IndyCar Media Conference

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Jay Frye Press Conference

ARNI SRIBHEN: Welcome, everyone, to today's IndyCar media conference call. Earlier today, IndyCar revealed photographs of its new look for the 2018 Verizon IndyCar Series. The 2018 aero kit project is a collaboration of IndyCar, Dallara, and design experts in the United Kingdom with input from drivers, teams and fans alike. The new core will come in two specifications, one for superspeedway ovals and the other for use on short ovals, permanent road courses and temporary street circuits. The public reveal comes Tuesday at Indianapolis Motor Speedway, when superspeedway cars powered by Chevrolet and Honda take to the track for testing.

Joining us today is Jay Frye, IndyCar president of competition and operations. Jay, thanks for taking the time today.

JAY FRYE: Thank you.

ARNI SRIBHEN: Jay, the 2018 aero kit project is more than a year in the making. We know there's still much to be done starting with tomorrow's testing and subsequent tests at Mid-Ohio Sports Car Course, Iowa Speedway, and Sebring International Raceway. But as you pause on the eve of the car's first actual test, what do you like about the new car's look?

JAY FRYE: Well, there's lots of different things we obviously like. I really like that it's -- this has been a year and a half in the making, and the process has finally come to the point where we can get the car on the track, so we're quite excited about that. We certainly appreciate everyone's help from Dallara to the teams' help and the manufacturers that have helped. And certainly the fans, over the last few months we kept putting out some different things to get reactions from the fans to see what they thought of the project. It helped us a lot because it made us feel like we were certainly going in the right direction, which was great.

But I think one of the things that's really cool about the car if you think of something specifically -- again, there's a lot of little things, but one of the little things that I think is pretty good or great is if you take the engine cover off now, you can actually see most of the engine, right, which before you would pull it off and you might see a lot of air inboxes and air intake and that type thing that's now been moved to the bottom. You're able to pull off the engine cover, Chevrolet and Honda will be able to display the engines in a different



way, and just little things like that make this project come to fruition.

ARNI SRIBHEN: This has been a collaboration because so many people have been involved. Can you elaborate on the steps IndyCar has taken to include people in the process?

JAY FRYE: Yeah, throughout the whole process we wanted to get as many opinions as we could get and be as transparent as we could about everything. Thinking about the whole process, how this has played out, last fall or last year we had a couple tests, one at Phoenix and one at Mid-Ohio where Andretti Autosport, Ganassi and ECR were involved, and at that point we did a lot of things to the current car that we wanted to apply to the new universal kit. So we've had great support of the teams at that point.

From that point, we took what we thought the car should look like, and that's where we talked about reverse engineering the car and to esthetically make it look with the historical feel but yet a very forward looking car, and we think we've done that.

From that point we did six or seven scale model wind tunnel tests, and the numbers have come back very strong, which we're quite excited about, and here we are coming up to tomorrow, where we're going to have our first on-track test. So it's been a long process, but it's been very methodical. It has been a process, so every day we've been able to check a box, and so far, so good on checking the boxes.

ARNI SRIBHEN: I know one of the groups that you involved in getting the feedback from the car was the Verizon IndyCar Series drivers, and they've been asking for the cars to generate more downforce from the underneath instead of the top of the car using the wings. It's clear even from the photographs that we've seen today that the top of the car has far fewer wing pieces. Do you think that will reduce the turbulent air for a trailing car?

JAY FRYE: Absolutely, and that's what we talked about earlier when we did the test, especially at Mid-Ohio. We did that to see what the difference was, where the drivers would have the ability to pull up closer quicker, not run into the blanket of air or wake, and that really worked well there. So I would say probably 60 to 70 percent of the downforce is generated from the bottom of the car, where before it was 40 to 45 percent, so

there's been a big gain in that. Also another piece of this puzzle is there is less parts and pieces on top of the car, which creates less debris opportunities, that type of thing.

Again, hopefully we've hit a home run on the esthetic part. We've hit a home run hopefully on the performance part of the car. The safety part of the car is well-advanced. The driver's side impact piece that's in this car is moved forward. The radiators are moved forward, so it's also a much more robust protection piece for the side impact for the drivers. Again, we've worked really hard to check numerous boxes, and hopefully everybody thinks we have.

Q. I have a question about what the cost of the new car will be for the teams and what parts will carry over from this year to next year.

JAY FRYE: Well, there's a couple -- let's back up here. From a total cost perspective, one of the things we had to look at was a conversion cost, right, so there's what would it cost to convert the cars now. It's not as much as we first thought it would be. Part of the process, too, is they can use this product for at least three years, so it's good for at least '18, '19 and '20. So the conversion piece is one thing.

The annual cost should be 30 to 40 percent less than what the current car is. One of the things with having a universal car is we're able to negotiate that, able to negotiate the term, which is, again, for three years, so the teams can plan for it. That was something that was very important, what the actual conversion cost was going to be and then what the annual cost was going to be over this term.

So the cars just in general, I would say it's 30 to 40 percent less than what the current model is, and again, the conversion costs didn't end up being -- it wasn't bad, and part of that was because we were able to do it over a three-year period.

Q. I have two quick questions. One is the wind screen that's been talked about. Are you going to try to get this aero kit the way you want it without the wind screen, or are you going to be popping the wind screen on at some point and including that in the testing before you finalize it?

JAY FRYE: Well, the cars have been built and designed around having some sort of application like that, so at some point between now and the end of the year we'll test something, whatever application we come up with. We're definitely conscious of it. We're conscious of how it will affect esthetically. We're conscious of the safety piece. A lot of things that went on recently with some other testing, hopefully we are already ahead of that, and we are already aware of some of the issues that could come with the testing.

When we get it on, we want to make sure we've got it right, and we want to make sure it's ready to go, and

again, at that point, then we'll decide is it an '18, '19, or are we going to use it in the future. If we're going to use it in the future, we want to make sure we're ready, and when the product is actually done and designed, developed, we'll actually be ready to put on a car.

Q. A lot of the drivers we've talked to have asked for -- it give it 100 percent throttle racing. They want to have more horsepower and less downforce and lift in the turns. You've talked about having less over the body downforce and more under body downforce, but is the net or the total downforce now going to be less than it was before so that you might get some lifting in the turns, or did you go for more downforce or the same downforce? What were you looking for in the total numbers?

JAY FRYE: Well, there's probably a 20 percent overall reduction, 20 to 25 percent overall reduction to the current car, and what we tried to do is create the window, so the total potential window of the car's downforce level has definitely shifted down, so not just the top, the maximum amount of downforce, the bottom end has changed, too, where it's dropped. So we've moved the window down. Not saying we're ever at completely max downforce, but this car does have less overall downforce. The downforce opportunity window is moved down.

Obviously as the teams start running the car, they'll get better and better and better, so we wanted to make sure to move it a different direction that once downforce comes back, to a degree, that we haven't exceeded this window that we're looking at.

Q. In terms of the team testing, it says the teams will get the kits delivered in November after the series test process is complete. Would you expect there to be actual team testing with the kits before the end of the year, or would that come in after 2018 starts?

JAY FRYE: Actually that would be in 2018. What's going to happen is after the series, after we have the sign-off test, which is here at Indianapolis, Iowa, Mid-Ohio and Sebring, the manufacturers will have a testing period, also, where they'll get kits to go test with their teams, and then the teams will get their kits in November, and then their team testing process will start in January.

Q. I have a two-part question: How involved were the drivers in the design process in terms of safety just in relation to -- like we've had a lot of big accidents lately with Seb and then also obviously with Hinch a couple of years ago. Does that have any impact on the overall design of the car? JAY FRYE: Yes, we tried to make sure we were very transparent through this whole process, and if you look at the two incidents you just mentioned, this driver side impact protection device piece is a big part of this new kit. It would have addressed Hinch's incident, and it

would have addressed Seb's incident, too, or it was areas that the car now is now is more robust than it currently is, so it's something we paid attention to. We made sure the drivers were involved with it.

Even if you look at the, per se, sponsor blocker on the current car, as you notice, it's not on this car. Well, with the radiators and the body and everything being moved forward, the body is moved out farther as you can see because of the driver impact device, so a wheel contact to the side of the car will be more like hitting a side pod versus getting up on the underwing. So there's things like that that we've done, again, little nuances to this entire project that we think has made the car safer, and we definitely have paid attention to the drivers' input, we've paid attention to Jeff Horton and Dr. Trammell and everybody else who's been involved with this to make this car as safe as we can.

Q. Do you think that the new kit will entice more teams to come into the series?

JAY FRYE: Hopefully, yes, because we're very fortunate right now, we have four or five different entries, or possible entries going forward, which is really good. But one of the things from a team perspective that you know you can get a kit now and you'll know that it's good -- you can plan a three-year window so you can plan your budgets three years out. You know what it costs. The price is not going to go up. So we were able fortunately to lock in all the costs to the car, so it's a good time to come in.

Also at this time, this whole process started when we started talking to new manufacturers to come into the sport. They weren't necessarily interested in the aero kit piece, so this was one of the things that we did, so hopefully besides new teams, we have an opportunity to recruit a new OEM partner, too.

Q. I've got one question about the design that you've been talking about. You said that the engine cowling opening will be much lower on the engine so that it becomes more visible, correct?

JAY FRYE: When you take off the engine cover, yes, the engine is more visible than it was before. There were obviously things on top of it that kind of blocked it where now that's gone, so you get a much cleaner, closer view of the engine.

Q. I wonder how much on board Honda and Chevrolet are with this because they always like to cover their engines so that people can't see them. JAY FRYE: Well, they've been very on board with it. They've been certainly a big part of the process. We've been working with them since this entire project started. And then recently, the last couple weeks when the kits started coming in, again, we for sure thank the Penske folks and the Schmidt Peterson folks for their help through this process, too, so it's been a collaborative effort to make sure all the parts and pieces fit because it has changed how the -- not so

much how the engines are installed but how the air box is installed and the turbos and that type thing, electronics. But the manufacturers have been involved in it from day one.

Q. So they'll be able to cover what they want to cover, but there's a lot more that will be visible to both fans and to those of us in the media?

JAY FRYE: Yes.

Q. Over the process of introducing this new look, you've talked about the historical styling cues. What part of the 2018 package would you call new or revolutionary?

JAY FRYE: Revolutionary? That's great. Great question. I think it's a combination of different things. Again, the car, the styling of the car was derived from -- we looked at pictures of cars over the last 20 or 30 years. We tried to find parts and pieces that we like and tried to put them all kind of together. Obviously everybody has different opinions on what they like or what they don't like, so that's collaborative. This car will have all new electronics. It'll have a new dash. It will have a new brake package. Obviously PFC is coming in with the calipers for next year.

So it's a pretty overall new car. The chassis is the same. Again, we're fortunate to extend the term with Dallara on that through '20, also. Again, from a team perspective, they know where we're going. They were part of the process, were able to lock it in for three years, and what we try to do is work three years out. We always try to work three years out, so then next year we'll try to have an understanding of where we're going to go in '21. So again, from a team, you can always plan three years out.

- Q. As a quick follow-up, does Dallara expect to make the majority of the parts here in its facility in Speedway, or will some be produced in Italy? JAY FRYE: Yeah, most all of them will be produced here in Speedway.
- Q. You obviously have a schedule for the venues and testing coming up, and we now know the timeline for what's going to happen after testing, but can you offer us some insight into any goals that maybe lay out for testing at these four diverse tracks that this testing is going to be going on at? JAY FRYE: Yes. The way we look at it, it's more of a sign-off test, so we're really -- there are certain targets we'll have at each venue that we go to. We'll try to hit the target. Once we hit the target, we might try to back it up and do it one more time, and then be done -- we'll as the league be done, and that's really what the next four venues or the four venues we're going to are for. It's just more of a sign-off test to make sure everything works like we think it's going to work, make sure we hit speed targets that we think we can hit, make full-tank runs a couple times to see how that plays out. So that's really our part.

So once we're done with that, then we give it to the manufacturers. The manufacturers can then go test with their teams, and then after that, obviously the teams will get their kits and then they can go test.

Again, we've tried to, like we did over the last year and a half, have a process and a procedure that we go through, and this is the first part of that. We've got to the track testing part. We're going to do the sign-off piece.

Again, I want to thank Juan and Oriol, too, for their participation in this. They've been great. And go from there.

Q. You're standardizing this car pretty much, chassis, aero kits, everything. What about the shock package? As I understand it today, teams are able to do their own shock package, but that's expensive. I've heard some complaints about that, where the teams with more -- bigger budgets can do more R&D. My question is will the new car have a standard shock package, or will that still be open for development?

JAY FRYE: That's one of the areas we're exploring right now. We came up with our five-year plan, and we've deregulated some parts and pieces. We've tried to get more of a cottage industry going again and that type thing. We haven't got to that yet, and that's one of the things on our list to look at to see what the direction is we want to go, and right now, like you mentioned, it is open.

It is expensive. But it's something that we're certainly going to look at in the future to see -- again, transparency with the teams and see where we want to go and what we want to do, but it's certainly on the list to incorporate it into the five-year plan at some point.

Q. The comment I heard was that those shock packages aren't putting even one additional person in the grandstands, so why waste the money. That was the comment I've heard.

JAY FRYE: Yeah, no, and understand it's something we're certainly cognizant of and we're aware of, and we're going to evaluate that. The aero kit project was a big project over the last year. We were fortunate enough to get some renewals done with our manufacturers and Firestone and Dallara this year, and that's -- the brake piece last year with PFC, so the shock package is something we'll look at next.

Q. Everything since you came on board as president you have said you wanted to change, you've done it. With these changes, you did mention earlier, somebody mentioned a question I had in mind, that other teams and other engine manufacturers are now looking at you because the engine manufacturers don't have a huge investment in the aero kits. Are you getting close

to somebody that's getting dead serious about joining Honda and Chevrolet?

JAY FRYE: Well, thanks. I'm not sure if we're close. I would say we're closer because there were several some hurdles that we had, and hopefully we've removed the hurdles, so there seems to be more enthusiasm about the direction, and they see our fiveyear plan, they see where we're going. That doesn't mean they're coming. It's just maybe there's now an opportunity that they could come. One of the things we did, too, when we went through this whole process is we made sure to let other OEMs who aren't currently our partners know what we're doing and ask for their opinion because we thought it certainly behooved us to show them where we're going and what we're doing before it came out, get their opinion on it because it wouldn't have been very smart on our behalf to come out with a new plan, and then for them to say that they didn't want to do that, either. I think we've eliminated some hurdles. I think they see we're doing what we said we're going to do, and they like our direction. They like where we're going. Again now we've just got to keep doing it.

Q. I understand the pre-testing that you've done as you built the car has been in an air tunnel as opposed to a computer, so you feel quite confident that you're testing indicates what the car should do tomorrow and you should find out, in fact, it does? JAY FRYE: We think so, yes. Again, nothing -- you know, I've always been a believer that data doesn't drive. This is going to be the finished product -- and even tomorrow, so for instance, this is a test, and we fully have expectations that there's going to be things happening that we're going to have to react and do things and that's why you go test. We're optimistic about tomorrow because we have all the wind tunnel testing we've done. The drivers have been in the simulator with this car, so Oriol and Juan are both up to speed as much as they can be with today's technology without actually being in the car, so tomorrow will be the first chance they get to sit in the car and drive the

It's just part of the process. I'm sure there will be some bumps tomorrow, but we'll get through it. We've got great teams and drivers helping us out.

Q. Things are heading in the right direction. You're doing your job. My hat is off to you.

JAY FRYE: Thank you. It's a great team effort. We've got a lot of great people at IndyCar. We've got a great paddock. We're all in this together. It's been very transparent and everybody has had an input, and again, this is just the piece of the puzzle that we've all worked on together to get to this point, and we're looking forward to seeing how it goes tomorrow.

Q. I was just wondering, are we going to have any new camera angles or anything like that for TV broadcasters?



JAY FRYE: Yes, thank you. That's something that we're looking at. There's one in the rear and one in the front, maybe in the nose. One of the attenuated -they're still kind of fluid on how it's going to go and how it's going to work, and that's one of the testing pieces we talked about. There was a spot on the car that we wanted to put a camera for next year, and we didn't think the area was hot or that part of the car would get hot, so we've already done some basic heat strip tape testing on a couple current cars to see how much heat is generated, and we actually found out that there was way more heat than we thought, so the heat would exceed what the camera can take. Again, this is just part of what we're working on now, part of the testing, but our ultimate goat with Robby Greene and his group is to get as many cameras on as many cars as we can to just enhance the overall product for our fans and give them different views and looks, and we're excited about where that'll go, but it'll certainly be part of the '18 car.

Q. When you talk about the esthetics of this car and how it was reverse engineered, is it fair to say that the chassis or the kits provided by Chevy and Honda will probably go into the record book as a case of over-engineering a problem that didn't quite ever catch on with the fans?

JAY FRYE: I don't think so. I think earlier we mentioned that everybody has their opinion on it. Like when we looked through the last 20 or 30 years of cars, we all had opinions on which one we liked the best, so that's very subjective. I think what both manufacturers did, the amount of effort they put into it was spectacular. You think about all what happened with that era, the last couple years, now we've just pivoted into this next version, and this next era of where we're going, so this has, again, got a historical feel but an overall forward look.

Again, I think it was just a different period, and now we're going a different direction. But again, the manufacturers have been spectacular and the stuff that they came up with was ingenious at times. Again, one of the things I feel Tino Belli and Bill Pappas have been incredible through this whole process, from numerous trips to Dallara and the things that we had to do to put this all together, they've been really phenomenal. So I wanted to make sure to mention them today, too.

Q. And the reason I say that is because it's very apparent that there's few bits and pieces on this car than the previous generation. Has it been like a determined effort to take stuff away from the car in the design?

JAY FRYE: Yeah, well, we mentioned earlier, this car is a sleeker look. There's less parts and pieces. One of the things we talked about is on the safety aspect, there's less opportunities for debris with this car we're going to test tomorrow, which is good. I think it's much easier for -- none of this -- that's a bad word. None of this is easy, but for the mechanics, the way that this

body comes -- this kit comes off the car, how it is to work on, will be better for them. There's different things that affect different people different ways, and again, we've tried to check the box on as many of them as we can. So far, so good we think.