Ladies and gentlemen, thank you for standing by and welcome to the Lockheed Martin Fourth Quarter and Full Year 2017 Earnings Results Conference Call. [Operator Instructions] As a reminder, today's call is being recorded. I'll turn the conference now to Mr. Greg Gardner, Vice President of Investor Relations. Please go ahead, sir.

Greg Gardner

Thank you, John, and good morning. I'd like to welcome everyone to our fourth quarter 2017 earnings conference call. Joining me today on the call are Marillyn Hewson, our Chairman, President and Chief Executive Officer; and Bruce Tanner, our Executive Vice President and Chief Financial Officer.

Statements made in today's call that are not historical fact are considered forward-looking statements and are made pursuant to the Safe Harbor provisions of federal securities law. Actual results may differ materially from those projected in the forward-looking statements. Please see today's press release and our SEC filings for a description of some of the factors that may cause results to differ materially from those that are in the forward-looking statements.

We have posted charts on our Web site today that we plan to address during the call to supplement our comments. Please access our Web site at www.lockheedmartin.com and click on the Investor Relations link to view and follow the charts.

With that, I'd like to turn the call over to Marillyn.

Marillyn Hewson

Thanks, Greg. Good morning, everyone. Thank you for joining us on the call today and I hope you have all had a good start to the New Year. Let me begin by expressing my sincere gratitude to the entire Lockheed Martin team for their contributions and commitment throughout 2017. It was through their dedication and efforts that we were able to deliver strong financial results for our stockholders an outstanding operational performance for our customers. Thanks to their focus on mission success, we are well positioned for long-term growth and I am excited by the prospects the future holds.

2017 was an exceptional year of achievement with strong operational results and new historical high watermarks for sales, orders and cash from operations. We were pleased to see our 2017 sales eclipse $51 billion, representing growth of 8% over 2016 results.

Our 2017 growth was broad-based with each of our four business areas exceeding last year's results. Leading this increase was our aeronautics business area. Fueled by 18% growth in the F-35 program, followed by our missiles and fire control business area, exceeding 2016 sales by 9%, driven by both tactical missiles and air and missile defense products.

We ended 2017 with approximately $100 billion in backlog, the result of our record orders and strong yearly book to bill ratio which have the corporation well positioned for continued growth. I would also like to highlight our performance in driving cash from operations as we generated $1.5 billion in cash during the fourth quarter and $6.5 billion for the year. These results allow us to continue our balance cash deployment strategy as we returned over $4 billion to stockholders through a combination of our commitment to dividends and our share repurchase program.

The corporation also funded a record level of investment in independent research and development and capital expenditure, developing new technologies and positioning the business for future growth. As we noted in today's earnings release, the Tax Cuts and Jobs Act was enacted in the fourth quarter of 2017 and will provide long-term benefits for the corporation. In the short term it did result in a onetime non-cash increase to income tax expense that caused our reported earnings to fall below the guidance ranges we communicated in October. We will discuss tax reform in detail later on the call but the impact of this onetime charge does not diminish the outstanding operational and financial performance we delivered in 2017.

Turning to the Department of Defense of budget, the federal government remains under a continuing resolution or CR for fiscal year 2018 with an extension now in place through the 8th of February. While we are disappointed at the need for the recent extension, there continue to be positive indications of future budget growth despite the current short term CR. First, in December President Trump released the administration's National Security Strategy, a broad overview of global challenges and the over-arching strategies to address them.

Notably, the strategy underscores the need for additional investment in the U.S. military and our country's national defense. This month, the defense department also released its 2018 National Defense Strategy, which reinforces the themes of the National Security Document. Specifically, both strategies highlight the commitment to layered missile defense as well as modernization of our military's weapon systems and readiness with emphasis on nuclear, space, cyber and intelligence capabilities. We believe our portfolio is well aligned to these objectives and we are hopeful appropriations will be enacted which support both the national security and national defense strategies.

Also the Continuing Resolution Bill that the government passed in December, included an additional $4.7 billion over the prior CR for emergency defense funding. Of the $4.7 billion, nearly $4 billion was targeted for missile defense needs, a key element of the National Security Strategy and included request for 50 additional THAAD interceptors and nearly 150 of our PAC-3 MSE missiles. This action represents an increase in missile defense funding of approximately 50% over fiscal year 2017 enacted amounts. A clear recognition of the need for the country to maintain a leadership position in this vital area of national security.

Lastly, in December President Trump signed into law the 2018 National Defense Authorization Act or NDAA. The bill which was passed by Congress with bipartisan support authorized over $626 billion in base defense spending, as well as $65 billion in overseas contingency operations funds. The NDAA base budget authority would exceed both fiscal year 2017 enacted amounts and the presidential request for FY2018 that was released last spring and would be in excess of the budget control spending caps.

As I have noted before, legislation is still needed to adjust the future spending limits imposed by the budget control act. We are encouraged by recent legislative activity and we continue to urge our lawmakers to work towards an agreement which modifies the budget cap and provides the defense spending required to deliver to our military the resources vital to our national security.

Moving to tax reform. We were pleased to see this important piece of legislation enacted and we believe it will have a positive impact on our corporation and allow American companies to compete more effectively in global pursuit. The new law reduces the combined U.S. corporate tax rate from the highest in the industrialized world, bringing it in line with the tax rates used in the most advanced economies. This will enable us and just as importantly many of our supply chain partners to invest in transformative technologies and make decisions that we anticipate will enhance our competitive position in the 21st century, supporting growth and long-term benefits for customers, employees and stockholders.

We believe this legislation will encourage investment, innovation and job creation across industry. It is important to recognize that the benefit that we will realize in 2018 continue into the future and we are currently exploring options to use these future benefits in ways that will support the growth of our company and deliver long-term value to our stakeholders. One immediate and proactive measure our corporation implemented was deciding to accelerate payments into our pension trust in 2018. As a result of this decision, we will contribute $5 billion in cash, satisfying our required pension contributions until 2021.

We are also exploring other investments as a result of the new legislation to enhance our competitive posture and long-term growth potential. Some of these initiatives include increasing our employee training and educational offerings to drive critical skill development, increasing our charitable contributions in science, technology, engineering and maths, or STEM programs, the life blood of our future talent pool, including the creation of a STEM scholarship fund to encourage participation in these important fields of study.

Increasing the Lockheed Martin ventures investment fund that we established over a decade ago, whose charter is to make strategic investments in early stage companies that are developing disruptive cutting-edge technologies in core businesses and new areas that are important to Lockheed Martin. We expect these investments will enable these companies to mature their technologies, grow their businesses and create jobs. Building on our 2017 record investments in capital expenditures and research and development, we will increase our commitment in these areas by a combined $200 million in 20189 as we continue to invest in the assets required to efficiently execute our business as well as the technologies needed to drive long-term growth.

We will continue to assess these and other options with the objective of using the benefits of tax reform to drive growth in our business, attract and retain high performing talent, create new employment opportunities and enhance future cash deployment actions. Moving on, I would like to highlight several operational milestones we achieved across the corporation during the recent few months. Beginning with an update on our F-35 program, during the fourth quarter we met our joint government and industry commitment by delivering the 66 aircraft in 2017. This accomplishment represents a 40% increase from the previous year as we continue to ramp up production on this transformational fighter.

We anticipate this momentum continuing into 2018 and now expect to deliver approximately 90 jets this year, an increase of over 35% from 2017 as we continue to progress to full rate production in the next few years. To date, we have delivered over 265 planes to U.S. and international customers. We are excited to see the international community embrace the F-35 with Norway receiving their first three conventional take-off and landing F-35As with the three CTOL variants landing Norwegian soil in November. Israel declaring initial operating capability for their first squadron of CTOL jets and through 2017, seven of our current 11 international customers have accepted the F-35 deliveries and we look forward to working with both existing and potential new buyers to satisfy growing future demand.

Moving to our missiles and fire control business area. Our PAC-3 team achieved several notable milestones, including successfully neutralizing four tactical ballistic missile targets in a complex test at White Sands Missile Range in New Mexico, satisfying a requirement that opens the door to full rate production for our PAC-3 MSE interceptor. Participating in a signing agreement with U.S. and Romanian officials providing Romania the opportunity to upgrade its air defense system by purchasing PAC-3 MSE missiles and receiving an order of over $900 million for PAC-3 missiles for the United States and allied military forces.

In the rotary and mission systems business area, we were pleased to see that the cabinet of Japan agreed to the purchase of two Aegis Ashore batteries which will increase that countries missile defense capabilities and provide greater protection for the Japanese people. The Japan maritime self-defense force currently operates multiple Aegis equipped destroyers and has been a long-term supporter of our Aegis ballistic missile defense technology. The installation of the two land-based Aegis Ashore batteries would supplement the Aegis sea based systems to deliver improved layer missile defense capability, allowing coverage over a wider range with the ability to address a greater number of threats.

While this opportunity remains to be finalized, we were excited by the confidence that the Japanese government continues to show in our Aegis product. Once operational, the Japanese installation will be the third Aegis ashore deployment, adding to those operated by the U.S. in Romania and Poland. Our [quarter] [ph] with our space business area through space based infrared system or SBIRS satellite was delivered to the air force at Cape Canaveral air station in October and was successfully launched in the orbit on a United Launch Alliance Atlas 5 rocket just ten days ago, ULA's 125th successful mission since being founded in 2006.

The geo-synchronous earth orbit or geo satellite is the fourth of our six satellite constellation to be deployed and is a key part of our nation's missile defense system. The SBIRS system enhances the military surveillance abilities and expands technical information gathering and situational awareness capability, collected from satellite powerful sensors and converting it into actionable information for defense and intelligence applications. We are extremely proud to be able to provide this crucial product in support of our country's security and defense.

I will now turn the call over to Bruce to review our 2017 financial performance and discuss our expectations for 2018. We will then open up the lines for your questions.

Bruce Tanner

Thanks, Marillyn and good morning, everyone. I will be making remarks based on the web charts that we included with our earnings release today. Let's begin with chart 3 and an overview of our results.

We finished the year with strong results in all key financial metrics. Sales exceeded $15 billion in the quarter, rebounding as expected from the lower than planned sales in the third quarter resulting in $51 billion in sales for the year. Segment operating profit was line with our expectations for the year at $5.1 billion, driving our earnings per share to $13.33, prior to the onetime adjustment to recognize the impact of the new corporate tax rate on our deferred tax asset balances at the end of the year.

We continue to have strong cash performance in the quarter, generating $6.5 billion for the full year. We delivered on our commitments to return cash to stockholders with $4.2 billion returned through dividends and share repurchases and we ended the year with about $100 billion in backlog. So we are pleased with our overall performance in 2017. On chart 4 we compare our sales for 2017 with our sales for 2016. Sales grew 8% over last year's results to just over $51 billion for the year, which is the highest level we have ever achieved. I will show how that growth was spread amongst our four business areas on the next chart.

Chart 5 compares 2017 sales levels versus last year's results for each of the business areas. All four business areas grew sales compared to 2016. Aeronautics was up 13% over last year driven primarily by higher F-35 production and sustainment volume and those delivery of two additional C-130 aircraft in the year. Rotary and mission systems grew 6% in 2017. Due to lower purchase accounting adjustments in 2017, as well as a favorable change in aircraft mix. Missile and fire control grew 9% in 2017 driven by higher volume and deliveries in the fire control, tactical missiles and air defense lines of business.

And finally, space was slightly higher than last year with higher AWE sales more than offsetting the volume from two commercial launches in 2016 versus none in 2017 and lower government satellite volume this year. On chart 6 we compare our earnings per share in 2017 with our results from 2016. As I said on the first Slide, our EPS for this year before the impacts of tax reform, is $13.33, or about $1 higher than our EPS in 2016.

On a GAAP basis, our EPS was $6.64 after recognizing a $1.9 billion charge to earnings, primarily to reflect the lower value of our deferred tax assets at the lower statutory rate of 21%. And as you could tell from our cash performance in the year, this charge had minimal impact on cash from operations. We show our cash performance on chart 7. We generated $6.5 billion in cash from operations in the year, about $300 million higher than we had outlook during the October call and a record level for the corporation. This amount represents a 25% increase in cash from operations over the 2016 result which was itself a record level at that time.

Chart 8 shows the amount of cash returned to stockholders during the year, with $6.5 billion in cash from operations and almost $1.2 billion of capital expenditures in the year, our free cash flow was $5.3 billion. And with almost $4.2 billion of cash returned in the form of either dividends or share repurchases, we returned 79% of our free cash flow in the year. Chart 9 provides both our pro forma 2017 results and our 2018 outlook under the new revenue recognition methodology that became effective on January 1st of this year.

Our sales and segment operating profit were in line with the estimate that we provided during the October call. You will notice that our pro forma results also reflect the new accounting standard to record only the FAS pension service cost and operating profit and non-service FAS pension cost and non-operating costs. Because our pro forma segment operating profit was similar to the profit under the old revenue recognition methodology, our EPS is close to as reported for 2017. And of course, cash from operations was not affected by the revenue recognition change. Our outlook for 2018 sales and segment operating profit is also about what we provided during the October call with sales growing about 2% over the 2017 level and a margin of 10.4% at the midpoint.

Projected EPS for 2018 is significantly higher than 2017 due to the lower tax rate, higher segment operating profit and improved FAS/CAS outlook that I will describe in a couple of charts. Cash from operations is expected to be greater than or equal to $3 billion after our decision to accelerate $3.4 billion worth of required pension contributions for 2019 and 2020 into 2018 or a total contribution of $5 billion in order to retain the tax deduction for these contributions at the old statutory rate of 35%.

The $3 billion outlook for cash from operations may seem higher than expected given that we have provided a preliminary outlook of $5 billion in cash from operations for 2018 during our discussion on the October call and we are contributing an additional $3.4 billion more to our pension trust than we discussed at that time. The reason for the higher cash is twofold. First, we expect to have about $900 million refund from our 2017 taxes paid because of the additional pension contributions and we also expect to pay about $500 million less in cash taxes during 2018 as a result of tax reform.

I will also provide more insight into what this acceleration of pension funding means for out year cash from operations in a couple of charts. Chart 10 shows our outlook for 2018 sales and segment operating profit by business area. We have provided pro forma sales and segment operating profit for 2016 and 2017 reflecting the new revenue standard and pension expense presentation in the attachments to our earnings release for comparison purposes.

Turning to chart 11. We show the updated FAS/CAS adjustment outlook for 2018 compared with what we discussed in October [indiscernible] basis points versus the level we expected in October to a rate of 3.625% and that lowered the FAS/CAS adjustment by $115 million. Our actual return on assets in 2017 increased through the end of the year to 13% versus the 9% we assumed in October, improving the adjustment by $75 million. We revised the longevity assumptions for our plan participants which improved the adjustment by $25 million and the planned asset returns on the additional $3.4 billion of contributions in the year, improve the adjustment by $165 million to the current outlook of just over $1 billion for the year.

Chart 12 provides a view of how tax reform and our decisions to accelerate required pension contributions impacts our cash from operations outlook for the next three years. We have already described the reason for our 2018 outlook of equal to or greater than $3 billion in cash from operations, we expect to fund this acceleration through cash from operations, cash from the balance sheet and commercial paper rather than long-term debt. And with the acceleration of contributions into 2018, we no longer have required contributions in 2019 or 2020. With this improvement along with the annual benefit from tax reform going forward, we now expect our cash from operations to be equal to or greater than $17 billion for the years 2018 to 2020 with both 2019 and 2020 expected to have around $7 billion in cash generation.

Finally, we have our summary on chart 13. We finished the year strong in 2017 and that positioned us well for 2018. The benefits of accelerating our pension contributions into 2018 and the recurring benefits of tax reform provide for significant cash generation in 2019 and 2020. Our portfolio of programs and capabilities positions us well for today's environment and what we expect in the years to come and we plan to make the necessary investments in new technologies, our facilities and our employees to support future growth.

With that, we are ready for your questions. John?

Question-and-Answer Session

Operator

[Operator Instructions] And we go first to the line of Sheila Kahyaoglu with Jefferies. Please go ahead.

Sheila Kahyaoglu

Just Bruce, I guess, on your chart 12, if you could maybe talk about the cumulative cash guidance of $17 billion. How do we think about the moving pieces? Pension a bit of, more of a headwind then we thought. Maybe 1.7 in taxes and offset. So how do we think about maybe working capital investments as well as CapEx and any other moving pieces?

Bruce Tanner

Yes. So thanks, Sheila. Maybe to reiterate what I said in the prepared remarks. We had, I think we had teed this up actually in the October call that we had some, the return of some fairly significant pension contributions starting in 2018, 19 and 20. And so that's one of the reasons why we'd expected cash in 2018 to be a little lower than 2017 before all these adjustments took place. So our decision clearly to accelerate the pension contributions in the 2018 was based on the tax benefits, maintaining the tax benefits to 35% rate provides to us. And I think that's good commonsense as I mean, the one think I would tell you is that doesn't create per se an extra benefit to us. It's really maintaining the benefit that we had under the old tax rate all along. And the real benefit here is coming from tax reform going forward. And you should think of that as roughly $0.5 billion a year going forward.

The working capital question that you asked about is a little convoluted perhaps because some of the pieces on working capital changed under the new revenue recognition approach on the balance sheet, if you will, moving from some inventory numbers up to contract assets but in total we will still think to have no material growth in our working capital over the next three years period frankly. The one -- I think you had one other question, I am sorry, just is top off my head there, you asked about capital expenditures.

Sheila Kahyaoglu

Yes.

Bruce Tanner

You know capital expenditures were at a record level in 2017. We actually expect to have a higher level in 2018. A lot of the reason for the additional capital in 2018 is supporting the new wins that we had in 2018. That number stays fairly consistent with where we are expecting 2018 to be and 2019. And then at least current planning is that drops off maybe a little bit in the 2020 timeframe but all that's dependent upon new opportunities as they present themselves and the potential to have efficiencies that we haven't currently invested in in our contracts going forward.

Operator

Our next question is from George Shapiro with Shapiro Research. Please go ahead.

George Shapiro

A couple of probably quick ones. The actual tax rate for '18 is going to be what, 18%, 18.5%? The second part, the Sikorsky profit you said was up $60 million but still would suggest to me they only made about $10 million in the quarter. And I know you have got the amortization yet but that still seemed like a low number if you could explore that a little bit. And then the last one is it would seem like the F-35 margin went up a little bit based on the incremental profit that you disclosed. Thanks.

Bruce Tanner

I think pretty accurate there. 18% is maybe a little less than that, frankly, is what we are looking at. And just to put maybe a little color behind that, sort of the headline reduction you would expect to see is sort of 14% [indiscernible] 35% tax rate and 21% tax rate. We think our effective tax rate is probably coming down about 10% and the reason for that is two-fold. One, we are losing the manufacturing deduction which was phased out under the new tax policies going forward. That's worth about 2% change in our effective tax rate. And then if you just think of the other deductions that we have that are still maintained going forward, but each one of them, those are for things like the R&D expense, this is for things like ESAF deductions and the like. While they are maintained, they are worth less under a 21% tax rate than they were under a 35% tax rate and so collectively those are worth about another 2%. So 14% becomes 10% and our 27%, 28% tax rate, sort of before tax reform becomes roughly 17%, 18% going forward. That's sort of the way we think about that.

Sikorsky, $60 million in the quarter. I am just trying to think, George, I think Sikorsky had actually a pretty good quarter in 2017. I mean that's, in fact I think that was, if I am not mistaken, that was probably the highest quarter of profit in the four quarters for 2017. So I think we are pleased actually with the results in the quarter. We obviously had higher aircraft delivery in the quarter and we also had a little bit of an improved mix situation on the deliveries of the aircraft that did occur in the quarter. So we are actually pretty pleased where it is and we think the good news about that is Sikorsky's profitability we expect to be higher in 2018 than in 2017.

And then lastly I think you asked about the F-35 margin and you are right. We did have some risk retirements in the quarter on the F-35 program that did result in higher margins in the quarter on the F-35 program. But I will say we had good performance on the manufacturing, especially the production obviously. A portion of the F-35 program throughout the year. This was just the last sort of instantiation of that in the form of some risk retirements that we took in the fourth quarter. So good performance overall.

Operator

And next we will go to Sam Pearlstein with Wells Fargo Securities. Please go ahead.

Samuel Pearlstein

I was wondering if you could talk a little bit about tax reform and some of the moves with regards to pension and how to think about capital allocation. September is when you typically deal with the dividend, now with a much lower operating cash flow number from the pension contribution. Does it change your view of the payout or how to think about dividend growth and then, Bruce, could you just give us a single point where some range is to when you said CapEx is up. What is that number for this year?

Bruce Tanner

Yes. Sam, I will take both of those. So capital allocation, U.S. tax reform and capital allocation impacts from that. As you said, and I don’t want to preempt the Board's decision, we will have that conversation in September. But we don’t expect there to be a significant change with any of the capital allocation items that we have already anticipated in our guidance for 2018. So for instance our guidance in October we talked about $1 billion of share repurchases. That won't change. We will have our normal discussion on dividends in September of later this year. And I think our overall capital allocation, I would say it's a little bit opportunistic base going forward. We will see what sort of organic opportunities present themselves that require capital expenditures and that’s clearly our first order of priority in terms of generating organic growth going forward.

And then we will take a look at the, what's left over, so to speak, for share repurchases and dividend payouts. But I would think that if you look at our track record for well over a decade, we have had a pretty good track record for I think doing the right things in terms of cash returned to stockholders and supporting the growth needed to support our corporation going forward. So we will continue that going forward. The one thing about our cash flow and in particular the tax reform going forward is it obviously makes our payout ratio a little bit lower than it has been in the past. So it creates at least the opportunity to continue the sorts of dividend increases that we have had in years past but we will face that and cross that bridge in the September timeframe when we do that with our Board, as I said, The absolute number in terms of 2018 CapEx is around $1.3 billion and at least as we sit here today, Sam that 1.3, maybe a little more than that in 2018, is about the same number we will see in 2019. Maybe a little lower than that. But you should think of both years at least, if not rounding to, being pretty close to $1.3 billion. Thanks.

Operator

And next we will go to Cai von Rumohr with Cowen & Company. Please go ahead.

Cai von Rumohr

So Bruce, if you could give us a profile of the deliveries and sales and profits of Sikorsky going forward, I mean I assume we are going to see some pickup in commercial deliveries this year. And secondly, you said that, as you look out to 2021, you will have to start pension contributions again, I think by our math you have done significantly well in terms of the contribution and the returns so that you should be relatively near full funding by the end of this year. Thanks.

Bruce Tanner

Thanks, Cai, good questions. So I think your first one is delivery profile and sales, earnings and profit going forward for Sikorsky and whether or not we expect to see a pickup in commercial deliveries. You know what's going on with Sikorsky is a pretty good drop off in terms of commercial or -- excuse me, in terms of government aircraft deliveries from 2017 to 2018. You should think of the 2017 was the end of multiyear [eight] [ph] and 2019 is sort of the first year of multiyear nine deliveries. And I think we are down about 50 or so between the Black Hawk program and Naval Hawk program, down some 50 commercial -- excuse me, 50 government helicopters. So pretty good reduction. And part of that is because the multiyear nine was a lower value in terms of overall quantity than multiyear eight and we negotiated a minimum quantity and that’s sort of what's in our planning purposes going forward. We are obviously hopeful and we gave pricing for that in the multiyear for additional aircraft that we hope will openly get plussed up through budget adjustments going forward.

The good news is we have already got those aircraft priced, if you will, in the multiyear. So we are kind of at the, hopefully, a bit of the low point there on the government deliveries. As far as commercial, Cai, though I think I have been watching, which I don’t normally do but I have been watching oil prices a bit and $65 here a barrel for at least a couple of weeks or so. I think we have got some more time to wait before and we need $65 a barrel to stay at that level for a little bit longer to sort of drive some of the volume of helicopters in the oil and gas industry. So we are obviously not expecting a large increase on the commercial helicopters in 2018 compared to 2017. And frankly, we are looking pretty flat in 2019 as well. Obviously, that could change pretty quickly depending on oil and gas prices. So as I said, we do watch that closer.

Long term with Sikorsky, we like to see the growth coming from the 53K program as we start to enter the low rate production aircraft, excuse me, low rate production phase of that program. And hopefully you should think of sort of the downturn in Black Hawk helicopter deliveries being offset by upticks in 53K volume as well as some of the other development programs we have got going like the Presidential helicopter program as well. So you should think of Sikorsky, this is again kind of a low point in sales in 2018 and some growth going forward in 2017 and beyond. So 53K, I think we are going to be, for those of that attend the Berlin Show, we are actually going to have that aircraft fly in Germany. And we are excited by the prospects of that opportunity not just for the U.S. Marine Corps, which I believe the quantity is about 200 aircraft in the plan of record for the Marine Corps. But we are hopeful that we can sell some international customers, the two most likely to be are either Germany or Israel. I am not sure which order that would be but if you happen to be in Berlin, by all means stop by and see the aircraft flying.

Operator

Our next question is from Ron Epstein with Bank of America Merrill Lynch. Please go ahead.

Ronald Epstein

Quick question, maybe changing gears a little bit to the F-35 program. On their earnings call, Northrop commented in their mission systems segment that they are producing about 90 units a year which they call peak production rates. And to me that kind of seemed well below the plan of record, I am not sure if they misspoke or what. But just trying to get a sense, I mean are we at peak production rates. I mean that kind of seems consistent with something Pat Shanahan said in public comments already. But I am just trying to get my head around like what peak rates are and where they should be, and I will leave it there.

Bruce Tanner

Hey, Ron. Let me take a shot at that, and I think there was some confusion by both the secretary's comments and I saw what was said by the Northrop Grumman folks as well. I think the message everyone is trying to send is, when you are delivering 90 aircraft or 90 million systems, or 90 of anything, that’s a pretty high production rate. Different than most low rate initial production programs. But the F-35 program is technically not a full rate production until I believe our past LRIP 14, I think the first production lot is sort of fiscal year, or our fiscal year that will be the lot after LRIP 14. So technically we are in low rate initial production but the quantities are very very high and you should just think if we are at 90 some odd units, which is again what Marillyn said we are going to be delivering aircraft flies in 2018, and the mission systems sort of the front end of deliveries. That’s the reason they could be at that rate in 2017. You should think of in the next three to four years, we are going to be at the 150 aircraft per year.

So we are not close to the peak of production yet but at the volume we are talking about now, it feels like we are in a production program. I think that’s what the secretary was trying to say is, this is not low rate. If you are delivering 90 aircraft a year, it feels sort of like a production program which you should not think if that is the peak. And, hey, before we go to next one, I realize that I jotted a note down to myself and I completely forgot to answer Cai's last question [indiscernible] contribution. And Cai kind of asked you know, are we getting close to full funding and so forth. One thing I would say is, is one of the things we looked at while we decided on $5 billion is the right number. We are getting close enough to where we -- we need to be careful to not yet overfund it on our pension program.

So while funding starts again up in 2021. It starts up at a much much lower level than what we currently funded for the 2019 and 2020 required contributions with our $5 billion. So part of that reason again is in the year 2020, we have the final close or the final freeze, excuse me, of our pension going forward and that’s one of the things that brings that down. But we have been putting a lot of, obviously funding into the pension plan over the past years and just gets us to the level that I just described about to you. Sorry, about that Cai.

Operator

And next we will go to Rich Safran with Buckingham Research. Please go ahead.

Richard Safran

I would like to ask another different type of question regarding the impact that tax reform here and I am not trying to rein on the parade at all here, but there is a lot of chatter on the hill and within the investment community that the Pentagon is to look to either try to capture or claw back some portion of the tax benefit the defense companies are getting from the lower rates. The thinking is that the government could either renegotiate existing contracts or might look to re-price items on future contracts. Now I am not sure how the government can renegotiate existing contracts but I would like to know if that’s something you are hearing from the government and if so I would like to get your response to that. Maybe discuss how you see your future contract and pricing negotiations being impacted by tax reform.

Marillyn Hewson

Thanks for the question, Rich, and I will take that one on because I have been very much involved with my fellow CEOs on looking very hard at this opportunity for tax reform to make this more competitive in the global marketplace. So let's remember first off, what the administration and Congress enacted significant tax reform. It was to make the U.S. economy more globally competitive and to encourage industry to invest in America to create jobs and accelerate economic growth. And Lockheed Martin is one of the leading companies that has been pushing for tax reform. We have had that. So we with that in mind we have this purposely set in mind, as you heard from my remarks earlier, that what the purpose of the tax reform is and as we evaluate options of what we want to do with these tax savings. It's all around that purpose that our government put forward.

So as I said in our remarks, our vision is to use these benefits to differentiate ourselves in the global marketplace through investments. And what makes us more innovative and more efficient so that we can grow our business and we can create new jobs. We wanted to also enhance the skills of our current workforce as we look at what's happening with digitization and all that transformation that’s happening. We want to make sure that our workforce is prepared for the future and we also want to make sure that we are an attractive employer for our future workforce by investing STEM activities and helping in the communities where we work.

So this is particularly important. If you think about the U.S., we are graduating fewer students with STEM degrees and yet many of our programs require only U.S. citizens to work on them. So we need students who are coming in with STEM educations, to come into those jobs. Frankly, if we don’t do this, I think we would have wasted the incredible potential the tax reform presents to us. If you think about our industry aerospace and defense, it is the backbone of global security and we take this mission very seriously and we are determined to make sure that we remain competitive by investing in our business, by enhancing our critical capabilities, by investing on our human capital, our employees. So that we can help protect the nation, our allies and our partners. So I would just take you back to the point of why the tax reform was put in place. It was to invest in America to create jobs and accelerate economic growth.

Operator

Our next question is from Rajeev Lalwani with Morgan Stanley. Please go ahead.

Rajeev Lalwani

Bruce, Marillyn, on the aeronautics side, can you just walk us through the limited growth of operating profits into '18. I am assuming it would just be the legacy programs offsetting F-35 growth. And then just looking forward, can you help us think about the growth of the segment and where it comes from. Is it going to be the F-35 or maybe some of the other programs you have been talking about?

Bruce Tanner

Within aeronautics you are talking about, Rajeev, the last part of the question.

Rajeev Lalwani

Yes.

Bruce Tanner

Yes. So margin wise at aero, we are guiding towards a little bit lower number in 2018 versus 2017. Back to George's question, we did have a number of risk retirements on some earlier F-35 LRIP production lots that we took in 2017 that at least -- and I will say they were a little higher than what we had planned for in 2017. And so while we have planned risk retirements for F-35 production in 2018, they are not at the same level as they were in 2017. So while we have opportunities, as I always say about this time of the year, to do better than what we are planning. The planning right now is just for a lower level than that. That’s driving it, I will say more than the mix of programs on the F-35. And the one thing that may is not true about what I just said is we are hopeful that there will be a TX or the APT program, the pilot training program for the air force, announced later this year. That will have a slight dilutive effect on the overall margins because it starts kind of slow as a program to begin with, especially if it's later in the year 2018. But that has a slightly lower, not slightly lower, quite a bit lower starting margin than our other programs within aeronautics.

I mean you should think of the F-35 now is about on par, margin wise, with the overall aeronautics margins as a whole. And that’s in part because the F-35 program is simply becoming so big relative to aeronautics as a whole. So again, slightly lower in 2018 versus 2017. Maybe the other reason for that is we did finish the last F-16 production aircraft delivery in 2017. We actually have quite a bit of F-16 modernization business but those are sort of starting out in the early phases than is our practice typically on early start programs like that. We are actually starting those off at probably a lower margin than the actual aircraft that deliver at the end of 2017. So I think those two reasons, Rajeev, are the reasons that you are seeing what you are seeing.

Operator

Our next question is from Rob Stallard with Vertical Research. Please go ahead.

Rob Stallard

Marillyn, you mentioned missile defense in your commentary a number of times. I was wondering if you could size the revenue exposure that you had in 2017 and how you expect this end market to grow for the next few years. And then just a quick one for Bruce, how do you expect on the FAS/CAS expense in this new format to track over the next three years to 2020. Thank you.

Marillyn Hewson

Bruce, I am actually going to refer to you on the revenue rolled up on all of missile defense. Because you know it crosses over several business areas between rotary mission systems and [indiscernible].

Bruce Tanner

Yes. So let me take a shot at that Rob. The areas you want to think of, frankly, is we do treat within missiles and fire control, air missile defense has its own line of business and you should think of that, so obviously the PAC-3 programs, THAAD and the [indiscernible] program, when we get that going. That’s about $2.5 billion worth of business a year. What's not included in that and off the top of my head, I am not sure I have got a definitive number for you, is the air missile defense and ballistic missile defense activities that we do at RMS. This is for things like Aegis Ashore but also some of the Aegis BMD work. If I had a guess, a ballpark, it's probably $0.5 billion there and then arguably you could say some of the space based early warning satellites that space systems are also some of that. So if you just kind of combine all those things together, I guess I could do some of the C-2 command and control activities that we do as well.

So maybe $3 billion, $3.5 billion worth of air missile defense and BMD work across literally three of the four business areas that we have today. The second part. The second part of the question was FAS/CAS in the new format. So FAS/CAS doesn't change because of the new format, it changes how much of pension expense is reflected in operating income versus non-operating. That's one of the reasons, quite honestly that we have always focused more on segment operating profit as opposed to operating profit, because segment operating profit is unaffected by this. If you just take a step back and take a look at FAS/CAS going forward, we expect FAS/CAS to increase pretty significantly over the next few years. I still see in the year 2020, that we are going to have FAS income rather than FAS expense. And so just to maybe size that for you, you should think of the CAS expense between sort of now and 2022, as we look forward, staying at about $2.5 billion a year. But FAS expense is going to decrease every year over that period of time and actually go to become income in 2020 and higher income in 2021 and higher than that in 2022. So the FAS/CAS adjustment will pick up steam quite a bit starting next year and every year there are after, at least as we can see it all the way through 2022 and beyond.

Operator

And next we will go to Hunter Keay with Wolfe Research. Please go ahead.

Hunter Kent Keay

A little bit more on missile defense, Marillyn, you obviously talked about in your prepared remarks, Bruce thanks for the color you just gave. You obviously had a lot of success in mid-course and terminal but eventually have been able to crack the code on boost phase. And I don't know if this is also an embedded tax reform question about maybe freeing up some money for some R&D but how do you expect Lockheed to participate in the missile defense form in maybe a boost phase capacity going forward. Is there an opportunity to really kind of think ahead on that and that kind of own that realm if you are able to sort of think forward? Can you talk about layered missile defense, that's a big part of it.

Marillyn Hewson

That's a great question, Hunter, and we do look across all elements of helping our customers address those priorities. And we are investing in research and development. So one of the tests that we did recently, we call it [indiscernible] but it was a navy test where we tested our Aegis system with the capabilities of an F-35 and we are able to have the F-35 identify the launch of a target well in advance of when the Aegis radar would have seen it, so bringing a lot of our capabilities together into a total systems solutions is one of the areas that we are investing in and demonstrating some of that capability across domains within our organizations to provide those kind of capabilities to our customers. Beyond that we continue to look at a range of things that we are investing in, such as hypersonics and directed energy and things that would help with any kind of threat that comes early on. And as Bruce outlined for you, we have several systems that are in that defense mode of addressing all phases of a missile launch. Anything you want to add, Bruce?

Bruce Tanner

The only thing I would add Hunter is, no one has the portfolio that Lockheed Martin does in terms of layered defense. I mean if you think of the think of the products we offer with PAC-3, THAAD, the overhead assets with satellites, the incredible fusion of sensors that comes from an F-35 and being able to feed it to an Aegis system, for instance. Having said that, what's termed left of launch is a vexing problem to be solved and Marillyn hit some of the opportunities that we are looking at to do that. Hypersonic capabilities in terms of weapons is one of those things that we are definitely looking at to help solve that problem. But that is high on our list of some of the more vexing problems that we are trying to solve for and definitely one that we are investing in, we will continue to invest in with our technologies going forward. Because it is an issues and it is something that we bring a unique perspective to with all the assets of our portfolio.

Marillyn Hewson

With your point about using some of the savings out of tax reform to go invest back into these areas, I think that is right in line with what would support our customers and will support the defense of our nation.

Operator

And next we will go to Jon Raviv with Citi. Please go ahead.

Jon Raviv

What is the path looking like to accelerating sales growth beyond 2018. I know that there is some specific items impacting this upcoming year but just thinking about getting back to that 3% to 5% in '19 and beyond. Some of the things you have good visibility on there. And then also how is that acceleration or how is the shape of the curve impacted by some of the recent budget actions, whether it's extended CR, [sequester] [ph] plays versus Congress marking up budgets to much higher levels than what the President has even requested.

Bruce Tanner

Yes. So, Jon, I will take that one on. As far as the path, as you describe it to accelerating, we now describe 2018 as sort of a transition year. We had obviously significant growth in 2017, all four business areas as I talked about grew individually. We don't have that situation in 2018 but as we look forward and I think I teed this up on the October call, that 2018 was a bit of a lull and then 2019 and 2020, we expect both of those years to be somewhere in the 4% to 5% growth range as we look at our outlook right now. And to sort of tie that into your question on the budget and the impact of CR, I don't think CR does a whole lot of impact in 2018. In fact I know it doesn't. Longer term I am not sure it has a huge impact on 2019 or not. I will say this though, the 4% or 5% that we are talking about is sort of based on the current presidential budget outlook. So some of the numbers that are being tossed about including most recently by the President himself for 2019, as well as some of the comments that Secretary Mattis has made about 2019 being sort of the year that he is going to put his stamp, those are my word, on the DoD budget. Those are baked into the numbers that I just talked about with the 4% to 5% growth.

So assuming those come in at anywhere near the levels, the higher levels that we are talking about, I like to see us be able to at least...

Greg Gardner

John, this is Greg. We have got time for one more question.

Operator

And that will be of Rob Spingarn with Credit Suisse. Please go ahead.

Robert Spingarn

If it's okay, I would like to ask two things. Bruce just quickly, one for Bruce, one for Marillyn. On the outlook, on the 19, 20 cash flow, if we were to normalize free cash flow and take the $7 billion from your chart 12 and knock off CapEx of a little over $1 billion and may be normalize for the pension contribution. Would it be fair to say free cash flow on a normalized basis is in the high 4s, almost $5 billion.

Bruce Tanner

So I would have said it's in the high 5s. When you said normalized for pension contribution, are you trying to say...

Robert Spingarn

Well, I am putting in what a normal pension contribution, in other words if we smooth what you are doing.

Bruce Tanner

Beyond 2020, you mean, Rob?

Robert Spingarn

Well, yes. Or if we were to factor what you spent this year, the early contribution and normalize for. In other words, we have a timing situation here and I want to think about what the normalized free cash flow is on an ongoing basis.

Bruce Tanner

Yes. So you should again think of, I mean the simplistic way I think of it is, John, you know cash from operations at least for '19 and '20 is $7 billion, is kind of what we teed up there. $1.3 billion I have talked about in 2019 from a CapEx perspective, actually going lower than that. So let's just call it $1.2 billion or so. You have got a $5.7 billion, $5.8 billion free cash flow number pre any pension funding. And as I said, the contribution starting in 2020 are significantly lower than the contributions that we had, that were required in 2019 and 2020 probably by an order of half those contributions that were required. And again, depending on how we do with the asset returns, with the additional $3.4 billion, I am hopeful 2018 is another year of strong asset returns, that number could get smaller. So I think simplistically thinking, free cash flow, we are close to $20 a share in 2019 and 2020 and depending upon what the pension contributions are required in 2020 and beyond.

Marillyn Hewson

You said 2020 but you mean 2021.

Bruce Tanner

2021, I am sorry. Yes.

Marillyn Hewson

Rob, you had question for me, or -- okay, looks like we lost him. Okay. So I guess we will wrap up the call then. John, thank you. Thank you all of joining us on the call today. I want to end this call by reiterating that we really had an exceptional year. A very strong year and it's because of our outstanding portfolio and our robust backlog that we continue to be well positioned to deliver substantial value to our customers and to our stockholders. So that concludes our call today, John.