## NTT INDYCAR SERIES News Conference

Thursday, October 12, 2023

## Jay Frye Rob Buckner Matt Niles

**Press Conference** 

Q. We haven't been a part of hybrid testing, but you guys have been doing it for quite a while. If you could walk us through the progress you made since you first starting testing.

JAY FRYE: I think first off we want to thank both of these guys (indiscernible) to this point. Today and tomorrow at IMS is actually the final kind of, from a certain perspective, first test.

Again, great job from everybody at Chevrolet, Honda. So far so good.

## Q. On the oval, because there's very little braking, how did you come up with the idea of the paddle system?

JAY FRYE: I'll let these guys.

#### Q. How did you come up with the idea?

MATT NILES: We had paddles on the car already. Using that for regen seemed like the natural thing to do. We had to do some software trickery to reassign the clutch paddle for use while out on track.

But it seems like it could work, and that's what we're trying to figure out here today and tomorrow, is get the drivers out there together and (indiscernible) see if we could get it to work in a pack.

#### Q. From the Chevrolet perspective?

ROB BUCKNER: Very similar. When we were looking at how we could make this work as a superspeedway, the paddle was a fit for how the drivers could manage the energy in the system, out of the system. Kind of plays into the hands of the driver with how this place historically races. Seems like a good starting point for first couple days here. I think we're all learning a lot. There's a lot of



details to come on that, but all good so far.

## Q. Two months into this, having this 2024 spec out on track, can you talk us through how this is different in basic terms.

MATT NILES: Basically what we're adding is an energy storage, which uses super (indiscernible), which is kind of a different thing than you might find in a road car except for a couple extreme examples.

At any rate, we have an energy storage on the car, basically like a battery, but using super capacitors. Then there's an electric motor. All of that is fit inside the bell housing which is a piece that fits between the engine and the gearbox at the back of the car.

We're adding in energy storage and the electric motor, tying it straight into the drivetrain of the whole vehicle. Then going out here we're using a paddle, the driver can say, I want to charge up the battery, they push a button, it uses the electric motor to add power to the car. At a road course, the same thing. We can use either automatic regeneration or you can have the driver involved pulling the paddle.

From our side, I think we're just interested in getting involved in different, sustainable technologies out there. Get a lot of our engineers to develop them and work on them, then come here to this sort of extreme environment to test them in a race, how that all plays out for the future.

JAY FRYE: It's got a lot of horsepower, low voltage. That was something that was important. How that works without batteries or cap backs. High horsepower, all this fits inside the bell housing. Obviously the packaging on an INDYCAR has to be small. One of the biggest challenges is the packaging of it into this car.

# Q. What are things over the last two months that you have either figured out or finalized of this package? What are you still in the process of learning or deciding?

MATT NILES: I think, yeah, we're pretty set on where we are with the energy storage. I think we've been finding out

... when all is said, we're done."

how all these different components survive in this environment. The vibration is unique. Also the temperatures that we deal with. We've been learning a lot about that.

But I think going forward, a lot of it is really how we use the system and the parts and pieces we have, and how that's regulated on track and how the drivers use it, how the engineers interface with it, how we go racing. That's where we've been going through sort of street course at the short course at Sebring, we've been running short ovals, road courses, and now we're here at this hallowed ground to see how it works here.

We just kind of have to go back through all the data, start making some decisions on how we go to St. Pete.

ROB BUCKNER: It's similar for us, a massive learning curve every time we go testing. It's a productive day and a new knob in terms of race cars are giant energy balance equations. This is another new factor in that. We found it could change car balance.

The drivers have been enjoying having a different experience in the car beyond what a 2.2 liter package has always been engine-wise. We'll keep longer and go from there.

### Q. How much of this is collaborative and how much is proprietary?

JAY FRYE: It's brake vibration, the way these two have worked together on this project...

We've been working at this for some time. We got to a certain point and we looked to our two car partners to finish the thing off and make it raceable. They've taken this idea we have collectively had, got it to a certain point, got the real experts in now to get these things to where we can race them.

#### Q. Is there room for proprietary innovation?

JAY FRYE: It's going to be a spec piece at this point, yes. The drivers will have a tool that they can use differently. I think that will be something that will separate, How does that work for the drivers.

#### Q. Rob and Matt,if you had the spec piece, does it come down to you guys still optimizing the actual 2.2 liter engine that you've had for the last decade? Is that where your camps sort of branch off?

MATT NILES: Yeah, I mean, we're still trying to get more power, squeeze more that we can out of that every year.

Then, yeah, I mean, it's a new piece, a new bit of energy. So even though we kind of all have the same system, there is some differences in how you might use it, how a driver might interface with it. Our engineers are able to sort of dig into that and try to figure out the best way to go forward.

Yeah, I mean, like Jay was saying as far as the collaboration, normally we're out here, it's cutthroat which we love competing out here. We've been able to wave the white flag and get this done, which has been really good.

It's been a great collaboration, so...

#### Q. Is it odd when either of the two of you call each other to talk about the hybrid assist piece because normally I doubt the two of you call each other?

JAY FRYE: There's weekly calls, daily calls, group calls. We have an IEC, INDYCAR Engine Committee. (Indiscernible) has been another extension of that. They talk a lot.

ROB BUCKNER: It's not as awkward as people think because it's easy to overlook. General Motors and Honda are developing fuel cells together, electric vehicles together. This isn't our only joint venture, if you will. Still compete in the showroom, compete on the racetrack, but this is a project that teaming up together has made a lot of sense. It helps the series that we're competing in. It's been a good joint collaboration project.

#### Q. Tech transfer has always been important to you as manufacturers. Is this something that can move over to road cars? What have you learned that can move over to road cars?

ROB BUCKNER: I think we're always trying to compare simulation tools and how we compare coming to the racetrack. I don't know if capacitors would power an all-electric vehicle, which is where we see GM going simply because they're kind of high power for a short duration, which isn't a good fit for an all electric vehicle in terms of range.

I think the whole EV space, everyone is learning a lot. You don't want to turn away from any opportunities to build upon that skill set for the company, for the program, for motorsports or anything.

Q. You both have two complete cars that you can use in the testing process right now. When do you expect every team to be able to have their hands on this? Are there any concerns on being able to get all the parts and pieces ready?

. . . when all is said, we're done."



MATT NILES: I think to get all the teams have their hands on it, our goal is to have that before the end of the year. I think getting all the parts and pieces in place by St. Petersburg is going to be a challenge.

But that's what we do here, is challenges. So we're going to keep pushing ahead and get it done.

## Q. Jay, you've been through that before with other parts, aero kit parts, aeroscreen, parts availability.

JAY FRYE: In addition to Honda and Chevrolet, we've got skeleton (indiscernible). We've got (indiscernible), PVG with the screen, upper frame. There's a lot of people involved.

Obviously it's all going to come together and fall together. We had a team manager meeting the other day, had the presentations with Dallara where we're at. I think we're into a good spot.

Again, how do you organize it? Is it by points? The next big test will be a 10-car test, first part of November, one car per team. We got a couple more four-car tests coming up. The next plateau will be the 10-car test.

MATT NILES: December.

## Q. What's the time frame for having the rules set in place?

JAY FRYE: We're learning stuff today, right? Again, we'll get to a certain point. This thing will evolve over the next couple years even, right? We go, this is a 24, 25, 26 thing right now, program. How does the program change in 24, 5 and 6? It will probably be much different in 26 than 24.

We evolve. We have these groups, (indiscernible) groups like that. We talk about this stuff, come up with a consensus, there we go.

#### Q. Could be good for competition?

JAY FRYE: Yeah. Like I said, it's going to give the drivers a new toy, a new tool. Some of them are going to like it probably more than others, it's going to be interesting to see how it plays out.

Remember, three or four years ago, we ran a push to pass test here, so we've done something kind of similar to this. Never run anything like this on an oval before or anywhere before, an oval for sure. It will be interesting to see how this afternoon plays out. Again, it's a new tool. We got amazing drivers and amazing teams, competitors, they'll figure it out.



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