



## Rolls-Royce 2013 Paris Air Show Investor Briefing – 18 June 2013

### Transcript

**Speakers:**

- Tony Wood, President, Aerospace**
- Mark Morris, Chief Financial Officer**
- Tom Bell, President, Defence Aerospace**

**MARK MORRIS:** Good morning everybody and thank you for coming to our Paris Air Show investor briefing. It's an early start. I know it's difficult sometimes with all the traffic. I hope we can promise you some better weather today than yesterday, although I have to say looking at it just now it doesn't seem to be running in our favour. I think many of you know me, I'm the CFO at Rolls-Royce and I see some familiar faces. It's nice to see some new ones too. Of course you heard from me last, certainly in a group at the prelims and you'll be hearing from me shortly at the interims on 25 July. But today you'll be pleased to know is not about me talking and it is not a trading update as you'd expect with the Paris Air Show. We're going to focus and try to give a little bit of context and colour on our Civil Aerospace business and our Defence Aerospace business.

And with me to my right I have Tony Wood who's our new President of Aerospace. And Tony's going to talk to you a little bit about Civil. Many of you will know Tony or be familiar with him, you've seen him before, of course he used to run our marine business and prior to that our repair and overhaul business. And he's even spent some time in Defence as well. So he's been with Rolls-Royce a long time. And to his right is Tom Bell who is our President of Defence and he's going to talk to you a little about Defence in terms of providing context and colour. So what we're going to do today is both Tony and Tom are going to talk for about 20 minutes about Civil and Defence. We'll then open up the floor for Q&A. And then we'll finish promptly at 9:45. And those of you that have booked a place on a bus to go to the Paris Air Show, the buses will be waiting outside. Those of you who haven't, I'm afraid I'm sorry, the buses are fully booked all the seats are taken, so we don't want to create too much chaos outside. So if you booked a seat on a bus then they'll be waiting promptly for you outside. And with that I will hand over to Tony. Thank you.

**TONY WOOD:** Thank you Mark and a very good morning to everybody. The good news for those of you in the room this morning is that you'll be going to the Paris Air Show a little later this morning than most of the rest of the contingent that try and work their way around the periphery. And having done the two and a half hour trip round town yesterday, I'm hoping we can get there a little more efficiently today. So as Mark said in the introduction. My name's Tony Wood. I've been with Rolls-Royce for about a dozen years. I'm an engineer by background. I guess I'm still the new boy in Rolls-Royce having only been here for 12 years, relative to some of my colleagues. I think the average age in Rolls-Royce is still ... or average length of service is still something like 17 or 18 years, so I'm getting there. But I have very much, as Mark said, been around the group. So I've certainly worked in Defence Aerospace and worked for quite a period of time in the Civil Aerospace business. Mike Terrett may be familiar with some you. I was Mike's COO a few years back. And also Services and most recently Marine, so I've just about wiped the salt water out of my eyes, having been working in the offshore and the merchant industry and now back into the Civil Aerospace business. I'm very pleased to be here today.

So I'm picking up the baton from Mark King who I guess will have spoken to you over the last few years, having been in this role previously for around five years. And the business is

in a good place. It's a great company, it's doing pretty well at the moment, great people, and strength and depth across the company in terms of the number of people we have in all of our businesses and what you would expect from a company like Rolls-Royce in terms of how we've developed strength in our various divisions. And a lot of the success of the company is down to the performance of the Civil business. And I'm going to talk a little bit about that today. I guess, so why is that, you know, where is the strength in the Civil business coming from? Well, clearly the growth in emerging markets has been a big part of our story. A lot of new planes on order, a lot of new planes coming to market, the more efficient versions, A350, 787 being a very big part of the story that I guess we'll all be hearing at this air show. High fuel costs and the drive for people to replace old aircraft around the world, a very big part of the story, and the growth story in Civil particularly. And as you've seen very big backlogs in both Airbus and Boeing product particularly, on which we have a very significant stake.

So as Mark King said to me in the middle of May, "It was okay when I left it, it's now up to you to pick the business up and take it forward." So four weeks in this is the story today as to how I see the business and what's going on around the world. I've spent the last four weeks with Mark actually travelling pretty extensively around the world, the air framers, the customers, the people that drive our business, speaking to them, understanding what's happening, how they see our performance, what are the issues that they have with us, looking at the growth plans for the whole aerospace business and looking at how we improve our financial performance which obviously we're going to talk about a little bit more today.

So I'm going to try and tell the story this morning by telling you how I see the business through something that some of you will doubtless be very familiar with, the four C's. It's something actually that John Rushton is pretty passionate about. It's actually the language with which we talk about and see the business internally. It's how we communicate to our employees. It's how we communicate with our customers and it works equally well in this environment in terms of how we see things. So no slides this morning, I find air shows are all about people, it's about who you talk to, what you learn and about obviously the products and services which hopefully many of you will have a chance to see later today at the air show with many of the great flying displays and things that'll come along this afternoon. I'm going to speak for about 20 minutes and then I'm going to hand over to my colleague who's going to balance for 20 minutes on a very low cost stool there, it's all part of the cost story that's coming Tom, before we look at the rest of the business.

So four C's, the first C – Customer, there's one thing that you notice about the structure of a company like Rolls-Royce, we're a business to business company. There are actually a relatively small number of interfaces, people in the business who talk to the customer every day. Of our 44,000 people there's only a few thousand of them I imagine that really know and really feel every day what the customer thinks about the company, how we're performing. Very different in a sort of business to consumer environment where most of your employees know because they're tripping over the customer and talking to the customer every day. That is one of the challenges of running a business like aerospace and Rolls-Royce, how do you get that customer voice, that customer empathy into the business. And for me it's about constant reminders that the customer pays for absolutely everything that we do and enables everything that we do within the business. And it's easy to forget that when you're working away in a purchasing department, in a finance department or elsewhere within the business. And that really is the mantra with which I approach the whole team worldwide in aerospace, is never ever forget that the customer is actually what drives and what enables everything that we do, and pays for everything around this business.

So we have a simple strategy, it's placing the customer at the heart of the business, understanding and shaping how our customer thinks about things and using obviously our balance of technology and understanding of the customers that take products and services to market and focusing on customers and focusing particularly on how we respond. Responsiveness really matters in this industry. So rather than me tell you anymore about how our customers feel about us, no slides, but I'm going to show you a very short video of some of our major customers around the world *[showing video]*.

So just a snapshot from some of those out there, those few customers represent about 10% of our current order book, excluding some of the announcements we've made over the

course of the last two weeks. So it's a good news/bad news story in terms of things we have to do. Customers like us, the one thing that certainly I've felt over the last month as I've been around the world talking to our major customers, air framers, airliners alike, is they like dealing with Rolls-Royce. They find us easy to deal with, they find us quite accommodating. But we frustrate them and we frustrate them largely in the areas of delivery, quality, reliability and responsiveness in terms of our ability to just have a consistent business, a business that performs every day. And the words of William Tan there, who runs the engineering business for Singapore Airlines, really doing a great job at the top of the game every day, trusted to deliver excellence, that we deliver and that it's excellent in terms of what the expectations are.

And quality, delivery, reliability and responsiveness are how we look at the performance of the business and driving our performance for customers, golden threads is the name we use internally. And it's about the link between what customers want and obviously our capability as a technology provider and developer to try and innovate and meet those customer needs. But it's all around those four threads that really is what drives how customers feel about us and how the business performs. So the issues around customers today, well getting the voice of that customer into the business as I've said, getting a line of sight through the business, getting all of the businesses through regions, through sites, through functions actually aligned with what we're trying to do and getting a very joined up through-life approach in terms of our commercial offering. It is very joined up as you well know, between our original equipment offering and our service packages that support them through life. How well are we doing organisationally to make sure that we're actually organising ourselves to manage the various elements of those, and doing it from new product introduction through to production cycle through to aftermarket and services?

Almost all of our customers are having conversations with us about new product offerings, about deliveries of new aircraft coming off the line today and about how we're servicing their installed base. This is a long-cycle, long-term game. These relationships are 30/40/50 year relationships with many of these airlines. And it's about being able to join up those conversations that are very much work done in different parts of the organisation. And we're trying to manage that across around 300 Civil customers and about 160 Defence forces I guess, Tom, around the world today. So what actions have we taken? Well, you've seen an announcement about our aero organisation, 1<sup>st</sup> of January this year. We combined our Defence business, our Civil business and our supply chain as one Aerospace organisation across the entire group, and that's the role that I'm facing off to in terms of the conversation we're having today. And we did that for a very deliberate reason. It's about aligning the organisation to the heartbeat of the customer.

One of the challenges of having a supply chain organisation that is separate is how do you manage the gearbox between your businesses and your supply chain to make sure that performance is always aligned, not just in front of the customer, but also in terms of leveraging the financial performance of the business. And one set of metrics, you know, having the supply chain team having a set of metrics on how they believe they're performing and then the business teams having a different set of metrics, clearly doesn't work. So actually joining all of that up in the organisation is what we've driven for. And it's had quite a profound impact on the workforce. I was walking through one of our businesses up in the UK the other day and just asking questions about, you know, what does the Aerospace organisation mean for you? Does it mean anything for you in terms of what's changed? And what it's done is it's reconnected a very large supply chain organisation in our business back with customers and back with products. When you're working in a turbine blade facility making thousands and thousands of turbine blades a year you can sometimes lose that line of sight of that turbine going into an engine for a particular customer like one of those you've seen on the video there.

We've put the purpose back in and the alignment back into our supply chain and given us also the opportunity to start to leverage the business benefits of running that combined unit better. And we've had some early wins, some of our major programmes, our largest production programme on wide bodies today is the Trent 700, about 50% of the A330s in the world today are powered by Rolls-Royce, about 75% of the aircraft being built in Toulouse today are being powered by Trent 700s. Delivery performance to due day has been 100% on time for more than two years now. That was around 62% if you roll the clock back three

years ago. And obviously the customer implications and the inventory implications of that were very significant.

We're running a tighter ship these days and absolutely my message to the team and my intent is that we continue to both lean out and sustain that performance. Trent 1000 going into the 787, less mature, earlier stage of its production programme, ramping up quickly now, 100% on time to due day. And it's been there for the last nine months, one of the most challenging programmes in terms of trying to work with the customer on maturing that aircraft. But the drum beat of the business, managing flow, managing inventory, getting that customer focus in. Snags, and by snags on engines I'm talking about paint blemishes, about temperature colouration issues on pipes, on casings, we've halved the number of snags per engine going into the Airbus and the Boeing build lines by ... well, halved it over the last 12 months, a very aggressive programme, putting the customers eyes into the business. It's not about fundamental quality flaws, it's about how it looks and feels and what the customer expects, getting the paperwork word perfect.

And probably the most impressive stat on how the customer feels about us, the industry in aerospace drives about a 10% year on year improvement in disruption. The disruption that a technical issue causes, that delays an aircraft despatch, causes an aborted take-off, a cancellation in some cases, so the industry has been improving at about 10%. We set a goal across all Rolls-Royce products to improve it on the wide bodies by 50% over a three year period. We're one year into that drive and we're bang on target in terms of the disruption as measured by the airlines around the world on the performance of Trents. This is hard to do; it's detailed work looking at the whole scope of everything we're having to manage across our engine products.

So the second C – Cost, back to your stool again Tom, I guess, in terms of ... how's it feeling?

TOM BELL: Not so good.

TONY WOOD: One thing that we talk about a lot internally is that companies sow the seeds of their demise in the good times. It's something I think about quite a lot in terms of taking on this role in aerospace. Record order books across the company, share price pretty much at an all-time high, bonuses for employees paying out close to maximums. Where's the burning platform when you talk to 44,000 people about the need to reduce cost in this business? Well it's quite simple, and the message that we're using and is starting to resonate across the whole business is that our competitors are more profitable. It's a fact; you can read their books in terms of what they put out in the market on an annual basis. And the biggest concern I have with our competitors being more profitable in this space is that they can out invest us on R&D, they can out invest us on cap ex and capability, they can strategically price in particular campaigns in terms of how they're positioning against us. And M&A clearly is an area in which they're pushing through and pushing ahead. The message is getting through. It's the key message across the company. And there is significant opportunity to improve margins across the Rolls-Royce aerospace business.

On my watch coming in, about seven and a half billion pounds of cost base in aerospace alone to tackle, 60% of that's purchased, 30% of it is people walking on two legs, 10% of it is IT and all of the overhead support that we have to drive our businesses. So just over a month ago we picked six of our best and brightest senior managers across the business and put them together as the team to go attack cost. So whilst the drive every day works in the business, we took a look across the entire aerospace organisation at where are the opportunities on cost, every area of cost, total cost, nothing off limits. No stone unturned in terms of some of the conversations we've had, and certainly Mark and I had a chance to look through some of the recommendations that came out of that, it was quite an enlightening experience to put a different lens, a different perspective on how costs are being driven across the business. And it's not just the doing 100 things one per cent better, lots of those ideas coming up from the teams. It's the structural and transformational issues as well as the incremental day-to-day improvements. And we've formed a team in place now across all businesses and we call it very simply ACT – Address Cost Today. That's the mantra across the aerospace business. We've changed the focus. We've changed the ambition on cost reduction.

We're looking at greater competition in our supply chain, clearly many opportunities to do that and we're looking at the alignment of incentives across people in every area of the business. And we're making some progress, literally a few weeks into a different lens, building on the work that we've been doing for the last few years. But volume helps. This business is growing, 2,200 Trents in service today, that number will double in service over the course of the next five years. And volume helps in both the original equipment side of the business, the leverage that gives us in our own facilities on volume and overhead recoveries. It also gives it in the supply chain clearly in terms of our purchasing leverage. And one of the reasons we're not having a big supplier forum at this air show is because we had that conversation with all of our suppliers worldwide, about expectations on cost, just a few weeks ago, so lots of leverage on the OE.

In the aftermarket side, the leverage is equally just as great. We overhaul worldwide something like three large engines a day. An average overhaul cost for an aerospace engine is somewhere between two and four million pounds overhaul cost. Turning up the dial progressively on looking at the amount of material fit, looking at the repair opportunities, looking at the opportunity to increase the lives on those components, just a few percentage points with that sort of volume on an annual overhaul rate of, you know, something around 1,000 engines is a significant dial that we can start to dial into, and we are.

But almost more powerful still is using what Rolls-Royce knows best which is as the fleet grows we get an extraordinary amount of visibility using the engine health monitoring data, using the fleet data and understanding how the product's performing to start to look at extending the life of that product on wing. And on the Trent 700 which is as I said our biggest in service programme today, we've extended the time on wing by about four and a half thousand hours, and to a big airline operator that's an extra year that that engine will stay on wing without coming in for that two to four million pound cost driven overhaul. That's where the engineering and the technology in our business actually makes a big difference. And that coupled with volume as I've said, is a big opportunity for us, and progressively we are going to start to work that much harder. But it's not just the clever stuff, it's equally the small stuff. And we've looked very hard at how we organise our travel arrangements across the business. We'll be saving something like 20 million pounds this year alone by tightening up on the way that travel is organised across the business, so a big focus on cost.

And now to cash the third C. Improving margins clearly by addressing cost, delivers more cash into the business. But we've got to deal with the headwinds of the growth of new programmes. And by far the biggest opportunity in our business on cash is inventory. We're carrying today around three billion pounds of inventory at the group level. I'm biased clearly largely by a lot of the products in the aerospace business. Our competitors are running at about double in some cases, the inventory turns that we're running. We're running at about three turns currently, just over. So there's around about a one and a half billion pound opportunity in our balance sheet today, over time to start to address inventory and a half a turn improvement throws off around about 400 million pounds. So yes, we have a broad portfolio, when you talk to the teams in the business, you know, lots of reasons why our inventory is what it is, interesting but not very interesting in terms of the opportunity to start to address and deal with some of that and that is the focus. So we are gradually turning the dials up on our management of inventory. The aero organisation helps in terms of looking at the alignment and the plan that drives inventory across the business. We've got much better visibility across the value stream. And particularly we're taking a lot of action on looking at buffers.

We are absolutely not going to compromise any of the customers you saw on the video there by taking rash decisions on inventory. But across our business the way we were organised previously we were optimising and making buffer decisions around different elements in the value chain rather than looking at it from demand signal right the way through to the supply chain. That is throwing off lots of opportunities to look at a better leaning out of that supply chain which will deliver cash. We're also looking at strategic material buyers. There's a lot of exotic materials that we're using gas turbines where we have to protect surety of supply, but equally make sure that inventory is being managed, around about 80 million pounds of strategic inventory actually that we store today, materials like rhenium and some of the other complex alloying elements that we use in turbine blades, opportunity there too. Actually being able to see and utilise serviceable used material that comes out of our overhaul shops, joining up all of our overhaul network, something I was responsible for just 18 months ago,

we now have the systems to be able to more accurately manage the inventory that comes out of an engine on overhaul and look at re-using it. We've put about 30 million pounds worth of that product back into engines being overhauled, immediate cash benefit coming out of doing that over the course of the last 12 months or so. So lots to go at, not easy, but a huge prize on cash as we start to work through it, that we have to deliver and it's balancing the headwinds of growth with the opportunities that we have to improve whilst protecting the customer.

And finally the fourth C – Concentration. It's really easy to get distracted in this business. Like all of us the amount of email traffic and opportunity that comes across our desk on things that we could do is almost insatiable. There's always an idea, there's always something else that we could do in this business but staying focused and being clearer about what we are going to invest in and the criteria for that, versus what we're not going to invest in is something that I've been spending quite a lot of time on, even over the last four weeks with the team. The actions we're taking, well clearly the four C's is helping, it's simplifying the business. It's getting people more focused around what's important, helping them to concentrate, customers, cost, cash, very simple messages that people can understand. But we've got obviously the headwinds to offset. So we're having a very careful look at our market opportunities and we chose not to play on the A320 neo programme. We looked at it very carefully. It was a very deliberate decision, we couldn't make sense of a business case on that given where we were, to invest and go forwards on that programme.

But we were very focused on the A350 XWB. There's about three times the thrust coming out of a Trent XWB engine. And we were only a 33% shareholder in IE in 25% of the narrow body market. So the maths says the opportunity on a Trent XWB was nearly ten times the scale in revenue terms and service opportunity terms, to our participation on other things that we could have done. So we're very focused around that particular programme. And the long-term core programmes of the 787 and the 350 which I started with are really the big stories of the wide body market for tomorrow. And we have significant stakes in both of those programmes clearly. On R&D there's no let-up in our need to stay at the leading edge of the technology race on gas turbines. This business is about fractions of a per cent of fuel burn and being able to deliver for customers. And many of you know how airlines make decisions, staying at that leading edge, whether it's fan technology, combustion technology, turbine technology, how we optimise the system, that is our business. We will continue to invest in R&D, and even whilst programme cycles and programme opportunities wane, we're going to remain very focused on that. It's not just about the technology, it's also about the cost.

We've applied already some 300 engineers to cost, we've been ramping that up over the last few years, we're going to ramp that up further again this year in terms of around about another 100 people in our cost focused team alone, a big part of our R&D story. And we've got a lot more to do I sense, on deciding what we do in the business versus what we buy and where our outsource opportunities are. And we're becoming much more discerning about that as we start to concentrate more on what we're good at. So several wins, we obviously did the IAE deal, the Aero Engine Controls business was acquired from Goodrich recently, more engineers being invested in, in cost and more concentration around that, very strong returns from that engineering team. And in R&D investment, in fuel burn improvements and weight improvements, that will be the battleground that continues in terms of our focus.

So in conclusion, the four C's, customer, cost, cash and concentration is how I see it. It's how we talk about the business internally. It's not going to go away any time soon and we're building momentum behind each of those four themes across the business. The management incentives are aligned around doing those things well. There are lots of opportunities, but there's also some pretty big headwinds out there that we're going to have to deal with as we go forwards as well. So I hope you've got a slightly better understanding about how I see the four C's and what we're doing in that area. But it's an air show this week and this is what we do. It's about people, it's about products. And what we do for our shareholders and our stakeholders is very much captured in a short video I want to show you of something that I had the pleasure of seeing on Friday last week. *[Showing video]*.

If you're an engineer in the aerospace business that's what makes the hair stand up on the back of your neck. The first time that a new aircraft of an entirely new design with many new technologies on flies is a very special moment, it's actually the first one that I've seen in my entire career despite having been through many, many programmes over the last 27 years or so. I've usually been back in the office doing something else, but on this occasion it was too big to miss, a very special event. So some last thoughts, I'm going to go back to the retail business because it's one that I stumbled across the other day and just really struck me in terms of that message I started with on the customer, it's something Sam Walton of Wal-Mart fame once said. There is only one boss, the customer. And he can fire everybody from the chairman right on down through the business simply by spending his money somewhere else. That's what the Paris Air Show's about for us in terms of that focus on customers and never forgetting just how important they are for our business. And that is what placing the customer at the heart of the business is all about and why it's so important to the rest of the story as we work through cost, cash and concentrate on the opportunities that are out there. So that's the story for a chunk of the aerospace business. I'm now going to hand over to my friend Tom, who's been very patiently balancing on the stool there, and see if I can balance on it too.

TOM BELL: I'm happy to stand up.

TONY WOOD: Over to you Tom.

TOM BELL: Thank you Tony.

TONY WOOD: Cheers.

TOM BELL: Thank you very much. And anybody who's feeling like they've got to stretch their legs for a minute, don't worry, you can stand up if you'd like and stretch your legs while I talk. Good morning and thank you for joining us also. My name is Tom Bell and I think I get the merit badge for shortest Rolls-Royce employee standing in front of you today because next week I'll celebrate my one year anniversary with Rolls-Royce. So given that I'm a little bit new to all of you I thought I would take a little bit of time and introduce myself to you. I'm 30 years in this industry, starting in a place that's not usually synonymous with aerospace excellence, New Orleans, Louisiana. New Orleans, Louisiana is where I joined Martin Marietta back in the day, at the Michoud Assembly facility working on a NASA programme. I joined the manufacturing engineering planning and control department after a couple of summer internships and was thrilled to join them full-time upon graduation from university, spent five years with Martin Marietta and then took my family up north to St Louis, Missouri where I joined then McDonnell Douglas. That one career move took a series of progressions over 25 years with McDonnell Douglas Boeing with two overseas assignments, a little placement in Seattle many times in St Louis and finally ending up in Washington DC.

Washington DC is where I've lived for about seven years in this business and where I have the pleasure of leading Rolls-Royce Defence into the future. When I'm not working which is increasingly rare, I do like to get out. I like hiking, kayaking and trying to do that thing called breathing, you know, in Washington DC, you've got to get out of Washington DC in order to breathe, and so I enjoy getting out about an hour west into the mountains and the Shenandoah River and trying to get some peace and quiet and breathe. Now, before I launch into the C's, since I run the Defence business for Rolls-Royce I'm sure everybody here wants to talk about this word we never could pronounce three years ago, called sequestration. I remember when it first was published, I said, "Now, how do you pronounce that?" And now I'm amazed at how easily it rolls off my tongue. But sequestration is a fact of life and it's a fact of life for us in Defence that our customers are only now really starting to deal with. The fact is that for a couple of budget cycles now the Pentagon has essentially played a game of chicken if you will, when it comes to the Congress and trying to plan how they do this thing called sequestration.

But Secretary Hagel and the Pentagon are now with fiscal 14 and fiscal 15, very much leaning into and planning for sequestration. Unfortunately for us we don't yet know exactly how that's going to manifest itself. So we are not in a position to look at our long-term forecast and say this is up, this is down, this is the net effect. The good news is with 25 products, 103 countries and 160 customers, the fact is we feel as if the breadth and depth of our portfolio gives us an opportunity to weather this storm better than our competitors. And

in fact the four C's that I'd like to talk to you about in Defence play very much into our strategy for exploiting this opportunity called sequestration, a little bit odd you might think, but let me explain as I go through the four C's. As an overview in Defence, before I get into the individual four C's, I'd like to talk to you about an engine. Now, I've purposely not labelled this engine because it's a test. No, it's not a test. This is the F136.

The F136 is an engine you may have heard about in past Rolls-Royce Defence briefings, or in fact, GE investor briefings. It's an engine we and GE developed to be an alternate engine for the F35. It was a fantastic engine. I'll say and you can tell Pratt & Whitney I said, it was better than 135, it was better than their engine. But it got the four C's wrong. It got the four C's wrong. It didn't understand that in the current customer environment, the customer was not going to pay twice to develop engines for one application. We had latent customer understanding of how absolutely definitive they were in that statement. And so the F136 was cancelled. And I don't have a revenue stream today as a result of the investment in this product. And that's unacceptable. That's unacceptable for any business leader to invest money, take time, devote resources to a product where we don't then turn that into a revenue stream for shareholders and for employees. And so we got the customer wrong, we didn't challenge the design teams and the business teams on cost enough to really present a value proposition that resonated with the customer. And as a result, another C, we were concentrating on something that didn't derive a revenue stream for Rolls-Royce Defence. So a little summary in one engine of not getting the four C's right. And so with that I'd like to dive into the four C's individually and talk a little bit about where maybe we're getting it right these days.

So first C – Customer, when I talk to the Defence team I like to try to underscore this C with this simple phrase, we need to have unparalleled customer understanding – unparalleled customer understanding, whether it be Wal-Mart, whether it be Neiman Marcus, whether it be AT&T or Vodafone, whoever you are, whatever business you're in, I contend, if you have unparalleled customer understanding you can differentiate yourself in the marketplace. Because if you have unparalleled customer understanding you have insights into customers true wants, fears, hopes, dreams, desires, inhibitions, inabilities. And when you can tap into that unparalleled customer understanding you then can bring solutions to the marketplace that for the customer resonate. And when you can do that the customer buys your product. So if you can have unparalleled customer understanding I contend you can differentiate yourself in any marketplace. And certainly that's true today in the Defence marketplace.

So let's talk about an example where I think we're getting this right. The 3.5 kit for the C130, the C130 heritage aircraft, there are about 1,000 of these, more than 1,000 in the global inventory. And the fact is the customers who fly this product love it, they love it. But they want and here's the real important part, they'll pay for improved SFC – Specific Fuel Consumption, improved time on wing and improved power. And so our engineers faced with that challenge of how to take this legacy product and improve it for today's customer environment created what we call the 3.5 kit which after testing by the US air force in rigorous conditions has proved that 10% fuel consumption improvement, 20% reliability improvement and increased power across the spectrum for this kit. In fact the air force said if/when we deploy this in our full fleet we'll save the US taxpayer two billion dollars over the life of these products. They said, "You hit the bull's eye with this product." And that's an example of our concentrating and listening to the customer and devoting our innovative capabilities in ways that delight the customer and then we'll turn into revenue streams for Rolls-Royce.

Another example of where we've got this right is the V-22 Osprey. For some time this product has been put into the most harsh environments known to man and the Marine Corps and the US Special Forces have been deploying this in areas that actually were hardly envisioned when the product was designed. As a result, time on wing and cost per flight hour have not been what the Marine Corps and the US Special Forces want this product to be. So again our engineers deployed a kit, worked with the software, worked with the engine to increase its capabilities and increase its thrust to weight ratio, and as a result we've now got the time on wing on a great glide scope up and cost per flight hour on a dramatic reduction. A great example where we're delighting the customer by listening and innovating in the space that they are most envious for. Unparalleled customer understanding for us is going to be a competitive discriminator for us in this environment.



The second C - Cost, is another example where we in Defence tried to take this and make it very personal for our people. You know it used to be in Defence, all of you love to come to air shows and see the latest fighter jet, you know, whizzing around the sky and doing tail slides and flat pancake spins, but the fact is customers these days are more concerned with cost than capability in many markets. There are still select markets where they'll go for the exquisite technology but in more cases than not low cost trumps best value. So I talk a lot to the Defence team about, we're in an environment where low cost beats best value and we Rolls-Royce need to bring the Rolls-Royce value proposition to that lower cost environment. So again how are we trying to tangibilise that for the Defence team? One – as Tony alluded to, we're addressing travel costs, overhead costs, facility costs very aggressively. And I'm going to talk about facility costs when we talk about cash or concentration in a minute.

But we're also deploying a specific, should cost mentality in each programme where we've taken the four most important programmes for Rolls-Royce Defence and we've said, "This is what we need to drive the cost of building this product to in order to delight the customer and succeed in the marketplace." And success for me in this case is selling the most engines, because I contend and I believe the marketplace is starting to prove, that if you can get your price point for technology down to a place where customers can afford more of it, in this budget environment that product won't get cut and customers will evolve platforms and solutions around those derivative engines. So we're very focused on cost and challenging our team to specific target unit cost targets and through this year alone we're well on our way in those four engines to identifying over 500,000 pounds worth of specific cost reduction activities which will manifest themselves in the cost of our platform. An exciting opportunity for us to innovate within the customer understanding that we're endeavouring to have and leverage the environment we're in. Low cost trumps best value for Rolls-Royce Defence is not a frightening phrase, it's a liberating phrase.

The third C – Cash, for us in Defence happily is again something that's not new. We've been focused on cash for a long time and we have the benefit of a business model that is a lucrative cash business model. But being good in this environment isn't good enough. And so we've been very focused as a team on two things for cash. One, again as Tony alluded to is inventory turns. We are aggressively addressing inventory turns and while differentiated between mission care and targets on mission care inventory turns where we hold risk and therefore we can probably quantify the need for how much inventory we hold versus the OE business where we want to drive down to a lower level of inventory turns. We are well on our way in 2013 to identifying and exploiting 100 million pounds worth of inventory reduction in our business alone. This is very exciting and won't be a one stop journey but rather a recurring theme as we continue to up the game on becoming more efficient inventory holders for the corporation.

But the second area we in Defence are focused on when it comes to cash is a little bit of a convoluted logic, and that's called exploiting the data we have about customer pain points. We have this database, it's a little bit of big data, where we call it resolve customer issues. We have customer touch points out there with the customer all over the world and they flow into customer service centres and tell us what's going on in our fleets, what's going on in the customer community. And by leveraging some tools and techniques we deployed for mission care, we are having the system and the team flag for us emerging customer pain points before they become crises. What's that got to do with cash? Well very simply, by the time a customer pain point becomes a crisis, I as a leader have limited degrees of freedom for how I can fix that problem. And unfortunately most times that involves throwing a lot of people, and people are cash, at the problem. And so this resolve customer issues database and being exploited within Defence is starting to emerge as a way, we're heading off these customer crises before they impact customer satisfaction at the highest level, but also impact my bottom line from a cash and profitability standpoint. That's the third C.

Fourth C – Concentration, again for us in Defence is a journey we've been on for some time. And very much bringing home for the Defence team with another catchphrase I like to use which is that old thing I learned back in Martin Marietta which is, not all business is good business. It's a good mantra for these days, not all business is good business. And it's important that as leaders we not chase every idea that could be good business but we'd be very diligent about making sure we're in the businesses that have the hurdle rates and the returns, that we Rolls-Royce need and you as shareholders expect. So with not all business is good business as our concentration mantra, we've done several things. One – we

deployed a fundamental make-buy process within Defence wherein we looked at everything we were making, much of it, you know, just an accident of history, we were making these parts because we always made these parts and the facilities were built to make these parts. But we said, "Are we really world class at making that at the price point we need in this environment?" And we identified 500 parts in our supply chain that we decided we were not world class at, and we could get better value for money by deploying out into the supply chain. That reduced our facilities by 33% and we were able to offload about 500 machine tools commensurate with those products.

TOM BELL:

As a result, we're not only saving overhead costs and facility costs but as a side benefit, we were able to move people from factories and facilities that looked like this. Anybody want to work there? I doubt it. To this much more collaborative, bright, modern working place for our people. So this make-buy decision not only had a direct bottom line affect but it also affected the morale of our people and the pride with which they come to work for Rolls-Royce. A couple other examples in Defence that we're very proud of is the recently announced sale of our share of the RTM322, a business that Turbomeca was interested in investing in and we decided wasn't within our core. We also decided to stop evolving a portable power generation system for the military as it was not core to our business either. Concentration; doing the things that we can do well and not doing the things that others can do better is key for our future.

So with that as a quick lap around the block of the four Cs, I wanted to summarize with this statement. 1. These four Cs for us in Defence are not a trite little poster on a wall. We're internalizing each one of them and making everybody in Defence think about how they affect their day to day life. 2. I contend, and I firmly believe and the Defence leadership team believes, if we get these 4 Cs right: unparalleled customer understanding, cash, cost, and concentration, we can truly differentiate ourselves in this marketplace and exploit the opportunities for propulsion systems that the world is coming to in this environment. If we get that right, we're going to be able to show you videos like this for generations to come with many, many products powered by Rolls-Royce power plants. *[Video]*

MARK MORRIS:

Some context and colour from Tony and Tom about our Civil and Defence industries and obviously what we're focused on at the moment. We talked about the four Cs and, of course, as I've spoken to many of you in the past about we've got this top line growth projection you can see in our order book; but, of course, how we start to drive the bottom line margin progression. Hopefully that gave you some idea of what we're focused on at the moment. So we're going to move to Q&A now. If you could stick your hands up, and when asked, can you just say your name and company? I'm guessing we've got some roving mics so when someone comes to you we will start. I will generally address the questions to Tony and Tom unless it's a group question, which I can help you with. So we start with Nick.

NICK CUNNINGHAM:

You talked a lot about inventory and getting the inventory turn from three times to six times. I guess the question is how long is that going to take? Is it a linear process? Is it dependent upon any specific development rates whatever they might be? And just more broadly, does that apply outside of the Aerospace business at all?

TONY WOOD:

Maybe I'll pick that one up. I mean, six isn't an absolute target and my sense is, based on where we're at, at the moment, we're probably never going to quite get there in terms of where you get to. This is an incremental game in terms of tightening up and dialling up the focus on inventory. It's not about a sudden step change. We've had programmes in the business in the past where we've been able to turn some of the dials pretty quickly but to the detriment of our in service performance or to the detriment of our OE delivery base. So it's doing it intelligently. It's not linear. Clearly there are some quick wins and then it gets more difficult as you start to get up the, sort of leaning out the process.

Some of the things I said on buffering are things that actually a very small number of people can go away and look at the overall supply chain. Look at the data on the variability of supply. How it's aligned right the way through against customer demand and we can do things relatively quickly. It gets more difficult as you get up the curve. So no specific points on the journey. It's exactly the same process, I think, from a Group perspective that I've been applying in the Marine business for the last 18 months where we've made some good progress and similarly in the Energy business. This isn't something that's unique to Aerospace. That three billion pounds is a Group number.

- TOM BELL: To add to that Tony, in Defence, what we've done is we've taken our 24, 25 products. We've got a specific inventory-turn target based basically on the maturity of the engine. You know, where it is in its life cycle tells us where our inventory-turn target should be. So we've taken that level of granularity and driven toward specific inventory turns per target with an aggregate average in Defence also.
- TONY WOOD: I think Tom made the point well in the presentation. The focus here is on the original equipment drumbeat but the inventory that's coming through the factory is the size, the scale, and the revenue line that's connected to our total care packages, MRMS packages in Defence. There is opportunity there for refinement. It's not the initial focus, frankly. That is an area where supporting the fleet and having service levels absolutely at the top end makes a huge difference. It's why customers buy our product. This is more about the original equipment side of the supply chain.
- DAVID LLOYD: Mr Wood, David Lloyd, Carlson Capital. My question for you is, it seems that Rolls has made a business decision and, in fact, a strategic decision to insource or partner with everyone who does maintenance for you. That is a very different model from, say, CFM who has multiple work shops around the world and is not so proprietary that who services their engines. You are and one thing I've come to understand about Rolls is that they're very interested in time on wing because time on wing equals utilisation of parts. Why have you done that when you might have been able to get a greater market share if your servicing was more ubiquitous and it was more broadly distributed around the world?
- TONY WOOD: Well firstly, it's not uniformly true across all of our businesses. So we do have a mixture of joint ventures in which we participate. Of businesses that I would call authorised shops who are authorised to support Rolls-Royce products. Equally in the Defence business, a lot of the Defence business is supported by authorised shops authorised to support Roll-Royce products.
- DAVID LLOYD: Indeed so but either they're joint ventures or they're authorised. In other words, you control them. Not some engine shop that starts up somewhere.
- TONY WOOD: Well there are third parties also. I can name several companies around the world that also support Rolls-Royce products. At the end of the day, if you're going to be able to support a product, you need to have access to the original equipment manufacturer's knowledge in terms of how to support the detailed technical requirements on that product. We take a very detailed and close-focused view on making sure that our products and our reputation around the world is managed by having a deep insight in terms of the shops that we work with to be able to support that product. That is what we're selling.
- It's a Rolls-Royce name on the side of every one of those products and we have to control that relationship carefully. The issues that relate to the four Cs on that point are very much making sure we've got the competitiveness structure right so that we can drive cost because ultimately we do have very long-term visibility on the revenue line associated with our long-term contracts. That gives us great stability. It's about making sure we're designing a maintenance network around the world which has sufficient capacity and capability to manage the cost line. That's really where our focus is once we've satisfied our self that the reputation and the reliability issues are being protected.
- DAVID LLOYD: To be honest with you, I'm still not satisfied with that because...and I'll say why. Authorising or joint venturing or whatever means in your control. Even if there are third parties who provide service, they must use OEM parts. I realise that Total Care is a great thing. That makes perfect sense to me; but, for example, if there were an airline that wanted to use PMA parts just because they want to do it. United does that. You don't have them necessarily as a customer if only you control who they get their parts from or any partner who you're affiliated with.
- TONY WOOD: Two answers, I think, in terms of your challenge. The first one is from a PMA perspective. Frankly, good luck to people in terms of how that is. The unparalleled understanding that goes into the design and the development of those products is the assurance we give to the market on the performance of those products in service. If I'm sat on an aircraft, I want to know that the OEM has had a big input into the reliability and the design and that we've not

compromised any of the decisions that are taken in the maintenance process. I mean the example I gave about time on wing. When you're talking about the length of time that a turbine blade will perform satisfactorily, that's kind of hard to do if you haven't got the depth of engineering understanding.

The tests that we do both on computers or equally by validation tests on test rigs to be able to assure that that product's going to perform in service. We've seen the occasions when that goes wrong and, frankly, that's not something that we're prepared to step into. So there is a difference here. On the PMA side, or on the broader side of the engines, we've invested literally billions of pounds in the development of these products. That is the value that we're putting out there in the market. That's the value we're going to protect through that authorisation process as well.

GEORGE  
FERGUSON:

George Ferguson, Bloomberg Industries. I have a question for you, Tom, on the C130. So would you be willing to give us a price point around what this modification might cost per engine on the C130. The second part of the question would be when you look at C130 opportunities in the future, are they reworking the existing fleet or is there any...how do you feel about new build C130?

TOM BELL:

Yeah, with all due respect, I'd prefer not to give you a specific price but I'll tell you this. The payback, based on an average fleet usage of a Heritage C130, is about four years. Depends how many flying hours the Air Force uses the C130 for but a good rule of thumb is a customer can expect a full payback in four years. As you can appreciate, these assets live in inventories in Air Forces around the world for decades. Literally, decades. So we feel very good about the value proposition there.

To the second part of your question, we're in, beg I say, the catbird seat here; because it's the Legacy Rolls-Royce engine that I'm offering the upgrade kit on for the Heritage C130s and we're also the exclusive manufacturer of engines for the C130J. So when a customer, or when Lockheed Martin is talking to customers that may be a Heritage C130 operator, we're very much with Lockheed and they're very much aware of our marketing activities. It's really a choice for a customer. Do they want to upgrade their entire fleet and maybe get the new avionics and the new capabilities that are inherent in the C130J with the 2100 Rolls-Royce engine or do they prefer to keep what they have, upgrade the engine, get the SFC and reliability improvements that the 3.5 kit gives them and keep milking that asset in their inventory. So it's a little bit of...we're good either way.

CLIFF RANSOM:

Cliff Ransom, Ransom Research. During this unprecedented time in the commercial aviation business [...unclear]. What makes you so confident that the extended supply chain in Aerospace will be able to keep up with this cycle, if it ever has? Particularly when you think that the things that you require are sold to industrial power markets and [unclear] activation. What gives you the confidence that the supply chain can keep it up with what you see in terms of [unclear]?

TONY WOOD:

Yeah, it's something we've spent a lot time about. These programmes don't just happen. Six and a half years ago we started the development programme on the Trent XWB for the A350. Right from the get-go, as the engineers start to work through the engine concepts and configurations, we're starting the process of designing the supply chain that's going to be able to deliver at the rate that we're projecting on these programmes. Now history's shown, I think, to your point that rate growth has always slipped to the right a little bit. We've had some big examples of that recently on some of the major platforms. None the less, I think the point is valid that programme rates are going up.

And certainly our success in the wide body market is going to drive a big part of that. We've been on a pretty heavy investment line in terms of putting capacity into our facilities. Building dual sources. We've opened up, for the first time in our history, a full large engine assembly and test facility out in Seletar. That's relieving load out of our facility in the UK and creating the capacity for the future. We've now got affectively two Derby's around the world; one in Asia, one in the UK, that have got the capacity to build these engines and test them. We've been doing that right the way down through our supply chain through our own facilities and working very intrusively with our suppliers to make sure that they've got the capacity plans in place to do it. That's a multiple year process as we start to build up.

Our concern is your concern in terms of making sure that every point of failure within that supply chain has been covered through our supply chain design and maturity process. We treat the maturing of the supply chain no different to the maturing of the products technically, in terms of making sure we can do rate. So it's been very big on our mind. In terms of the competition with the energy and industrial sectors, I'd say in the gas turbine market, that's actually a relatively small factor. We don't have a great deal of conflict with some of the energy products in our supply chains. I mean certainly when you get back to raw material castings and things like that. At that level, we've worked quite closely with some of the big players in the world that you'll be very familiar with to make sure that there's capacity at that level. Through manufacturing and such like we've been...there's not a lot of conflict.

CLIFF RANSOM: What's going to be different this time? Can you say one or two or three things that can be different in how you treat your supply chain this time versus the last few years?

TONY WOOD: It's that alignment. It's that detail planning of making sure the demand signal's clear and actually...just the time we've taken ahead of time to put those plans in place. That's what drives the difference there. Making sure that the assumptions, the second-guessing that goes on right the way down the supply chain; making sure we're all working to the same set of assumptions on where these programmes end up.

QUESTION: Oddo Securities. So my question is related to cost saving opportunities; which area do you focus on for most Civil / Defence and do you mean that a cost saving of one percentage point yearly? Is it achievable going forward or can you do better? Thank you.

TONY WOOD: I mean Tom and I could probably answer that together. I mean certainly from the Civil aviation business, we can always do better. The pitch that I was making earlier is the fact that there's always the benefit that you have, certainly for the first few weeks and months when you start to look at a business afresh, to reset expectations on the scale of the opportunity and the ambition. I'm certainly confident there's a lot of rich picking golden opportunity there. I mean we've set very clear questions out of our supply chain in terms of our expectations through the Address Cost Today programme. We're working through with every one of those suppliers as to what their delivery commitments against that are going to be. We're certainly looking at more than a fraction of a percentage point in terms of reducing cost. Obviously we're balancing that off against the headwinds we'll have to deal with as well in terms of the other inflationary pressures that come onto the business. I don't think we've given any specific numbers. It's balancing those two variables. Defence, Tom?

TOM BELL: Yeah and in Defence, lest there be any doubt, our resetting our cost base is not an option. It's not a nice-to-have. It's not an interesting side show. The Defence team is focused on this like a laser beam because resetting our cost base is going to be necessary for us to exploit this environment. The customers are looking for these cost effective solutions and we've got a great range of products that, at a different cost point, are going to be able to exploit global demand for derivative products and new applications. So, for us in Defence, it's an imperative. It's an absolute that we're driving to.

OLIVER SLEATH: Oliver Sleath, Credit Suisse. This question's for Tony. Can you give us an update on the Trent 1000? The updates you're making now is for the new TEN variant. Are there any potential gains you can make in the market share on the 787?

TONY WOOD: Yeah well obviously we're waiting with expectation in terms of how ultimately the air framer are positioning the overall -10 product. We are very focused on the whole 787 programme. It is, without doubt, our ambition to maintain at least 50% market share on that platform. All of our investment focus has been around making sure that the Trent 1000 engine and the variants and the improvements that we've been putting into that make sure that that is the engine of choice for that platform to achieve that goal.

The good news is that with some of the recent wins the market share we're currently holding is around 47%, post the recent announcements. The -10 product is going to be a great aircraft, I think. While the overall programme has struggled with some early maturity issues, extremely well-reported in the press around the world, that's a programme that's going to be around for the next 20 or 30 years. It's a great product. It's a product we believe in. It's in a marketplace that actually has got capacity for a significant number of aircraft. So we're

completely aligned, I think, with Boeing and our expectations for the aircraft. We believe that the -10 product would be a great product in the marketplace. Boeing are obviously working through that launch criteria in terms of initial customers and exactly when they're ready to go there.

We're certainly ready with Singapore Airlines, with their selection of 30 of the -10 variants subject to Boeing launching the programme. We've got a development programme coming through for the -TEN. The 10, 8, and 9 is the way the project guys remember that; but in the -TEN programme...we're driving about a 3% fuel burn improvement over the current standard of Trent 1000. Obviously coming through round about 2016 or 2017. So we're very focused on that. The development programme's going extremely well. It's great to see those aircraft back up in the air again and the production line in Boeing starting to roll.

ANDREW GOLLAN: Andrew Gollan, Investec. Going back to the margin costs, Tony you mentioned that the structural differences between Rolls-Royce and some of the competitors. If you could tell us a little more about that to help us understand what they are and whether the transformation changes will be cost structures in the Civil business [unclear].

TONY WOOD: Firstly on the structural costs. I mean, yes we have a wider portfolio than both of our competitors. That's a fact of history. It gives us a lot of resilience in many respects in terms of programmes at different stages of their life cycle; but it gives us some complexity to manage in terms of managing cost and inventory and the volume benefits, obviously, are more widely port-folioed. I guess that's all a fact. It's not very interesting, in terms of the message we're having with our supply chain and our teams internally. The fact is we have to deal with that and we've got to drive cost and we've got to drive the entry performance on those programmes.

I guess the good news is the point that the portfolio over time is narrowing and becoming more focused on larger programmes for the future. So the conversation we were having about the Trent 1000 and the Trent XWB. I mean it's actually over 1,300 engines already contracted on the Trent XWB now. That gives us tremendous focus and leverage within the whole supply chain. It's a different kind of conversation when you're contracting for a programme that's been that successful. So the business is evolving. The portfolio is narrowing. We've still got a lot of resilience. It's still a broad portfolio in terms of the different market sectors that we're addressing. The benefit of those new large programmes is clearly going to help us and that's directly linking into your question on the supply chain. That's the confidence.

From a route to market perspective we can have a completely different conversation with our supply chain about a programme like the Trent XWB for 350 than we've been having on some of the lower volume programmes in the past. I mean the Trent 700's a great success story on the A330. It's been going for a long time and we weren't able to show our supply chain the visibility of just how long this programme was going to run and how big it was going to be because it's sort of evolved over time. It's a different set of dynamics on a programme where you've got such a large order book and the first aircraft hasn't even gone into service yet. There's a big leverage point. So how are they responding? It's a tough conversation.

The world's tough at the moment but at the end of the day, if you want to be a partner on that programme then you've got to have the capacity, the capability, and the cost line to be able to support our ambitions. It's certainly true that, in parallel with reducing the supply chain, there are suppliers falling by the wayside. We're ending up...we've got something like 75 suppliers now on the Trent XWB programme. So a much more focused portfolio. These are bigger, more capable suppliers. Suppliers that can drive cost and actually have the scale to be able to access low-cost supply chains in Asia and other parts of the world which needs to be a part of this answer.

DAVID PERRY: David Perry from JP Morgan. Tony, you talked about not doing 100 things 1% better but about really doing things differently. You come with fresh eyes. You've got this team of six people in it. Can you give us real concrete examples of some of the things that are being considered that you are doing or making that will really make that big structural difference?

TONY WOOD: Yeah. Well firstly it's about doing both. Sorry if I misrepresented that. We are going to do 100 things 1% better and we are going to look at some of the structural changes as well; but the small Address Cost Today team that we put together, were really looking at the mechanisms that we use to support the broader workforce on driving that incremental change. Making sure people are clear, equipped with the right tools and enabled to actually go and put those changes in and that's largely been about using processes like Yellow Belt training. Giving people basic project skills and an awareness of how they can go and work with their teams and setting the environment in a different light as to just how high on the priority list and individual suggestion from an employee is going to be if it reduces costs. So it is about doing 100 things 1% better as well. On the structural side there's a whole range of things that we've touched on both across the Defence and the Civil Aerospace businesses. We're really starting to challenge how do we organize and make our decisions around things that we do versus things that we purchase. It's a journey.

There are various activities that we've outsourced. We've outsourced a lot of our logistics activity over the last few years. We had some of the proudest logistics people in the UK that were up in Derby but not the most cost effective way to do it in a Rolls-Royce structure and not something, frankly, that we have the expertise in to keep up with the best in the world today so we have outsourced that. Several of our employees have transferred to logistics providers over the last couple of years to do that. We're starting to look at our whole IT footprint. We're starting to look at our functional footprint in terms of how we support finance across the business, how we support HR across the business. Starting to become much more discerning in those areas. I think, obviously as those plans become public, all subject to consultation and subject to fairly detailed internal review then we'll share with you the benefits that they bring. No stone unturned, but the big focus on a lot of the functional areas.

ZAFAR KHAN: Zafar Khan, Soc Gen. I've got one question for you Tony and one for Tom. Just on the Civil side, you mentioned the big opportunities going forward as well as the big headwinds. I think the opportunities are well documented. Can you give us some idea of what the big headwinds are? And for you, Tom, I know the concerning thing is on the sequestration side but from the first look you've had, are you able to give us confidence that you will be able to hold the top line?

TONY WOOD : Just on some of the headwinds, I mean, you won't be surprised to know that people in Rolls-Royce and our supply chain are still looking to be paid more year on year and trying to get the balance between the pay line and the productivity line in each of those conversations is clearly part of the challenge. We're working very closely with our trade unions across the world and we're trying to make sure that, when you look out in our external supply chain, that our suppliers are offsetting some of those natural inflationary pressures around pay. There's a big challenge, actually, bringing new programmes to market. There's always a maturing programme to get the product quality and the leanness of the supply chain sorted out and achieving those on plan with the evolution of programme rate is another area that we spend a lot of time on. There's a big headwind as we go through some of these new development programmes to make sure that we're hitting those milestones and getting the maturity in line with our assumptions.

TOM BELL: On sequestration, our favourite word. Again, the point I would like to leave you with is the fact that with the breadth and depth of our portfolio and the number of customers we serve around the world, we feel like we're in a good place going into this environment. Frankly, and again as I said, although we're not giving a market update in this meeting as Mark said at the beginning, I don't think there's any Defence leader who can look you in the eye and say they know where this thing is going to go. I've heard some in Washington D.C. say this is the "ultimate unguided missile" at this point. It's just going everywhere. So we feel good about where we are heading into this storm. We feel as if when we get the four Cs right, we're going to be able to exploit opportunities that present themselves. When it gets to the point where we're updating guidance, we'll see if we can muster up more specifics on where our top line and bottom might be heading.

CELINE FORNARO: Celine Fornaro, Bank of America Merrill Lynch. I have one generic question for Tony and Tom and Mark, you can comment as well. Basically, how do you benchmark your businesses? So Aerospace and Defence, is it only against your usual typical peers? How do you think about that? Are you looking also at other industries? Also, I was curious to

know if you're bringing in new people at middle management level from other industries that can help you change the culture.

TONY WOOD: You prefaced that with you have a generic question so Mark does all the generic questions.

MARK MORRIS: I think in terms of benchmarking, we're a bit like a Venn diagram circle. We encroach on lots of other industries and we look across the best of those in terms of where we see ourselves. I mean, clearly, I don't think it's any surprise in terms of how we're measuring external performance we're looking at it against margin progression and return on sales. Clearly, GE, at the moment is around the 17 or 18% mark and we're down the sort of 10 or 11% mark. As we talked about in the past, I don't see any real structural impediments as to how we start to close that gap.

It won't happen overnight; but it is some of the things that Tony and Tom have been talking about this morning are the things that we're focused on in this part of the journey. We've got a big order book. We know the top line's coming. Defence, clearly, is a little bit less certain in comparison to some of our other sectors but when we talk about it internally there are things that are going to drive some of that behaviour. Tony talked about our portfolio narrowing. That's what I call variability. We used to have much more variability. As we move forward, we'll have less variability.

Volume is our friend. It drives a drumbeat through the factories. It improves productivity. It allows us to leverage our supply chain and if we just think from where we've come from 20 years ago. The conversations we used to have with our supply chains about joining a Rolls-Royce where we were clearly number three. We had small volumes. Now we can guarantee bigger volumes. We've got suppliers fighting over themselves to come and join. All of those help to drive efficiencies.

Of course, we talk about R&D. R&D is running relatively high in the cycle at the moment. A lot of NPI, New Product Introduction coming on. Again, I would expect you would hope that Rolls-Royce would continue to put money into R&D because that's what keeps us ahead and keeps us at the cutting edge of technology. Again, volume will be our friend. So in absolute terms I would expect it to increase but as a percentage of sales I would expect to slowly start to decrease over time. Not necessarily year on year because it will depend on where we are on programmes.

Of course, finally, what I'll refer to as indirect costs and I've spoken to a number of you on the usual investor road shows that we do about that sort of area as well. We're looking at total cost. Not just product cost. Not just about low cost country sorting. Not just about the suppliers; but actually how efficient are we internally. What we do versus what we make. Of course, lots of opportunity to improve our indirect costs as well. So those are the sorts of things we're doing.

The benchmark point I'm coming to, really, is really about return on sales for us in terms of where we're trying to get that next mark. Then with respect to each other's sort of metric that we can look at, we will look across various industry metrics and determine whether we think they are applicable to us or not or where we need to be. Again, it's quite important on what we class as sort of...what does Rolls-Royce need to be world class at? What is our IP? We can be world class at finance, but you know what? It's not going to move the dial. We need to be efficient and cost effective and make sure we can do our stuff; but it's our engineering, our R&D, where we need to be world class. That is what investors buy Rolls-Royce shares for. So it's making sure that we maintain those areas that really are cutting edge and that will distinguish us from our competition. So that, I would say, is the generic response in terms of how we benchmark ourselves.

TOM BELL: You know, Mark talked about the Venn diagram. In Defence, not only do we normally look at GE and Pratt as benchmarks but I look at our European collaborative partners. Snecma, MTU, ITP, the people we work with. They're benchmarks for me because I want to be as competitive as them. I also look at companies that many of you may not follow. Like Williams is a little turbo machinery company in the United States that I want to compete with and beat in certain markets. So I resonate with the Venn diagram with many intersections.



You also asked a second question about people and talent. I think...again, I'm only here a year. I'm very impressed with the talent that Rolls-Royce has; but in Defence we're also on a charge to bring in some talent to help us in this environment. You know that old book that you read in business school, 'What Got You Here, Won't Get You There' or something. It was about career management. It also applies to Defence. The same thinking that made Rolls-Royce Defence successful over the last decades will not necessarily make us successful going forward and so this is all about a cultural change that we're very excited about in Rolls-Royce Defence. It will begin with people.

TONY WOOD: Yeah the only thing I was going to add to what they've said is really...and also, we don't underestimate, and neither do our customers, the benefit of benchmarking our customer performance against our competitors. We've spent more time really understanding delivery, quality, reliability, and responsiveness relative to our competitors over the last couple of years, I would argue, than we've ever spent. That ultimately is the thing that pulls the top line in; and actually get that right and the rest of the business below it works better as well on the cost and the other financial metrics that pop out are better too. So a lot of time doing benchmarking on customer performance.

AVI HODDES: Avi Hoddes, UBS. A question regarding the facilities in Singapore; obviously in the long-term new facilities have got to be a good things for margins [...unclear] but with a 12-month view, it is a drag? In terms of where your loads are in these facilities, is it going to be helpful?

MARK MORRIS: Well let me just try to give an answer. It's a regular question. Where are we in the Capex cycle. I mean people tend to focus on Seletar in Singapore and Crosspointe in the U.S. are the ones that they hear more about. I guess there's more fanfare from Rolls-Royce, in terms of pictures and stuff you see. There's a lot of stuff going on when you're increasing volume. You have to be ahead of the curve. It doesn't work where you can just smoothly increase stuff. It tends to come in blocks. We need to build new factories. We need to put expensive equipment in the IT to support it. That in turn will drive the productivity because it's modern working practices, the latest machinery. You ride the productivity curve with new equipment.

So, clearly, as evidenced by the amount of Capex we've got and our cash conversion. At the moment, we're in a fairly heavy cycle. It is not where I would like it to be but it reflects reality that when you've got a huge order book, you have to be ahead of the curve and ready to deliver on time to our customers. Of course, we want to make sure that we deliver on the promises we've made.

So there is work to do. Of course, they will in turn breed improved productivity and lower unit cost. That is our intention and of course, by having another facility within Seletar for assembly and tests similar to the one we have in Derby at the moment. That, in itself, is starting to breed some internal competition. I'm sure Tony can talk far more eloquently than I can, having been in this part of the business but the reality is, of course, the demand as to which way we will move things will be driven by where we see productivity and the benefits. So that in turn creates some internal competition which is good. Of course, we expect to see productivity unit cost improvements coming through from the deployment of modern working practices and better facilities. It creates a drag, first and foremost, in where you are because you have to get ahead of the curve before the volume arrives.

QUESTION: So it still within the trial phase? *[unclear]*.

GEORGE FERGUSON: George Ferguson, Bloomberg Industries. Question for you on the V22, Tom. So the Marine Corps truly loves this airplane. It looks like you're going to get a five year *[unclear]* five year purchase of that airplane. The big challenge has been the operating costs *[unclear]*. Could you elaborate a little further about where you think you can get these operating costs per hour to and talk to us about it in the context of have you made that airplane powerful to *[unclear]* to do that?

TOM BELL: Great. Thank you. Yes. The V22 is a product like the 787 whose challenges are well documented, right? So we won't go through that. As you very well know it's been deployed now very successfully over a number of years in the world's worst environments. As a result, there's a little bit of mythology that has built up about what the cost per flight hour is.

Not to suggest that the data's wrong; just so few operators are ever going to put it in those kinds of environments on a routine basis. So we're embarked on a two-phased attack here.

First of all, the Marine Corps and SOCOM are the two main operators. SOCOM. U.S. Special Operations Command. The U.S. Air Force. They are two different communities that we're trying to keep together to harmonise the synergies between them and the common fleet but we're also working with Bell-Boeing about whether or not it's time to recognise that maybe those fleets should go in different directions to satisfy different operational challenges that they foresee in their futures. So that's the first thing we're going to do is make sure we're listening to our customer acutely enough so that if those customers want to go in different directions we go there with them. Okay. The second thing is the U.S. Marine Corps...very bullish. The joint programme office at Pax River...very bullish about the international uptake of this product. It's been in the press that Israel is looking to acquire V22s. The U.S. JPO I think was in the press last week in a pre-Paris announcement about other countries that are actively looking at it.

The fact is, many countries have been enamoured with the technology. Most have also been put off by the acquisition and operation costs. So, to your question, the retrofit we're putting into the engine drives up the specific fuel consumption and down the time on wing problems. As a result, also drives down the cost per flight hour rather dramatically. The Marine Corps has some graphs that show it and they take the legend off for public release but it's a slope that would make anybody proud. Okay. The international operators who are taking a look at this now see that they're at the point where they can acquire the airplane for an attractive price, especially with the multi-year that you refer to; and the ONS costs are now in a band that they seem manageable. Especially when they aggregate it for the operations they're likely to take in. So we're able to show the operator that the promised ONS costs for their environment is going to be what the ONS cost really is. Not the operational data in the harshest environments.

QUESTION:

Sandy Morris, Jefferies. [unclear] can you tell us about the 777X and what happened there in relation to the 4 C's and how would keeping that playing field level, despite events like that. Clearly you would like to keep exclusivity on the A350 [unclear]. How does the 4C's fit in with that [unclear]?

TONY WOOD:

Yeah well 777X first. I mean I think the facts of the matter are we put in an incredibly attractive proposal, both technically and commercially. That was fed back by Boeing in their assessments. We were ahead of their thresholds in terms of the fuel burn performance on the engine that we proposed for that platform and we put in a very attractive commercial proposal with it. At the end of the day, we would have loved to have been on that programme; but you consider standing back from the decision and saying well, we haven't lost anything. We haven't gained anything in some respects. The status quo has been maintained and I guess stepping back from it I can understand why a sort of Boeing GE relationship on a continuation of the current exclusive position they had. There will have been other elements of their conversations that I can understand why that outcome happened. I don't believe it happened and certainly Boeing, publically, have been clear that it didn't happen on the basis of us not being able to keep up with the technology race or make an attractive proposal. It was a decision that they took to maintain the status quo. So, disappointed? Yes. Unexpected? No, in some respects, I think, in terms of what's happened there.

It's not the only game in town. Clearly, we have to perform on the Airbus portfolios that are going to compete with that aircraft. We still have a very close relationship with Boeing. I spent a lot of time with them yesterday and last night. In terms of looking at next programmes and the future programmes that are going to come along. This industry has a habit of having no visibility on future wide-body or narrow-body aircraft programmes. Then suddenly another aircraft comes along and the whole investment cycle and the focus on that platform comes along too. There are a lot of other aircraft in that portfolio that, at some point, will require replacing and this industry has an incredible reputation for suddenly from year to year and air show to air show coming up with that next programme that looks to trump current technology.

So we'll see where we get to. We're absolutely positioned. The technology programmes are in place and the dynamic will continue on 777X. We may or may not hear more about that

programme in terms of exactly what it is and where in the market it's going to be over the course of this show. Nothing changes in terms of our requirement to absolutely execute on those current programmes and secure both the exclusive position we have on the -1000 on the A350 but absolutely make sure that we continue to deliver on the A380 and the other A350 programmes. And the A330, which continues to be the drumbeat of our current relationship before those programmes ramp up. Focus on the customer. That's the best protection we have in the near term.

MARK MORRIS: Good. I think we need to draw it to a close. Those of you that have got space on the bus, I suggest you get on it quickly.