tangled in.

At nighttime, you don’t have the peripheral vision / the cues; because it is like I said—it is the blackest black you’ve ever seen—and can get disoriented easy. You still have to have cognizance where that safety tether is, because you don’t want it to wrap around behind you because you can get snagged in it and you—you have to get your buddy to come help you.

Dennis: One of the things you said about the spacewalk—it was 99.8 percent work?

Butch: Ninety-nine point eight percent work / two percent “Wow!” But the “Wow!” is the biggest “Wow!” you could imagine! [Laughter]

Dennis: Well, I’ve got—

Butch: Spacewalk’s work!

Dennis: I’ve got the verse for the “Wow!”

Butch: Okay.

Dennis: Psalm 19:1—I bet you know what that is.

Butch: Go ahead; I do.

Dennis: The heavens—

Dennis & Butch: —heavens declare—

Butch: Yes, sir.

Dennis: —the glory of God and the sky above proclaims His handiwork.

Butch: A-MEN!

Dennis: How did you—
**Butch:** How true!

**Dennis:** —how did you see the handiwork of God? I mean, give it your best shot, Butch.

**Butch:** I—it’s not easy—sensory overload. As you look back at the earth, in a span of like eight hours you can see Baja, California—the desert contrasted with the blue Pacific and the sun gleaning off the entire ocean.

**Dennis:** You said the Caribbean was spectacular.

**Butch:** The Caribbean, the Bahamas—like I said—with eight hours, I saw the mouth of the Amazon River, the red deserts of Australia / these unbelievable lakes in Uzbekistan—contrasted with this light, aqua blue and this—you know, the wispy clouds and the tan-ness of the desert—just sensory overload / just spectacular! It all screams of the glory of God—I mean—it absolutely does. I saw a lightning storm, Dennis, over central Africa—one night pass—that I guestimate was 15,000 lightning strikes in about a five-minute span—just amazing!—absolutely thrilling and amazing.

**Dennis:** I just found the entire experience, with no gravity, to be—as I thought about it—mentally exhausting. I thought about a spacewalk and how you practice the spacewalk, back here on earth—five times in a giant pool—

**Butch:** Right.

**Dennis:** —with this spacesuit on.

Most people have got this picture of a spacesuit as being this—you know, this little handy, jetpack that you strap on and you go. [Laughter] It weighs 230 pounds.

**Butch:** Yes.

**Dennis:** The suit costs eight million dollars.

**Butch:** There-abouts—yes, sir.

**Dennis:** Alright? I want to just talk about the first time you put that on; because—what is it?—400/500 steps in putting that suit on? Takes you four hours?

**Butch:** Yes. One thing that people don’t realize is that, before you even open the hatch to go outside—once you’ve depressed the airlock down, you open the hatch—before even that, you are in that suit for five hours, going through these 400 steps to make sure all the connections are right and all your tools are on. I mean, it goes on, and on, and on, and on. Then to make sure you are prepared—there are no leaks in your suit—like you said, it’s a *mountain* of work. The hardest job in orbit—the hardest job off the
planet—is the person that’s in charge of suiting up the two people that are going outside. That’s the hardest job.

For those last three spacewalks—that was Samantha Cristoforetti from Italy—because literally our lives are in her hands. We don’t know if she’s gotten everything done correctly. We can kind of—we’re listening along obviously, but she’s the one doing all the work to get us in the suits, and get everything done, and get pressurized. She’s depressing the airlock / repressing—doing all this stuff. That is a great, great deal of responsibility—the person that does that job.

Dennis: I’ve got to take you to one story—that undoubtedly you know—but it occurred during a spacewalk—of how an Italian astronaut almost drowned in a spacewalk.

Butch: True. Luca Parmitano.

Dennis: What happened?

Butch: There was a process in the fan pump separator that had—we don’t know all the details / it’s hard to determine exactly what happened—but there’s water that is in the suit, in the backpack, that goes through—you have a liquid-cooling undergarment that you wear that has these little tubes that runs through the whole thing. Water is pumped through that / those tubes to help keep you cool. You have to have that or you get very overheated inside the suit.

There’s a process where this water got into the wrong part of the suit and started coming into the air hole that allows the—where the air comes into the suit for breathing. Over the course of a couple minutes—we’ve had some suits that have spit some, because you get some condensation in the system / it spits out a little water—but in this instance, it was far more than that. It was in the course of—like a liter-and-a-half or so that got into his helmet. There was an emergency to get him back inside. We went through emergency procedures to get him back inside. He basically found his way back, blind, because he couldn’t see—just handed himself all the way back to the airlock. Got him inside, emergency repressed the airlock, pulled him out, pulled his helmet off and—thankfully, he was okay.

We’ve gone through many things since then to go through the process. NASA’s very good about assessing situations and coming up with fixes. They’ve done some wonderful work to allow us to continue on.

Dennis: You went—you went through Stepping Up®, our video series, calling men to courageously step up.

Butch: I did.
Dennis: Why did you—why did you go through that? For goodness sakes, you just strapped a rocket on with fuel and blasted your way into outer space / running around in spacesuits. Why did you ask Houston and NASA to upload that and watch that video series?

Butch: I need continual input. The people asked me what I missed most when I was in station. I didn’t miss anything, because it is such a unique environment. We prepared ourselves—Deanna, and I, and the girls—for our separation; but if I did miss one thing—it was my church / my church family—because the interaction we get, the study we get, the exhortation, the admonishment—I need that.

I knew I needed continual input, even that faraway place. I uplinked things that are special / that I had positive—something—you know, I had never seen it; but I had some positive comments on the *Stepping Up* program.

I knew that I needed to maintain and continue my journey that the Lord has put us all on—

Dennis: Right.

Butch: —for His glory. I had heard some wonderful things about it. I asked for that to help me as I continue to study, even in that place, and try to learn and grow for His glory. It was a huge benefit. Some of the concepts and things I learned—I probably / I talked about family worship—it was through some conviction through *Stepping Up* that when I came back—Deanna will back me up on this—that my propensity to do our family worship is even more so than it was before; agreed?

Deanna: Yes.

Butch: Yes; because *Stepping Up* just put that conviction on me.

Dennis: You probably don’t remember this—but when you were on earth in Star City, Russia, outside of Moscow—I said to you, “If you get a chance to go through *Stepping Up*—whomever you take through up there and you as well—realize that it’s easy to step up in outer space—

Butch: [Laughing] Yes.

Dennis: —where there is no gravity.

Butch: Right.

Dennis: But when you get back here,—

Butch: Yes.
Dennis: —there’s a lot of gravity—
Butch: Yes; I remember that well.
Dennis: —from a lot of different places.
Butch: Yes, sir.
Dennis: So I’m thrilled to hear that you personally benefitted from that—
Butch: Yes.
Dennis: —and that you truly are stepping up.

Well, we don’t have time to get into the whole story; but Barbara, and I, and Laura, our daughter, were watching your reentry on TV. There was a blackout period for what seemed like 40 minutes.

Butch: Forty-plus minutes; yes.
Dennis: It was like: “Is this normal?”
Butch: Yes; blackout—you mean communication—there was no communication at all.
Dennis: We didn’t know if you’d burned up—
Butch: Right.
Dennis: —in the atmosphere.
Butch: Right.
Dennis: We didn’t know if you were safely through the atmosphere, making a safe landing. I’ve got to tell you—I wasn’t at the command center in Houston, like you were—they distracted you, Deanna.
Deanna: [Laughing] They did.
Dennis: I mean that—
Deanna: Thankfully!
Dennis: Frankly, that was really wise of them to distract you—
Deanna: Yes.

Dennis: —because the communication wasn’t occurring.

Deanna: Right; yes.

Butch: Our flight director / lead flight director, Tomas Gonzalez-Torres—he was in a little room next door to where Deanna was in a viewing room with some guests and friends.

He walked in and turned down the sound so they wouldn’t hear any of that. So she never knew.

Deanna: Yes.

Butch: But yes; it was—we could hear all the calls that were being made to us. They were even telling the space station guys: “Call the Soyuz.” And we’d hear them call / we’d answer; but for whatever reason, our communication wasn’t going out. At that part of the entry, there is no tracking of the vehicle. The Russians have no tracking either. They had one little mobile site in Egypt, which is close—it’s not long before you actually touchdown—that got a blip of us—where we were supposed to be / when we were supposed to be there. That was the comforting thing I think for them—like: “Okay. They’re okay,”—though they still couldn’t talk to us. But that never got relayed back to Houston and to the people that would have it on television—like what you were watching.

Dennis: Well, they had completely surrounded the reentry vehicle.

Butch: Right.

Dennis: What was in the red tent? I mean, they had this red tent—

Butch: Right.

Dennis: —they took you all to. I was going, “What’s in there?” [Laughter] Are they checking your blood pressure/your oxygen?

Butch: Oh they were checking everything—oh yes, everything—yes.

Dennis: What’s the biggest health concern at that point?

Butch: It’s not—well, I guess it is a health concern—you’re adjusting to gravity. You haven’t been stimulated by gravity and your semicircular canals in your inner ear—and there’s an adjustment period for that—they’re assessing. You stand up; and you actually stand up and walk with your eyes closed, heel to toe. Try to do that when you haven’t
been on the planet six months—it’s really hard when you’ve been off the planet six months.

It’s assessing—if we go to other planets—if we go to Mars one day, it’s only got the / a little over a third of the gravitational pull of the earth because of its size. Still, you go there—you transit for six months—you’ve got to be able to function when you get there. So we’re doing assessment, now, along those lines: “What can you do when you first touchdown, back into the gravitational environment?”—that’s going on.

You’re changing out of your spacesuit into just a flight suit. Some of those, like I said, standard medical—checking your temperature, and your pulse, and all that. That’s part of it—giving you water, because you need it.

**Dennis:** So Deanna, what was it like to see him for the first time?

**Deanna:** Oh it was great! It was great to see him.

**Dennis:** He got on a NASA jet—came back to—I guess, Houston; right?

**Deanna:** Yes; pulled up and—

**Butch:** I got some memorable hugs when I got back. I tell you—those—my daughters, Daryn and Logan, and Deanna—very memorable hugs.

**Deanna:** They put us on the airplane first so we could go in and see him and talk to him for a little bit.

**Butch:** —before I came out.

**Deanna:** Yes; before he gets off.

**Butch:** It was nice

**Dennis:** That has to be powerful.

**Butch:** It was.

**Deanna:** Yes.

**Butch:** It was very special.

**Dennis:** Nothing like a family—

**Butch:** Yes; very true.
Dennis: —to come home to.

Butch: Because you think—I mean, we talked about it / like I called you up—I was able to call Deanna / we talk about it. You come back—in that fashion like I just described—nothing’s a guarantee, obviously / you never know for sure. There’s always that opportunity—it’s a dangerous environment—that you don’t make it back, and we had talked about that.

When you do, from the whole—you talk about ascents, spacewalks, reentry—all those hazardous kind of situations. You’re back safe—the Lord brought us back together—it is special / very special.

Dennis: Yes.

[Studio]

Bob: Well, again, today, we’ve been listing to a conversation that you had with Butch Wilmore and his wife Deanna. Butch was the commander of the International Space Station for a period of time. You got a chance, not only to talk with them, but they took you around and showed you NASA and Houston; right?

Dennis: Oh, yes.

Bob: You got a chance to see the whole operation?

Dennis: Oh I got to walk in some places that true tourists don’t get to see.

Bob: Yes?

Dennis: It was a cool tour. I can’t believe you hadn’t been down there to visit NASA as well.

Bob: Well, I’ll have to get down there; because there’s a new Cheesecake Factory® in Houston that has opened up.

Dennis: That would be why you would go! [Laughter]

Bob: Got to get down there.

Dennis: You know, we’re kind of chuckling here, at the end; but the clock is winding down here, in the month of December. Speaking of being on mission, FamilyLife wants to invite you to be on mission with us.
Make it your mission to support this ministry and be a part of bringing America’s families back to the strength—the moral and spiritual strength that they should have for the next generation.

Bob, I look at what’s happening in our country; and I feel like, right now, you and I are battling for our grandkids.

**Bob:** Yes.

**Dennis:** We want them to grow up in a culture that has some moral and spiritual absolutes that are based on the Bible, and we want them to be successful when they establish their marriage / their family, when they have kids, and when they equip their kids to be able to live life as God designed it in their generation.

*FamilyLife Today* is all about that mission in, first of all, the listeners life, who’s listening to this broadcast right now; but it’s also about this—with literally hundreds of thousands of others / perhaps millions around the world, who are listening to *FamilyLife Today*. If you believe in the mission of *FamilyLife Today* and what we’re doing here, could I invite you / could I challenge you to join with us in this mission?

Make it yours—make it your family’s mission! Say: “You know what? We’re going to be a part of that. We’re going to give and be a part of the overall mission.”

Barbara and I recently wrote out a check. We decided we wanted to be a part of, not only *FamilyLife*’s mission, but also the mission of some other organizations. When you give, you’re a part of that team. Would you join us and be on the team? We need you now more than ever.

**Bob:** Of course, when you make a yearend gift right now, your gift is effectively tripled because of the matching-gift opportunity that has been made available to us this month. Our Matching Gift Monitor, Michelle Hill, is here again with us today with an update on how we’re doing in our progress toward the matching gift. Michelle—

**Michelle:** Sure Bob, I’ll do that, but first I want to tell you how fun this has been for me, and I gotta let our listeners know I’m going to disappear after today and get back to work on FamilyLife This Week, because remember Bob…you’re the one who gave me that job…

Well, it looks like the new match total of one point eight million dollars is motivating quite a few additional listeners to call us because today we’re at one million and nineteen thousand dollars…so thanks to everyone for partnering with us to keep FamilyLife Today and FamilyLife this Week on the air. And of course gifts are *still* being tripled, thanks to the match.
Bob: And it’s easy for someone to make a yearend contribution. All you have to do is go to FamilyLifeToday.com and donate online, or call 1-800-FL-TODAY to donate. Or you can mail your donation to FamilyLife Today at PO Box 7111, Little Rock, AR; and our zip code is 72223. We just want to say, “Thanks,” in advance, for whatever you’re able to do in helping us with a yearend contribution, here at FamilyLife Today.

And we hope you have a great weekend. Hope you and your family are able to be together to celebrate Jesus’ birth over this holiday weekend.

And I hope you can join us back on Monday when we’re going to talk about God’s design for moms. Motherhood has a mission. Gloria Furman joins us Monday to talk about just what God has in mind, both for the kids and for the moms, when He puts them together. Hope you can be here for that.

I want to thank our engineer today, Keith Lynch, along with our entire broadcast production team. On behalf of our host, Dennis Rainey, I’m Bob Lepine. We hope you have a Merry Christmas, and we’ll see you back Monday for another edition of FamilyLife Today.

FamilyLife Today is a production of FamilyLife of Little Rock, Arkansas. Help for today. Hope for tomorrow.

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