Raytheon Technologies Corp. (NYSE:RTX) Q4 2022 Earnings Conference Call January 24, 2023 8:30 AM ET

Company Participants

Greg Hayes - Chairman and Chief Executive Officer Chris Calio - Chief Operating Officer Neil Mitchill - Chief Financial Officer

Conference Call Participants

Robert Stallard - Vertical Research Sheila Kahyaoglu - Jefferies Ronald Epstein - Bank of America Noah Poponak - Goldman Sachs Peter Arment - Baird Myles Walton - Wolfe Research David Strauss - Barclays Cai von Rumohr - Cowen Kristine Liwag - Morgan Stanley Doug Harned - Bernstein Seth Seifman - JPMorgan

Operator

Good day ladies and gentlemen, and welcome to the Raytheon Technologies Fourth Quarter 2022 Earnings Conference Call. My name is Latif, and I will be your operator for today. As a reminder, this conference is being recorded for replay purposes. On the call today are Greg Hayes, Chairman and Chief Executive Officer; Chris Calio, Chief Operating Officer; Neil Mitchill, Chief Financial Officer; and Jennifer Reed, Vice President of Investor Relations. This call is being carried live on the Internet, and there is a presentation available for download from Raytheon Technologies' website at www.rtx.com.

Please note, except where otherwise noted, the company will speak to results from continuing operations, excluding acquisition accounting adjustment and net non-recurring and/or significant items, often referred to by management as other significant items. The company also reminds listeners that the earnings and cash flow expectations and any other forward-looking statements provided in this call are subject to risks and uncertainties. Raytheon Technologies' SEC filings, including its Form 8-K, 10-Q and 10-K provide details on important factors that could cause actual results to differ materially from those anticipated in the forward-looking statements. Once the call

becomes open for questions, we ask that you limit your first round to one question per caller to give everyone the opportunity to participate. [Operator Instructions] You may ask further questions by reinserting yourself into the queue as time permits.

With that, I will turn the call over to Mr. Hayes.

Greg Hayes

Thank you, Latif, and good morning, everyone. I hope you've all had a chance to review our press release this morning. Before we get into the highlights, I'd first like to welcome Chris Calio to the call. As you know, Chris has been our Chief Operating Officer for the last year, has been responsible for our business units as well as our operations, engineering and digital functions. Effective March 1, Chris has been elected to the position of President and Chief Operating Officer of RTX. Chris has been instrumental over this past year in driving our focus on operational excellence and delivering for our customers in a very challenging environment. So welcome, Chris.

Okay. Let's go to the webcast slide for Slide 2. We'll talk about some of the highlights for 2022. I don't need to tell anybody that 2022 was an incredibly dynamic year. And I'm pleased to say that we were able to achieve, despite facing a number of significant challenges, including transitioning out of Russia, managing record levels of inflation as well as supply chain and labor constraints. With all that as a backdrop, we still delivered \$67.1 billion in sales for the full year, which was up 6% organically and adjusted EPS of \$4.78, which was up 12% year-over-year. We also returned almost \$6 billion of capital to shareowners, which included \$2.8 billion of share repurchases. And more importantly, even with the \$1.6 billion headwind from the R&D tax legislation, we generated \$4.9 billion in free cash flow, which exceeded our expectations. At the same time, we continue to position the business for sustained profitable growth.

In 2022, we captured \$86 billion in new bookings, resulting in backlog growth of 12%, a book-to-bill of 1.28 and a near record backlog at the end of the year of \$175 billion. Additionally, we were granted over 2,600 patents last year. This places us in the top 10 of companies in the United States for the second consecutive year. While we invested \$9 billion in R&D and CapEx, this allowed us to bring new technologies to our market and drive further automation and digitization through each phase of our product lifestyle from design, through development, through manufacturing and product sustainment.

Our investment in recent awards supports our mission to create a safer and more connected world, which was especially true in 2022. Our products and technologies have been instrumental in helping the people of Ukraine defend itself. From the Stinger, Javelin and Excalibur to NASAMS and now Patriot air and missile defense system, we

remain in lockstep with the U.S. government to ensure we can continue to support our allies.

On the commercial side of the business, we saw continued advancements on our path towards leading the future of sustainable aviation with the start of development flight testing of the GTF Advantage engine, which, as you know, further enhances the GTF's position as the leader in fuel efficiency and CO2 emissions.

Importantly, we also completed the first engine test run for our regional hybrid electric flight demonstrator. This system integrates a 1-megawatt electric motor, which was developed by Collins with a highly efficient Pratt & Whitney fuel burning engine, specifically adapted for hybrid electric operations. This new engine will reduce fuel burn and CO2 emissions by 30% compared to today's most advanced regional turboprop aircraft. These types of investments along with strong demand across both the commercial and defense end markets will position us for continued growth as we head into 2023. We're particularly proud that RTX outperformed among all companies in the Russell 1000 for local U.S. job creation in 2022. RTX leads the industry in employee giving and volunteering, which is a testament to the impact our workforce has in the communities where we work and where we live.

Before I turn it over to Chris, I just want to spend a minute to talk about the status of our integration and the next steps as we evolve as a pure-play aerospace and defense company. As you know, in 2020, we brought together two great companies, UTC aerospace business and Raytheon. With combined strength, scale and capabilities that makes us uniquely equipped to innovate and deliver game-changing technologies and solutions for our customers. As we approach the third anniversary of this merger, we've accomplished many of our objectives, including exceeding our original synergy commitment, and we see even more opportunities ahead.

So today, we're starting the next step in our integration and evolution. Our plan is to streamline our structure to a customer-centric organization with three focus segments: Collins Aerospace, Raytheon and Pratt & Whitney. This will better align us with our customers' needs and allow us to better collaborate on next-generation technology. There is still a lot of work to be done to make this happen, but let me turn it over to Chris to give you some of the additional details of this transformation and some additional business updates. Chris?

Chris Calio

All right. Thank you, Greg. It's great to join today's call, and I'm looking forward to engaging more with everybody. I'm starting here on Slide 3. Over the past year, I've been focused with our team on driving operational performance and program execution

as well as identifying ways to improve our cost position and to ensure alignment between our investments and our strategic priorities. As Greg noted, our merger integration is nearly complete, having realized gross cost synergies of \$1.4 billion. And so we are now in the process of realigning RTX into three business units. Let me give you some additional color around our thinking on this.

At its core, this move is about enabling us to better coordinate with our customers, aligning with their needs and collaborating more effectively across our businesses, all of which is feedback we've received from our customers. All of this will ultimately enhance performance, make us even more competitive and allow us to capture additional revenue synergies in areas such as connected battle space. For example, just this past year, we were awarded a phase of the JADC2 effort known as TITAN, where RIS and Collins are working together to deliver this cutting-edge solution to ensure our joint forces have one common operating picture of the battle space.

Additionally, this realignment will allow us to better leverage our scale so we can optimize our footprint, improve resource allocation and reduce costs for both RTX and our customers. Now we don't have a number for you today in terms of cost savings as we are in the early stages of that analysis, but we do believe there are additional material opportunities to be realized. Commencing with this reorganization, Roy Azevedo, President of RIS business, informed us of his plan to retire. Roy will, however, stay on as an adviser over the next several months to help us with this important transformation.

Shawn Mural, currently the CFO of RI&S, has been made acting President of RIS, effective February 1. While organizational changes like this are never easy, we have demonstrated our ability to successfully execute on these types of initiatives in the past. And many members of the team involved in this process have experience from our recent portfolio and merger transformations. The exact timing of this change isn't final yet, the current plan is to make it effective during the second half of the year. Until then, we'll manage the business under our current structure. We'll provide updates on our progress over the coming months.

Before I turn it over to Neil to discuss our results for the quarter and the outlook for the year, I want to turn to Slide 4 to share some of our critical assumptions for 2023 and the areas where we're focused to ensure we execute on our commitments. As Greg mentioned earlier, customer demand for our products and services continues to grow. In Commercial Aerospace, we expect global air traffic to fully recover to 2019 levels as we exit 2023 with continued strength in the U.S. and Europe. This is pretty consistent from what we're all hearing from the airlines. And like everyone else, we're keeping a close eye on China, which historically has represented about 14% of global air traffic.

Our working assumption today is that China's lifting of COVID restrictions continues to be manageable and its traffic levels will remain robust. We also assume traffic in other parts of the world remain resilient. We are, therefore, expecting commercial aftermarket revenue growth across our aerospace businesses to approach 20% in 2023. Commercial production rates are also quickly accelerating. We expect commercial aircraft volumes will be up around 20% year-over-year.

On the defense side, our backlog is expected to continue to grow given the heightened and increasingly complex threat environment. In the U.S., we continue to see strong bipartisan support as evidenced by the adoption of the Defense Authorization Bill and the Omnibus Appropriations Bill with a budget of \$858 billion, which is up about 10% from 2022. In overseas, the EU is targeting a €70 billion increase in defense spending over the next three years and Japan will increase their defense budget by 26% this year. Given our current backlog and this continued strength in demand, we remain extremely focused on execution, and I see four key actions that will position us to be successful on this front.

One, we continue to grow production capacity to deliver on this backlog as we move through 2023 and 2024. For example, we've made investments in key strategic locations like Asheville, North Carolina, for turbine airfoils, the Kinney, Texas for RF and EO/IR products and Bangalore, India to expand the Collins India manufacturing strategy. Second, we, of course, need a skilled workforce to execute our development and production programs. Labor availability remains a constraint. We've made some progress across RTX in Q4 through reduced attrition and other strategic retention and recruiting initiatives.

Third, we need to continue restoring health within our supply chain. We've actively maintained a physical presence at close to 400 supplier sites. We continue to qualify additional suppliers on key programs. We secured sources of supply for critical commodities. While we are broadly beginning to see our supply chain improve, it is not yet at the levels we need, we are assuming a recovery as we move into the back half of the year.

And lastly, we are taking a number of actions to deal with the elevated levels of inflation that everyone is experiencing. For perspective, we are expecting roughly \$2 billion of labor and material inflation in 2023. And we are targeting to more than offset this headwind through higher pricing and aggressive cost reduction actions across all RTX. Some of these actions in the category are blocking and tackling, such as continual process improvement and some are more strategic in nature, such as driving productivity through increasing the amount of connected equipment and automated factory hours.

There is no doubt, we've got a lot of work in front of us, but I think we all believe we've got the right actions identified, and more importantly, the right team in place to do it. So with that, let me turn it over to Neil to look at our financial results and outlook for 2023.

Neil Mitchill

Thank you, Chris. Let's turn to Slide 5. I'm pleased to see how we finished the year where we continue to see solid growth in organic sales, and adjusted earnings per share and robust free cash flow in the quarter. Fourth quarter sales of \$18.1 billion grew 7% organically versus the prior year. This growth was primarily driven by our commercial aerospace businesses as the continued recovery in commercial air traffic more than offset the supply chain and labor challenges we saw during the year. Adjusted earnings per share of \$1.27 was in line with our expectations and up 18%, led by the commercial aftermarket at Pratt & Collins, which more than offset the impact of lower productivity in our defense businesses.

On a GAAP basis, earnings per share from continuing operations was \$0.96 per share and included \$0.31 of acquisition accounting adjustments, restructuring and nonrecurring items. It's worth noting that both GAAP and adjusted earnings per share had a tax benefit of about \$0.06 associated with legal entity and operational reorganizations, which were completed during the quarter.

And finally, we had free cash flow of \$3.8 billion in the quarter, bringing our total cash generation for the year to \$4.9 billion which exceeded our commitment as a result of stronger collections, particularly in international areas across the portfolio.

With that, let's turn to Slide 6, and I'll get into the segment results. Starting with Collins. At Collins sales were \$5.7 billion in the quarter, up 15% on an adjusted basis and up 16% organically, driven primarily by the continued recovery in commercial aerospace end markets.

By channel, commercial aftermarket sales were up 21%, driven by a 32% increase in provisioning and a 25% increase in parts and repair, while modifications and upgrades were up 5% organically in the quarter. Sequentially, commercial aftermarket sales were up 6%.

Commercial OE sales were up 20% versus prior year, driven principally by the continued strength in the narrow-body. Military sales were up 5%, driven primarily by improved material receipts, higher volume and new program awards.

Adjusted operating profit of \$743 million was up \$274 million from the prior year as drop-through on higher commercial aftermarket volume and lower R&D expense was more than offset by higher SG&A expense.

So shifting to Pratt & Whitney on Slide 7, sales of \$5.7 billion were up 10% on an adjusted basis and up 11% on an organic basis, with commercial OE sales growth in large commercial engines in Pratt Canada as well as higher commercial aftermarket volume. Commercial OE sales were up 37%, driven by favorable volume and mix within Pratt's large commercial engine and Pratt Canada businesses.

Commercial aftermarket sales were up 11% in the quarter with growth in both legacy large commercial and Pratt Canada shop visits.

In the military business, sales were down 2%, driven by lower military legacy program aftermarket sales.

Adjusted operating profit of \$321 million was up \$159 million from the prior year, driven primarily by drop-through on higher commercial aftermarket, which included a favorable contract adjustment that was partially offset by higher SG&A and R&D.

Turning now to RI&S on Slide 8. Sales of \$3.5 billion were down 8% versus prior year on an adjusted basis, driven by the divestiture of the Global Training and Services business in the fourth quarter of 2021. On an organic basis, sales were down 5% versus prior year, driven by command, control and communications, cyber training and services and sensing and effects.

Adjusted operating profit in the quarter of \$278 million was down \$122 million versus prior year. Excluding the impact of divestitures, operating profit was down \$96 million, driven primarily by unfavorable mix, lower net program efficiencies and lower volume. RIS had a \$2.9 billion of bookings in the quarter, resulting in a book-to-bill of 0.92 and a backlog of \$16 billion and on a full year basis, RIS' book-to-bill was 0.96.

Turning now to Slide 9. R&D sales were \$4.1 billion, up 6% on an adjusted basis and up 7% organically, primarily driven by higher volume in Naval Power programs including SPY-6 production, higher volume in Strategic Missile Defense, including Next Generation Interceptor development and higher volume and advanced technology programs.

Adjusted operating profit of \$418 million was \$68 million lower than the prior year, driven by unfavorable program mix and lower net program efficiencies, partially offset by drop-through on higher volume.

RMD's bookings in the quarter were \$6 billion for a book-to-bill of 1.48. And for the full year, RMD's book-to-bill was 1.37, resulting in a record backlog of \$34 billion.

So with that, let's turn to Slide 10 to discuss the financial outlook for the year. At the RTX level, we expect full year 2023 sales of between \$72 billion and \$73 billion, which

represents organic growth of 7% to 9% year-over-year. From an earnings perspective, we expect adjusted earnings per share of \$4.90 to \$5.05, up 3% to 6% year-over-year.

And we expect to generate free cash flow of about \$4.8 billion. I should note, we are not assuming the legislation requiring R&D capitalization for tax purposes will be repealed in our outlook. And as a result, in 2023, we'll have a cash payment of about \$1.4 billion related to the current law.

While there are more details on the cash flow walk in the appendix, let me share a few of the moving pieces. First, we are expecting segment operating profit growth.

Offsetting that will be increases in working capital, capital expenditures as well as a lower pension cost recovery. Additionally, we're expecting to buy back approximately \$3 billion of RTX shares in 2023, of course, subject to market conditions.

Now getting into the details around the earnings per share walk, starting at the segment level, we expect strong operating profit growth of about 20%, which results in about \$0.77 of earnings per share growth at the midpoint of our outlook range. And as Chris noted earlier, this overcomes about \$2 billion of material and labor inflation. And with respect to pension, although markets have improved since we spoke in October, pension will still be a substantial year-over-year headwind. Based on actual 2022 asset returns and where discount rates ended the year, that headwind will be about \$0.22.

Our tax rate in 2023 is expected to be approximately 18% versus the 14.4% we saw in 2022, which will result in a \$0.22 headwind. This change is primarily driven by benefits recorded in 2022 that likely won't repeat in 2023.

And to wrap things up, we see about \$0.14 of net headwind year-over-year, primarily driven by higher interest and corporate expenses, and all of this brings us to our outlook range of \$4.90 to \$5.05 per share.

So with that, let's go to Slide 11 for a little more detail on the segment outlooks. At Collins, we expect full year sales to be up low double digits, primarily driven by continuation of the commercial aero recovery. Military sales at Collins are expected to be up mid-single digits for the year as well. We expect Collins adjusted operating profit to grow between \$750 million and \$825 million versus last year, and this is primarily driven by drop-through on commercial aftermarket, higher OE production ramp and increased defense volumes.

At Pratt & Whitney, we expect full year sales to be up low to mid-teens versus prior year, principally driven by higher OE deliveries in both Pratt's large commercial engine and Pratt Canada businesses, as well as continued growth in legacy large commercial engines, GTF aftermarket and Pratt Canada shop visits. Military sales at Pratt are

expected to be flat, driven by higher F135 sustainment volume, which will offset lower F135 material inputs.

We expect Pratt's adjusted operating profit to grow between \$200 million and \$275 million versus last year, primarily on higher aftermarket volume, which is partially offset by a higher large commercial OE delivery impact.

Turning to RI&S, we expect full year sales to be flat versus the prior year and adjusted operating profit to be up between \$75 million and \$125 million, driven by improved net program efficiencies. And in R&D, we expect sales to grow low-to-mid single digits versus 2022 as the effects of the supply chain constraints ease in the back half of the year and for adjusted operating profit to be up between \$175 million and \$225 million versus prior year, driven by improved net program efficiencies, which will be partially offset by continued mix headwinds.

And finally, higher intercompany activity will increase sales eliminations by about 10% year-over-year. And it's also worth noting, we've included an outlook for some of the below-the-line items and pension in the webcast appendix.

So with that, let me hand it back to Greg to wrap things up.

Greg Hayes

Okay, Neil, thanks very much. So we're going to close out on Slide 12 and take a quick look at our priorities. Obviously, there is no surprises here.

As we head into 2023, I would tell you the future remains bright for RTX, especially with a \$175 billion backlog and strong demand in all of our end markets. We also know the challenges that we saw in 2022 will continue, and we'll keep working to mitigate the big three that we continued to focus on: supply chain, labor and inflation.

And although we're monitoring the macro environment, we remain optimistic on the economic outlook as the demand drivers for our businesses remain incredibly strong. As Chris mentioned, we're actively preparing for the demand ahead by expanding capacity, investing in digital solutions and leveraging automation to unlock efficiencies across our value streams. We have the right team in place, and we're making the right investments. And we're also taking proactive actions to mitigate the risks we see today and to ensure success not just in 2023 but beyond.

The streamlining lining of our businesses is just the next step in our journey on leveraging the unique scale and capabilities of RTX to deliver value for our customers and our shareowners. Right now, it's all about program execution and managing costs.

We have the backlog, we have the demand, and we have the technology and our balance between defense and commercial aero will help us navigate into the future.

We will, of course, continue to stay disciplined in capital allocation, and we're going to generate strong free cash flow this year and beyond, all of which enables us to return significant value to our shareowners. Most importantly, we remain confident in our ability to achieve our 2025 targets. We're going to provide an update at our upcoming Investor Day, which will be on June 19 at the Paris Air Show.

Before I close, I really want to say a special thank you to Roy Azevedo for his many contributions to Raytheon over these past 34 years. Roy has been a key member of our senior leadership team at RTX for the past three years, and we wish him nothing but health and success as he moves into the next phase of his career.

So with that, let's close out the – this portion and open it up for questions. Latif?

Question-and-Answer Session

Operator

[Operator Instructions] The first question comes from the line of Robert Stallard of Vertical Research. Please go ahead, Robert.

Robert Stallard

Thanks so much. Good morning.

Greg Hayes

Good morning, Rob.

Neil Mitchill

Good morning.

Robert Stallard

Greg, just like to follow-up on your final comment there on your confidence in 2025, whether there's confidence has been shaken anyway by this change in the R&D tax legislation but also the supply chain challenges because you basically have to double the cash flow between now and then to get to your target.

Greg Hayes

Rob that is a great question, one that we have been working through over these last couple of months. We obviously thought going into the end of 2022 that the tax

legislation, the R&D amortization would get eliminated. Unfortunately, that didn't happen. That cost us \$1.6 billion last year. As Neil said, it will be another \$1.4 billion.

And as we go into the 2025 time frame, that drag will still be about \$1 billion, about \$800 million of that is actual net R&D deferral and there's a couple of hundred million dollars of additional interest expense and financing our little loan to the government. So is all that being equal, we still see – and we had always talked about a \$10 billion free cash flow in 2025. Realistically, I think that number is going to be \$9 billion.

Now most of that growth from, let's call it, \$5 billion this year to \$9 billion is going to come from segment operating profit. We should grow between 2022 and 2025 by about \$5 billion. And that just assumes an execution on the current demand that we have in backlog, right? That's – there's nothing else magic about that except the continued return of people flying and the defense budgets remaining very robust.

So we see a path to the \$9 billion. I don't see a path to the \$10 billion today because of the R&D. But it's a long time, maybe we hope that people in Washington will understand that they're making a very, very bad tactical decision here and not allowing us to deduct R&D, but it is the reality that we face today.

Robert Stallard

Right. Thanks, Greg.

Greg Hayes

Thanks, Robert.

Operator

Thank you. Our next question comes from the line of Sheila Kahyaoglu of Jefferies. Your question please, Sheila.

Sheila Kahyaoglu

Hi, good morning, guys, and thank you. Maybe a little bit more focus on 2023. You mentioned 400 suppliers in the supply chain. How are you expecting the supply chain to unravel across both the commercial aerospace and defense segments? And you mentioned \$2 billion of inflation headwinds. Can you talk about the impact of pricing on a net basis and across the businesses, maybe where you're seeing the most impact?

Chris Calio

Hey Sheila, it's Chris. I'll start with this one and then invite Neil and Greg to chime in. So let's talk about supply chain for a minute. Maybe start with the positive, which was –

saw some stabilization as we exited the year last year. If you look at R&D, material receipts were up 30% Q3 to Q4.

Supplier delinquencies were down. At Pratt, we saw some uptick in casting deliveries. So those are some of the green shoots that we saw at the end of the year. But I'll tell you, it's not where we need to be, especially for the back half of 2023. The kinds of things that we're focused on, candidly are the things that we can control.

We've got the people on site, as you mentioned, and they're responding to engineering and quality issues, giving us better visibility of what's going on. We're leaving bottlenecks and also finding issues earlier than perhaps we were previously giving us more time to react. We qualified some additional suppliers and negotiated additional LTAs. I think we did about 400 agreements last year with about \$1.8 billion in annual spend. So again, giving our suppliers better visibility into our demand and what we're doing.

And then candidly, we're taking some actions in our own house to better enable supply chain performance, small things like reducing the time it takes to place a PO to perhaps more complex things like engineering changes to improve the yields on some of our complex parts and ensuring we've got sort of a stable configuration as programs move from development into production. So those are all the things that we're focused on continue to drive health and supply chain. But you're right, we're going to need it to perform to hit these numbers we've got here in 2023 and beyond.

Greg Hayes

So Sheila, the other question you had there was on inflation. And I think, again, we – the \$2 billion of inflation is a real number we saw it last year. We were able to overcome it through cost reduction as well as some additional pricing. And again, we will see pricing benefits again in 2023, especially on the commercial aftermarket side.

Keep in mind also on the defense side about 1/3 of our business is cost type, cost reimbursable and so some of that inflation gets passed automatically along to our customer at the Department of Defense. As I think about that \$2 billion, right about \$1.2 billion I think Chris said is product related and about \$800 million of that is people cost. And that is a real number. We've got roughly \$20 billion in compensation costs across RTX that's about a 4% increase year-over-year for \$800 million. It's a big number.

But again, we've got plans in place for cost reduction both in the supply chain and in the factories as well as in the back office. And some of this transformation activity that Chris mentioned with the realignment of the businesses will also present us an opportunity to get after some of that cost. So it's real, but we've got plans and I think we have more than provided for that in the guidance that Neil covered.

Sheila Kahyaoglu

Great. Thank you, both.

Greg Hayes

Thanks, Sheila.

Operator

Thank you. Our next question comes from the line of Ronald Epstein of Bank of America. Your question please, Ronald.

Ronald Epstein

Hey, yes. Good morning, everyone.

Greg Hayes

Hey Ron, good morning.

Ronald Epstein

Good question for you about this restructuring reorganization, I guess, in the defense business in Raytheon. I think we all understand that you'll get cost synergies out of it. But if you look at RIS in the quarter with the sales down 5%, how does the reorganization boost sales synergies. I think that that's the first question.

And then the second question is, I mean it's really – I mean, how do you boost that? And then the second question is, is there some restructuring that actually has to go on in that portfolio? Because are there some businesses in there that are just structurally lagging?

Chris Calio

Hey Ron, it's Chris. Maybe I'll take a crack at the sales synergy. So again, as we kind of said upfront, this is about taking the organization to the next level, right? You got a tremendous defense backlog, something like \$70 billion RIS R&D. And this is really about enhancing customer alignment and coordination. We've had customer feedback throughout the last couple of years about the need for us to figure out how to better integrate some of our solutions, providing mission solutions to the customers, coming in with a unified narrative and an investment story.

All of these things, I think, will enable us to work better and frankly, collaborate better across businesses. In large organizations like ours, you won't be surprised to hear that sometimes there's some friction there, and we think this will help remove some of that

friction and again, provide better solutions to the customer. So thus far, the customer feedback, those that we've spoken to sort of see that potential and it's up to us to execute on it.

As of the portfolio, I think, again, RIS has a very strong portfolio. Book-to-bill was 0.96 not necessarily where we wanted. We had some campaigns push out of the year, but feel really strong again about the portfolio, and we're going to continue to invest in it.

Greg Hayes

Ron, let me just jump in and add to that. As we look at this reorganization, this is not just about putting RIS and RMD together to recreate the old legacy Raytheon Company. We're going to look to take the entire portfolio of RIS, Collins, RMD and move the pieces where they most appropriately align from a technology and a customer standpoint.

So you may well see pieces, especially related to JADC2 moving into the Collins business. We'll see how all of this evolves over the next several months. I would tell you by the time we get to the end of the first quarter, we should have a really good understanding of what the new organization is going to look like. We'll share that with everybody at that point.

It's going to take us longer than that to actually do the rewiring that's why we're talking about kind of a mid-year. But I agree with Chris. I think the portfolio that we have across the legacy Raytheon and Collins business is really quite strong. And the book-to-bill we'll be – we'll get better at some of those legacy RI&S businesses, especially in the Space segment.

I would also tell you that the performance in Q4 was not great, but it was really program – legacy programs from many years ago that we still have not completed. So there's some work to do there. But I would tell you the portfolio is not broken or the business is not broken.

Ronald Epstein

Got it. Right. Thank you.

Operator

Thank you. Our next question comes from the line of Noah Poponak of Goldman Sachs. Your question please, Noah.

Noah Poponak

Hey, good morning, everybody.

Neil Mitchill

Hey Noah, how are you? Good morning.

Noah Poponak

Good. Recognizing that there's multiple top line inputs that are out of your control at the moment, which of the 2025 segment margin targets hold and which do not at this point? Because in the two aerospace segments, the 2024, 2025 incrementals required to get there are a lot better than 2023. And then obviously, on the defense side, it requires a pretty big step up. So help me with that math? And I guess, just what's the latest medium-term outlook for each of the segment margins?

Neil Mitchill

Yes. Noah, let me take a stab at that one for you because as you look out to 2025, clearly, we've had in 2022, some supply chain and labor impacts that have kind of caused us to come in a little lower than our initial expectations. However, when you think about that backlog that we've been talking about, it's \$175 billion at the company level, \$69 billion, \$70 billion within the defense. We have a lot to deliver ahead of us.

And so I think there's going to be some puts and takes as we look at the segments on an individual basis as you get out to 2025. But as I step back and look at the totality of RTX and where we projected to be and where we're aiming to go and with that backlog, we feel confident that we can get there. We can get the sales growth, get the earnings growth and Greg already hit on the cash flow pieces there. So some things have changed since we've talked in 2021. We're certainly dealing with a lot more inflation, but we've also got the situation in Ukraine that has given R&D some tailwinds.

So when we get to June, we'll be able to lay out that in more detail. It also be aligned with the format of our new operating segments at that time. But I think there's going to be some puts and takes, but we're all focused on driving margin improvements and making the right investments to drive that automation in the factory and digitization. I should add to Greg's comments earlier about the free cash flow walk. We'll probably see about \$0.5 billion of capital headwind between 2022 and 2023. So making the right investments. I'm really focused on earnings growth and conversion to cash and so we'll see where the margins land, but I do think we're going to get that earnings growth.

Noah Poponak

Is it your anticipation that you'll have a few hundred basis points of defense segment margin expansion over the next few years? And is that all cost or is that mix? Or is it not dealing with supply chain? Or how do you do that?

Greg Hayes

It's – I would tell you, it is a combination of all of those things. It's supply chain getting better, which allows us to see productivity in our factories. It's also – as we move from these LRIP contracts, initial rates of production on LTAMDS and SPY-6 and others to full rate production to see an improvement in margin on the production side as well as the mix of DoD versus international sales. Today, we're actually at a low point of about 30% at RMD of international versus DoD sales that actually transitions back towards a more historical level 40%, 45% as we do more exports, especially around LTAMDS and some of these new systems.

Noah Poponak

Okay. Thank you.

Operator

Thank you. Our next question comes from the line of Peter Arment of Baird. Your question please, Peter.

Peter Arment

Hey, good morning, Greg.

Greg Hayes

Good morning, Peter.

Peter Arment

Greg, I want to say in RMD. You've just up low to mid-single digits on an organic basis. Just in the backdrop, it seems like it should be potentially better than that. Obviously, wondering if you could just kind of parse out how much is being impacted by the supply chain. And if – just when we think about all the DoD potential replenishment activity, plus you've got strong demand from NATO allies. Just a lot of opportunities for the space, it feels like you should be having a more potentially sustained top line growth. Maybe just your thoughts on that over the coming next couple of years. Thanks.

Greg Hayes

Peter, I think you're spot on. I think as we look at 2023 and then 2024, there is more growth potential at RMD than there probably is any business outside of Collins just because, again, the backlog is so strong. I would tell you, given the challenges that we saw in supply chain last year and driving material in, I think we've taken a more conservative view of 2023 performance there. I think total material inputs at RMD last

year were around \$6 billion. This year, we're looking at about \$6.5 billion. But quite frankly, the demand is out there for more.

So that \$6.5 billion should also drive some productivity, \$100 million to \$150 million. Again, I think that's actually light by historical standards, but we're – I hate to say that we're conservative again and again. But really we set these targets. So we think we can absolutely deliver. We're not going to have to go back and relook at these in the middle of the year. But there is certainly the demand out there for higher top line and that would result in higher bottom line. But most of that growth, I think, will come in 2024 when we really see supply chain back to where we had seen it pre-pandemic. And that is the key for RMD. They've got the orders. We've got the capacity. We just have to bring – drive the material in and that \$6.5 billion that we see next year is going to have to continue to grow significantly to meet the demand out there that we see.

Peter Arment

Appreciate the color. Thanks, Greg.

Greg Hayes

Thanks, Peter.

Operator

Thank you. Our next question comes from the line of Myles Walton of Wolfe Research. Your question please, Myles.

Myles Walton

Thanks. Hey, good morning. And Greg, just a follow-up first. I think you just said RMD might have the fastest growth outside of Collins. And I just wanted to clarify, is Pratt still the faster growing of the two? Or is Collins now faster growing?

Greg Hayes

From a bottom line perspective, it's going to be Collins, right? I think, again, top line, you're going to see – what is the number, Neil, for 2023 here for Pratt?

Neil Mitchill

For 2023, they'll be up low to mid-teens. So very substantial growth for 2023. And sort of as you look out over the next several years. These – all four businesses are in the same ZIP code of high single-digit type of sales growth on a CAGR basis.

Myles Walton

Got it. And maybe a more detailed question on Pratt. If you can just give a little color on where GTF is in the aftermarket composition where legacy higher-margin aftermarket is in that composition? And how those two play out over the next several years? And also how the GTF aftermarket is trending versus your sort of assumptions of profitability on those long-term contracts?

Chris Calio

Myles, this is Chris. Maybe just as a step back for a minute on GTF. Demand remains really, really strong. As you know, we continue to do the block upgrades to drive improved time on wing obviously, improve time on wing helps with their contract profitability. We continue to incorporate upgrades to sort of improve the customer experience. On the aftermarket side, in 2022 turned slightly positive.

And so from this point, it's about accelerating those margins. You're going to see that through some better contract mix as we talked about back in Investor Day in 2021. You're going to see that through increased time on wing through some of these upgrades. And so the GTF aftermarket profitability is something that is of high focus at frac given the growing installed base, get about 2,500 engines out there and a very large backlog. So GTF aftermarket is a huge driver.

Neil Mitchill

And maybe I'll just put a couple of financial numbers around that to help out a little bit. But at Pratt for 2023, we think the aftermarket there will be up between 20% and 25% from a sales perspective. So think about the legacy shop visits being about 15% to 20% up year-over-year.

On the OE side, that would imply about a mid-teens sort of a sales growth there. So we see strong growth, obviously, in the commercial business. And I guess while I'm on Pratt, I'll just throw out a couple of the Collins numbers just so everyone has them. In their aftermarket business, think about that as being up sort of low double digits to low teens, sequentially kind of growing in the low single-digit percentage kind of range. And on the OE side, up low to mid-teens year-over-year. So again, with all that OE growth that we see across the narrow and wide-body platforms, you'll see that both at Pratt and Collins.

Myles Walton

Thank you.

Neil Mitchill

You're welcome.

Operator

Thank you. Our next question comes from the line of David Strauss of Barclays. Your question please, David.

David Strauss

Good morning, everyone.

Greg Hayes

Good morning, David.

David Strauss

Greg, I guess following up on that. Could you just comment where you are on, I guess, across mainly Collins, but also touching on Pratt, where you are relative to the manufacturer stated rates, I guess, in particular on the MAX in the low 30s, A320 in the mid to high 40s and 787 around two a month. Thanks.

Greg Hayes

David, it's something we focus a lot on. Obviously, we are, I would tell you, at Collins and at Pratt in lockstep with Boeing and Airbus in terms of their production rates. Obviously, some of the challenges that we've talked about at Pratt on the supply chain with structural castings is limited, I would say, some of our ability to meet some of the demand out there. That's starting to ease. And again, we are working very closely with Airbus on the A320 production rate.

As far as 737, that's really a Collins story. And we – the outlook that Neil talked about, that assumes those rates that you talked about around 31 aircraft or so a month on average. I think they were a little light on that in the fourth quarter, but we think we'll get back to that. They still have roughly 200 aircraft that be delivered that are in inventory, too, from when the line was shut down, which, again, also is part of Collins' upside for the year.

As far as 787, we see that, as you said, I think it's one a month going to two a month and perhaps up to three. Again, I think that's – that will all depend upon Boeing's ability to continue to get the aircraft out the door. But we are working with them on a daily, weekly basis to make sure that we can support them. But we don't see anything in our supply chain today that would prevent us from delivering either at Boeing or Airbus to the rates that they need.

David Strauss

Great. And Greg, could you just comment on the interiors business, how that's doing? Is that – if you're starting to see a pickup there from the widebody side? Thanks.

Greg Hayes

Yes. It's – David, it's one of those things, it is probably the slowest recovery of all of the Collins businesses to your point because it is primarily widebody. And as the airlines were conserving cash for these last couple of years, we saw sales down significantly. We don't expect a recovery in the interiors business, literally over the next three years. So it gets better, but it's still not back to what it was pre-pandemic. It's – it will remain a challenge.

Operator

Thank you. Our next question comes from the line of Cai von Rumohr of Cowen. Your question please, Cai.

Cai von Rumohr

Yes. Thank you so much. So cash flow – in the fourth quarter, you had a \$900 million uptick in payables, a huge uptick in contract liabilities and yet inventory where you normally get a benefit in the fourth quarter were actually up a bit. Maybe comment on some of those trends and how that translates to a flat year in 2023.

Neil Mitchill

Thanks, Cai. Good morning. Let me start on 2022 and where we ended the year. You're right, the inventory was up. I would say most of that was at Pratt and Collins as you think about the backlog, the growth rates we just talked about on the commercial aerospace side and the supply chain issues that we're all working to overcome. We were pretty strategic in our thinking around making sure we're bringing the materials and so that we can deliver and meet the customer commitments. You pointed out the accounts payable growth there. So not all, but a large portion of that inventory growth was sort of offset by the payables to kind of go along with that.

On the advances side or the contract side, really that was driven by some – a couple of large international advances that we received in December. That contributed to our overdrive of free cash flow, which was about \$500 million relative to our expectations. That will be a drag on working capital as you get into 2023. And as I look at the 2023 free cash flow, we see a little bit of headwind on the working capital, in part because of some of the advances that we got at the end of 2022. And I'd say in part because we're going to continue to be pretty strategic about making sure that we bring in parts and

materials where we need them and where there's constraints and bottlenecks in the supply chain value stream right now.

So on balance, we're always targeting to take that inventory balance down, but we want to be smart and make sure we have the products so we can deliver it. We will be seeing improved velocity through our factories as we go through 2023. So I'd expect the turns to improve here. But all eyes on the inventory management for sure, and then managing through the collections as we get into 2023 at our international customer sites.

Cai von Rumohr

Thank you very much.

Neil Mitchill

You're welcome.

Operator

Thank you. Our next question comes from the line of Kristine Liwag of Morgan Stanley. Your question please, Kristine.

Kristine Liwag

Hey, good morning everyone.

Greg Hayes

Good morning.

Kristine Liwag

Greg and Chris, hey, following up on the supply chain what issues did the same versus 2022 versus what issues are different, I mean considering the strengthening visibility on demand, I would have assumed that we've seen a lot more improvement by now. So what's the root of the problem? And can you provide more details on the actions you're taking to get this resolved by the second half of the year?

Chris Calio

Hey Kristine its Chris. So I would say the constraints are those that we've talked about previously. I said that we saw some improvement on castings, but it's not where it needs to be, so casting is still there. Rocket Motors continues to be a pacing item at R&D. And microelectronics, while the lead times have stabilized, they haven't come down and back to 2019 historical levels. And so those are sort of the three main areas

that I talked about. We've talked about in the past that continue to be a headwind as we're moving into 2023.

In terms of the specific actions, I talked about a few of them earlier. But again, some of this is what I would call blocking and tackling in the factories, whether it be ours or our supply chain. And I mentioned that before in some cases, we'll try to make an engineering change to improve producibility and ultimately yield. In other places, we just need to be in with our customer answering quality questions and making sure we can help them relieve bottlenecks.

On microelectronics, a lot of that was about really the supply base, understanding our demand and then working some interesting agreements, negotiated agreements on making sure that we had our priority place in line and we made sure that we had our right allocation. With what you're seeing on the consumer side in terms of microelectronics coming down, we expect to see our allocation get better in that area, but again, still not where it needs to be here in 2023. We are assuming a back half recovery. So certainly not all is lost, but it will be the man-to-man defense here to get to that point.

Kristine Liwag

Thanks Chris. And Greg, maybe a follow-up; you mentioned on your commentary on commercial large structural casting. It sounded more constructive today than your commentary in previous quarters. I was wondering what changed in the supply chain that you're seeing to make you more confident? How much of that is the OEMs walking away from, like Airbus walking away from the 75 per month versus you're seeing that ease through investments they're making or maybe labor easing?

Greg Hayes

Well, I think, Kristine, if you think about the structural casting issue, we're not out of the woods, as Chris said, but it has certainly gotten a lot better from where we were a year ago today. And we continue to work with the suppliers there, primarily around the requirement side, making sure that the specifications that we're flowing down are actually producible in the supply chain. So that's giving us this confidence. But as Chris said, it's going to be the end of 2023 before we see structural castings back to 2019 levels. Again, we've got confidence they have been bringing people on, they have been training people. We have folks out there helping them. But all of that would support the OE rates that we need to support for 2023.

Anything you want to add there, Chris?

Chris Calio

No. I would just support you said, Greg, that our supply chain is bringing in labor, they're starting to see more success on that front. But in some cases, like take casting, this is a pretty complex process. And there's a learning curve for folks that you bring in and take some time to come down that learning curve to get to a level of productivity that we need to see for the improvements here; but again, focused on that in the back half of 2023.

Kristine Liwag

Great. Thank you.

Operator

Thank you. Our next question comes from the line of Doug Harned of Bernstein. Please go ahead, Doug.

Doug Harned

Thank you. Good morning. On Pratt, you're talking about 15% to 20% growth in the aftermarket and the legacy programs this year. One of the things that we've been concerned about has been capacity constraints just it's taking longer if they get a V2500 into a shop for an overhaul and longer to get it through. When you look at that upside you're forecasting, how are you thinking about the capacity issue labor availability? And is there potentially further upside from that if you can actually get – have more success there?

Greg Hayes

Doug, let me start with that, and maybe Chris will add. So as we think about the outlook, you're right to say that we see the large commercial engine – legacy commercial engine shop visits up 15% to 20%. Think about the Vs being up around 20%, and if you think about the math there, we were a little over 700 or so as we exited 2022. So that puts us in the mid-800s, kind of a range expectation for 2023, which is a level we've been at before. So as it relates to capacity, we have that level of capacity for the legacy shop visits. And it really then comes back to the conversation we've been having here for the last hour about ensuring that the supply chain is there and ready to support that level of shop visit inductions, which again, we've been planning. These expectations are in line with the numbers that Chris put out there back in May of 2021. So again, the supply chain, I think expects this level of an uptick in our shops to as well.

In terms of – is there upside as you think about retirements of this aircraft, for example, it was 21 aircraft in the last year got retired that V2500 powered. So I'm not going to get ahead of ourselves. But I think that when you look at the dynamics around OE deliveries

today of new aircraft, we think the V2500 still has a lot of life left in it. About a third of that fleet has yet to see its first shop visit, and so I'm cautiously optimistic that we will see that fly for a longer period of time at these elevated levels.

Chris, I don't know if there's anything else you want to add to that?

Chris Calio

Doug, I would add that you're right, turn times have been elevated on V and other platforms. And so we don't see as many supply chain constraints there, perhaps as we do in other areas. I would say the labor is stabilizing. Again, you bring in people off the street to do MRO, there is a learning curve associated with that individual becoming a productive technician and maintenance personnel. But we believe we've got the plan in place there. In terms of upside, I mean, again, if you listen to lessors and others out there today, and Neil kind of referenced this, given the supply chain challenges we're having on perhaps new production, you're seeing airlines hold on to older assets longer, signing up for longer leases. So again, it kind of goes to the life of the V2500 maybe being some upside there.

Doug Harned

And just really quick, what was the favorable contract adjustment, the size of that Pratt for the quarter?

Neil Mitchill

From an operating profit, think about a few pennies.

Doug Harned

Okay. All right. Great. Okay. Thank you.

Neil Mitchill

Welcome.

Operator

Thank you. Our final question will come from the line of Seth Seifman of JPMorgan. Your question please, Seth.

Seth Seifman

Great. Thanks. Thanks for the final question. Guys, I wonder if we could dig in a little bit more on the GTF. And you talked, Chris, a little bit about the time on wing. What we've been reading lately from comments from some of the leasing companies and comments

in the press is the time on wing on new generation engines has been falling short of expectations. And so a) kind of to what degree do you share that perception and kind of where does it need to get; b) what specifically in the engine do you need to kind of improve to get it there; and then the last part is, I think you mentioned the GTF aftermarket profits were positive for the first time. And just with a relatively young pool of engines and maybe some time on wing challenges, how do profits get to positive?

Chris Calio

So I would say that I generally agree with the sentiment that you're hearing, time on wing, and we've been pretty open about this. And very open dialogue with our customers, a lot of time on wing – on newer platforms, not necessarily being where we wanted them to be when we launched the program. We have done a number of block upgrades. As I said, we've got a block upgrade going in now through MRO that increases time on wing. On average, about 20% just based on the geography that you're in.

And we've got some other, I'd say, durability and reliability hardware and software fixes that we put in as well. So we want to – we obviously want to get to the contractual levels that we have promised, and we've got a plan to go do that with these upgrades, Seth. I will tell you, keep in mind, you've got the GTF advantage that's going to start cutting in 2024. As you know, that's the next generation of the GTF, more thrust, better fuel burn, start flight testing in Q4 with Airbus, and we remain on track there in – for 2024 EIS.

That takes all of the lessons learned we've had on the, what I call base GTF program and some enhanced testing. And we think that that's the next generation that will get to the levels of performance and time on wing that our customers are anticipating. But even on the – what I'll call the existing fleet today, we've got upgrade plans to continue to push that time on wing higher and higher. Our customers are demanding it, and our contracts are dependent on it. So we're aligned there.

Seth Seifman

Okay. Thanks very much.

Greg Hayes

Okay. Thanks, Seth, and thank you, everyone, for listening today. As always, Jennifer and her team are going to be available today, tomorrow, the rest of the week to answer any follow-up questions that you have. Thank you for listening, and take care, everyone.