Ladies and gentlemen, thank you for standing by and welcome to the Lockheed Martin Second Quarter 2018 Earnings Results Conference Call. At this time, all the participant lines are in a listen-only mode. Later, we will conduct a question-and-answer session and instructions will be given at that time. [Operator Instructions] As a reminder, today's conference is being recorded.

Now I would like to turn the conference over to the Vice President of Investor Relations, Greg Gardner. Please go ahead, sir.

Greg Gardner

Thank you, Brian, and good morning. I would like to welcome everyone to our second quarter 2018 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 in the forward-looking statements.

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

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

Marillyn Hewson

Thanks, Greg. Good morning, everyone and welcome to our call today. We are pleased to have you joining us as we review our second quarter results, some key operational accomplishments from across our Company and celebrate a very noteworthy milestone.

Before I begin I want to offer my appreciation and congratulations to our Lockheed Martin team for their continuing dedication in the achievement of strong second quarter financial results as we continue to focus the organization on long term growth and value creation. The corporation continues to deliver innovative capabilities to our customers while also

returning value to our stockholders and I am very proud of our Lockheed Martin team.

As today's release detailed, we have a very strong quarter and continue to develop excellent financial results – I'm sorry continue to deliver excellent financial results. And we will review these results in depth a little later on the call.

I'm very pleased that our strong financial performance across the corporation and expectations for the remainder of 2018 have enabled us to increase our full year outlook for sale, operating profit, earnings per share and cash from operations. Our second quarter and year-to-date financial performance and increased full year projection for all financial metrics are the result of the strength provided by our broad portfolio of offerings as each of our four business areas were able to contribute to our improved financial outlook.

I will cover some performance highlights from our business areas in just a moment, but I want to begin by recognizing a very special milestone that occurred this quarter. June 17 marked the 75th anniversary of the founding our Skunk Works organization. In 1943, the U.S. Army expressed its urgent need for a jet fighter to counter the rapidly growing German aerial threat and Clarence Kelly Johnson and his team of dedicated engineers began the Skunk Works legacy. In just 143 days, this energetic group of aerospace innovators designed and built the XP-80 fighter aircraft helping to usher in the jet age of U.S. aviation.

Over the past three quarters of a century, the Skunk Works has produced the advanced technology that leads some of the most recognizable breakthrough products in our industry including the U2 Dragon Lady spy plane, the SR-71 Blackbird reconnaissance aircraft, the fastest plane to ever fly and the F-117 Nighthawk, the world's first stealth fighter and precursor to today's F-22 and F-35, which were also developed at the Skunk Works.

The Skunk Works has become an industry standard for innovation and is a vital incubator for current technologies such as quiet supersonic flight, hypersonics, intelligence surveillance and reconnaissance systems, and advanced unmanned aerial platforms, key providers of growth opportunities in the future.

History has shown that this unique organization has the unparalleled capacity to produce new solutions to complex problems. Lockheed Martin's Skunk Works remains focused on a commitment to innovation born 75 years ago and we look forward to continuing this rich heritage for another 75 years and beyond.

Turning briefly to the Department of Defense budget, you'll recall that in the first guarter Congress passed the Bipartisan Budget Act of 2018 which raised the defense budget caps for both 2018 and 2019. Fiscal year 2019 based DoD budgets will build upon the significant growth included in the FY 2018 appropriations with an additional \$17 billion on top of the greater than \$70 billion dollar increase from FY 2017 to FY 2018. Both the House and Senate fiscal year 2019 appropriation bills have successfully cleared their respective committees. Once the FY 2019 Defense Appropriation Bill passes the Senate floor later this summer, the two chambers will commence the conference process. While each bill has met the total legislated target for the DoD budget caps, both committees have put forth recommended funding in excess of the original presidential budget request for a number of our programs including 12 to 16 additional F-35 jets, up to 14 additional THAAD interceptors, 8 additional C-130J aircraft, 8 to 15 Blackhawk helicopters and 1 to 2 additional Littoral Combat Ships. These increases are above the additional funding and active in the FY 2018 on the [indiscernible] appropriations of which over \$7 billion [were for] [ph] Lockheed Martin programs.

These FY 2019 increases will still need to be settled in conference and the agree-to-appropriations bill must be signed into law. However, we are very encouraged by the support of our portfolio has continued to receive as the budget process progresses.

Moving on, I'd like to highlight several significant milestones we achieved across the corporation during the past quarter. Beginning with an update on our F-35 program. We saw four significant events take place in this quarter. In June, the United Kingdom welcomed its first four F-35B short takeoff and vertical landing jets to its shores as the U.K. prepares for its lightning force and mission operating capability by the end of this year.

The STOVL aircraft will be used by both the Royal Air Force and Royal Navy and we're proud to deliver these planes as the RAF celebrates its one hundredth anniversary.

Also in June, we were honored to host the roll out ceremony to mark the first two F-35 deliveries to Turkey at our Fort Worth Texas facility. Turkey has been a long standing member of the F-35 program joining in 1999 at its inception. The two F-35 jets will initially be stationed at Luke Air Force Base and will take part in a pilot training program.

In May, the Israeli Air Force announced their F-35 Adir aircraft have been used in operational combat, marking the first time this fifth generation stealth fighter has been deployed into a contested environment. In this quarter, we made our three hundredth F-35 delivery as the U.S. Air Force

received its latest conventional takeoff and landing variant at Hill Air Force Base. We've now delivered 305 production aircraft in total, demonstrating the program's continued progress and momentum. We anticipate delivering 91 Joint Strike Fighters in 2018 as we ramp towards full rate production.

These four important milestones underscore the strong support both the U.S. forces and the international community have shown for this transformational aircraft.

I'll close our aeronautics discussion by noting how pleased we were with the Slovakian Defense Ministry's announcement this morning that they have selected our F-16 to replace its current fleet of fighters with 14 state-of-theart block 70 aircraft planned to be ordered. The State Department has already approved the sale and we will now move to finalize the agreement which we expect will exceed \$1 billion.

We are excited by the opportunity to add Slovakian jets to our recent Bahrain order as we look to extend our new Greenville F-16 production line for years to come.

Moving to our Missiles and Fire Control business area, we saw significant demand for our tactical missile products this quarter as well as continued support in air and missile defense. Our guided multiple launch rocket system, GMLRS team received a not-to-exceed award of approximately \$820 million dollars for Lot 13 production and delivery of precision strike weapon systems for the U.S. Army.

We also received an award of over \$360 million for Army Tactical Missile System or ATACMS missiles. This program will allow the military system to upgrade their existing ATACMS missiles with new technology and double their range, while extending their shelf life by more than 10 years. Also in our Air and Missile Defense Organization, our PAC-3 team received a pair of awards to produce additional interceptors for the U.S. Army and foreign military sales customers with a potential value in excess of a \$0.5 billion.

Before moving on, I'd like to acknowledge the Tactical Missile team's successful dual test event launching a pair of long range anti-ship missiles or LRASM precision guided missile from a U.S. Air Force B-1B lancer bomber. The missiles positively identified their maritime target and delivered a successful impact. This is the second successful dual LRASM flight test as the team progresses towards early operational capability on B1B aircraft later this year demonstrating our ability to rapidly deliver crucial capabilities to our war fighters.

In the Rotary and Mission Systems business area, we saw two historic achievements for CH-53K King Stallion heavy lift helicopter. In April, the CH-

53K made its international debut at the ILA Berlin Air Show and flew for the first time outside of the United States.

Using its modern design and fly-by-wire technology, the heavy lift 53-K demonstrated its unique capabilities. It was remarkable to see a rugged aircraft of this power and cargo weight carrying capacity exhibit such maneuverability.

In May, we delivered the first of our anticipating 200 production King Stallions to the U.S. Marine corps. The helicopter now enters into the supportability test plan where the Marines will conduct logistics and maintenance evaluations to ensure readiness and support on the flight line when the CH-53K enters into service with the corps. We currently have an additional 18 aircraft in various stages of production as the program continues to mature and grow.

As part of our continuing focus on affordability and our ongoing commitment to maintaining efficient operations, we made the difficult decision this quarter to eliminate certain positions and restructure part of the Rotary and Mission Systems organization which resulted in a \$0.26 charge to earnings per share.

The majority of this action is related to our Sikorsky line of business as we complete the integration activities we began several years ago and work to ensure the organization is properly sized to meet customer requirements and growth objectives. We believe this will benefit our customers help position the RMS business area and the corporation for improved competitiveness and create additional long term value for stockholders.

I'll close with our space business area which celebrated two important milestones this quarter. In May, the fourth Space Based Infrared System or SBIRS GEO Flight-4 satellite achieved first flight as it turned on its powerful sensors for the first time and began transmitting images back to Earth. SBIRS GEO-4 is the latest satellite to join the Air Force's orbiting missile warning system and it completes the baseline SBIRS constellation providing global coverage and increased accuracy to detect an even greater number of targets. We are proud to be able to provide this key component of the nation's Air and Missile Defense System and look forward to continuing this rich legacy with the future completion of SBIRS 5 and 6 and beyond.

Our space business area continued its leadership in research and space exploration with the successful launch of the Lockheed Martin designed and built NASA Mars InSight Lander. The InSight spacecraft was launched aboard a ULA Atlas V rocket this past May and is scheduled to arrive in November of this year. After its 6 months journey to the Red Planet, the InSight robotic

explorer will begin its mission of studying the interior composition of the planet's core by analyzing the structure of the core and crust and measuring the rate of internal seismic activity. The data provided by this mission will help scientist better understand the geologic evolution of Mars as well as all terrestrial planets including Earth.

Our corporation has built Landers for Mars research programs since NASA's first Viking mission in the 1970s and we've been a part of every NASA mission to Mars. We continue to incorporate innovative technologies and decades of experience into each new spacecraft and we are excited to continue our Mars heritage with the InSight program.

I'll now turn the call over to Bruce to review our second quarter financial performance and discuss our updated outlook for 2018. We will then open up the line for your questions.

Bruce Tanner

Thanks Marillyn and good morning, everyone. As I highlight, our key financial accomplishments, please follow along with the web charts that we included with our earnings release today.

Let's begin with chart three and an overview of our results for the quarter. In short, we exceeded our expectations for every financial metric in the quarter building upon the strong results from the first quarter. Sales and segment operating profit and cash from operations excluding our pension contribution were particularly strong. During the quarter, we generated \$1.9 billion dollars in cash from operations before making \$2 billion in contributions to our pension trust that we accelerated to preserve the 35% tax deduction as we have previously discussed. This contribution will turn cash for the quarter slightly negative however was much better than we projected when we last spoke in April.

Our accelerated contributions will end next quarter as we make the final \$1.5 billion of our planned \$5 billion in pension outlays for the year. We returned almost \$900 million dollars to our stockholders again this quarter, nearly \$600 million through dividends and more than \$300 million through share repurchases reducing share count by a million shares and we increased our full year outlook for sales, operating profit, earnings per share and cash from operations. So we're very pleased with our results for the first half of the year.

On Chart 4, we compare our sales and segment operating profit in the second quarter of this year with last year's results. Sales grew almost 7% over the same quarter last year driven by a combination of three factors. First, higher than planned win rates on new programs. Second, earlier than

planned awards. And third, several unplanned awards associated with the Omnibus budget increases announced last quarter some of which are expected to convert into increased sales quicker under the new revenue recognition methodology.

Missiles and Fire Control had the highest growth in the quarter at almost 17% driven by classified business, volume in our air missile defense line of business and increases in sensor and tactical missile sales.

Aeronautics grew 8% in the quarter, due primarily to increased F-35 production volume while RMS grew more than 4%, due to higher volume on radar programs and a number of programs in our integrated warfare systems and sensor line of business. These increases more than offset lower volume at Sikorsky due to lower Black Hawk volume which itself was lower was partially offset by higher CH-53K volume. Space's sales in the quarter were essentially flat compared with last year second quarter results.

Segment operating profit was up almost 9% in the quarter compared with last year's results. RMS again had the highest operating profit improvement this quarter with a 26% increase, driven by higher sales volume and improved performance across most of the portfolio including Sikorsky, where we're seeing better performance on the Multi-Year IX contract for Black Hawk helicopters along with cost reduction activities across Sikorsky that are more than offsetting the lower billed rate volume of Multi-Year IX versus Multi-Year VIII.

I'll point out of the results for RMS exclude \$96 million in severance and restructuring charges that are recognized as unallocated corporate expense in accordance with our practice for charges this large. These charges better position us to be more cost competitive both in the current market environment and going forward.

Missiles and Fire Control had the next highest level of profit growth at 10% with higher volume resulting from the sales increase and improved performance across the portfolio more than offsetting a provision we established for performance on an international combat vehicle.

Space grew over 7% driven by higher risk retirements in fleet ballistic missiles and lower provisions for performance in commercial satellites. Aeronautics profit grew 1% in the quarter with improved performance on F-35 production and sustainment contracts more than offsetting a significant risk retirement on the C-5 program that occurred last year.

Turning to Chart 5, we'll discuss our earnings per share in the quarter. Our EPS of \$4.05 was \$0.77 higher than our results last year, driven by the higher segment operating profit results and a lower tax rate in the quarter

compared with last year. The \$4.05 EPS in the quarter includes the \$0.26 charge for severance and restructuring activity that I mentioned earlier.

On Chart 6, we provide a revised outlook for the year. We are increasing our outlook for sales by \$1.25 billion and our segment operating profit outlook by \$260 million as a result of the strong performance in the first half of the year and our expectations that we will continue to see strong performance in the second half as well. We're also increasing our EPS and cash from operations outlooks and will discuss each of those increases in the next few charts.

Chart 7 provides our sales guidance by business area for the year. We're increasing our sales outlook for all four business areas with RMS representing the largest increase at \$400 million, Space next with a \$350 million increase and both Aeronautics and Missiles and Fire Control increasing by \$250 million each to account for the \$1.25 billion increase overall.

Chart 8 shows our new segment – excuse me, our new outlook for segment operating profit by business area for the year. We are increasing our segment operating profit outlook by \$260 million with RMS also having the largest profit increase among the business areas at \$120 million, Missiles and Fire Control next with an \$80 million increase, and space and Aeronautics increasing \$35 million and \$25 million respectively.

Chart 9 provides a reconciliation of our current and prior earnings per share outlook for the year. Our segment operating profit improvement drives a \$0.72 increase in our EPS. The severance and restructuring charge mentioned earlier reduces EPS by \$0.26 and a lower projected tax rate along with several miscellaneous impacts improved our EPS by \$0.49 with most of that change resulting from expectations of a lower tax rate in 2018 as we continue to incorporate refinements and implementing the Tax Cuts and Jobs Act legislation enacted last year.

Chart 10 provides an update to our long term cash from operations outlook. Given the increase in our outlook for 2018 cash from operations, we now see our updated three year cash goal to be equal to or greater than \$17.3 billion with the increase in 2018 representing an overall increase in our three year expectations rather than a pull forward from future years.

And finally on chart 11, we have our summary. We've had a very strong first half of 2018 allowing us to increase our outlook for all key financial measures for the full-year. And as a reminder, we'll be providing our trend information for 2019 during the upcoming October call.

With that we're ready for your questions.

Question-and-Answer Session

Operator

[Operator Instructions] Our first question today comes from the line of Carter Copeland with Melius Research. Please go ahead.

Bruce Tanner

Carter, are you there, you're mute.

Carter Copeland

I am indeed on mute. Thank you very much. Good morning and good results guys.

Bruce Tanner

Thank you.

Carter Copeland

Just I wonder if you could give a little bit more color Bruce on the charge in MFC on the warrior capability sustainment just, what were you encountered there and in the ring fencing of that anything you can tell us about that to just keep in mind?

Bruce Tanner

Yeah. Thanks for the comments and the question, Carter. So we've been working on the Warriors is the Warrior capability sustainment program and essentially it's taking a legacy armored combat vehicle putting a new turret on it some new electronics, some new cannon essentially for our intents and purposes coming up with a new combat vehicle. And it is – as a fairly significant amount of developmental effort on it to make sure that turret operates well, make sure the cannon fires at speed and the like.

So it had some issues obviously with the development aspects of this. We think we have that quantified as a result of this charge. There's a follow-on production effort that results from this development contract to essentially modify a number of these vehicles in the service for the U.K. Army and that's the expectation Carter is that this will come to satisfactory conclusion on the development side and will move into production and hopefully put this behind us.

Operator

And our next question is from the line of Peter Arment with Baird. Please go ahead.

Peter Arment

Yeah, thanks. Good morning Marillyn and Bruce. Hey Bruce, maybe just given the higher sales guidance if you could be, is there any way to bracket it that you view that you said higher win rates in earlier planned wins, so how do we think of that in the context of when you're going to give that 2019 trend information in terms of the sales profile? Is there this a pull forward or is just the timing of the awards? Any color there would to helpful.

Bruce Tanner

Look I think as I said in the in the prepared remarks, we've had more success from a win rates perspective and you should think of us we always sort of go into the year with sort of high expectations for ourselves but you don't win every single competition out there, but we probably win I don't know 65%, 70% of the competitions we enter thinking we're going to win most of them, and that's typically the case.

Here we've actually experienced a higher rate than that particularly in Missiles and Fire Control but not exclusively Missile and Fire Control. And as I said in the remarks earlier, some of those awards we've gotten into the point where the habit perhaps of just expecting things to get delayed for things like protests and the like and we haven't seen that happen to delay award recognition as much as maybe we've had seen as historically as well. So those two are both goodness those two are both a little bit of increase for the year, but also increase in future years if you think about higher win rate. And then the Omnibus activities in the awards we're receiving here, I mean the surprise is maybe how much of that is already getting put under contract for 2018 and resulting in the sales recognition that we talked about earlier and this is again because of the revenue recognition methodology essentially recognize and as we starting incurring cost. But that's almost pure upper to our expectations for the out years, so my expectation Peter would be this is not a pull forward, this is an upper for both to 2018 and future years as well.

Operator

And we do have a question from the line of Robert Spingarn with Credit Suisse. Please go ahead.

Robert Spingarn

Hey, good morning.

Bruce Tanner

Hi, Rob.

Robert Spingarn

I wanted to ask you about aeronautics margins and the implied guidance remain fairly steady I guess in around 10.6 for the remainder of the year. But you look to be making good progress toward a definitized contract on LRIP 11. So what I was wondering is, is it possible that contract once it's done generates some positive EACs there's upside to the back end of the year in Aeronautics on F-35 or does it not actually impact the booking rate?

Bruce Tanner

Rob, I'll take a shot at that and Marillyn can jump in the some comments if she has some. So I think we are making progress, you're probably seen some of the press that came out on LRIP 11 there. I think we're in the final throws of that if you will. I wouldn't expect LRIP 11 to have huge consequential impacts from a margin perspective on the rest of 2018 quite honestly, primarily because it's not the bulk of the activity if you will in 2018 previous contracts are the bulk and we typically have most of our risk retirements and step ups associated sort of contracts I'll say further along than we expect to be on LRIP 11 throughout the rest of 2018. We do expect the continued good performance on the rest of the F-35 portfolio and we're optimistic or at least we're hopeful that there's an opportunity to continue to see that kind of performance in the second half of the year but we're not counting on it at this point, Rob.

Operator

And we do have a question from the line of Joe DeNardi with Stifel. Please go ahead.

Joseph DeNardi

Yeah. Thanks very much. Bruce, just on the guidance increase, you took this year's cash from ops guidance but left 2019 and 2020 at the same. Can you just speak to why that is? Thank you.

Bruce Tanner

Yeah, so Joe, hopefully it's a simple answer to the question. We just haven't updated our planning information for 2019 and 2020. And the only reason that we increase the three year total is because of what happened 2018 obviously the \$300 million increase. So similar to the question that Peter

was asking relative there is the positive impact we're seeing in 2018 translate into 2019 and beyond that. And I think the answer to that is yes. And I hope to give you inside into at least the 2019 portion of that when we talk in the October call to give trend information there but my expectation is a lot of the goodness we're seeing in 2018 for the rest of this year is going to continue to translate into 2019 and beyond.

Operator

And we do have a question from the line of Jon Raviv with Citi. Please go ahead.

Jon Raviv

Hi, Bruce, good morning. Just want to follow-up on that point. I think previously you talked about on the growth side as well 4% to 5% 2019 and 2020, just sort of put a button on this, where do expect acceleration beyond 2018 to speak from everything you're seeing in terms of win rates and budget because I think this year you are already kind of in that range now?

Bruce Tanner

Yes, Jon, the question is, do we expect an increase over the sort of the increases that we've previously talked about for years 2019 and 2020. The answer is yes. And again my only hesitation of telling you that is that I don't quite yet have the quantification of that but my expectation based on everything we've seen through this year and everything we expect to happen going forward is that those numbers will be higher than what we've talked about in the past. And again I'll give you more inside into that hopefully quite a bit of inside into that in October.

Operator

And we do have a question from the line of Sam Pearlstein with Wells Fargo. Please go ahead.

Sam Pearlstein

Good morning.

Bruce Tanner

Hi, Sam.

Sam Pearlstein

I was wondering if you could just address something quickly which is you mentioned a lower tax rate is only if you could just say what the tax you expect for this year? And then secondly in the Rotary and Mission Systems, if I just look at the overall guidance even with the higher sales and profit for this year would imply the second half margin has to come down pretty materially from the first half, so something unusual about the first half, is there a change in mix, can you just help us understand what's happening in the second half there?

Bruce Tanner

Yeah. I think that one as well Sam. And so tax rate in 2018 you should probably think of mid-14ish kind of level is what we're out looking for the rest of the year 218. That's probably a little bit lower than what you just expect us to do going forward say in the years 2019 and 2020. There's sort of some onetime adjustments. I'll give you one example, one of the adjustments where the update the deferred tax asset write down that occurred in 2017 just some true up to that that actually got reflected in our 2018 tax expense that we would not expect to carry over into 2019 and beyond. So again this year, think about mid-14s probably a little higher than that as we go forward into 2019 and 2020.

On the RMS side, you're right, I mean the math would say that we are going to come down some of that [Technical Difficulty] I think that reflects, we've had some really, really strong performance in the first half of the year and a lot of risk retirements pretty much across the entire portfolio as I talked about in my prepared remarks for RMS, I mean virtually every line of business, plus we're very pleased with what's happened in Sikorsky for the first half of the year. And I think Sam it's just a question of whether or not we can sort of replicate the higher than I'll say expected level of risk retirements that occurred in the first half and the second half. And at least as we're planning right now, we don't see the same level of planned risk retirements going forward as what we experienced in the in the first half, but we're optimistic that we'll continue to try to improve up on that just as we did in the first half of the year, so watch the space.

Operator

And we do have a question from the line of Doug Harned with Bernstein. Please go ahead.

Doug Harned

Thank you. I wanted to go back to F-35, and two things. One is, you know now that your peers getting close on LRIP 11 looking toward a block buy. Can you talk about given the pressure coming from the customer on pricing,

how are you looking at margins going forward, how should we think of that trajectory over the next few years?

And then second, just the point on Turkey, there was an agreement in Congress yesterday I don't know where this is going to go and blocking the delivery to Turkey. What would a block on the Turkish deliveries? What effect could that have on the supply chain in your delivery rates?

Bruce Tanner

So, I'll park the first and maybe a little bit of a second one and I probably turn that over a little bit to Marillyn on the second question. So LRIP 11, as we talked about on previous questions, I think we're in the final close of that and that hopefully sets the stage for as you indicated the next big accomplishment on F-35 which is to get the block buy sort of in place. This would be a combination of think of it as combining our supply chain buys for LRIPs 12, 13 and 14 all in one sort of a hence the name block buy deal to get cost savings associated with that aggregated demand.

Doug, I think to your question, we've seen good performance on the F-35. I've talked about the fact that we do expect to see sequential improvement on F-35 margins going forward, that be probably not at the same rate as a few years past, you know there were a couple years there were at least I had said that we were expecting a 100 basis points improvement year-over-year. Don't see those sorts of improvements but that expectation is that we still will see improvements on F-35 going forward. And I'll say this LRIP 11 deal doesn't change that trajectory or our expectation of those margins going forward.

As to the Turkish deliveries and supply chain implications, we're delivering, we would expect to continue to deliver Turkish aircraft as with essentially every international procurer of F-35 is the initial deliveries of F-35 is actually stay in the continental United States for training purposes. So the international pilots typically stay in the United States to get a level of proficiency to be able to fly the aircraft before they're sort of shipped overseas. So we've got some time before those aircraft would leave the U.S. and go in country. That is normal standard practice for every international buy. And I guess my expectations would be we continue to deliver those and continue deliver those into our U.S. bases for training purposes. This is a contract that obviously this is one that we have the agreement. This is under the FMS the foreign military sales arrange but this is a contract between Lockheed Martin and the U.S. government as opposed to direct commercial sales, so we'll continue to deliver air craft until the U.S. government says don't deliver those aircraft which we're not expecting.

Marillyn Hewson

So on supply chain front, I will address that. As we manage our supply chain, we do have parts and components being produced all around the world, so we're always looking at international dynamics of that. The most recent discussion that you're hearing on Turkey, we've been looking at that and been in discussions with the most senior levels of the Pentagon. We understand what impact that would be on the supply chain. And so we'll book comply as Bruce said and support the U.S. government and comply to any official guidance that we get going forward.

But if we look at the program itself, I mean it's got some range of time before we actually have some action and frankly with the vast Department of Defense to do is come back with a plan in 90 days. So we see what that plan is going forward and will continue to be in close dialogue with the U.S. government.

Operator

And we do have a question from the line of Richard Safran with Buckingham Research. Please go ahead.

Richard Safran

Marillyn, Bruce, Greg, good morning. How are you?

Marillyn Hewson

Good morning.

Richard Safran

So I have a bit of a multipart question here related to F-35 modernization. You recently awarded the Distributed Aperture System to Raytheon, you took away from Northrop, Elbit won the display taking it away from L-3 not too long ago. I want to know if you could discuss how you're thinking about further upgrade to the F-35. How much more of the airplane might be replaced and up for bid. Do the changes you're making just come in one future version of the airplane or is it expected that you'll retrofit the fleet over time? And finally, since it appears that these are both capability and cost improvements, just wondering if we should expect Lockheed to capture at least part of that cost improvement in our margins?

Marillyn Hewson

That's a multifaceted question, Rich, thanks very much for the question. I'll start and then Bruce can fill in as well and how we see that for the longer

term. But basically this is our job as managing the program itself and so we reached a point along the way of gotten through now flight test program, we are now more mature and technically mature aircraft program. And as we go to look at the next lot of aircraft, we look at having competitions for best value on components that we can do. And so some of those you sided with the distributed system and then displayed and others are just a normal course on a production program that we'll look at and we'll continue to do that.

As we look overtime, just like any other program we will constantly be looking at continuous improvement of the program and that will open up some opportunities for additional development. But I think that answers that. Bruce you might want to address the cost side of it.

Bruce Tanner

Yeah. So Rich, I think another part of your question was retrofit fleet, so incorporated this. That's not our call that's obviously the JPOs call is to why not they want to do that. If you're asking my expectation, I'd say I wouldn't expect a near term retrofit at all. My guess would be we'd go downstream and see if there is a chance to do other modifications to it to the aircraft and do this in combination with other modifications as opposed to sort of start replacing the existing aircraft with this new or this new processor and our processor in the display system. So probably more in the normal course of business as opposed to a full blown retrofit is sort of the way I'd characterize it.

And I think your last question was capability to increase margins associated with this and we just say I think your premise is right. We do expect these changes to be lower costs, lower sustainment cost importantly going forward, so this is sort of a double benefit, it lowers the production cost of the aircraft, it also lowers the sustainment cost to keep those aircraft flying. We're banking on that Rick and you should think of as we're pricing it under those assumptions. So we wouldn't expect to have sort of pop in margin associated with this activity because we're pricing it out of the expectation that the benefits that we expect to see will impact the crew in this case to the U.S. government.

Operator

And we do have a question from the line of Cai von Rumohr with Cowen & Company. Please go ahead.

Cai von Rumohr

Yes. Thank you very much. So your backlog at mid-year is relatively in line with where it was at year-end. Can you give us a range as to where you expect it might be by the end of this year and some color on the foreign sales opportunities included there?

Bruce Tanner

Yeah, Cai. I will take a poke at that. You're right where [Technical Difficulty] \$5 billion or about \$105 billion now. We would expect to be north of that maybe between \$7 million to \$10 million – excuse billion dollars some of that obviously depended on some of the second half of the year awards. The big chunk of that that we are expecting a large third quarter from an order perspective the largest piece of that is obviously for the F-35 block buy. You should think of that is I don't know exactly what that is somewhere in the \$11-ish billion plus range. So that's a very significant single order that we are expecting in the second half of the year. We also have some awards for things like that for the kingdom of Saudi Arabia, we have a couple of competitions obviously with the trainer replacement for the Air Force and MQ-25 for the Navy. So some of those competitions could obviously swing backlog between now and the new year obviously depending on whether or not we're success or the size of the initial award. But in any event we would expect to see as probably north of \$110 billion as we get to year-end.

Cai von Rumohr

Great. Thank you very much.

Bruce Tanner

Thank you.

Operator

And we do have a question from the line of Ron Epstein with Bank of America. Please go ahead.

Ron Epstein

Hey, good morning.

Bruce Tanner

Hey, Ron.

Ron Epstein

This is a question for maybe both of you guys. When you look at the U.K. recent announcement of the sixth generation fighter program concept whatever you call the tempest program? And that kind of more recently Airbus is moved to say, hey what maybe we should join forces on a fighter and have a pan-European sixth generation fighter. When you think a little bit longer term about the target market maybe beyond F-35, I mean how does that impact you guys and I mean how do we think about sixth gen fighter in Lockheed?

Marillyn Hewson

Well, I just came from Riyadh and Farnborough where that announcement was made by the U.K. about the new Tempest fighter program and I had a chance to talk to some of the senior leadership in the Royal Air Force about it. You the comments to me where that, yes this is a new fighter program that they are focused on but it is to complement the F-35. So we don't see it as a replacement for the F-35, I mean it's going to take some time to do a development program beyond that.

And so any additional investment that they make of course that's good for the engineering base for innovation in an aerospace and defense industry and we're in discussions with them and trying to learn more about how we can help and supporting what their plans are in the U.K. Just as you might have hear they say that they'd like to participate in that. I think we bring as I highlight in my earlier remarks some just tremendous capability from innovation standpoint particularly out of some Skunk Works organization and we're looking forward to that.

The U.K. is solid with the F-35. I mean they were original investors putting \$2 billion up front in the development phase. Today they've gone 15 jets and they're still on their path for the 138 program of the record that they're going to buy. So I don't see an impact on the F-35 going forward, it brings a lot of transformational capabilities. My understanding from them is that they just see it as continuing to keep their engineering based focused on the next design just the U.S. government will do as we look at concepts that we might put forward on the sixth generation fighter.

Anything Bruce you want to add?

Bruce Tanner

You know I might add Marillyn is I think as Marillyn said I think this is complimentary to the F-35 and also sort of that I guess the typhoon that we said on replacement. And I think into large extent this is healthy to have our allies developing capabilities that actually we can actually potentially partner with and share those capabilities cross across the ocean so to speak on

future opportunities. So this is a positive that the industries of our partner countries that are allied participants are staying in the game with next generation innovations, so those are the positive thing.

Operator

And we do have a question from the line of Sheila Kahyaoglu with Jefferies. Please go ahead.

Sheila Kahyaoglu

Hi, good morning. Marillyn and Bruce. Great quarter.

Marillyn Hewson

Good morning.

Bruce Tanner

Thank you.

Sheila Kahyaoglu

A bit of a less exciting question, I was wondering if you could touch upon pension and some of the longer term drivers, is there any way to have quantified pension contributions and cap recoveries in 2021 and beyond?

Bruce Tanner

Yeah, Sheila, I will take one. So I hope I'll get a little better inside into that in the October call, we'll have been close obviously by the October call will be what ten almost through ten months of the year from a return perspective on our assets, so we'll have a better indication of what that looks like versus through the first half of the year what I said here today. As far the biggest driver relative to influencing contributions going forward, again just maybe parrot what I've said previously, you should think of essentially zero contributions in 2019, minimal contribution in 2020s is really associate with some of the legacy represented workforce defined benefits plan.

We start making contributions in 2021. I hesitate to give a number right now only because I don't know where we're going to be at the end of this year relative to asset returns. There's less sensitivity on the cash side, so sort of the billing side if you will and the recovery of cash not the outlay of cash and you should think of that is being fairly close to where we are today. I think we're at around \$2.4 billion of cash today. That number stays fairly consistent almost without regard to what happens over the next few years.

So when you start looking at 2021 and 2022, it's still about that level maybe \$100 million or \$200 million plus or minus either way there. But that's sort of the level you should think about it. So cash pretty consistent, fairs I'll give you more inside in October once we have a better idea where we're going to end the year from an asset return perspective.

Operator

And we do have a question from the line of Seth Seifman with J.P. Morgan. Please go ahead.

Seth Seifman

Thanks very much and good morning. That was actually related to the question that I wanted to ask also about pension. Bruce, could you talk a little bit so we can kind of understand conceptually, when you freeze the plan in 2020, is there or is there any more cash, like is pension still allowable costs for you guys is the whatever 401-K matching contributions you make, are those kind of cash or whatever your cash balance that you do receive from the government is at the time you freeze the plan, you just take that in over the next four or five years and then cash kind of goes to zero? And then maybe on the flip side, the contribution side of that, how should we think about what happens when the plan is pros and it gets to be fully funded?

Bruce Tanner

Yeah, so good question Seth. So just to repeat what you said, so we do a full freeze on our defined benefit pension plan in 2020. You asked a question, if I understood the question, you asked does that change the liability of recovery of our defined benefit pension contribution and the answer is no. Those cash cost will continue, back to Sheila's question that they go beyond the freeze if you will of the defined benefit pension plan, but they start to get much smaller particularly as I'm thinking out loud here particularly about the 2025 and later time periods. And think of this is essentially the recovery of a lot of the prepayment credits that we end the year with every year that we disclosed in our 10-Qs and I know I have talked a number of you about that. So somehow that those prepayment credits need to get billed and recovered by Lockheed Martin and those extend beyond the date of the pension freeze. We do have other defined contribution benefits and those are liable just as any other liable cost is in the cost accounting standard regulation.

So sort of no change there going forward. We will recover both from a liable perspective a liability perspective both the remaining defined benefit, pension contributions and new any new defined contribution plan

contributions. So we would think – I think another question that you have was sort of the outlays from the contributions when fully funded, perhaps and it's still going to take a while to get fully funded. So I think the last I looked it's still sort of post 2025. I think I said in the past we still expect to have cash recoveries associated with our pension plan in excess of our outlays every single year just about as far out as we can look until we do get fully funded. So I'll stop there.

Operator

And we have a question from the line of Noah Poponak with Goldman Sachs. Please go ahead.

Goldman Sachs

Hey, good morning, everyone.

Marillyn Hewson

Good morning.

Noah Poponak

Bruce, you have been saying pretty late into May I think that what the company say in the 2018 budget would be pretty unlikely to impact 2018 and was in 2019, 2020 event or maybe even beyond 2020 given the long cycle nature a lot of the business, but you've now raise the revenue guidance pretty significantly relative to sizes of other raises you had in the past. And I could I guess I could see if that was happening in something like tactical missiles that can be shorter cycle but it's super broad based, it's almost like perfectly we split across the business. So something is evolving like fairly rapidly would seem. I know you mentioned the win rate in the faster awards, but I was hoping you could put a little more meat on the bone there maybe even I don't know if you could give a few precise program examples, just super curious what was able to change that quickly across the business?

Bruce Tanner

So, I'm not sure how satisfying this is going to be Noah, but I mean I'll just reiterate what I said on the prepared remarks. But when you go through at least the way we do planning, we have expectations for how many awards we're going to win in a year. We sometimes while we think we have – what we think we got to win every reward frankly, we know that's not realistic. So we kind of put some cushion if you will into our planning purposes for losses that we may or may not – have a good indication of where those losses

might occur. And we also try to face the timing of when awards will occur in the year.

And as I said earlier, we've had just a tremendous across the board a year from an orders perspective so far in the first half of the year. And maybe what's – maybe not as obvious as I think it maybe it is when you get unexpected awards or higher than planned awards in the first half, on the first part of the year, those have more opportunity to translate into sales under the new revenue recognition methodology, then say an unexpected award you receive in November or December maybe just to state the obvious there.

So the fact that we had higher win rates in the first half of the year on some fairly good sized programs, some in the classified arena, but pretty much across the board. As I said this is a very broad and diversified set of opportunities that we've won here. So that's part of it. And then the other part like I said is we got or we received not just the competitive orders but also a number of sole source orders earlier than we had planned in our planning. So all those times when I was talking to you at the beginning of the year I was just simply referencing this is what our plan looks like and both of these came in either higher than or quicker than we expected or in some cases both of them, we put that plan together.

The Omnibus budget that we talked about and by the way that happened all since of the beginning of the year. That was as I said earlier in the last call that added \$7.5 billion of potential orders. And we're expecting I looked at this data just here, they were expecting the great bulk of that to be placed under contract in 2018. And probably surprise to me as some of that is already under contract today or we've been awarded that in the form of long lead funding or UCA funding and that is translating into sales as we speak. So we're potentially saying several hundreds of millions of dollars of revenue associated with Omnibus funding that was never ever envision as we starter 2018.

And back to the earlier question on, does this translate or carry into the future years. The answer is absolutely yes.

Operator

And we do have a question from the line of George Shapiro with Shapiro Research. Please go ahead.

George Shapiro

Yes, I was wondering if you could tell us how many more years of growth the F-35 program has? And then also do you still believe you can ultimately

get to the mature margins as you've seen on programs like the F-16? And if so how much in the future? Thanks.

Bruce Tanner

I'll take and Marillyn can add some color to that as well. So we've had this question asked quite a few time as far as the years of growth. I mean you kind of point to what is the current point of record. And I think the current plan of record for the F-35 shows every single year deliveries increased at least out through 2023 and that about as far out as the planning goes. I'll tell you and I just look at this the other day, we actually have tooling capacity for more than the current plan of records maximum delivery rate. So assuming we've got more order, more international customer or increases on domestic orders, there is still some opportunity beyond the current planned peak production rate.

And the George, I think there is ongoing – the question maybe was how long do we stay at sort of that peak volume, I don't the answer to that question but if I go back and look at F-16 as maybe an example of what could happen. We were probably at peak production on F-16 for 7 or 10 years. And the thing that F-35 has and the F-16 never had for us is the potential for an increased sustainment activity that we would expect to grow even beyond sort of peak production level. So I think we still got quite a ways to go before see peak F-35 and that doesn't include potential retrofit and modernization programs on the F-35 as we see with every production aircraft. So we're not there yet. Now I hope we never see that honestly, but we're still years away from it and if and when we do see that.

And as far as the margin, I still think there is upside as I said previous George, I still think as I said probably adding some item from day one is probably, there is no reason the F-35 shouldn't look like every other production aircraft in our history would be at F-16 or C-130s or others where you have mixed domestic content and international content. And if and when we get the ability to see this aircraft on a direct commercial sales basis, the margin approximate what they look like on F-16 programs for incidence back in that timeframe. We're still probably years away from that but even having said that I still think there is incremental improvement at the current margin level for at least the next couple of years.

Greg Gardner

This is Greg. I think we've come up on the top of the hour here, so I'll turn it back to Marillyn for some final thoughts.

Marillyn Hewson

Okay, thank you, Greg. I just want to end by reiterating that we had a strong quarter and year-to-date performance and we continue to produce outstanding results and position the corporation deliver long term value to our customer and our stockholders. So thanks again for joining us on the call today and we look forward to speaking you on our next earnings call in October. That concludes our call.