

Check 6
Interview With Pratt & Whitney President Chris Calio
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AW&ST: Hello and welcome to Farnborough week. I'm [Aviation Week Senior Propulsion Editor] Guy Norris here with Chris Calio, president of Pratt & Whitney. Chris, thank you for talking to us today, although for obvious reasons we're not speaking at Farnborough. But I want to catch up with you and the news from Pratt & Whitney in the virtual world.

Since you officially took the reins from Bob Leduc around the turn of the year, it's probably fair to say that you've been through a baptism of fire, what with the impact of the pandemic, the continuing efforts to get the Geared Turbofan upgrades in place, and of course you've been through the merger with Raytheon, too. So can I ask you how you've been dealing with the situation of the pandemic in the midst of that Raytheon merger, which officially closed at the beginning of April?

Calio: Thanks for having me, Guy. Unfortunately, we're not sweating it out together on the tarmac at Farnborough where we'd prefer to be. You talk about coming in officially in January for Bob, it was some big shoes to fill. It's not exactly how you want to script it, coming into it with a pandemic. We're all in this together. There's no industry, no person that's gone unscathed from this, regardless how long you've been in tenure in your position. There's no playbook to pull down off the shelf and leaf through for an answer. So we've all been in it together, figuring out together as an industry and certainly as a company. When you think about our priorities, we've got 42,000 people in 40 countries. Making sure that they were safe, making sure they could do their jobs safely and productively has been our No. 1 and overarching priority. And that's where this team has really come together.

I mentioned to somebody the other day, crises like this either pull people together or pull people apart. I think in our case at Pratt, it has brought us together around that overarching priority: keeping our people safe. Some people have got to do their job in the shop touching the product, building the product and servicing the product, and there is one set of issues there, making sure they have the right protective equipment, that the shop is configured in such a way to facilitate social distancing. And then you have folks who can do their jobs at home, fortunately. We have to be sure we have the right IT infrastructure and the right productivity. So this is how we've been balancing the situation; that's the charge that we're leading around.

Right. And of course as you mentioned, a lot of the work that still has to go on particularly with updating the Geared Turbofan fleets—I understand that you’ve been able to take advantage of this down time in some areas to accelerate that program. Can you give us a little snapshot of where things are with that?

Sure, and just to take a little step back, Guy, obviously safety of our employees being a No. 1 priority, right after that of course is what action do we need to take to preserve the financial stability of the company; we’ve had to reduce E&D, we’ve had to reduce capital expenditures; we’ve done furloughs; we’ve done those kinds of things.

This has also required us to be pretty ruthless in how we prioritize our investments and the things that we have to do in the business. The one thing that we have absolutely kept front and center is the GTF—that is central to Pratt & Whitney and our future, so we’ve kept going with the upgrading of the configuration for the GTF, putting in reliability upgrades, LLP upgrades. And to your earlier point, retrofitting the LPT. So we continue to invest both on the production side and also in the MRO side.

This is a horrible situation we’re all facing, but we try to make the best of it from an MRO output perspective so when this industry finally recovers, which it will, the GTF fleet will be in a much better and healthier position than when we came in [to the pandemic]. And so we continue to prioritize MRO and LPT retrofits and output in our shops and in our partner shops.

And now that you’re obviously part of a bigger conglomerate, are you already seeing positive impacts from that? I’m thinking potential benefits of Raytheon’s large military focus during what is proving to be leaner times for commercial side of the business for both largely commercially-dependent Collins and the Pratt & Whitney side of it.

Yes, I know, people have asked me whether or not the merger was/is a distraction and for us, it was not. It’s been quite the opposite; it’s been an injection of technology and talent on an additional scale on the aerospace side. So it has been, in our view, a fantastic deal. I think there are things in the future we’ll be able to do from a cost synergy perspective. And it’s less of a story but one that needs to be told, from a revenue synergy perspective. There’s a lot of ways that these companies can work together to bring new and innovative products to our military and commercial customers. So I think it’s going to be a fantastic deal for us.

Right. And of course the bigger picture beyond the recovery—from everyone’s side, but particularly on the commercial side—is the pursuit of sustainability. That’s been a huge factor in Europe particularly, where you are now a big operator. With plans being announced to develop this potential ecosystem around hydrogen fuel, how do you, Pratt & Whitney, view the road to renewed sustainability, the potential adoption of hydrogen-based fuel system? How much life do you see ahead of us in a gas turbine as we know it? By all accounts, Pratt led the way to introducing its

geared architecture, perhaps opened up a new life in the gas turbine. Do you see that going away, or do you see it really as being a step up in the next direction?

We still think that the geared architecture has room to grow and still more to do in the gas turbine engine. I think with the gear, we also have propulsion efficiency, and customers have seen the benefit of that. I still think there are still things to do on the material side that can bring efficiency; it's another area where we can focus to extend the life of the traditional geared architecture. So I think there's a lot of room there.

You mention the sustainability initiative. We are *all in* on trying to reduce the carbon footprint. There are some very aggressive industry goals out there that we want to support. The customer will demand some more aggressive goals that have come up in the recent months. So we are going to continue to support that. We're placing our bets in several other areas.

You've heard Greg Hayes talk about our hybrid-electric demonstrator. We still believe that that might have a path. Hydrogen is certainly something that is out there today. I think we'll see that in the smaller aircraft sooner rather than later. Obviously, we'll have some space constraints, so we'll have to deal with. But I do believe that it is a viable option. You've heard Airbus say that is viable in the 2030-35 timeframe. So that's something we'll continue to invest in and be focused on, because sustainability is at the core of everything we've done when we designed and manufactured the gear, and that is the staple for us, and we want to continue to follow through on that.

Turning to the military front, obviously a lot going on at the moment. Looking to flatten the cost curve on the F-135 engine, you're pushing your case for the engine on the F-15EX, rather successfully at the moment, and of course you're in the middle of the competition of the B-52 reengining with the PW800. A lot going on at the moment. So can you give us a thumbnail sketch of how you see things panning out during this year?

You're right; there are a lot of exciting opportunities on the military side. Our military engines business/segment will really be our rock this year and in the near term. I think they will continue to drive sales and cash and really be a huge contributor to Pratt & Whitney overall. On the F-135, that's still in the early stages, Guy. We're early on in the program of record, and there's a lot more F-135 deliveries; we've talked about the work we've done with the War on Cost—taking cost out of the engine. We've done a fantastic job there to make that a more competitive platform.

The next frontier, of course, is sustainment. Sustainment is going to get much heavier as we move forward here. How do we go attack costs on sustainment so that the operating cost of the F-135 continues to improve?

So between the GTF on the commercial side and JSF on the military side, those are our two big central platforms that really form the two investment thesis of Pratt & Whitney. But there are other investments that you mentioned. The F-15EX: The F-100 is a phenomenal engine—we've got 3,000 operating out in the world today. It's the safest single engine fighter in history; I think there is going to be a compelling case for it on the F-15EX. I look forward to an open competition on that platform.

The B-52 reengining opportunity—we've been powering the B-52 for 60+ years with the TF33. Incumbency is important to us, and the B-52 continues to be a critical element of the national defense strategy.

So we are going to be putting forward the PW800—which has the incredible efficiency and sustainability elements of the geared turbofan—bringing that to a military platform. The PW800 has been fantastic in service; it has got great dispatch reliability and only 25,000 hr. So we think it's a phenomenal option for the B-52 and brings tremendous life-cycle fit to that program.

Chris, thank you again so much for your time. Again, sorry we aren't seeing you in person at the show. It's been great catching up through the magic of this media. Talk to you again, I hope, next time in person!

Thanks, Guy—I look forward to being on the other side of the table from you.