Transcription

Rolls-Royce Trading & Trent 1000 Update

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PRESENTATION

Operator

Hello and welcome to the Rolls-Royce Trading and Trent 1000 Update. Throughout this, all participants will be in listen-only mode and afterwards there will be a question and answer session. And just to remind you, this is being recorded.

Today I'm pleased to present Warren East, CEO, and Stephen Daintith, CFO. Please begin.

Warren East

Thank you. Good morning everybody and thanks for joining us at relatively short notice. You will have seen the trading update this morning and we also have distributed a presentation around the Trent 1000 and what we're going to do now is quickly go through the presentation on the Trent 1000.

We're joined this morning by Simon Burr, who is our Head of Engineering in Civil Aerospace and he will go through some of those slides.

Let me start with a contextual slide to begin with. I'm now on slide 2. This lays out the fact that on the Trent 1000, we have effectively three versions of the engine in service – Package B, Package C and TEN. And on the Trent 1000, we have, for the last couple of years, been wrestling with three fundamental issues with the engine: issues with durability in the turbine section. What has caused the hiatus, really, around the Trent 1000 was when we discovered some issues in the compressor section of the engine, where we discovered cracking in compressors that we worked out would have a potential safety issue, and therefore we had to instigate a regime of inspections with removals of defective components and replacement of defective components to ensure safety of the fleet. All of those inspections and removals led to effectively overwhelming our repair and overhaul network in the state that it was in at the time, and that led to aircraft being parked on the ground, which led to disruption for our customers, which has led to costs. That is what the hiatus has really been about.

However, if you lay it out as we have on this slide, we have three versions of the engine – three fundamental issues – and we need to fix all of those issues. So, the slide shows a snapshot of where we are today: we have fixes for all of the issues on two of the marks of engine: the B and the C. We have fixes for the IP compressor and the IP turbine blade on the TEN as well. A number of those fixes have already been certified and you can see the extent to which the replacement components have been rolled into the installed base – the fleet that is out there flying at the moment. And we have made significant progress on all of that over the last 18 months.

We now have one issue: the high-pressure turbine blade on the TEN version of the engine. That design has been ongoing and we expected to have a tick in that box and to have a redesign of that certified and to be installing that in the early part of next year. But recent testing has shown that we can't achieve the durability that we want to achieve and therefore it's going to take us longer.

At that point I'll hand over to Simon to give you a little bit more detail on the issue with the TEN and the high-pressure turbine and then I'll come back and talk about what we're doing about it.

Simon Burr

Good morning. This is Simon Burr. The high-pressure turbine blade in the illustration, hopefully you can see, experiences gases from the combustor. You've probably seen Rolls-Royce has communicated before that these blades each absorb the energy equivalent to what you see in a Formula 1 car – very energy-intense. The alloy system, the material system we use in these planes has been in effect for over a decade and we know it works in service. The same

system is used on the XWB very successfully and on other engines. So the issue isn't anything do with the material system; it's about how it's cooled.

The blade itself is surrounded by gases that are above melting point of the blade. That concept has been used on all jet engines and gas turbines for many years. To protect the blade it has tubing that goes through the centre of the blade through multiple passages and also has a film on the outside of the blade that protects the blade from these very hot gases. This is called 'film cooling'. So the blades have around 200 very small holes in them to create that film and that design system has been used for many years very successfully. The issue on the TEN is not the blade materials or how it's made; it's the cooling. With the cooling, we're doing two things: we're increasing the amount of cooling air and making a slight redistribution of some of those holes that create the film of cooler air, which protects the blade.

The engine went into service with an expectation of a particular life and we put an inspection regime with that. That's been successful to make sure there is no operational disruption, i.e. no events in service. It's a recurrent inspection regime to make sure that the engine performs in the air, take-off and climb as expected.

As we've inspected engines, what we've found is that the turbine blades are deteriorating faster than anticipated from the original design. So we don't have to take the engines off and replace the blades, the design change that we're putting in has increased cooling and, as I said, a slight redistribution of the cooling holes, and then we have to do a series of arduous tests to satisfy, first of all, ourselves, and then Boeing and then our regulators that we've got a satisfactory life.

So that's the core of the story. The HP turbine blade is designed to increase engine life, so it's a critical part, as it were, in the design of the engine. What we've done, if I just go on a slide, is a detailed review. We've done various tests. The Trent 1000 TEN is actually certified to a higher thrust than the previous variant - it's designed to operate at up to 76,000 lbs of thrust compared to the Pack B and C up to 74. The hottest point is in the take-off and climb – that's the design point we have to worry about.

We've done a series of tests. What we need to do is make sure that the blades will be absolutely robust in service. The test results show that we need to make a further refinement. We're going to do that and then we have a series of tests to complete to satisfy ourselves that the blade will operate in the way expected.

So those are the steps we're taking. The way that the end blade is made and the material systems are identical, but the difference is in the detail and design of the blade and the cooling system itself. Hopefully that covers the essentials of what we're doing.

The last thing I would say is that we now have a very good model of how the blades are performing in service. In designing a solution that you can model what's happening and replicate that in models, what's happening in service, then you can be pretty confident in the design solution, so when you commit to testing, you know whether the outcome you expect will be achieved. We've got a good model now for what's happening in service on the TEN fleet and that's led to our strategy in terms of overhaul and management of the fleet until the new blade is in service.

Warren East

Thank you Simon. If we flick on to 'What are we doing about this?'. The key thing is to provide certainty to our customers, because, as I said at the start, the hiatus has been caused by aircraft on the ground, which is disruption for our customers and what they need above all is certainty as to when they will have an aircraft available so that they can serve passengers.

We also need, of course, to resolve the situation and put the final ticks in the final box on slide 1 as soon as possible. So what are we doing about putting that tick in the box as soon as possible? We are getting Simon more resources to deal with that problem, making sure that we have dedicated people working on it to bring this new design through testing as soon as possible. We have to create test engines in order for that to happen, so we have freed up capacity to make sure that we can create test engines as quickly as possible to accelerate the design.

The other thing that we really need to do is make sure that, moving towards the certainty for our customers, we need to get through the backlog of all the overhauls that we need to do as quickly as possible, and that means increasing the capacity of our repair and overhaul network. If you've followed the story, we've been doing that consistently over the last 18 months and indeed we are redoubling our efforts there. We are repurposing some of our facilities from assembly and test, we're repurposing some of our component facilities to make the components required. We're adding test bed capability and we're also attempting innovative methods to service near-wing with our customers. So maximising the MRO capacity.

The other thing that we're announcing this morning is that we're investing in additional spare engines so that when we do end up with an aircraft that would otherwise be on the ground because we can't get something through the repair and overhaul the network as quickly as we'd like, then we can deliver a spare engine and have the aircraft flying again in a matter of hours, rather than a matter of weeks or months.

So those are the three actions that we're taking to effectively provide certainty as soon as possible to our customers. I'm going to hand over to Stephen to talk us through the financial implications of all this.

Stephen Daintith

Thanks Warren. Good morning. Concurrent with the engineering review, we've carried out a detailed financial review of the consequences of these matters that we're announcing today. This review has factored in the revised timing for the high-pressure turbine blade introduction, which is now the first half of 2021. We've also taken a more conservative view of the alternate high-pressure turbine blade durability. I've put this in very simple terms using the 20th year as the final year for a shop visit for an engine programme. Typically, you would expect a shop visit every five years and therefore having four shop visits over that period. We're now looking at a period of closer to four years for every shop visit, so you're going to have one extra shop visit over that 20-year cycle.

That extra shop visit then causes us to look at the roughly 20 customer contracts. We carried out a detailed financial review of our customer contracts and assessed the impact of that extra shop visit on each of those 20 customer contracts. Three of those contracts we are highlighting as loss-making contracts. We're reporting those losses today as part of an exceptional charge, which also includes the revised in-service cash cost estimates on the Trent 1000.

We've also carried out a detailed financial review of the Trent 7000 and the customer contracts undertaken and are not expecting any material impact on profit or cash on the Trent 7000.

Moving on to the next slide, the Trent 1000 in-service cash costs, what does this do? Now, in this chart here we show in the first half how we guided on the Trent 1000 cash costs and our revised estimates that we're releasing today. So, first of all, 2019. We're now expecting 2019 to be around £550 million, compared to the £450-500 million that we previously disclosed. 2020 will be similarly £450-550 million. 2021 will be £450-550 million. You can see there the impact of the Trent 1000 in TEN version in-service cash costs coming through. Just to be clear on this one as well, the £400 million increase over the £1.6 billion was foreseen at the time of the 2019 Half Year results.

Previously, we'd assessed that to be around £400 million spread over a few years. We guided that number as within normal contingency levels over 2021 and 2022. We're now expecting an increment of £400 million on that number, taking the total, therefore, to £800 million on the TEN. That cash cost will be spread across 2021, 2022 and 2023. So, when you add on the £800 million cash costs on the TEN over that time and profile, the £1.6 billion that we've previously disclosed on the other variants of the Trent 1000, that gives you a total cash cost across the years 2017-2023 of £2.4 billion.

Moving on to the next slide. How do we get go the £1.4 billion exceptional P&L charge? This is principally comprised of these two items. Broadly equal parts. With the additional cash cost to cover the customer disruption, and remediation and shop visit costs, this is almost all of the £800 million of in-service cash costs on the TEN I just ran through on the previous slide.

The second part of this is the up-front recognition of future contract losses on just a handful of customer contracts that are part of those 20 contracts that we carried out a review of as a consequence of this engineering review. The full accounting treatment will be finalised with the full 2019 results.

On the 2019 outlook, guidance is maintained, but we now expect the outcome towards the lower end of the range. The bottom-right side of that chart shows that the guidance that we've given, underlying operating profit of £700 million, plus or minus £100 million from core free cash flow of £700 million plus or minus £100 million. So we're still within that range, but towards the lower end of that range.

Civil aerospace has had continued growth in engine flying hours, continued progress on OE loss reduction but there has been a modest impact on profit with the additional engineering investment on the Trent 1000.

Defence continues to expect stable sales and investment in future programmes continues to drive higher self-funded R&D. Defence is still a very solid performer for the group. Power systems trading remained healthy. We see continued growth but delivery referrals on a small number of larger projects impacts the full year 2019 revenue growth. So we're now expecting low- to mid-single-digit growth in power systems. Clearly that will flow through to margin and impacting the profit guidance we've given today. ITP is trading in line with expectations.

Warren East

And with that we'll now be happy to take any of your questions.

Q&A

Operator

Thank you. Ladies and gentlemen, if you wish to ask a question, please can you press 0 and then 1 on your phone keypad now in order to enter the queue. Then after I announce you, just ask that question. And if you find that the question has been answered before it's your turn to speak, just press 0 and then 2 to cancel. There will be a brief pause while the questions are being registered.

Our first question is to the line of Chloe Lemargie at Exane. Please go ahead, your line is now open.

Chloe Lemargie

Yes, thank you very much. I have two questions please. The first one is on 2020 cash flow, which is now actually a steep change from 2019. We know you are on your benefit [inaudible]] from the Trent 1000 essentially, so could you please work us through your latest assessment of the key moving parts there in terms of working capital tailwind, the restructuring benefits, etc.

The second question is on the Trent 1000 and HPT blade. You now expect the fix to enter service in H1 2021. It's quite some time out from now, so are there any intermediate steps that we could track to see whether the fix risks [inaudible] any further delays until then? Thank you.

Stephen Daintith

The biggest single driver of growth in 2020 is going to be the growth in underlying operating profit that we're expecting. That's driven largely in civil aerospace. We'll be expecting to see an improvement in growth margins delivered by the continued OE deficit reduction programme that we're working through and the benefits of our restructuring efforts.

In underlying operating profit we're expecting material growth at pre-2019 levels. We're not being explicit on that guidance yet, but clearly that's a key driver to our cash flow performance and guidance in 2020. We're expecting, on the long term creditor movement the inflows that we guided previously of around £400 million from that. Capex, that includes capitalised R&D, will remain steady at about £1.4 billion also. So recurring free cash flow will grow nicely. And then we're going to have in total around £700 million of costs on the Trent 1000, which will be in respect of the £500 million that we're highlighting today, plus the increased investment in spare engines that we'll see in capital expenditure, an extra £200 million of cash cost there on spare engines, to bring down the AOG levels from the levels that we're seeing today. And that investment has a very good payback in less than 12 months.

We clearly would have liked to have done more during the course of 2019, but didn't have the capacity to build those spare engines and one of the benefits of the slight softness in the wide body market that we're seeing today, that gives us that capacity now to build those spare engines to bring the down aircraft on ground. And at the balance, it'll be a working capital benefit, which will broadly offset the £700 million, pretty much equal and opposite offset to the Trent 1000 cash cost of £700 million and the vast majority of that will be the inventory unwind that we finally expect to see having clearly not made the progress that we would have liked to see in 2019.

Warren East

And on the question about things to look out for between now and the middle of 2021 to see that we're on track. Basically we need to do a lot of testing. We need to test the new designs on the ground and then test the new design in the air and then engage with the regulators for certification and approval. And so we will have opportunities to update you at regular intervals. We'll be communicating- I'm sure there will be an update on this with our final full-year results in February. We'll provide you with updates with regular communications throughout the period. What you need to look for is that we're making progress through that testing regime.

One thing I'd also highlight is for us what all this extra effort that we're making and talking about this morning is providing certainty to our customers and bringing down the number of aircraft on ground. So you should look for the trajectory from where we are now to single-digit aircraft on ground by half-way through next year. We'll obviously have an update on that in February.

Chloe Lemargie

Thank you very much.

Operator

Okay, our next question is from the line of Olivier Brochet at Credit Suisse. Please go ahead. Your line is now open.

Olivier Brochet

Yes, good morning gentlemen. I would ask two questions as well. One as a follow-up to Chloe's. If you could also help us understand what will happen in 2021 compared to the various bridge elements you have provided for 2020, please. And the second one is on power systems. If you could provide a bit more colour on the projects that are being deferred, please.

Warren East

Could you say that first question again? We didn't quite hear it.

Olivier Brochet

Sure. The first question is on the 2021 free cash flow. I understand it's not the point of providing a guidance there, but can you provide us some elements to compare what will happen in 2021 on the free cash flow- [inaudible]

Stephen Daintith

Let me just expand on that. We're not giving details. I'll just give you three big drivers in 2021. Clearly we should expect ongoing profit growth, good profit growth. The restructuring efforts really flowing through by then. No material changes in things like capital expenditure or R&D – you shouldn't expect any material changes there. The Trent 1000 costs starting to come down to an extent in 2020, and clearly working capital is expected therefore to play no major contribution in our free cash flow. So that's the rough guide you should be thinking about when we think about 2021.

Warren East

I think your second question was about the power systems expectations for this year.

Olivier Brochet

Yes. To understand which sort of contracts have been postponed so that we can track when they come back.

Warren East

There are a couple of large PowerGen contracts and we are providing just part of the solution for large data centre installations, so although we have our products all ready to go, there are other project delays, which means the projects basically have been pushed over into 2020. We have no concerns over whether those projects will happen or not. This is a sector that's growing very strongly. There is no question about the demand for data centres. It's just specific project logistics.

Olivier Brochet

Thank you.

Operator

The next question is over to the line of Andrew Humphrey at Morgan Stanley. Please go ahead. Your line is now open.

Andrew Humphrey

Thanks for taking my questions. I wanted to ask first, on the IP compressor, the grid you put up at the start on slide 2 indicates 25% of the package Cs are being refitted there. I would say that might be a slightly lower number than some people have been expecting. Can you talk about the cadence of [inaudible] replacements there and how it fits into the bigger picture of where you would have hoped to be at this stage?

And secondly, on the non-cash charge that you've taken today relating to future contract losses on the TEN. Could you give us an idea of where that puts the Trent 1000 programme in terms of overall profitability at this point and whatever implications that might have for the profitability of future contracts on the Trent 1000?

Warren East

As for the pace of fitting these fixtures, we only do this when the engine is in for an overhaul when it's actually needed. This isn't like in the consumer world where you have a product recall and the consumers bring their cars back to have new brakes fitted or whatever. These engines are very reliable engines and our airline customers love flying them. It's a durability issue that we have. They carry on using that asset, flying the engine as much as they can until it actually reaches the time that the durability runs out and the compressor needs to be inspected. If it is inspected and is defective and needs replacing, then it will be replaced with the new fix rather than the one that's being withdrawn. So that's why we expect it will take several years for all these boxes on this chart to turn green, but that's not a bad thing, that's actually a good thing.

Stephen Daintith

And then on the Trent 1000 engine programmes, it's important to look at this first of all in the context of the 20 contracts that we have today. Clearly the after-market margin on those contracts has been weakened by the reduced durability of the blade and the cost that we are incurring over the next few years as well that will flow through the contract packs. So that margin you should think about that as a material decline of, using round numbers, one could go from around 20% or so. So now, moving into single-digit territory, high-single digits, that sort of margin, but that's made up of a mixture of very profitable contracts and some not so profitable. And it's those few not so profitable that we're highlighting today as loss-making contracts. But an important distinction here is that, going forward, new contracts that are outside that period of increased cash cost will be at a healthy margin and we expect, therefore, the margin over time to start improving again, to get back towards that 20% or so that I just mentioned.

Andrew Humphrey

Great, thank you.

Warren East

Do we have any further questions in the queue?

[Operator drops from the call due to a technical issue]

In that case, thank you very much. If anyone does have any further questions later in the day, then you know how to contact us. I hope you found the material useful and we'll be in touch with our full-year results in February. Thank you.