

AirSpace Season 1, Episode 3

Bailing Out

Chris Browne:

When we started doing uncontrolled rolls, that was the first point I said, "This isn't good."

Mike Day:

Then there's a high-powered, high-impulse rocket motor underneath the seat that fires and propels the seat somewhere between 15 to 20 Gs.

Nick Partridge:

Those were the voices of Chris Browne and Mike Day, two people who know firsthand that ejecting out of an airplane is a crazy, scary, high-powered operation and that getting out of the airplane is just the beginning.

Matt Shindell:

If the ejection goes all right, then you've still got to make your way down to the ground or to the water.

Emily Martin:

Then you have to figure out how to signal to somebody and let them know where you are so they can come actually rescue you.

Nick Partridge:

In this episode of Airspace, Emily Martin-

Emily Martin:

Hi.

Nick Partridge:

... Matt Shindell-

Matt Shindell:

Hello.

Emily Martin:

... and Nick Partridge.

Nick Partridge:

Yep. We all sit down with a pilot who's actually survived a real-life bailout, ejecting from 23,000 feet in the air.

Chris Browne:

So I said, "Snake, have you got it?" He said, "No, jump," and I didn't wait to hear, "out."

Emily Martin:

We send Nick off to a training site to hop into his own F-16 jet and give it a try.

Nick Partridge:

Well, sort of. The ins and outs of bailing out. That's coming up next on Airspace from the National Air and Space Museum with help from PRX.

When was the last time you guys bailed out of something? All the time?

Emily Martin:

I bail out all the time. Just not airplanes.

Nick Partridge:

Really?

Emily Martin:

Really.

Nick Partridge:

What kinds of things do you bail out of?

Emily Martin:

If karaoke is involved, I'm busy that night. If it's a fancy dress party, I'm also busy that night.

Matt Shindell:

Is that fancy dress in the British sense of wearing a costume?

Emily Martin:

In the British sense, like costume party, although if there's hats, I'm all in. I'll do hats.

Matt Shindell:

I've bailed out a canoe that I first fell out of and then filled with water.

Emily Martin:

So you're the reason it was full of water?

Matt Shindell:

Yeah, pretty much.

Emily Martin:

Were there are other people in the canoe?

Matt Shindell:

One other person.

Emily Martin:

And a bucket and they made you do all the work?

Matt Shindell:

Well, it was kind of my fault. I dropped my glasses in the water. I was trying to get them back.

Nick Partridge:

Did you?

Matt Shindell:

Yeah.

Nick Partridge:

Okay, good.

Matt Shindell:

No, I didn't get the glasses back. Sorry. No.

Nick Partridge:

Oh.

Emily Martin:

They didn't float?

Nick Partridge:

There was collateral damage.

Matt Shindell:

Yeah, glasses don't float.

Nick Partridge:

Yeah. I bail out on Matt all the time.

Emily Martin:

What's Nicks excuse when he bails out?

Matt Shindell:

Nick does this weird thing where he's like, "I'll come over before the party and watch you set up, and then I'll just leave and not go to the party." I always just say, "Oh, yeah, that sounds like a great idea. Let's do it." Then it's like, "Ooh, well, my wife's not really feeling well right now. I think we're going to have to stay home."

Emily Martin:

The good news about all of this is now I know both of your secrets, so you guys can't bail out now.

Nick Partridge:

So we've all had plenty of experience bailing out of various social situations and perhaps work obligations, but in the movies, they make it look easy.

Emily Martin:

That reminds me of one of the Charlie's Angels reboots, where you see a disguised Drew Barrymore bailing out of a commercial airline jet with a terrorist who then gets intercepted by Lucy Liu, who was falling from somewhere where they disarm the terrorist and land into a speeding motor boat that's being captained by Cameron Diaz.

Matt Shindell:

I think that Tom Cruise has cornered the market on bailouts, like that scene in Mission Impossible.

Nick Partridge:

Which one?

Matt Shindell:

Hasn't he jumped out of something in pretty much every Mission Impossible movie, skyscrapers, airplanes?

Emily Martin:

Matt, I think I'd actually take that a step further, too. I think Tom Cruise has bailed out in one way or another from every film he's ever made, not just the action movies.

Matt Shindell:

Risky Business?

Nick Partridge:

Bailed on his college admission interview.

Matt Shindell:

Eyes Wide Shut?

Nick Partridge:

Bailed on his marriage.

Matt Shindell:

Collateral?

Nick Partridge:

Bailed on the cab fare.

Matt Shindell:

Rain Man?

Nick Partridge:

Bailed on his family.

Matt Shindell:

Edge of Tomorrow?

Nick Partridge:

Bailed on the space-time continuum.

Matt Shindell:

I think you've got a point.

Nick Partridge:

Of course, Tom Cruise was in one of the most famous airplane movies of all time, Top Gun, and spoiler alert, he bails out there, too. Here's the scene where Goose and Maverick, that's Tom cruise and his co-pilot, eject.

Film Clip:

[inaudible 00:03:50]. Eject. [inaudible 00:03:50]. Eject, eject, eject. [inaudible 00:03:51] canopy.

Nick Partridge:

The canopy is the bubble roof that goes over the pilots. In this scene, Goose strikes it as his seat ejects from the aircraft, and he's killed instantly. It's an awful moment for the characters, and it must've been on the minds of Navy and Air Force pilots who were in training to safely eject from their aircraft around the time the movie came out.

Matt Shindell:

But, I mean, the canopy isn't really the only thing that you have to worry about. Once you eject from that plane, which is going hundreds of miles per hour, you can get some pretty serious injuries just from going out into the air at that speed.

Emily Martin:

This episode wouldn't be nearly as interesting if one of us didn't at least try to eject from a jet. So we thought it would be really fun to have Nick go and give it a try or get him as close as possible to trying it without causing any injuries. We wouldn't want you to bonk your noggin on the bubble.

Nick Partridge:

So I headed over to Joint Base Andrews to run through the training they give to Air National Guard pilots. Andrews is conveniently located only about a 20-minute drive from our podcast studios.

As we pulled through the gate, it was clear we were in a high-security environment. Air Force One flies out of Andrews, and the base freezes whenever the president's plane is in motion. We missed

a freeze by only a few minutes, but we did make it to our destination on time. As we arrived, four F-16 fighter jets took off from the runway directly in front of us. We were then escorted through a few different security gates and led down into the aircraft equipment shop.

Hi.

Jesse McCarley:

Hi. I'm Jesse McCarley.

Nick Partridge:

Nick Partridge.

Jesse McCarley:

Nice to meet you. So you guys are here to talk about ejections, right?

Nick Partridge:

Yes.

Jesse McCarley:

Let me take you in here.

Nick Partridge:

Outstanding.

The room was about the size of a single-car garage, but with a double high ceiling.

Jesse McCarley:

When we do our training, we break it up into two blocks. We have our emergency egress training that we do in the F-16 trainer here, and then here we have the emergency parachute trainer.

Nick Partridge:

In one corner was half of an F-16, just the nose and the cockpit, actually. On the other end, draped over a metal rack about 15 feet tall was a bright orange, white, and green parachute. We focused on the F-16 ejection seat training first.

Jesse McCarley:

This is essentially for people that have never flown or been in one of these before. We'll do some cockpit familiarization. We can show the functional components of what actually has to get pulled to make the seat fire.

Nick Partridge:

At this point, Sergeant McCarley headed over to the corner of the room, but he paused, looked back, and asked me just how serious I wanted to get.

Jesse McCarley:

Do you want to actually put on a harness and strap into this thing?

Nick Partridge:

Yes.

Jesse McCarley:

All right.

Nick Partridge:

Of course I said yes.

I don't want to play it cool. That's not a maybe.

McCarley held up a tangled mess of straps and guided me on where to put my legs.

Jesse McCarley:

[crosstalk 00:06:57].

Nick Partridge:

Then he let the shoulder straps fall into place.

Heavier than I thought.

So at this point, I have my legs and arms in the straps, and all of them are connected and cinched down really tight at various points, really tight. It's pretty uncomfortable, meaning I can't really stand up straight. Near each of my shoulders were what looked like small seatbelt-shaped fasteners, but Sergeant McCarley explained that they were part of a two-tiered safety system that keeps a person connected to the parachute.

Jesse McCarley:

You pinch the back here, and you pull.

Nick Partridge:

So I don't want to do that prematurely.

Jesse McCarley:

You definitely don't want to do that before you're on the ground. You can pop on in, and this will give you a kind of feel for how cramped this cockpit can be.

Nick Partridge:

Hop on in. Are there any tricks or pointers that I need to know before I actually try and get into this thing?

Jesse McCarley:

What I would recommend is that you have a seat on the ladder-

Nick Partridge:

Gotcha.

Jesse McCarley:

... facing forward, and then swing one leg into the right side and keep this leg as close to the cockpit as you can. Otherwise you're going to do a split getting in.

Nick Partridge:

Exactly what I'm about to do.

Jesse McCarley:

Yeah. Lift both your knees up. Well, that's interesting. I've never seen that before.

Nick Partridge:

I'm glad that I was able to ... Thank you for the excellent instruction that I just totally didn't stick with.

Jesse McCarley:

That's all right.

Nick Partridge:

This is not a large cockpit.

Jesse McCarley:

No, this is actually the smallest cockpit in the inventory when it comes to operational fighters.

Nick Partridge:

If all of these things that are etched onto the panel were actual controls, this would, I think, begin to convey how complex this machine is. This is kind of overwhelming. Though it is a simulator, I know the simulator does things that I don't know about yet, so I hesitate.

Jesse McCarley:

That's correct.

Nick Partridge:

The seat is armed.

Jesse McCarley:

Seat is armed. Prepared to eject.

Nick Partridge:

Prepare to eject, and that's a signal to get your body as comfortable as possible before you ride a rocket out of an airplane.

Jesse McCarley:

Just like a car crash, you want to be as relaxed as possible.

Nick Partridge:

Now, a little aside here. Some naval training facilities have a simulator seat on a rail, and it shoots you about 20 feet into the air to give you a taste of the force of a real ejection.

Jesse McCarley:

Obviously, big things are keeping your legs flat, your elbows in, and spine straight. You want to be looking up and out. Anywhere your eyes go, your face is going to follow. If you are looking down, you're going to experience that 9 to 14 additional Gs. You're going to experience that on the back of your head, and it's going to push your face down into your knees. You're going to pull that handle, and you're going to apply 40 or 50 pounds of pressure, and you're going to do it straight up, so a linear vertical pull, and then back into your chest. You want linear compression on your spine. Hands are clear? Canopy's coming down. All right. What I'm going to do is I'm going to give you the command, "Prepare to eject." You're going to get in your body position, and you're going to go ahead and pull that handle and-

Nick Partridge:

So at this moment, I'm not really sure what to expect. The uncertainty was building, and my heart rate was a little bit up.

Jesse McCarley:

Eject, eject, eject.

Nick Partridge:

It was a hugely anticlimactic moment. That noise you hear is my seat slowly rising out of the cockpit, really gentle, maybe a total of three feet. The roof of the plane, the canopy, also opened up, but, again, at a very leisurely pace.

Jesse McCarley:

There you go. You've ridden it. You've ridden the sled.

Nick Partridge:

Even though this was all playing out with comedic slow motion, it's important to note here that mastering the body position can be the difference between life and death. You have to be able to know which levers to pull and when and master all of this stuff flawlessly when it's going slow in the simulator if you have any hope of getting it right when you're at speed.

Jesse McCarley:

The speed is actually an interesting factor when it comes to ejections, but essentially your body is producing a ton of cortisol, and you're hyper-alert about everything that's happening. So something that feels like a second could feel like four seconds, five seconds.

Nick Partridge:

You mentioned car accidents being analogous. I was once in an accident where my vehicle left the road and was traveling through the air for a little bit before it came to an unceremonious stop. I remember in

the absence of any very real security or emergency procedures, I checked my seatbelt, and that was secure. Then because I didn't have anything else to do, I turned down the radio. I don't know. Maybe I didn't want to be listening to Counting Crows if it went the wrong way.

Jesse McCarley:

It's funny. When you're under a lot of stress, you're able to focus on strange things that you normally wouldn't.

Nick Partridge:

Over the next hour, Sergeant McCarley walked me through the other main aspect of injection technique, the parachute simulation. I actually dropped into the hanging harness, and the moment when you let go of your foothold and fall, even in a simulator, is a little jarring.

Jesse McCarley:

This is ... Whoa.

Nick Partridge:

But it was worth it, because at the end of the lesson, he said this.

Jesse McCarley:

Like a pro. Actually, technically, if you were to go ... I'd you off to go on a backseat right after this. This would be one of the steps that you'd have to take in order to fly in the backseat.

Nick Partridge:

I am qualified to ride in an F-16 now.

Jesse McCarley:

Yep.

Nick Partridge:

Nice.

Jesse McCarley:

At least from an egress standpoint, you are.

Nick Partridge:

From an egress standpoint.

I am now-

Matt Shindell:

Superstar.

Nick Partridge:

... a qualified, qualified F-16 passenger.

Emily Martin:

I want to be qualified, qualified.

Matt Shindell:

So when you eject from the airplane, you've got your seat attached to you, and you've got your parachute, but what else are you carrying?

Nick Partridge:

Your seat has all kinds of survival goodies in it. You've got flashlights and survival rations and a signaling mirror and a radio and-

Emily Martin:

Wait, a signaling mirror?

Nick Partridge:

Uh-huh (affirmative).

Emily Martin:

So cool.

Matt Shindell:

Can I ask a question?

Nick Partridge:

Yeah, Matt.

Matt Shindell:

So Nick, I heard there's a post-ejection checklist that comes with a little dance. Can you tell us about the dance?

Emily Martin:

Can you do the dance on a podcast?

Nick Partridge:

So it's not exactly a dance. The gestures are a way to remember some of the most important steps in the ejection process. I can do it, but our listeners won't be able to actually see it.

Emily Martin:

Well, that's okay. You can do it. Do it for us here in the studio, and we'll actually tell everybody about it.

Nick Partridge:

Okay, let me see. The first move is checking your lens.

Emily Martin:

He's waving his hands in the air like he just doesn't care.

Nick Partridge:

Then pushing your visor up.

Matt Shindell:

He's kind of doing the YMCA A.

Nick Partridge:

Then you remove your face mask and regulator.

Matt Shindell:

I don't know how to describe it.

Emily Martin:

It's like the hula, but just on the one side.

Matt Shindell:

Yeah, hula, but it's also like, "Get away from me, you annoying little dog," or something. Yeah.

Nick Partridge:

Yeah, yeah, yeah. Then there's something that you check with the survival equipment behind you in the seat.

Emily Martin:

It's sort of the hula on the other side. Yeah.

Matt Shindell:

Yeah. It's kind of ... Yeah, exactly.

Emily Martin:

Just the arms part, though. He's sitting down, so we can't tell if he can do the hips.

Nick Partridge:

You've got to check your life preserver.

Matt Shindell:

So you look strong and manly with your fists in front of your chest.

Emily Martin:

He's kind of wobbling back and forth, holding his lapels.

Nick Partridge:

Four line [inaudible 00:13:48], so hands back up.

Emily Martin:

He's still waving his hands.

Nick Partridge:

Steer into the wind.

Emily Martin:

Now he's just waving his hands back and forth.

Matt Shindell:

Waving his fists. Yeah.

Nick Partridge:

Prepare to land.

Emily Martin:

He looks like he's going to try and stand up. Hold on. Preparing, he looks like he just won the Olympic gold.

Matt Shindell:

This doesn't look much different from the others.

Emily Martin:

I don't think he remembers his choreography at all.

Nick Partridge:

Then you land, which I'm not going to simulate now, because it would involve me just falling out of my chair.

Matt Shindell:

I'm going to have to send a letter to your instructor and say you are no longer qualified.

Nick Partridge:

But the salient part of landing is that the balls of your feet have to hit both at the same time. Otherwise you're going to-

Emily Martin:

So it's a little bit like clogging?

Nick Partridge:

You're going to break that one. I've never clogged. Do you do that in clogging?

Emily Martin:

You've never clogged?

Nick Partridge:

No.

Emily Martin:

Hmm.

Matt Shindell:

Hmm.

Nick Partridge:

That was the most judgmental "hmm" I've received all day, and I've gotten some doozies. So the dance is fun, and we're laughing about it now because I look ridiculous trying to recreate that here in my chair. But this is a really extreme situation that not a lot of people have had to endure. When you pull that handle and come out of the aircraft, you have a rocket attached to your end, and it lights and gets you out of that situation as fast as humanly possible, which puts tremendous strain on your body, to the tune of anywhere between 10 and 15 Gs, depending on the circumstances. For comparison, astronauts launching aboard the space shuttle would experience no more than about three Gs.

Emily Martin:

So how often do you think it actually happens when somebody has to eject out of a jet?

Matt Shindell:

Actually fewer than 1% of all air crews ever have to eject.

Nick Partridge:

It's even rarer to find someone who has survived that experience without at least some broken bones to show for it. More on that after the break.

Matt Shindell:

So you guys know Chris Browne. He served as a naval aviator. He directed operations at National and Dulles Airports, and he's now the interim director of the Smithsonian's National Air and Space Museum.

Emily Martin:

Which is to say he's our boss. Chris sat down with all three of us to tell us his story.

Nick Partridge:

Like many great adventure stories, it began many years ago on a dark and stormy night.

Matt Shindell:

That was the night that Chris bailed out of a burning of F-14.

Nick Partridge:

Which is the same kind of airplane featured in the film Top Gun.

Chris Browne:

St. Patrick's Day 1983, I'd been in the squatter about a year. So I was junior, and I was crewed with the commanding officer. So he was in the front and I was in the back, and whenever you fly with the commanding officer, you have immediate creds to whatever story you tell. So that was operative to this.

Nick Partridge:

The commanding officer, the skipper, his call sign was Snake. Chris's was Brownie.

Chris Browne:

We launched at about, I guess, 11:00 PM, and we were going through a cycle of preparation called ORE, operational readiness exam, about 200 miles north of Puerto Rico. It was a normal launch, other than the fact that it was an incredibly black, dark night. So typically if you've been in the woods or camping without any moonlight and you get that sense of how dark it can get, which for us means that there no horizon. So that's always a little disconcerting. But in any event, we launched, proceeded out to our area of operation, and I started to see sparks coming out from the underside of the belly of the aircraft, which was a little unusual.

Nick Partridge:

Yes.

Matt Shindell:

You're telling this story very calmly. Were you very calm at the moment that this was happening?

Chris Browne:

You tend to be very focused and compartmentalize. I mean, that's part of, I guess, the training that-

Emily Martin:

I mean, how fast are you going? You're going really fast.

Chris Browne:

At that moment, we were probably doing about 300 or 315 knots.

Emily Martin:

That's [crosstalk 00:17:36].

Chris Browne:

So we were just loitering, as we would say, and about 23,000 feet. I said, "Well, we've got some problems." It became apparent that now the sparks were sort of streaming. Systems started to shut

down, go awry, and in the backseat of the F-14, there's about eight panels of circuit breakers. So circuit breakers started popping.

Matt Shindell:

It was like flipping the breakers at your house?

Chris Browne:

Yes. Yeah. You push it back in, and it keeps popping out. Then it's like, "Ooh." The heart rate's starting to go up. The engines were performing fine, so there's no engine fire, but we turned towards the ship at this point and obviously declared an emergency. Well, lo and behold, we're motoring along, and the aircraft does a roll. Mind you, it's pitch dark at night. Airplane's got multiple emergencies. So I said, "Snake, have you got it?" He said, "No. Hang on." It was like, "Well, okay. I'm hanging on." Pilot has the flight controls. I'm in the back. I don't have the ability to actually maneuver the aircraft physically. We came up and then did another roll. So I said, "Snake, have you got it?" He said, "No, jump," and I didn't wait to hear, "out." We both knew that the plane was on fire, and at that point, you don't know what's going to happen. I mean, is it going to blow up? So it was, as I said, time to give it back to the taxpayers.

Matt Shindell:

You're still going around 300 miles an hour?

Chris Browne:

Yeah, we were trying to slow down at that point. So we were probably 280 or something like that. The whole seat leaves the aircraft. We actually were inverted at the time of leave, and later my sister said, "Oh my God. You were upside down?" I go, "Well, at 23,000 feet, you've got plenty of room to work with." But, I mean, it is somewhat of interest. If we had been much closer to the ship, very near landing, it would have had a different outcome. So we were just as happy that the whole thing came apart when it did.

Nick Partridge:

So you pulled the handle, and now what happens?

Chris Browne:

So you're still buckled in. You've got your mask on and helmet and everything. You're still in this seat. Things are sort of wild gyrations and out of control. But then the drogue shoot, which automatically deploys, stabilizes you. But nevertheless, you're dropping like an anvil. So you feel like you're just dropping down through a mine shaft.

Emily Martin:

So pretty quickly, you end up inverting back sort of up-

Chris Browne:

Correct.

Emily Martin:

... because you've got the shoot stabilizing you?

Chris Browne:

That's right.

Emily Martin:

It must've been so disorienting at such high speeds.

Chris Browne:

Once the seat stabilized, I remember looking down to my left lower quadrant and seeing the F-14 driving down towards the water, engulfed in flames. It was at that point I thought, "No kidding. Son of a gun. The thing really was on fire," because at that point I hadn't smelled smoke. We hadn't seen flames. We just had a plane that was coming apart.

Matt Shindell:

So if you had waited a few seconds more, do you think it would have gone badly?

Chris Browne:

Quite possibly.

Nick Partridge:

Can you see Snake at this point?

Chris Browne:

No, that comes later. But at that point, it's very you, yourself, and I kind of thing. I was thinking, like anyone else in that situation, "All right. Is this thing going to work as advertised, or am I going to drill into the water at 500 knots?", as this thing's dropping down like a rock. At this point, the timing is like, "How long have I been at this?" It did strike me that I was still cold. I recall that when we had pre-briefed the flight, the air temperature was 77 degrees and the water temperature was 77 degrees. Again, it was in March, 200 miles north of Puerto Rico. So the cue, there was, "I still have to have some altitude here because of the temperature."

So I said, "All right. Sit tight. Let it go," and then bang, bang, sort of a violent ... The parachute automatically opens. In the opening shock of the parachute, the helmet I had on jostled off. In training, we're always told, "Hang onto everything, because you never know how it might be of use to you later." So I ended up riding down with the chin strap in my mouth and the helmet hanging off. I probably should have just pitched it, because it was such a distraction. But then, again, it was pretty dark. I got the flashlight out to look at the parachute to make sure it's all behaving as need be in this fully-

Emily Martin:

Wow. That takes a lot of-

Matt Shindell:

The wherewithal.

Emily Martin:

Yeah, just to be able to like, "Well, I should check out my parachute at this moment. That sounds like a good idea." I don't know if I'd have it together.

Chris Browne:

As I've told people, I said there's nothing heroic or amazing that I did that night. I mean, I just ...

Emily Martin:

You just wanted to see if your 'chute looked good.

Chris Browne:

It was a product of ... Yeah.

Nick Partridge:

So you've got your flashlight out. Was the parachute okay?

Chris Browne:

Yeah, it was. It was not tangled, which is good, because if it had been, I'm not sure what my next act would have been. But one of the things that you want to do is you want to have the ability to turn into the wind with your parachute so that you're not tracking over the water, in this case, at a high speed. One of the ways you do that is you actually sever four of the lines to your parachute.

Emily Martin:

But you cut lines to your parachute as like a way to-

Chris Browne:

Yeah. Yeah, because-

Emily Martin:

That sounds flawed, doesn't it?

Nick Partridge:

Did it cross your mind to put the helmet back on first?

Emily Martin:

It sounds like a flawed mechanism to me.

Nick Partridge:

Yeah. Why would you do this?

Emily Martin:

Why would you sever any connection you have to that parachute?

Chris Browne:

It's been tried and true by others, so I trust it, I guess.

Emily Martin:

It's the way they do it, right? You don't question it.

Chris Browne:

Yeah, four lines, you just cut it. Cut it. But it presumes that you can then maneuver the 'chute into the wind. It's intended to give you a little bit more maneuverability. During the flight brief, it was also briefed it was 25 knots of wind and eight-foot seas. I said, "So it's all about setting up shop to make sure that when you hit that water, you're doing everything right so you don't drown." So one of the things is this life raft you have, which is not much bigger than this table. I've got the seat pan sort of hanging to my butt, and there's a handle and this sort of clam shell. You pull the handle, and out pops the undeployed raft. It falls down, and at the end of its 13-foot lanyard actuates a bottle, and it instantly inflates.

But because of the wind, the damn raft started gyrating at the end of its lanyard, to the point that it started coming up towards the parachute lines. I thought, "Oh, good gracious. This won't work." So I actually pulled the lanyard in and wedged the raft between my two legs, and I've got the helmet in my mouth. It was very awkward, kind of gyrating around-

Emily Martin:

What are your hands doing? They're on the parachute?

Chris Browne:

They're on the shroud lines. Yeah.

Nick Partridge:

At any point there, are you glad that it's at night just in case the ship was close?

Chris Browne:

Well, the other thing that happens is everything you have is tied on a string and the string to you so that you don't lose things. So when I let go of my flashlight to pull the raft in, now the flashlight's on a two-foot ... Everything is like too many strings. It was just like, "Ah." After a while, the air started to feel a little thicker. So I started to let the raft out. Then at that point, it's like, "Okay, as soon as this raft hits the water, I'm out of here." You're just going down to dark, no moonlight. There's no moon or anything. It was windy, and you could hear things were blowing around.

I heard what I thought was the raft flutter and the end sort of hit hard, and I thought, "Okay, it's hit." I lifted ... It's a two-part release from your parachute. There's a guard that you lift up and then the release that you pull down. I lifted up the guard and was getting ready to disconnect and pull. A faithful person would say, as I didn't, somebody sort of said, "Hang on a minute, hoss. Just give it a little minute." As it turns out, I was probably still at about 2,000 feet.

Emily Martin:

Oh, jeez.

Chris Browne:

So one of the things I look back on is how close I came to releasing from the 'chute early. That would have been a different ending to the story. But it was enough that spooked me at the time. I thought, "Son of a gun, I am not getting out of the 'chute until I know that I'm about to get wet." Then as I started getting closer to the surface, the water, the white caps were creating phosphorus. You could see the phosphorus lighting up. There's a lot of spray and noise and humidity. I thought, "Okay. Any moment now." Then when the raft did hit, it was very obvious and out, and I never saw the 'chute again. I think it just blew off.

Nick Partridge:

Well, you're in the water, so that's an improvement, and 15 minutes from coming out of the airplane, give or take?

Chris Browne:

Yeah, that's probably about right.

Nick Partridge:

How far were you from getting back on the boat?

Chris Browne:

Probably 50 miles from the ship. Not too far. So I get in the raft, and I pull out a strobe light. I had a little pencil flare, fired a pencil flare, as did Snake. That was the first indication that he had made it, because I was about 100 yards away. So I said, "Okay, well, if Snake's okay, I'm okay." I pulled out the radio. I get on the frequency, and so you've got to take it from the perspective of the helo crew. They fly over, and the intent is to fly over, drop the flares to mark where you are, and the crew chief dropped these damn flares. They must have landed within eight feet of me. It's like this bonfire on the water. I just remember thinking, "Son of a gun. I'm going to burn up out here now."

The helo came back, does its approach. Swimmer jumps out. At this point, the down wash from the helo, it's like hurricane winds and stuff. So it gets pretty disconcertingly loud. The petty officer, the rescue swimmer, comes over near me, and he says, "All right. You've got to deflate your raft, because you don't want the raft without weight in it and getting sucked up into the blades." So then it's sort of like releasing perfectly parachute lines. Now it's like, "I'm deflating the raft. You sure we want to do this?" "Yeah, we've got to do it." So we deflate the raft, and into the helo we go. It all ended well, and I was back flying within 18 hours.

Emily Martin:

18 hours?

Nick Partridge:

18 hours?

Chris Browne:

Yeah, the next day.

Matt Shindell:

So did you see things differently from the cockpit from that moment on, or did things really just go back exactly the way they were before?

Chris Browne:

You kind of fall right back into it, and the systems worked as advertised, truly. Martin Baker is the manufacturer of the ejection seats that we used and most ejection seats. When you successfully use one of their seats, they send you a tie and a tie clip, and there's a red triangle on it. What that is, is that's sort of an emergency icon, if you will, that is on the seat, showing, "This is where we pull," and sort of a unique ... Not a terribly nice tie, but it's a unique tie.

Emily Martin:

It's got provenance.

Chris Browne:

Yeah.

Nick Partridge:

Earned it.

Emily Martin:

Do they still do ties and tie tacks?

Chris Browne:

Yeah. Yeah, so far as I know.

Matt Shindell:

Do you know if we have one of these in the collection?

Chris Browne:

I don't know. You're welcome to it if you'd like.

Matt Shindell:

There you go. We've made an acquisition right here.

Nick Partridge:

Did the helmet make it back to the ship?

Chris Browne:

Yeah, it did, and the guys just said, "Well, we can fix this up." I said, "No, you know what? We're not going to do that." I went out and purchased my own protection helmet.

Nick Partridge:

Had you soured on that helmet by that point?

Chris Browne:

I still have it. Yeah. I still have it. Yeah. Yeah, I kept the helmet. I should turn it into a lampshade or something like that.

Emily Martin:

I wouldn't make it into a lampshade. I would just make it into sculptural art.

Nick Partridge:

Put a plant in it.

Emily Martin:

But then you'd have to ... I mean, it would roll off a shelf or something, because it's round, isn't it?

Matt Shindell:

You could use it as a cereal bowl to eat your ramen.

Emily Martin:

But it deserves a place of honor, right? I mean, that's-

Nick Partridge:

Right.

Emily Martin:

I mean, it needs to be bronzed.

Matt Shindell:

Oh, well, the helmet is great, but I can't stop thinking about that tie. It is a trophy, and there's a long history of trophies related to bailing out.

Nick Partridge:

Are they all silk ties?

Matt Shindell:

The oldest trophies that we have are these golden caterpillar lapel pins. They signified that you are a member of what they call the Caterpillar Club. You had used a parachute to save your life in an air emergency. In the early 20th century, most parachutes were made of silk, so if you bailed out with a parachute, silken thread had saved your life.

Emily Martin:

It's not like a trophy that you get by winning a contest, right? It's more of a badge of honor.

Matt Shindell:

Exactly. It's a badge of honor. In fact, during World War II, they actually created a badge, an embroidered insignia for Army pilots who had bailed out over water and landed in the ocean. Those men were called the Goldfish Club. So they had an embroidered goldfish with angel's wings. It looks like a goldfish cracker with wings flying over an embroidered wave.

Emily Martin:

I mean, a goldfish cracker with angel wings is a pretty sweet idea.

Matt Shindell:

I think that's pretty cool. I mean, Nick, if you could design an embroidered patch for having gone through your slow-motion ejection training, what would it be?

Nick Partridge:

An inchworm slowly ascending a silk thread at El Capitan at Yosemite. A lot of silk subtexts in these commemorative badges and pins.

Matt Shindell:

Well, I wonder if the tie is made of silk.

Nick Partridge:

It is. Yes. I checked.

Matt Shindell:

Well, there you go. It's all silk all the way down.

Emily Martin:

So Nick, we know that bailing out is actually really serious business. Now that you've actually gone through the training and you've heard the story from Chris, do you actually think you're ready to do it?

Nick Partridge:

I think I remain more comfortable bailing out of social occasions at Matt's house than I would be bailing out of an actual airplane.

Matt Shindell:

But you are still coming to the house on Saturday, right?

Nick Partridge:

No. Yeah, we'll be there Saturday.

Matt Shindell:

All right.

Nick Partridge:

Emily?

Emily Martin:

We'll see. No, it is actually on my calendar.

Nick Partridge:

This episode of Airspace was produced by Jocelyn Frank. Our executive producer is Katie Moyer. Since this is our March episode, it's coming out really near the 35th anniversary of Chris's St. Patrick's Day bailout. If you're celebrating, please raise a glass of green beer in his honor. To see pictures of Chris with his Martin Baker tie and photos of me dangling from the parachute simulator, please go to our website, airandspace.si.edu. Thanks to John Barth, Jason Orfanon, Tarek Fouda, Major General Rick Devereaux, and Staff Sergeant Erica Rodriguez. This episode was supported by PRX and the Alfred P. Sloan Foundation, enhancing public understanding of science, technology, and economic performance. More information on Sloan at sloan.org.

Jesse McCarley:

Lift both of your knees up. Well, that's interesting. I've never seen that before.

Outro:

From PRX.