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CORPORATE PARTICIPANTS

Heidi Wood *L-3 Communications Holdings, Inc. - VP & Chief Analytics Officer*

Michael Strianese *L-3 Communications Holdings, Inc. - Chairman & CEO*

Dick Cody *L-3 Communications Holdings, Inc. - SVP - Washington Operations*

Christopher Kubasik *L-3 Communications Holdings, Inc. - President & COO*

Andy Ivers *L-3 Communications Holdings, Inc. - President - Broadband Communications*

John Mega *L-3 Communications Holdings, Inc. - President of Communication Systems*

Steve Kantor *L-3 Communications Holdings, Inc. - President of L-3 Electronic Systems*

Tom Ripp *L-3 Communications Holdings, Inc. - President of Security & Detection*

Mark Von Schwarz *L-3 Communications Holdings, Inc. - President of Aerospace Systems*

Jeff Miller *L-3 Communications Holdings, Inc. - President, Integrated Sensor Systems*

Ralph D'Ambrosio *L-3 Communications Holdings, Inc. - SVP & CFO*

Todd Gautier *L-3 Communications Holdings, Inc. - President of Precision Engagement Sector*

Ed Boyington *L-3 Communications Holdings, Inc. - President of L-3 Vertex Aerospace*

Dave Micha *L-3 Communications Holdings, Inc. - President, Advanced Communications*

PRESENTATION

Heidi Wood - *L-3 Communications Holdings, Inc. - VP & Chief Analytics Officer*

(audio in progress) Analytics Officer of L-3. With me today are Michael Strianese, Chairman and CEO; Christopher Kubasik, President and COO; Ralph D'Ambrosio, Senior Vice President and Chief Financial Officer, as well as other members of the L-3 management team. We have a good program for you today, with a full lineup of our leadership team. Our theme today is disciplined growth and you're going to hear from our leadership, not only our CEO and CFO and COO, but also our three Presidents, as well as a few of the leaders underneath them to highlight some of the growth initiatives we have underway.

Before we get started, I'd like to share some brief announcements. We are webcasting today's event in listen-only mode and we welcome those of you who have joined us online, presentation materials related to financial information will be available live and archived on the Company's website.

I'd like to remind you that today's presentation includes forward-looking statements. Forward-looking statements are subject to future events and uncertainties that could cause our actual results to differ materially from those statements. All forward-looking statements should be considered in conjunction with the cautionary statements on the slide and the risk factors included in our filings with the SEC. As a reminder to those in the room, please refrain from taking photos of the slides on the screen.

Before I turn it over to Mike, let me mention that we will have time for questions at the end of today's program, or highlight today's program. Now, I'd like to welcome our Chairman and CEO, Mike Strianese.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Well, thanks Heidi. I'm glad we have such a big turnout today. So, in case you've forgotten who we are, L-3 at a glance. We maintain leading positions in select aerospace and defense and commercial and international markets. We're unique, in that we not only serve as a prime contractor in areas like ISR system, aircraft sustainment, training, simulation and night vision, but we also are a product supplier for electronics and communication systems. So we get the best of both worlds. We can prime when we can prime and when we can't, we sell products, or subsystems.



Our objectives are to provide innovative solutions for our customers, to be leaders in everything we do, expand our market positions and unique capabilities we have. If you look at the business areas today, you'll see in many of them, most of them, if you will, we occupy number 1 or number 2 positions and that is by design. If it's worth doing, it's worth doing well and we like to be able to define our market and be the leader.

As Heidi mentioned, the theme was disciplined growth for today and we're entering a period now where we think the bottom has happened that we're starting to see modest growth this year. And, of course, everybody is very excited about the growth we are about to see in the coming years.

Our culture has been to perform with integrity, excellence and accountability and thereby, increasing value for all shareholders. So next year, in 2017 L-3 will turn 20, we'll have our 20th anniversary. And when I look back, there are really three distinct periods in our life over those 20 years that one can identify. The first eight years or so, starting back in 1998, we'd call it aggressive growth. Those were the Frank years that we fondly recall, where we were probably acquiring 10, 12 companies a year and growing very rapidly post IPO. That was the post 9/11 era. We were just getting into Iraq and Afghanistan, spending was growing and there were a lot of properties for sale. Some of the primes we're divesting non-core assets, some of the more electronics, like the Link stimulation business, or integrated systems. But a lot of the core businesses that form L-3 today were acquired during that period.

Then, we got to the portfolio shaping era, or when I showed up, they turned out the lights and the party was over. So, spending became very, very soft. We went through the Budget Control Act, sequestration. Unlike many companies, we kind of looked internally and said, well it's time to trim the portfolio and stay focused on the things we do best, our electronic systems, our communications and ISR. So we had a spin-off of Engility. We divested NSS. We had a couple of other divestitures. And were exiting that period with a very sharply focused company, doing what we do best.

And right now I think we're on the cusp of entering this area called disciplined growth, or this era called disciplined growth, where we are focusing, not only on our organic growth, which will be driven by the new budgets, but also some modest M&A activity. I doubt it will be the 12 company per year pace that we once sought in the aggressive growth era. But this year we've had four or five deals close already and the M&A is starting to come back and it's a lot less risky and a lot more feasible to do M&A when you're in a rising budget environment, as you might imagine.

So, some of the highlights for 2016, which turned out to be -- it's turning out to be a good year for us. As we had said last year, we are focusing on margin expansion. Well, the margins are increasing, as well as operating income and earnings per share versus 2015. We, from a program standpoint, delivered the first head-of-state aircraft to a very, very satisfied customer. So that ended up ending well. Didn't start out as well as we would have liked, but we completed that aircraft, and it's probably the most beautiful aircraft in the world. We completed the divestiture of NSS, or National Security Solutions earlier in the year, which was something we've been working on for a while. There was a lot of traffic in that space at the time we were selling. So we were able to get it done and get it done at a good price. And, as I said, we've closed four deals; ATM, Microe, Aerosim and MacDonald Humfrey just a week or so ago, and those will be covered at various points today. And on top of that there were several strategic business awards that we won. Chris is going to cover most of those. But if you think about the F/A-18 that came into Waco, for example, that the head-of-state was delivered, there's this big hangar that's available, (inaudible) F/A-18s in another 6 to 12 months, which is good. In addition, the logistics business, the Vertex business, won a very big competition on the tanker, as well as the C-12s. And Ed Boyington is here, who runs that business. He is going to talk to it, because given the new world order, there is going to be a very significant focus on readiness. Everybody has heard some of the Service Chiefs testify in front of Congress and the readiness is really scary. I mean we just do not have the equipment where it needs to be. So, there's going to be a lot of focus on readiness. And I think that creates a different environment for our Vertex business.

So, the two primary markets, one is government, the other will be commercial/international, we have one chart for each, just in general terms. As you know, the DoD is 70% of our business. It's driven largely by the budget, which is driven largely by geopolitical conditions, including military spending and Dick Cody is going to follow me, who will give a little color on the budget and the changing environment. The up cycle looks like it's beginning this year, with a very modest 2% to 3% growth and we are tracking to those numbers. So, I mean, our goal is to outgrow the DoD budget. We're still dealing with sequester timing and OCO relief. But the good news is also there are pockets of growth, especially in the classified area. This could be an area we can't talk a lot about, but we've been making good penetration on these programs. We're a prime in certain areas, but we're a major subsystem supplier in others. And it's an area that has been expanding rapidly.

High defense spending is expected, as you know, without a lot of color right now. So I wish I could tell you how much and how fast today, but I can't, because we know the general statements. Bigger Navy, 350 ships, but will take some more time to get there, and we don't know when that

starts. They added 16,000 troops in the Army, about four brigades. We are very levered to the headcount in the Army, with the night vision and the Comms and everything else. So that will start to get into the numbers sooner than later. But there is going to be more beyond that, because if anybody has seen the Heritage Foundation reports that was issued last week, they've a very bad rating to the services, and particularly the Army, in terms of composition, structure and readiness. So if that gets any attention on the Hill, which it should, there will be a focus there. In addition to more aircraft, so -- it's just more of everything really. There's a bill to be paid for the eight years of neglect that we've been through, called the Budget Control Act and sequestration, that was \$1 trillion over 10 years. They have \$1 trillion, half of which went to defense. So \$0.5 trillion over 10 years. And when you do the math, that's roughly \$50 billion a year. And it's hard to make that back up, both in terms of money and in terms of time. So we've lost capability. The adversaries have caught up and they've targeted areas where the US leads, like force projection or Comms. They've created environments, where it's harder to project for us, because they have denied access in areas where they've got longer range missiles, or denied GPS environments. And there's a lot of new problems to deal with. And we've to play catch-up. That's part of what the 3rd Offset strategy is about; that you read about and hear about and there's just a lot to get done.

So a number of those capabilities, we are very strong in, whether it's secure or survivable communications, ISR systems, sensors, night vision, naval systems, which will play into this growth into ships, as well as readiness support and special operating forces. I mean in terms of our alignment, if the question was with what else would you add to the side, I think we've pretty full in terms of the portfolio and as it aligns to the new world order that we're going to see. International and commercial has been affected by global economic and security conditions. It's a large market; ISR, simulators, Com Systems, night vision, all things we've been selling; aviation security systems and sensors as well. But there's been near-term softness, particularly in the ISR area and generally the countries that would be interested there are oil-producing countries, and the oil price has had an effect; I will tell you it has. We've seen things slip to the right and without any good reason, other than budget softness and other priorities. We are intensifying our BD efforts overseas and setting up -- we're increasing our capacity in places like Riyadh and the Emirates and we're expecting to see some better results going forward.

In commercial, there are favorable long-term fundamentals in the areas where we're operating, particularly aviation, avionics, just due to the buildout of airports and the aircraft deliveries, primarily in Middle East and Asia. And all these new airports that are going up want state of the art security systems. We see that as a growth market, given the security situation there and we've been building out that business. You've seen a couple of acquisition announced this year already.

Pilot training, Todd is going to speak to you today. That's an area that's very exciting. We've had a couple of recent acquisitions there. But if you look at the demographics and the demands, there is going to be a projected shortage of 500,000 pilots over the next -- if you look at the time period, it's like probably in a 10 to 20-year window globally. And this business is doing very, very well. We make the simulators. But I think the business model has migrated from airlines buying the device and then putting trainers on them, to wanting to buy power by the hour, if you will. They'd rather come to our facility, get on our machine and use our trainers. It takes up capital of course, because we want to tow in the machine, but the margins make it more than worthwhile, it's very, very good. We have a demo system. Todd I won't take all your points away, but outside of Gatwick, we've put a couple of sims there. And as I recall, I visited it two or three times by now. I was there with Chris last year. Both BAE and Virgin Atlantic are flying those machines up 24/7 with their pilots. I mean it's really been a fabulous model for us. So we look forward to continued growth in that area.

So some of the areas on the DoD side, we did this pictorially. I guess this is a quiz, I'd like to name them all, but the first one is ISR systems. There is certainly a demand, given some of the geopolitical issues about surveillance; and surveillance on the borders in certain countries. You can think of it national infrastructure surveillance. So we've -- the Spider Aircraft, which has been slow to catch on, but it is certainly an affordable solution for many of those companies. And we have an additional aircraft that will be readied probably next year, that is completely refig, configurable, multi-mission aircraft, where we can change out the sensor package quite rapidly. In fact, it's called "RAPIDS", for everything; from signal intelligence, to full-motion video, to search and rescue, to -- you name it. And we think that it's at a price point and its capability point where it's going to be very attractive. It's so attractive in fact that we have US customers interested in it.

The second picture there is a business jet and what we're seeing, certainly in the US marketplace and internationally to some degree is a trend towards putting airborne systems on business jets, versus 707s, or big old DoD platforms, like the AWACS, JSTARS and (inaudible) and old tankers, right. 707s, they are getting expensive to operate, they are getting a little old. And everything we've heard in terms of recapitalization seems to



point that business jets is a solution. So we've been getting out in front of that and making sure that we have the capability to cross-deck or migrate those systems into a small space with more power, and lighter-weight. So this is a challenge, but we are at the forefront of it.

The third is our Reality 7 Simulator that you see -- that you see in the Gatwick facility actually. But what's very unique about that compared to what else is on the market right now is that's completely reconfigurable. So even though we're operating them now, we still sell them to airlines in various countries. But that could be reconfigured, and it's this -- once I got [the right chart] here -- is this one, upper right that could be reconfigured to virtually every Boeing or Airbus platforms that's being used today. So, you buy the base machine with hydraulic cable and everything, and the electronics. And that pilot module is swappable. You could swap it out and put it wherever you want. So it's a nice growth platform. You can get as many installed as you can. And we sell the upgrade kit. So getting follow-on revenue is one of our objectives, by the way. We'd like to go beyond the one-time product sale and have continuous revenue streams coming in.

Next in the lower-left here is the airport security ClearScan machine, used for check points. And we are continuing to introduce a series of new products. The problem in the airports with the lines and getting through security has gotten to the point where the TSA has been asking for help. People are missing flights, the airlines are complaining they are losing money and we are going to be the thought leader in coming up with a solution that moves passengers through reports rapidly and provides more data. So that was part of the rationale for the acquisitions we just completed or in the process of completing.

Finally, the classic L-3 picture of the Internet in the Sky. That's WIN-T, or the Warfighter Information Network Tactical. And coming up with solutions for not only secure, but survivable communications. And what happens when one band gets jammed, how do we get around that, and what survives in a combat environment is becoming a critical problem. And I could tell you, we're on the forefront of delivering solutions for it.

And, finally, you have our Soldier Systems, our Warrior Systems with night vision designators, and we are leading in that area as well with some new products and the like. But, the Soldier is a system and it's really an integrated package in terms of what can be displayed on their visor, if you will, both what comes out of the gun scope, or comes out of GPS; Coms data, what comes out of the overhead UAV systems. It's quite phenomenal. We had it on display at the AUSA Show a couple of months ago. And there were virtually a line of people from the Army there on line to try it on and take a look at it. It was quite fabulous in terms of the capability. And, of course, the weight the soldiers has to carry is very significant. So cutting down on weight, size and power requirements, because a big part of the weight problem is the batteries. And I'm optimistic that that will be a trend of the future.

So, a lot of the places where we've fallen behind over the last few years tend to be in technology and you hear a lot coming out of the Pentagon on that. And is part of the NDAA, the National Defense Authorization Act that I saw last week, I think it was that got passed, a whole bunch of language in there on the restructuring of AT&L, that branch of the Pentagon; Acquisition, Technology, and Logistics. And one of the things they were doing is separating R&D from procurement. And they want to put a lot more focus on what gets developed and how fast. If you look at the boxes, what I am trying to say here is, every service branch has stood up some kind of a rapid capability office, whether it's the airports, the Navy, accelerated capabilities, Army rapid capabilities, the agencies all have them now. Everybody wants everything yesterday, as fast as they can get it, because there's this gap and it needs to get closed, and it needs to get closed fast. So we're working as closely as we can with our customers. And there's some new rules on R&D also out of the Pentagon. We're getting sponsors as necessary to keep [allowable] and the like, but there is definitely going to be more interaction with customers and with these rapid acquisition agencies. But this is the trend. They are trying to get things faster than they own. The old-fashioned acquisition system allows for it. It's interesting what's going on. They have been retooling themselves even to get technology on the battlefield faster.

Alright, changing gears a little bit. So what have we done with the cash? Well, IRAD is running about 2.5% of sales. So that's a number of about \$250-ish million roughly. I'm sure Ralph will have the details. CapEx is about \$200 million. We did our last installment of debt repayments this year, just shy of \$300 million. We had a bond deal a week ago, that we refinanced some of our 10-year senior sub debt. And the new issue that was sold last week was very well received. That was oversubscribed by a factor of 4 or 8, depending on who you talk to, but is very, very well placed deal, its coupon is 3.85%, if I'm not mistaken -- 3.95%, and they were sold at a discount. So, Ralph will give you details, but we are pleased we don't have any refinancings coming up in the year. So that requirement for the debt repayment does not come up. Again, Ralph will give you those details, so it gives us more cash to invest going forward.



Dividends, we had our 12th annual increase this year, it's up to \$220 million and we're forecasting to continue the modest growth we've had in the past. Share repurchases this year were \$373 million. We've always said that that would be used where there was not appropriate M&A for us. Well, there was some decent M&A this year. So we used some cash for M&A, another \$387 million. And we're very mindful of creating value with that cash. That is really what we and the Board decided to do with the cash and we've been very -- I'd like to think of it as shareholder friendly, in terms of focusing on the dividend, focusing on share repurchases, and M&A to grow earnings. So, it's been a while since we've been able to grow the top and bottom line through acquisitions, but those days, looks like they're returning.

Piece of news for today. So, as we reach our 20th anniversary, to recognize the breadth of the Company, in the beginning there were 10 business units, two did communications and we were called L-3 Communications. Well, we thought that was kind of limiting and what we do? So we're going to change our name to L3 Technologies at the beginning of the year. Why did we do? Well, because it makes sense, but also there was an occasion to collapse this holding company structure that you recall was [called] L-3 Communications Holdings, Inc. It was originally set up when we financed the LBO for various collateral reasons and the like and it took a lot of work to maintain and it was no longer needed. So there was a proposal in our proxy this year and shareholders approved collapsing that structure, Holdings, Inc. And we took that as an opportunity to -- well, let's strip the name through to be more representative of who we are. So logo is going to be the same. The good news is, no more hyphen and no more com.com, and the Web address is going to be a much cleaner address. I think everybody will like that and probably save the whole community tons of hours a productivity, certainly within the Company anyway. The com.com and the hyphen caused more problems. So we were able to secure L3T.com, and it will be a same ticker, LLL, and everything else -- there nothing else is going on, very cosmetic and top level. But, again, it's a sign of the times that we're really happy to have been able to get a hold of that name. It's a process that you have to go through in Delaware to get your name, but I think it's a sign of the times, at our 20th anniversary here. I'm happy we're able to do that.

So, in summary, 2016 looks solid and 2017 is looking even better. The budget cycle -- up cycle is beginning, and there is no reason to believe it's not going to be stronger next year. How much stronger? There is no budget yet. I was quoted last week as being one of the more reserved CEOs to comment on it. And I mean I'll tell you what I said. I said, well, if you think about it, the idea of a \$1 trillion infrastructure bill has been floated. The notion of some tax reform has been floated, a big DoD budget has been floated. And the healthcare bill, obviously that's a savings I would think. But there are some business folks that are looking at the stuff in the White House and as I like to call it the White House North over here in Madison Avenue. And I have a feeling, when they see these numbers and what they add up to, they may say, oh, my God, there's going to be a big gap and we haven't heard a lot about what's happening with the deficit. So I'm hoping -- I doubt it's going to put the brakes on defense, because it sounds like it's the biggest priority out of all the things that they want to do. But, again, I'm just trying to be moderate, and let's not uncork the champagne yet. I want to see a budget. And I think we'll see on soon. And I think we've to deal with a CR. Dick will talk about some of the dynamics. But, putting it all aside, we're staying focused on our customers, affordable solutions, because Dallas will still be an issue, with the goal to continue to grow the sales, margins and our EPS, and we'll continue generating industry-leading cash flow, which will give us a lot of flexibility in how that cash gets deployed and continuing to create value and disciplined growth that we are focusing on.

So with that let me turn it over to Dick Cody, who runs our Washington Office. Dick?

Dick Cody - *L-3 Communications Holdings, Inc. - SVP - Washington Operations*

Thank you, Mike. Okay. Good morning, everybody. Good to see you all again. For my share, I only have about six charts. What I want to do is kind of shape the environment that we should be facing in the new administration here in January, as well as just coming off of the Reagan National Defense Forum. Some of you were there. Mike and I and Chris and the leadership team were there also. And it was a very, very good discussion, laying out exactly the challenges inside the US, whether it be domestic issues of entitlements, but more importantly, outside and the challenges we face.

So I'm going to talk to you first about the challenges up close the day that the new President takes over, the new Congress is sworn in. You still have North Korea. Probably before the end of December, they will do their fifth bomb test, as well as another missile test. And as you know, they've been unrelenting in that, and that's going to cause some reverberations throughout the Pacific and certainly on our West Coast. Iran is still a problem, they are still the leader of exporting terrorism and funding terrorism in the Middle East and in other places.



We're on our 16th year of Afghanistan. We have over 10,000 troops in Afghanistan today still, as well as we have some L-3 employees over there, so they are going to be facing that. Defeating ISIS, Syria, Iraq, we still have about 6,000 or 7,000 troops in the Middle East involved in some shape or fashion in working what is the day after when Aleppo falls, what is the day after when Mosul falls and what does Iraq end up being looking like, and how does that impact the rest of the Gulf States.

Russian revanchism and aggression, we heard from several Ministers of Defense in the last two weeks about what they are worried about in terms of Estonia, Latvia, Lithuania, but more importantly, the Scandinavian nations in the north with increase of Russian flights, increase of Russian submarines and other systems, as well as down in the Southern belly of the Mediterranean, where Russia now has a port in Syria, they have their aircraft carrier there. They are launching all kinds of strikes. Across the board, we're going to have to face a Russia that is rising and spending a lot more money on their military and other activities. And then in the Pacific, they have to deal with the Chinese hegemon, in terms of pushing out their claims on all the different islands, as well as their aggressiveness along the borders and strengthening. And they too have increased their military spending quite a bit. And then reassuring our allies in Europe, not just because of Russia, but because of the almost 15 million or 20 million refugees that have been pouring out of the Middle East and North Africa. And then of course the promise of a military buildup. Those are the things that are facing the new administration as they take over.

So, I've shown you these slides before, but I think it's important to kind of frame it here, as we got kind of a redux and a reset. So if you remember about two years ago, I showed you this slide and basically what it is, this is a spectrum of conflict, from nuclear war, general war, all the way down to domestic and disaster relief. We had a very, very large military during this timeframe of 1950-1989 and what I did was we put down [the stoppers], the number of times we put brigade-size units or more into combat, deployed from the United States and involved. And during the Cold War, we had bipolar powers that basically kept their other countries inline. We deployed to war Vietnam and Korea, Grenada, Panama and some other places, [this is sign], which we are still in, Lebanon, ten times in 40 years. That was kind of the balance of these two superpowers, keeping everybody aligned. Then when the wall came down, this is what it looked like up to 2012. And you can see the challenge for that military, had to shift from offsetting Russia, offsetting the big superpowers, but full spectrum capability. So you didn't have a Military, an Air Force, or Navy, or Army, or Marine Corps focused on the Soviet Union. Now they had to have full spectrum capability and certainly that's a more expensive proposition in terms of capacity, in terms of capability. And a lot of these starbursts that are in red, they have Velcro on it. In other words, a brigade is there today, they're going to have to replace that brigade tomorrow. We've been in the Sinai 21 years. People forget that. We've been in Korea since 1950 and we're now building up Korea again.

So, this is the problem set. And then, as you look forward, and Mike mentioned the Heritage Foundation. They do a study every year and they kind of take a look at the globe and they take a look and assess the military capability of the United States to be a global power and to be able to deter our enemies and assure our allies. Well, this is what we think in the next 10 years is going to look like. And, right now, the United States Army and Marine Corps are in 200 plus countries. And that is stretching a very, very small military. So this is the intensity of what's going on in the world. We can either be shaped by these things as a United States, as a global power, or we can allow them to shape, or we can shape them ourselves. So the other piece to take away is the cycle of these things are happening faster and we have more countries right now in the world that are being challenged across the board.

So with that as a backdrop, here is what the new administration inherits day one in January. This is the budget, as you know, from the Obama administration, the five gap over 2017 to 2021. You all know the numbers. The FY17 budget is in a CR. It'll come out about \$524 billion, probably in April, April 1, which means the DoD has lost about six months of buying time, so they have to spend their money pretty quick and get it on contract. But, in 2018, 2019 and 2020, it's only about a 3% -- 2% to 3% CAGR over growth on a total budget. Now, these numbers do not reflect the \$63-plus billion in OCO. But with the world I just showed you, this keeps the Army, Navy, Air Force and Marine Corps about where they are, and is not enough to address the problems. And as Mike said, their readiness has eroded over the last six years. 60% of the aircraft are flyable, 50% of their helicopters, one-third of the army brigades are not ready for combat. This is all testimony that you've heard in the last two years and it's been driven by this budget. And so, the budget itself is not big enough for the world challenges they face.

So let me drill down one more step and this is the ops and maintenance budget, because what's facing the new administration and certainly the Service Chiefs, they've all talked about readiness. What has risen a little bit has been the dollars for ops and maintenance, read repair the helicopters, modernize the aircraft, bring in the ships to have them re-certified, pay for the deployment and re-engaging in Europe or pay for deployments of



special ops in Africa. So this has increased a bit more. But there's still not enough, because they lack the capacity to get this all done. So this is what the Trump administration and the new Congress are going to be facing.

Inside of this budget, the O&M dollars, this is where we get the Vertex, where we maintain the helicopter fleets and I think Ed is going to talk about that; about how big that is in terms of our footprint and how important it is for the services that depend on L-3 to generate and buy back the readiness they need, as well as the training required to get our troops and our aircrews back up. So, think of the O&M as buying back the readiness. That's the wolf at the door right now. And that's what the Heritage Foundation reports, and of course all the service chiefs reiterated that this past weekend that at the Reagan Library.

So, Mike has already talked to you about our portfolio shaping, the Group Presidents and the Sector Presidents are going to talk in detail about the programs. But what we have done over the last two or three years is understand where our DoD customer is, our allies, who also have the same problems that they're facing. And we said, okay, what are their high demands and we mapped them out, and we took a look at what they had. We looked at our core capabilities about how we reshaped and where we're going to focus our efforts. And then we looked at the third offset, this is the wolf at the door, the near-term and this is the third offset, to buy back that technological gap that Russia and China took advantage of while we were fighting these two wars in Iraq and Afghanistan and they started increasing and learning from us. And as you look at it in the center, we map very, very well across the board, across our three business groups. A check mark means we're playing there, either one or two on the products. And on the third offset means that we're working the IRAD, we're working very, very closely with the customer. I'm trying to buy back the far-term readiness technologically superior piece to answer what they need in the future. And I feel very, very good about, and you're going to hear more from our Group Presidents on how that maps out. Bottom line is we're aligned to where this new landscape is going.

Okay, the Trump Budget. Mike as said, no one knows what the numbers are. So I didn't put any numbers out. What I did was let's use the frame of reference. This is the House resolution. And as you know, in the NDAA, they were higher than the Pres Bud, about \$618 billion ceiling, that's the op risers, the appropriation guys have come down a little bit. But if you take a look at -- and this is the Obama budget, here, and this is the Budget Control Act. These green arrows, 2018, that's the first year that the new administration working with the Congress will have to be able to adjust. They'll adjust on the margins in 2017 after he's sworn in and the new House and Senate is sworn in. But that'll mostly be in the OCO, ops and maintenance, to buy back that near-term readiness. Where they really have an opportunity to start showing where they're going is in the 2018 budget, which they have to submit in April for the FY18 budget, and that will start showing size. If you listen to the rhetoric; 350 ship Navy, 600,000 man Army, 200,000 men Marine Corps, more air wings, a better space and underwater capability, undersea, that's about an 18% increase, about \$125 billion over five years. We don't think he's going to get there. So I put these little (inaudible). 4%, maybe in 2018, growth in (inaudible). He's going to have to work some other challenges to get those dollars. But initially, what we're going to see is going to be in the OCO account, in the O&M to buy back that near term readiness.

So we're watching this very, very closely to see how this all pans out. My get off the stage is this, these are all the challenges, above and beyond that world that I laid out. He's got to deal with this budget and right-size it, the infrastructure investment, tax reform. He's got immigration, as you know. I've talked about this. And then you've got all this. So he's going to have to deal with it.

Now, the good news is, this is the first time since the 20s that an incoming President of one party will have his party in control of the Senate and his party in control of the House for four years. Because of the way the landscape is and who is up for a re-election, it's very, very possible, in fact, highly possible that you will have a Republican Senate and a Republican house for the first time since the 20s. So we're hopeful that they will be able to get agreement on all of these challenges they face, so that we can support our customer better.

So with that, I am going to pass it off to our COO and President, Mr. Kubasik.

Christopher Kubasik - L-3 Communications Holdings, Inc. - President & COO

Good morning, everybody. It's good to see so many familiar and smiling faces out there. So I was here last year, I think I'd been on the job about eight days and didn't have a whole lot to say. But this year, I think I'll have a little more to say. So a lot of people been asking with myself and the team that you'll hear from in the next hour or so, have been working on in 2016 and what we're focused on in 2017. And as the COO, the number one goal is to focus on program execution. We have thousands of contracts and commitments and that's been a major focus myself and the team



and I think the results that you'll see have shown that 2016 is lining up to be one of our better years and the obvious benefits, without one-time charges, reversing profits or booking losses is going to be higher margins and more cash. The additional benefit is our customers look at our past performance, and as we continue to perform well on these programs, no red programs, C-PAR scores, we're in a better position to win more business.

Mike talked about our disciplined growth strategy. We're going to do it through innovation. We have a substantial R&D budget, clearly that will allow us to enhance our existing products, create new products and arguably more affordable products for our customers around the globe. Internationally, you'll see we're about 15% international. I think it's going to be a challenge, but we set an aggressive goal for ourselves to increase our international business in the years ahead.

We talked about acquisitions. A year ago, we said we were going to look at these. I think a lot of people were surprised that we were able to get five announced, four closed, we may still get the fifth one closed this year. And I'll show you some numbers and you'll see that we're doing a pretty good job on the valuations. And then as Mike said, we're only 19 years old. So we're still relatively young in the history of the Company we are trying to look for opportunities where we can continuously improve and do things better.

I've been in this industry about 33 years and you get to see a lot of different things. And I have to tell you what's unique and special about L-3, from the inside now is that we have a very unique culture and this is a graphic depiction of what we talk about every day internally and trying to balance the entrepreneurial spirit that is in existence at these different divisions and sectors that have been a result of 140 acquisitions were the benefits of being a \$10 billion corporation to have that scale. So we're looking and continually making progress in the IT arena. One of my goals for 2017 is take a fresh look at maybe a shared service concept. We have some of that, but ultimately try to streamline our operations, make us more affordable, let the divisions and the sectors focus on innovation, selling their products, building their products and delivering them on time and that's something that I think is unique, and I'd like to emphasize.

So, going back to the execution and what we've been doing, when Mike hired me about 13 months ago, I think he was pretty clear that one of the goals was to accelerate a lot of initiatives. It's a large, complicated, diverse, corporation and with the additional resources, been spending a lot of time doing earlier and multiple reviews on major business opportunities, acquisitions. The goal here is to get a better answer quicker and to take advantage of the different experiences that we all have and that's been in place throughout the year.

There are a lot of different systems and a lot of different information. Been working with a small team to develop some metrics, more sophisticated than just margin, to monitor the business, both at the Group level and at the Corporate level. Actually, later today, I'm going to see the demo of what the team has pulled together in a dashboard that we'll be using to identify information and data more timely. I believe in this Corporation, the earlier you can identify a problem or a potential problem, we have more than enough talent and resources to deploy and fix that and that's one of the goals there. Clearly, well before my arrival, I think they've probably did like 76 quarterly reviews, so I'm just a new participant in that. But what I've been doing, and what Mike has asked me to do is to go out to the different divisions, I told them that knock them out in a couple of months. And they told me, they were 80 some. So I got about halfway through in 2016, but either by myself or with a small team, we spent the day looking at the strategy, looking at different opportunities to grow, have all-hands meetings and do programmatic reviews, and that's something that I will continue in 2017. And some of the sites represented here today, I have had the pleasure of me visiting in excess of three or four times, and there's a correlation with their financial results and the number of visits. So you'll see that with the increased growth, people don't want me to come visit them many more, but that's a fair trade-off.

A lot of companies have -- whether you call it Lean manufacturing, Six-Sigma, Kaizen events. And in our different sectors and companies, we have a variety of initiatives focused on business excellence. We're going to elevate at the Corporate level, with no additional cost one resource that we're re-badging in effect to try to again to accelerate our best practice methodology throughout L-3. It's a customer-focused model that we've built. Customers want innovation, they want quality, they want on-time delivery and affordable products. So through that lens that we're looking at this and clearly the goal will help us achieve our cash and earnings opportunities. We already have numerous green belts and black belts, again it's an acceleration. I'm excited about this opportunity and I think it can help us improve our performance.

So on the R&D front, you see the numbers. Our general trend and ambition is to continue to invest more in R&D, whether it's through the government and reimbursed as IRAD, or in the commercial world. And again, we're looking at this from a customer perspective. What are their needs? What are their challenges? And how can we best spend our money? The types of areas we're looking at for 2017 include autonomy, robotics, secure

communication, additional satellite payloads, and again, some of these are new products, but generally they are an evolution of our existing portfolio. We're looking for better security, we're looking for miniaturization and we're looking at the weight and size of these products. So I'm very excited what we have and the potential and we're going to continue to grow organically through R&D. And as you probably already know, this is the first year in 2017 that we will be growing organically after the decline that Mike covered.

International, I mentioned 15%. 2017, we have some new initiatives here. We basically have a presence in the Mid East and the Far East. We have a small office in India, we have something in South America and like everybody we have the obligatory UK, Canadian and Australian office, where our customers speak English and look a lot like ourselves. So we've made two acquisitions abroad, I'll cover those shortly, one in Australia, one in the UK. We've updated -- some of the talent, upgraded it, we've added people and it's a relationship business. Myself and several here have relations around the globe. And in 2017 we're going to get out and be a little more aggressive in meeting these customers and developing some new business opportunities.

The market is flat, as you know. There's foreign currency challenges, there's oil challenges, but again, I think we can be a little more agile than others. I think we have some affordable products and expect some good things, but that's an area I'm going to personally spend a lot more time on in 2017.

So a lot of people ask about our M&A process and I'm sure every company will show you something like this. So what we do that I think is different and actually do it, is we start with the strategy and we get incoming ideas from some people I see here in the audience. We have each of our groups develop their own strategy and do a GAAP analysis. What are they missing in technology? What are they missing in customers? And then once we have an agreement on what the strategy is, Mike and myself actually approve it, and this is -- there is this desire to look at the numbers and we try to hold off on the numbers, because we want to make sure this thing makes sense strategically, regardless of the price, or the multiple and we do that pretty well, in my opinion.

Then we move on to the operational side that myself and others assist with and that's really what are you going to do with this thing when you get it? [It's important] to have the right culture, to have the right fit, what are the systems, what are we going to do with this thing? If you get through those two hurdles, then Ralph and the team and myself and Mike spend a lot of time looking at the financials, understanding the plan, the commitment, the impact on our stock and of course the prices that we're going to pay. So I think we have a pretty good process. I think when you do 140 acquisitions in 19 years, you get pretty good at it. We got a great M&A team in the Company Presidents who spend a lot of time on this, in addition to myself and others.

So here is a living example and you'll hear from Tom Ripp, our President. These are security and detection systems. It's about a \$370 million business. It's the sensors that you see at the airports for passengers and screening. And we had a couple internal debates. We've briefed the Board twice and we decided, do we want to invest and grow this business or do we want to sell it, because \$370 million, it's not bad, but it's not the bulk we wanted. We recommended and the Board approved trying to grow this business. You'll hear more about the trend. It's a growing market. We think we have the best products and we think we can make a difference.

So we've closed on the MacDonald Humfrey acquisition in the UK. Again, this is moving up the food chain, a concept you'll hear more about, instead of just selling products here and there. We're taking a holistic system engineering approach, how do we all get through the airport quickly, with no risk. And as Mike said, and I've learned more about this, the airlines want us to get through, so we can go, do some shopping, eat a cheeseburger and have a beer, because the airlines actually get a piece of the action. So nobody is happy when you're standing in line, including those of us in line. So we closed that.

Implant Science is another one, we're getting this out of a very creative transaction that brings no liabilities to us, basically out of a bankruptcy through a 363 process. That's ongoing. I'll just keep it vague, because there's an upcoming auction in a few weeks and we're the stalking-horse, we're in the lead position. But hopefully in the next 30 days, we'll have these two. We have a \$0.5 billion business. I think we've got great upside and Mike and I've spent a lot of time talking about our business and we kind of think \$0.5 billion is a minimum and a \$1 billion is about an ideal size for one of our portfolios, so we can invest and grow and develop people.



So the four that we've closed this year and we put out releases and a lot of data; MacDonald Humfrey, security & detection in the UK I just talked about. Aerosim is a commercial pilot, and what this did, strategically, we didn't have a presence in the US. You get the certifications, we found a company, we've known these guys, we closed on them, and this now allows us to do our pilot training here in the US, which was a gap. ATM, we closed earlier in January of this year. Again, they have some RF components. I realize it's pretty small, but again, it's filled out the portfolio. And looking at it, just the other day, even though they're small numbers, it's actually exceeding the plan that we had. And then Micreo is in Australia. Again, a company we knew, we work with, we already had a presence in Australia, they have a big focus on electronic warfare, which is an area that is growing and therefore we made that acquisition.

And if you look at the 2017 multiples, you'll see that we paid 8.9 on 2017. I think we're trading around 12 today. That's kind of the concept and we've actually done it and we're quite proud of it. The hard work is ahead, got to go ahead and integrate it and be successful, but I'm confident we'll be able to do that.

So, I'll wrap it up and be happy to take questions at the end of the day. You'll hear Mike and Ralph and I kind of say the same thing, because we're all aligned on this. We're going to opportunistically deploy our cash for the best long-term value of the Corporation. And a year ago, people might have sat there and thought we were going to buy a bunch of stock, but we didn't. We decided to grow the topline, the earnings and the cash through some accretive and good acquisitions and we'll continue to look at that throughout 2017.

So for the first time, all the market trends are positive. We serve three or four broad markets, depending how you slice it. We cover defense, you know we are there. There is an up cycle, and I think we're going to be in good position. Security and detection, you'll hear about is growing. And then the whole commercial aero has an up cycle, specifically in the commercial pilot training. And international is flat. But we're still going to try. So at the end of today, we're all committed to execute on our several thousand contracts. We want to deliver those things on time, on schedule, with a quality product, while simultaneously looking at our business and seeing how we can better optimize it and make it better.

So, those are my comments. And I've had the pleasure of working with three gentlemen throughout the year and you'll get a chance to hear from them and their team and I'd like to start with John Mega, who is President of our Communications Group. I'll hand it over to him. Thank you.

John Mega - *L-3 Communications Holdings, Inc. - President of Communication Systems*

Well, thank you, Chris. I notice we're ahead of schedule, but I promise not to drone on and on. I'll give you a very brief presentation on the Comm Systems Group today, what we're up to, where we've been, where we're going. With me is Andy Ivers, who runs the Broadband segment of our Group, our largest segment, and he'll talk to you about some very successful turnaround initiatives in his sector, most notably at Comm Systems West and a very bright future for their technology and their products going forward.

So, we're broken up into four sectors. Our genesis really started in 2014 when management combined the heritage Microwave Group at L-3, which I ran since the inception of L-3, which the Comm Systems Group, most notably Salt Lake City, Comm systems West; and Comm Systems East in Camden, New Jersey. Today, we're broken up into four sectors, the largest of which is broadband. Most of their volume comes from Salt Lake City. These guys are world leaders in data links and all the products that go into data links; broadband, high speed modems, software-defined radios, storage devices, complex antenna assemblies, and most notably, some very exotic waveforms that carry the information that goes over those data links.

Our next biggest sector is Advanced Comms, the flagship division there would be our Camden operation in New Jersey, run by Dave Micha. Raise your hand in case somebody wants to talk to you during break or afterwards. These guys have one of the handful of companies in the US certified for information assurance, think encryption keys, key generation, key transmission, data storage. They also have a great capability in maritime C4ISR. They've done the entire fleet for the US Coast Guard. They do some exotic antenna work with their Randtron operations in Menlo Park, California and microwave components at Narda-MITEQ and complex microwave subsystems.

The third sector in our group is Tactical SATCOM. The flagship division there would be GCS, up in Rochester. These guys are world leaders in fly-away SATCOM systems. Everything from man portable 0.9 rucksack transportable SATCOM terminals that are presently favored by SOCOM that set up



quickly and weigh 40 pounds, through a whole family of terminals from 1.2 meter through 1.6, 2.0 all the way up to 3.0 meters. They're used in White House communications and our military and friendly militaries all over the world.

And our last sector is Space and Power which is where our tube divisions reside. We have two tube divisions, one of them is located in the San Francisco Bay Area, EDD that does non-space-based tube amplifier assemblies for radar installations, uplinks, EW systems, medical business. We also have a space-based tube division in the LA area in Torrance. We're one of two folks worldwide that make traveling wave tube amplifiers for satellites, the other being Thales in France. And we have a portfolio of telemetry and RF products at our telemetry East and West divisions in San Diego and Pennsylvania.

So our business base, as you see, in the bottom right hand side, is pretty much evenly distributed through branches of the services. I draw your attention to other DoD, the 24%. We do an awful lot of work, that's highly classified, TS SCI and above. And in today's budget environment, that's kind of a nice place to be. So we stay focused in that particular area.

Over the last three years, we've been a little bit flat, we've had two major hurdles that we've had to deal with. Back in 2014, when we combined the Microwave Group and the Comm Systems Group, I mentioned that we were struggling at Salt Lake City. We had gone through an implementation from homegrown systems to SAP business systems that didn't go particularly well, causing a lot of constipation on the factory floor. Past-dues were up, margins were down. At that time, I stood here and I said, the underlying technology I thought was very, very good at Comm Systems West and we could fix those other things. I'm pleased to report that we have fixed them. Andy will go through that today. And the prospects do in fact look very good for their products going forward.

The other hurdle we've had to get over is the sort of tumultuous nature of commercial space. We've had two issues there. Over the last couple of years, the launch of broadband communications satellites has been about half of what's normal. A normal launch would be 22 to 25 birds. This year it's going to be 14, last year it was kind of a similar number. The other issue we've had to deal with is that there's two people that make travelling wave tube amplifiers for satellites; us and the French. As you all know, over the last couple of years, with the parity of the dollar and the euro, the other guy got an interesting pricing advantage standing still. We have a strategy to deal with that. We're going to combine our two tube divisions, and that's underway. Helix space tube architecture is the same, whether it's in space or on the ground, the difference being part selection, traceability and testing data. So we're going to make one division instead of having a couple of hundred million dollar divisions. We'll take two \$110 million to \$150 million divisions, and make one \$0.25 billion division, with a much more attractive rate structure, much better able to compete going forward and much less subject to cyclical swings of commercial space. Through this time period, however, we've managed to focus on our margins and keep them up there. We've worked them up from the 9s into the 10% level. I fully expect when we're done with our consolidation in 2018, going forward, we should be north of 11% margins and I think our current growth curve of 4% to 5% ought to accelerate.

We have a great product portfolio to aid those initiatives. I mentioned we have a maritime C4ISR capability at Coms East. We've done the entire coastguard fleet. We've made great traction internationally in maritime comms, and we are migrating to land and air applications, air operation centers, battle management centers. Certainly we've done comms in all of the major UAV platforms, Global Hawk, Predator, Grey Eagle, Senior Leadership Aircraft for bad day management of the country, by tying together all kinds of sensors. So we have a very good capability in C4ISR.

Our systems are open architecture, which is really what people want from an interoperability standpoint. Our radios are software defined, which is great for mission flexibility and kind of staves off obsolescence. I mentioned we have a great portfolio of waveforms of LPI, LPD that work very, very well in a contested environment, and that's important in today's world. We have great program platforms. For instance, the airborne surveillance Advanced Hawkeye program. You see that picture down in the lower right-hand side. That's the eyes of the fleet. On the predecessor program, we enjoyed a sole source position on TRAC-A. Probably we did somewhere in the neighborhood of 250 to 270 systems. We'll do a large number of replacements in advanced Hawkeye, \$5 million or \$6 million a piece on a sole source basis. That's a great platform to be on.

We have a very good entrenched position at SOCOM and other friendly special forces and fly-away VSATs, we will hold on to that. And space might be cyclical, but it's not going away. Our two products will have a good home going forward. And our TT&C products, our Telemetry East and West are probably on most all major US government satellites.



So we have some exciting targets to shoot at too in the future. I mentioned our C4ISR capabilities of maritime, great traction in Australia. We've been on the helicopter landing platform, big aircraft carrier for helicopters where we've strung together hundreds of comm systems very successfully, doing the Collins-class submarine over there as well. We have opportunities in patrol boats in Australia. In Canada, we're doing tanker integrations. We've got our eye on the surface combatant program that is coming up, which is a very big program, some 15 warships, I think three destroyers, 12 frigates and we'll be bidding that in 2017. Very soon, we should conclude negotiations on a tanker job in New Zealand that we're excited about doing the Comms.

I mentioned waveforms and the home they have in a denied environment. Andy will talk more about that. An awful lot of classified fundings have come our way in the last couple of years for that technology.

Rotary wing, our MUM-T product for Apache helicopters which is the manned/unmanned terminal extended, gives the Apache pilot an over the horizon situational awareness capability and targeting capability that we hope to migrate into the Navy platforms, the MH-60 SNR models and the Osprey, literally thousands of platforms worldwide for us to chase with that system, it's very, very well received.

I'm pleased to tell you we're in negotiations for our first GaN based SSPA for the space world. That's important; in a tilt towards LEO's tubed based amplifiers will give way to solid-state amplifiers. We have a product offering to address that market for constellations that will be like one web and so forth. I mentioned there is two guys that do space-based TWTAs. There's lots of capability, particularly with the contraction in commercial space in C, Ku and Ka bands, not so much in higher frequencies. We've done a lot of work in Q and V band with the US government and the commercial guys are starting to focus on those frequencies. And I think we'll be ahead of the pack there. There is an opportunity coming up in SOCOM for re-compete that we're very, very focused on. We'd like to maintain our incumbency there.

So overall, we have a good product portfolio, we've maintained our margins, we've got over our hurdles for growth. We're going to start to grow, we're going to start to increase margins and I think the future looks very, very good for the Comms Systems Group.

So with that I'm going to turn it over to Andy Ivers, who will give you a little insight into our restructuring initiatives of at Comms Systems-West and the future of some of the products there. Andy?

Andy Ivers - L-3 Communications Holdings, Inc. - President - Broadband Communications

Good morning, everyone. So I think I was on the panel here last year when we talked a little bit about some of the challenges we faced at Com Systems-West. I'm pleased to report that we've made significant progress and I'll show you some of the results as we go through today. But just to talk a little bit about who we are in the broadband communications sector.

We're really in Salt Lake City, the datalink guys, and data links take a lot of different forms, whether it's command and control for UAV, whether it's exfiltration of SIGINT, radar or any other INT data off the platforms, and we do a full end-to-end systems there, which means we will put in the large aperture dish that talks to the satellite, all of the ground-based infrastructure, the equipment on the aircraft, whether it's a Predator, Reaper, Global Hawk. And in many cases we gotten to run the installations for the government where we provide FSRs. So we have about 500 FSRs deployed today worldwide. Some of them in friendly places, some of them in not-so-friendly places, supporting all of those systems.

Our discriminator is really the high-bandwidth we provide. So in a lot of companies, they will talk about 5-megahertz and 10-megahertz radios. 274 megabits to 1 gigabit is pretty much what we do every day for lunch. It's a very different market, where data is really everything. So, what we have going forward that's going to help us? We have a huge installed base. So we're on almost every UAV of any size from a command and control, and exfiltration capability. What that affords us is an excellent opportunity to go back to those platforms now and offer a continuous upgrade strategy, particularly as we enter into the third offset where the concern is about command and control in contested environments. We haven't had to face that historically with these data links. We have the ability to go in and now upgrade all of those platforms, bring some of the waveform capability that we've been developing over the last decade, particularly our Chameleon waveforms, which provide low probability of intercept, anti-jam capability, low probability of detection and bring them into a whole class of platforms that heretofore they had not been on. That capability has been demonstrated over the last two years and I think we're going to see in 2017 that will be very exciting as a demonstration at Northern Edge

in Alaska, where we'll actually demonstrate mobile ad hoc networking for low probability of intercept, low probability of detection waveforms, truly at the cutting edge of what can be done. So it's exciting technical work.

If you look at the issues that we've overcome in the last two years and I picked two years, because that's pretty much my tenure. We implemented SAP. As John indicated, the initial implementation was little lumpier than we might have liked. It took longer, it cost more, and it really constipated the factory. We have a factory that specializes in doing high mix, low volume type of work and the implementation and the choice of how you set the system up is pretty critical. We struggled through that. I'm pleased to report that through a number of changes we've made, some bringing some additional SAP expertise into the company, some changing the way we're using the tools, we've had a dramatic improvement in performance. We went from on-time delivery in the 70% range up to on-time delivery over 2016 in excess of 95% all year long. Clearly not good enough. I want to be 100% on time and I have the divisions in the sector that are 100% on time, so we'll get there, but great strides. We've gone from past-due deliveries that number in the thousands, to past-due deliveries a number in the -- less than 100 kind of range now. So, significant improvement in that area. What does that do for us? It's very hard to go to your customers and generate new business when you're not performing on your existing business. And, now I go back and my customers tell me, no longer made a long pole in the tent. Now we're a preferred supplier, we're on time, we're out in front of them, we're building to inventory, in some cases, so we can shorten up the lead times for them. And it's resulting in a very positive impact. Sales are up, profit is up and just in general, once you start performing for your customers, things get better. We've gone from a sub-10% Company, to a Company that's running almost 11% ROS. And I think to put that in context, you have to run your firm fixed price programs up near 15%, if you're a business like ours. We do a fair amount of cost type development. We do the cost type work, because it's high risk advanced technology work, it brings great technology and products into our Company. We then transition those into fixed-price production programs. Those are the high margin programs, you have to execute on those, which means you got to get them out of the factory and ship it on time. We're doing that now. We're doing it reliably, repeatedly and it's just showing in the returns.

John mentioned our classified portfolio. I won't talk a lot about the classified programs, other than to say as we go into this third offset and we face near-peer, or in some cases better than peer adversaries in the world, those classified programs and the work that we do, the platforms that we're going on are absolutely critical to the nation's defense.

And then another area of growth for us is international. We have roughly doubled our international sales in the last two years. It was fairly modest two years ago. We're up near \$100 million in international sales out of the Salt Lake City operation alone, and we're growing continuously in that area. The trick to the international growth is, all of our partners that we operate within the international arena, they work with the US forces, they see products like Rover, the UAV, the data links, the ability to understand the situational awareness on the battlefield and when we show up with those products in an international forum, very attractive. So we've had good penetration in the Middle Eastern arenas. We've had good penetration in the UK, and we're starting to see a lot of opportunities in the Far East, in the Ukraine area, Japan, particularly as those countries start to feel the threat from China that General Cody talked about.

You might ask what did we do in the last two years. We made a number of management changes, some of those are bringing new talent in, some of those are aligning with talent was there to better utilize the skills. We focused on continuous improvement. When we were struggling with our SAP implementation, we took our eye off the bubble on constantly getting better. We have stood up a dedicated continuous improvement organization and we can touch \$19 million in hard savings, and at the end of the day, that's \$19 million that drops straight through to the bottom line as profit that would have been spent doing things that were not value added in the organization. We're not done. We celebrate those victories with the team. We're getting the entire 3,500-person organization in Salt Lake, energize thinking about it. We stand up the people that have the best ideas and reward them and create a culture where continuous improvement is absolutely mandatory and I think we'll see continued opportunities emerging from that as we go year-over-year.

We've gone from a mentality, which was very program focused, where we've built to order on most of our products, to looking at our high volume products, our Rover products, some of our high volume modems and we started to forecast those out, so that we could now build them in a continuous production flow over the course of the year, as opposed to we will build 25 or something and then shut the line down and wait for the next order. What this allows us to do now is get the economies of scale from the material procurement and to get the economies that come out of a continuous learning curve. So we've seen dramatic reductions in our product costs in some of those areas that reflect well into our fixed price programs that were bid several years ago and they put us in a very, very good competitive position on our fixed-price programs going forward.

We have made significant improvements in our program execution. I'm pleased to report that this year we have no red programs. We had a couple in the past, but they are largely green. And as you can see, when you're averaging 15% on fixed price programs that's a result of good execution, disciplined management and the team is doing a great job there.

We focused on new awards, you know, when we were focused on delivering and shipping, it was about capturing more business from our existing customers. We stood up a very aggressive business development organization, we have more than doubled the business coming into the organization from new awards, which means we're out pursuing more things, capturing more things, broadening our portfolio and our footprint in the market space.

We have the luxury of being a market leader in the data link business, where we command a very large market share, that's a great thing. It makes a little bit difficult to grow in that space, so we have to move into adjacent spaces, and John talked about our focus on rotary wing as an adjacent space. So taking the same technologies that we've used in our UAVs, taking it over to the helicopter commands, whether it's the AH-64, and there is 1,500 of those globally, the navy platforms, and really broadening out what we do in those spaces. And I'll touch on where we're going, because obviously you guys are forward looking, not rearward looking and it's great to say we did good, and we've got the company running at double digits.

But what are we going to do on a go-forward basis? We see the opportunity for sustained growth in the 5% to 10% range with double-digit margins. I'd like to see them continue to get better. As we grow our international business that tends to be higher margin business, which allows us to command the double digits. We still have to deal with the cost-type work, which is good from a technology perspective, but not so good from a margin perspective, typically comes in, in the 7% or 8%, by far rule, but it's really funded R&D and so it's one way to look at it is investment we don't have to make to get products that we can sell in the fixed price arena.

We have a great capability within Chameleon, we've talked about it, continue to talk about it. I'd love to tell you the programs that it's going into. There's about a half a dozen of them right now, all of which are classified, but we're actually taking this technology, embedding it in products that are going into classified programs that are flying today. So it's out there in the world in various instantiations right now, solving point-to-point links.

The very high visibility platforms, when we talk about F-35, F-22 and the bomber, we're working to get on those platforms. We're not there yet. We think we have a terrific solution to what I would argue as one of the grimmest problems we face in this nation, where we've built two very advanced fighters, the F-22 and the F-35. We put really neat data links on both of them, but they are different and they don't talk to each other. And it's really kind of tragic, if you follow the news that when we went into Libya, the F-22, only real means of communicating with the other fighters was FM voice. We've demonstrated F-22 to F-35 Comms using existing antennas and Chameleon that preserves the low observable nature of the platform and really offers them the opportunity to solve this problem in an easy and relatively inexpensive way. We'll demonstrate, as I said, that in Northern Edge in, I guess, August of 2017 and hopefully that will get us moving forward.

On the international front, we won a program called Joint Common Remote Viewing Terminal, which is a fairly long-winded way of the UK saying they bought Rover, which is a flagship product for us. It was interesting, I was over in the UK talking to one of the brigadiers and he said whatever it is that the guys decide to buy in JCRVT, it needs to be Rover. Our data link, our Rover 6s really are almost the Kleenex of the industry. They've taken the Rover name and when they talk about data links, they talk about using Rover and that's a pretty important thing.

JCRVT is a pivotal program for us over in the UK. It's going to lead to Navy applications, it's going to lead to vehicular applications. We think that will grow from where it is today a \$30 million program to probably a \$300 million to \$400 million program over its life. So a big win in the UK. I talked about Rotary Wing, Manned-Unmanned Teaming. The really key thing there is the Army used to use the Kiowa Warrior as a forward scout for the Apache, so that it would fly out, and find targets and you would shoot them. Now, an Apache pilot can access a UAV, a Predator, a Gray Eagle, a Reaper, directly from the cockpit, they don't have to talk back to the mothership. They can take the video terminal and control it and they can actually take control of the weapons that are on the platform. So it gives a totally new capability to the attack pilot that he didn't have in the past. And it takes the Kiowa Warrior out of the picture, so no longer we have to put a war fighter in danger to look over the hill and see where the bad guys are.



And then in the emerging products area, the same sorts of technologies that allow us to communicate in a secure and low observable manner lend themselves very well to swarming UAVs. So we have a couple of seed programs that we're working primarily with the Navy and Marine Corps, where we're developing the ability for these small swarming platforms to communicate with one another, to coordinate very accurately in time, so that if these platforms want to cooperatively do something, they can now cooperate with very, very precise timing between the two of them, even in a GPS denied environment and be used to do directed energy attacks or other types of EW attacks in a coordinated way. So we think that has tremendous legs on it in the long run. We ultimately see a convergence of communications and electronic warfare and I think the technology is there for that convergence to happen today. It will really be a question of doctrinally and within the Services when can they figure out how to combine the rice bowls for the two different capabilities and bring them together. But we're well positioned for that when it happens and hope to be at the leading edge of that.

And with that, I'd like to introduce Mr. Steve Kantor, and the Electronic Systems.

Steve Kantor - *L-3 Communications Holdings, Inc. - President of L-3 Electronic Systems*

Good morning. Nice to see you all again, particularly this year, we got good results and look forward to seeing you next year with having better results. I think you mostly know what Electronic Systems is about. The products we provide are wide variable products that meet land, sea, air and space requirements. And our customers are also similarly very broad in terms of DoD, other government agencies, as well as commercial and international businesses.

What's notable here is in the middle of this page, where we talk about how we distinguish ourselves. So, it's very important for us to maintain discriminating products. We're constantly evolving new products to stay ahead of the market. We are a products Company, so we can't be stale. So every year, we're constantly looking at our portfolio, advancing the product capability, smaller, lighter, cheaper products that are in fact more capable. That's how we discriminate ourselves and that's how we meet the customers' emerging requirements. And as you may remember years ago, we used to develop a product, you'd have a long production run. In today's environment, as you get products into the production world, the demand is for the next product, when are you going to release the next upgrade. So we've adapted that, we are agile, we've always been that way. We'll continue to do it. We're very aggressive at it, and so every year we're introducing the next-gen of products to stay ahead of the market.

I want to talk a little bit about our performance. Let me start with indicating in 2016 that we're really excited about the book-on-bill. We've had a book-to-bill that's about 1.1x. That's significant, in that it builds the backlog. Gives us a head start into 2017 and beyond. And that's a dramatic change from what we've seen with a stagnant DoD budget. So the growth is coming from a combination of DoD, commercial and international business.

in our 2017 forecast, we see a 7% growth. We've got 3% to 4% in the organic and the others are the acquisitions you heard Mike and Chris talk about. I'll tell you that we're continuing that view strategically. As Chris mentioned, we are focused on the strategic acquisitions that grow the Company. We've got two or three more going on, I expect some of those to close in January or February of next year. So we'll continue down this disciplined acquisition strategy to grow the Company, along with organic growth.

You can see the improved margin, both graphically and in the numbers. We've worked on program execution. We've worked on consolidations. We've worked on cost takeout. And so the combination of those things, along with some actual closures of facilities, have all been helping to drive consolidated margin improvement. So you can see the improvement to this year, basically for next year \$70 million more of EBIT improvement, which is approximately 80 basis points. So we're pretty excited about that.

If you look at the segments that are shown, these are sectors. We're going to spend some time talking about three of those, Precision Engagement and Training. Todd Gautier is here. He is going to give you some more details on that. Jeff Miller, who runs our Integrated Sensor System sector, he is going to talk about some of the growth and advances in that area. And Tom Ripp is here to talk about Aviation Security.

You can see the balance. We tend in Electronic Systems to maintain this balance of about 55%, 60% DoD and US government and about 40% or so Commercial and International, so a nice balance. We continue to work that to expand in both areas. And we're also not dependent on any single platform. So we're basically providing products to every agency and every platform, but we're not dependent on any single one.

These are our leading products and capabilities. I won't go through them all. I will tell you that night vision products, for example, is an area where we continue to be a market leader. As I mentioned earlier, we continue to advance the state of the art in that area, good reactions from SOF command, good reactions from DoD and the Army and a lot of international interest. You'll see that in the next chart. The government has actually helped us by reducing the export restrictions and so now we're able to export a lot of the products we couldn't do two years ago and that's paying off in great orders.

Commercial and military flight simulators have been a mainstay, but as Mike mentioned, we're moving to a different model, which is not only providing simulators, but providing pilot training. You will hear some more about that. F-35, where we have the displays and the EODAS, which is the self-protection system. We continue to work the affordability issue along with Lockheed to drive the cost of the displays down. We've been successful with that. And we're also inventing new technology to improve the survivability of the aircraft with EODAS.

We've also moved, and I think I've briefed this is a couple years ago, we moved that technology into the commercial arena. At that time, we were investing in it and we won some development programs. Today we're in high rate production on these displays for the commercial marketplace. So we've been able to migrate military technology into the commercial sector.

Naval remains strong and we're pretty excited about the Ohio Replacement Program, and the anticipation of more ships. We have lots of equipment on these nuclear submarine fleet, as well as the carrier fleet; power conversion equipment, photonic masts, towed arrays, very significant for us and we're developing undersea solutions for the emerging threat of undersea warfare.

Airborne surveillance systems, or our tradition EOIR systems, we've been delivering for years. We're now moving into IRSTs, which are infrared search and track systems, which basically provide actionable intelligence and system solutions. That's a combination of activities we've been doing in development and some of the acquisitions, as I mentioned four sections, one of them. So we're able to move up the food chain there.

Space sensors is growing significantly. We've been doing development for several years of advanced stage sensors, both commercially and military applications. That's actually also starting to move into production. That's going to be a significant growth area as well.

And finally, aviation security, I'll let Tom talk more about it, but that's a growing area and it's moving from -- essentially from products to system, and network solutions. I think there is a subtlety here and I wanted to point that out. These are not just our leading products and discriminators, but I will tell you that they are all specifically in markets that we see as significant growth markets. You kind of get a double bang. Not only do we have advanced capabilities and market-leading products, but we're also in the growth markets and I think we're going to see some significant returns on that investment.

These are our growth opportunities. On one side of this page, you see the key awards, I will touch on just a couple. Submarine towed arrays, the competitions in 2016 for thin-line and fat-line towed arrays for the submarine fleet. We won both of those in a competition. So we're well positioned for the next several years with those products. The Australian LAND 53. This is the Australian Army program for night vision goggles, designators and aiming devices. This was a huge competition. It was run by the Australian Army. They took products from every supplier and spent months in the field testing them. We won every piece of that award. It's close to, as you can see, \$300 million, plus it's a long sustainment and spares follow on. Very proud of that and that's opening the doors for some other opportunities.

TSA continues to grow. They are expanding in different airports. So we've had some good product sales this past year. They were pretty quiet the previous two years, but they started to open up the gates and buy more product for the smaller airports and also the sustainment of all those products is a good business for us in terms of maintaining that equipment. Avionics, the aircraft, you'll see that continuing. F-35, as I mentioned, continues and the Army continues to buy and we expect expansion in night vision products.

In terms of major initiatives, you can see there, again, similar initiatives, all in the same areas; night vision, avionics, pilot training and simulations. You saw the Night Vision program there, which we're pursuing, which is similar to the LAND 53 program. That's in process.

Advanced programs, these are classified areas. I can't talk about the programs, but I can assure you there's a lot more interest in these areas and a lot more money flowing into that, and we're at the forefront of it. And the undersea, as I mentioned, we are continuing to invest and develop products for that market. We see those kinds of numbers there for the next few years. And Todd will talk about pilot training.

So with that, let me turn it over to Todd and just leave you with the thought that I think we're well positioned, great products in a growing market space.

Todd Gautier - *L-3 Communications Holdings, Inc. - President of Precision Engagement Sector*

Good morning. It's a privilege to be able to talk to you today about precision engagement and training. The business is primarily focused on small, air-launched, unmanned aerial systems, tactical UAVs, weapon systems components, the GPSes, the next-generation GPS, fusing IMUs, the integral components inside weapon systems, as well as fully integrated weapon systems as a prime. We also are into the assured precision, or assured positioning, navigation and timing, which is a capability to combat denied and degraded GPS, which is a reality of our new combat environments, as well as being a world leader in training, both commercial training, commercial aviation training for airlines, as well as training in the defense industry, with link UK or link US. We do about \$1.1 billion in sales a year and our business is set to grow dramatically in the coming years.

Looking at precision engagement and the market that we're operating in, over 2016, we're recovering from a drawdown in the forces in Afghanistan and Iraq. However, the bins were full, they've continued to utilize these weapon systems in those theaters for the last several years and they're now emptying. We've seen a significant surge in orders for our weapons components this year, we're seeing that continue next year as well. So instead of being a business that is a harvest business, we are actually seeing this growing again, as those traditional weapon systems in the traditional theaters continue to be used at an accelerating rate.

Third offset is another large driver force within our business. The third offset is merely the US strategy to counter the enemy or our near peers from forcing us to stand off, preventing us access and denying us the ability to get close to where target sets would be. L-3 is deeply involved in systems to support the third offset, new technologies, precision weapons, autonomy, longer range systems, electronic warfare, GPS degraded and denied operations, new generation sensors and an entire host of systems. We are core in that central market space. There's over \$18 billion of Fed funds that have been focused on the third offset. So that's the next six years of the budget.

On top of that, if you look at what size the Class 5 budgets are, and you can see them forecast in certain areas, they are massive. The majority of the technologies and systems being developed to support the third offset are actually being developed in an environment where the threat is not knowing what we're doing to keep them from countering it. And so, you are going to see a lot of what we do and a lot of what I'm going to allude to, unfortunately we can't provide the details on, but we'll try to show you some numbers and give you an example or an idea of what we're doing in those marketplaces. Both those markets, the new weapons technologies and the traditional weapon systems market, we are seeing growth and we'll see growth into the future.

As an example, we historically haven't been able to talk about this, we only recently received approval to discuss it. We have a program called Alamo. It's a 57 millimeter Mark III 32 Mod 0 radar-guided projectile. It is the first radar guided projectile ever. We are the prime. We are currently early in the phase of this program. It was originally designed to support the asymmetric swarming boat threat. So mini boats coming out after a ship or an asset, instead of shooting a pistol, if you will, at these, we're able to shoot a sniper rifle at them. It gives us the ability to target at range, take out very rapidly many threats and not allow them to get close to something that we hold dear.

Another example of that for prime, we have more than a handful of programs where we are the prime, some special projects. An example, one is in LRIP already. We're talking about programs of record. It's a \$700 million opportunity, if we can transition this into production and we believe we're going to get there. We have other programs that are in the early risk reduction phases, all the way up through into EMD. These programs represent multi-billion dollar opportunities for our corporation as we transition these phases. Traditionally, weapons programs are not fast, they take years to develop and we've been working on many of these programs for several years. We hope to see significant growth as we deliver on these key technologies. But these are key disruptive technologies. Just like Alamo, first ever radar guided projectile. It is disruptive in the marketplace and it's disruptive to our threat and that's where our focus is in supporting the third offset with our weapon systems capabilities.

We had some major wins in 2016. Can't necessarily talk about the details, but they were significant for us. And there are some major opportunities looking forward in 2017 as well and going forward. We see significant growth and we see growth accelerating in the future years as we transition these programs through the phases into their production phase.

For commercial training, we're seeing an unprecedented growth in the commercial airline training market, commercial aviation as a whole. Backlog is around 6,000 aircraft at Boeing and Airbus, that looks at about 10 years of production backlog for these airlines, unless they do something to ramp up the number of aircraft they are able to produce per year. The global fleet of aircraft are going to more than double in the next 20 years, that's going to require 40,000 new aircrafts by 2035 -- 40,000. On top of that, making it a headwind for the airlines are pilot shortages. It's an unprecedented pilot shortage as well. They are going to need over 600,000 new pilots in the next 15 or 20 years to build a support, flying the aircraft on a route that they're planning today. There are 227,000 new pilots needed just to replace the retiring air crews that are flying today. On top of that 227,000 pilots, to fly those aircraft that are needed in the new fleet in this expansion, another 350,000 pilots. It's truly a staggering number and it's a major problem for the airlines already. This year, there was a first airline that declared bankruptcy here in the US that actually stated that having pilots to fly the routes was one of the major causes. Their inability to remain solvent.

We also see that airlines are evolving their business models. The majors are now having to compete with low cost carriers. Price is everything for these low cost carriers. They drive cost out of everything. They're not buying and owning training centers, they're using training by the drop when they need it and driving cost out of the organizations, making them much more competitive against the larger airlines. Larger airlines see this. They're going to have to counter in some method. We're seeing larger airlines starting to use power by the hour, leasing our training systems, as well as leasing our pilots. And we also have these larger airlines contacting us, talking about outsourcing their entire airline training capability into our Company. It's a fantastic evolution in the market and we are ready for that. As well, we're seeing that they're evolving their need for pilots. They're seeing in the US even, and primarily in Europe, this has been happening. But they're not going to be able to just take pilots out of the regional airlines that are their feeder airlines, because if the feeders lose pilots and go broke, the majors aren't going to have people to be able to fly on a plane. So they're actually contacting us now to set up the debt programs to allow us to deliver trained pilots to them. Across Europe and Asia, right now, we provide pilots to the airlines, take an individual who has never flown an airplane in their life, 18 months later they move into the right seat of a wide-body aircraft and flying passengers. That's what we do. We are a university for highly qualified, highly skilled airline pilots.

Big point to take away is that the commercial airline training market is actually expanding well beyond the capacity to support the need for pilots in the years coming ahead. It's a big problem. For us, our commercial training solutions business, it really is the consolidation of Link UK, CTC, and a new business we acquired this year, Aerosim. We've grown our capacity this year significantly. We have five new devices in service, providing 24/7, 365 training to the airlines, in both running Gatwick area, as well as our Asian airline training center in Bangkok. We're announcing a London training center that we are investing in establishing outside of Gatwick, in the London area. It will an eight-day training center, next door to a new manufacturing facility that we're building. We have outstripped our capacity that we currently have to build our training systems, because we're building a significantly larger portion, larger number of training systems than we actually had forecast. We need a larger facility and I need to do in a way that's efficient that I can reduce cost and drive down the cost from our overall systems.

We've realized significant synergies in our business this year. Device sales are significantly up. Airline training course is up, wet training hours are up, and our CTS consolidation is driving efficiencies and synergies, as well as driving cost out of our business.

We acquired Aerosim, it's a huge boost for our ability and our strategy going forward. It gives us the US market. We now have the FAA certifications to train US pilots for US carriers. It also gives us the Chinese CAAC certifications to be able to train Chinese pilots for China. All the Chinese pilots are trained outside of China. Aerosim had the largest quota of available pilots to train in the world. In addition, they have low level flight training devices, which increases our portfolio of systems we can offer our customers. And they also have a maintenance training capability. Maintenance training is another problem for the airlines. You don't hear about it too much in the papers, because it's not as sexy as talking about airline pilots, but more maintenance trainers and maintenance technicians and personnel are needed than airlines. It is a bigger shortage than the pilot shortage affecting airlines in the coming years, and we're moving into that market as well.

So what about our results? For airline full-flight Sim devices, when L-3 acquired Link UK in 2012, the business was in a bit of decline from how it's being run. From that point in time, when it had 10% market share, we're up this year to a 40% market share of winning the competitions in the open market. Airline training has grown from about 17,000 hours sold a year, up to over 80,000 hours sold this year. Training academy is growing.

We started in 2015 moving into this business of CTC. We had 400 cadet starts. We are projecting in 2017 over 875 cadet starts and are looking to move that up to around 1,200 to 1,300 in the future. Since Link UK's acquisition in 2013, in 2016 we've had a 2x increase in our sales and by 2017 that will be a 3x increase in sales. We have a discriminating product, it's better. We have higher quality and we are able to compete. We can compete and win on price against our competition.

So as a summary, we have a very stable products base in our defense, training components and products, as well as our fusing and weapon systems components. We're ideally positioned in the third offset market with next generation weapon systems, as well as commercial training systems business. We're making significant and very well placed strategic investments in capacity and growth and it is paying off. We had major successes this year in those key areas of growth and opportunity, and those opportunities are only expanding in the years in front of us. We've had a strong 2016. We're going to have a better 2017 and we are going to have significant expansion in growth over the next five years. Thank you very much.

Jeff Miller - L-3 Communications Holdings, Inc. - President, Integrated Sensor Systems

Thanks, Todd. Good morning. I'm Jeff Miller, President of Integrated Sensor Systems, or ISS. I appreciate the opportunity to talk to everybody this morning and give you a bit of an overview on ISS. The last couple of years in ISS have been extremely exciting, really driven by a return to growth, significant margin enhancement and some portfolio shaping, great improvement in our program performance, eliminating all of our red programs, trending very well, driving margins through our programs, as well as through efficiencies.

Pretty significant increase in our strategic focus. When I came into the company a couple years ago, I personally was surprised at the breadth of sensor capability within the company, we are doing a lot of work to get more synergy across our divisions, to bring that together and that's paying off for us. We're focused on the balance sheet side of the equation, reduced inventories, improved our cash flow, made significant investments and we'll talk about the margin enhancements. We're doing that in parallel with significantly increasing our investments to balance the strategy that we put into place.

So we've got the strategies and we're driving efficiencies to be able to fund those through increased investments. We have a very nice balance of international and domestic in the portfolio. About half of my employees live outside United States, about half in the US and we routinely run at about 33% of our business being international business. So we have a nice mix there. We're doing all those things in the continuous improvement framework of L-3 excellence, which Chris mentioned earlier. And I think all of the combination of those things is driving us to have a very good year this year and a very strong outlook for the future.

So with that as background, what is ISS? Again, it's a collection of sensor programs and companies. My surprise really coming into the Company was that breadth of sensor solutions in all domains. So when you think of L-3 sensors, it's everything from the floor of the ocean to space. We have sensors everywhere in between. On the space side of it, we're very strong, both in the launch and control electronics pieces of it. We just recently signed a multi-year deal with ULA for continued development and expansion of the launch electronics. We provide a number of sensors for the classified applications in space and we're growing that into a very rapidly emerging market for larger sensor subsystems.

Airborne is our largest piece of the business, primarily out of Wescam in Canada, very strong position, market leading on the manned ISR platforms and making good penetration into the unmanned applications. Maritime surface and ground are both areas where we have a little bit less of a position, but more opportunity to grow there on both surface ships and combat vehicles. Particularly on the combat vehicle side. Across the world, we've seen delays in fielding some of the combat vehicles. For us that's an opportunity to unseat some of the incumbents on the ground side. So we have some very specific opportunities on the ground side, taking advantage of our business model and our systems from the airborne side and leveraging them into the ground side.

We are very strong in undersea. We have all of the photonics masts on the US programs, the Virginia-class and working for the next generation for the Ohio Replacement Program. Photonics masts, we should think of as a periscope. And a growing -- particularly international growing position in electronic warfare. So our systems, again, all domains, space to the ocean floor and electronic warfare as well.

So when we look at the market and focus on our organic growth, we made good progress. And the theme you are going to see in all these is, in each of these positions, we have a very strong position and we're leveraging it to grow into new areas. So on the space side, we have a position

there on the electronics. That third offset technology in space is extremely rapidly growing. We really feel good about our opportunities there and making very significant investments to penetrate that market.

Airborne again, we own most of the gimbals for the airborne side. We have this emerging market for infrared search and track, which Steve mentioned. So if you think of most of our imaging systems, think of -- from a very long distance away, presenting a user with the best image possible, so that from very long range you can tell whether somebody is carrying a RAKE or an AK-47. That's not what IRSTs do. When you think about an IRST, think about doing what a radar does add IRSTs do that, but you're doing it passively, so you're not giving away your location, it's a passive system. Our particular focus on IRST is they exist out in the world. If you see one today, you're probably talking about a several hundred pound package on a large aircraft. The picture we show there, think the size of a Quaker Oats oatmeal box and a few pounds. So very different application, much higher technology, but we see that there is an emerging market where we won't be going head to head with some of the people that own the larger systems, but creating a space for ourselves in the new market.

I talked about the ground systems, very good opportunities there. We've made some penetration into the international markets on the ground vehicles and that is our strategy, to give ourselves a presence on vehicles internationally. And as the US starts to upgrade the US platforms, use that to leverage back into the US market.

Undersea, as I mentioned. very strong support for the Virginia-class programs in general. We're locked into that for a number of years. That gives us an opportunity to look for expanding that market, particularly in undersea surveillance. You've heard a couple of people mention it, it's classified information, we don't get into the details, but a significant part of the US budget is looking at improving undersea surveillance and we're very well positioned to penetrate that market.

The electronic warfare side, most of our position there is in manned portable systems, or vehicle-borne systems, we have opportunities and I'll talk about it with our acquisitions, to expand that into airborne and into smaller man-carried -- or man-worn EW systems. So, again, strong base with a good opportunity to evolve into the new markets.

So that's our organic strategy. We're also focused on growth through M&A. We've been very targeted in the acquisitions we've made. Last year at this time we had just acquired ForceX in Nashville, Tennessee. A small company that we'd worked with for a long period of time. And we frequently talked about them as they move us from being an imaging supplier to a data supplier. So in our Group we talk about delivering confidence. All these sensors I talked about, they're all high-tech. At the end of the day, they are doing one thing. They're giving a tactical user information, so that user can make a life and death decision in real-time. ForceX helps us do that. They do the software side of it. It takes tons of data and puts it to a user in real-time, so that they can make those decisions. That acquisition has gone extremely well. The integration, the cultural alignment, the customer relationships which have enabled us to get some new products fielded through these customers that we have previously not been able to penetrate has really helped us.

In September of this year, we also closed on Micro, an EW business in Australia. Several things that really drove us to look at this acquisition, one of which you saw in past few charts was an attractive price for a business that we're looking to extend into. As I mentioned, it helps us to extend our portfolio in electronic warfare. It also gives us a much stronger footprint in Australia with some certain customers. We're seeing already the benefit of having those guys there as a support house for us. Steve mentioned the night vision systems we won down there. We're doing the support for them -- for that program out of our business in Australia. So that's worked extremely well for us.

So, what is the context of all I've talked about? I talked about the execution part, this is the result that we're seeing out of all of those efforts. For 2016, we'll see a 24% growth in sales. We have actually one or two international programs that I am not counting on this year, because they're international programs. But they say they're going to happen this year, which could drive that a bit higher, as well as our book to bill, which is at 1.2x. Again, it could be a little bit higher if these international programs come in.

Since last year, we increased our ROS this year by 220 basis points. We had increased it about 240 basis points from 2014 to 2015, another 220 basis points this year putting it above 17%. We're feeling very healthy about where our ROS is at. And again, that was done while increasing our IRAD investments by 50%. So we're running right now at about 5% of our sales going back into IRAD, while we're achieving that margin expansion.



Sales next year is up 7%. About two-thirds of that is organic growth, about a third is the acquisition out of Microe. We expect to increase ROS another 20 basis points to 40 basis points next year, maybe starting to peak out on the ROS right side of it, so little more focus on growing the topline, as you see in our new business outlook.

2017 backlog, particularly if we get these international programs in, will be at an all-time high. That's extremely impressive for the businesses that I work with. During the surge deployment phase, some of these businesses delivered tremendous amounts of business. That tended to be small number of products to small number of customers. That's all been replaced, so we hit that now all-time high with a much broader portfolio of products, a much broader portfolio of customers, that's taken more work. So it's quite an achievement to get back to that backlog. So that's why we're excited about where we're at this year and very excited about the future.

With that, I'm going to hand it over to Tom Ripp to talk to you about Security and Detection.

Tom Ripp - L-3 Communications Holdings, Inc. - President of Security & Detection

Good morning. I'm Tom Ripp from the Security business for L-3. Just a quick description of the products that we do, probably well known, but we do the X-ray systems that screen baggage and parcels at airports. We're most well-known probably for the hands-up, most people say, oh, you're that guy when you go through the airports, the millimeter wave screening. And then we have a smaller business doing mine detection for the Army and Marines for the United States.

But it's a good news story for us this year. Chris mentioned the acquisitions that have been going on. We're going to grow our business next year with the acquisitions and with organic growth to \$500 million. Those numbers are without Implant Science. If we do close that, we should be in the \$560 million range. So even further growth on top of that 40%. 9% growth organically. The EU is continuing to upgrade all of its checked baggage systems across its airports. They are in the process of doing that. That has to happen by the 2020 timeframe, although the EU will probably extend another year or two. But that continues. And of course the TSA is going through a rather slow recap, but they have started to invest, as Steve mentioned, in airport security equipment once again. The business that we have, people have mentioned their international businesses, we are about 60% commercial. International, about half of our people are resident overseas. We operate out of offices in Beijing, Dubai, London, so most international locations where we need to operate that's where we have locations.

Our strategy has been to migrate, as was mentioned, from the sensors to more of a systems integration and mission support role. Our customers, in most cases, security equipment comes off the bottom line at airports around the world. They're usually commercial entities, not so much of the United States, where the TSA pays for equipment. But our customers no longer are looking at the deployment of federated sensors. They're looking for solutions, they're looking for people to help them with their mission support. The aviation customers are looking to reduce their cost, improve their security efficiency, while improving security. And that's where we are now well positioned to support the customer base with the acquisition of MacDonald Humfrey that brings in some good integrating capability into our portfolio, into our capability. So we will be focusing on overall solutions with our customer base as we move forward.

The market's growing -- overall market, those studies are out there, about 5%, 5.5% CAGR over the next couple of years. This is total security equipment across the -- so it's more than just our sensors. But this reflects about what we see in terms of sensors. But more importantly, passenger traffic is increasing rapidly. Over the past two to three years, passenger traffic has increased 10%. Over the next 10 years, they're forecasting an increase of 50% in passenger traffic. I think we're all aware what happened in the summer in the United States, when [Alliance] started to go out the door. That's happening not only in the United States, that's happening across Europe. And so when you survey top airlines and study their airports, there's a study that says about 73% of airports say that one of their priority investment areas is in passenger processing. And as mentioned before, you get passengers through security faster, they're happier, it's more efficient, they're on air side now, buying retail goods with airlines and airports, that's where they make a lot of their profits. So this is the problem that airports are facing. This is what we're helping them solve.

In terms of our sensors, we continue though to focus on having the appropriate sensors that we can integrate. We have our new ClearScan Checkpoint CT. That's been trialed in an operation right now in Schiphol. It's in Changi Airport in Singapore. It's in Johannesburg. The TSA is going to start to trial this system. This allows people to leave laptops and liquids in bags. So it's part of the solution to get people through faster, it's a state-of-the-art system. It also enables us to address via algorithms new threats. HMEs, homemade explosives, these are the type of things that they are concerned

about. They're no longer concerned as much about razorblades. You can see the aircraft are now defended. No one is going to get into the cockpit, but homemade explosives is a new threat sort of thing. This type of technology will allow us to migrate as those threats increase.

We're also picking up explosive in trace detection. That's via the acquisition of Implant. As security moves away from air side, more out to the curb, things that have happened in Istanbul, this type of technology becomes very important. But it's also important for us to complete our suite at the checkpoint and in checked baggage.

And we've introduced this year a new checked baggage systems, high-speed checked baggage systems that's been deployed in Japan, being deployed throughout Europe. These systems operate at a very high speed airports, up to 1,500 bags per hour. So again, it's increasing the efficiency of the baggage screening process for airports.

But what we really want to get to is this checkpoint solution. No longer do we want -- will we be supplying just the pro-vision system, or just the X-ray system or just the tray system. We can do that, we will do that. But what we would like to do is provide the entire solution. We want to give them a centralized screening, reduce the manpower requirement. We want to give them operating metrics, operating information, which the airport can -- to improve its operations, to improve its security. There are a number of things that are driving the growth in this area. Number one is, obviously, everybody wants to have improved security. We can do that by upgrading our algorithms. They want to reduce cost, they want to increase throughput and they want to decrease footprint. And by providing integrated solutions, we can do that and increase our sales over the next coming five years.

So in summary, we see significant market growth. The market is growing at 5.5%. We see growth in passenger throughput. We're in some very good growth segments. Our acquisitions are going to accelerate our growth. You saw Mac H adding to our base. Implant Sciences should come along. There are others we will look at. We are going to be the leaders and we are leading the migration towards network security. And this is the way of the future. And, of course, this will expand our margins greatly over the next five-year horizon.

With that, turn it over to Mark Von Schwarz, President of Aerospace Systems.

Mark Von Schwarz - L-3 Communications Holdings, Inc. - President of Aerospace Systems

Thanks, Tom. And especially for those scanners, we do an awful lot of travel and I always feel good when I see that meatball, because I know we're getting through quick and we're getting through safe. So I am very grateful for that stuff. I am Mark Von Schwarz, I'm the President of L-3 Aerospace Systems. I've been in the job a little over a year now. I previously ran the ISR sector for about six years.

And in Aerospace, we do about \$4 billion in annual sales. We are organized into three sectors. A little over half of that business is with the ISR customers. Pappy, who is here with me today who we will feature a little bit, is a little bit -- less than a third of our sales, and the rest of the portfolio is in aircraft systems. Our big customer is DoD, that's about 83% of our business. The rest of our portfolio is in international business, and consistent with the customers that we see in the rest of our portfolio.

Now, as you can see, we're down a little bit, in single digits over the last three years and this has largely been due to the ramp down in the Middle East, in sequestration, and a decline in the overseas contingency budgets. And of course that's our sweet spot, is in rapid capabilities and frankly in readiness. Were also down a little bit in our international sales and this has largely been driven by the oil prices, creating delays in some of our international project starts. But we've actually had a couple good starts this year.

So, we are in the aftermarket aircraft business. We don't make the aircraft, but we make the aircraft a lot better. We're capable of adding significant intelligence, surveillance and reconnaissance capabilities to the aircraft, along with the most advanced computer systems and most advanced communication systems. We also run depot-level maintenance along with total fleet support. Our services run the entire gamut from kit and fly away to total company-owned and company-operated services and these are all tailored to our customer needs. Whatever our customer wants, we can do. And while we're not an OEM, our favorite position is to be the prime to help ensure our customers' missions and frankly that mission is to defend the United States and the freedom of our allies.



And I feel very good about some of the things we've been able to accomplish in 2016. As Mike said, we made penetration on the F/A-18 market. We've already rolled five of those aircraft into our Canadian division. We will be rolling those aircraft into our platform integration division about mid-summer this next year in Waco, Texas. We also won the KC-10 program, an important takeaway from Northrop Grumman, and the Navy C-12 competitions. And I am going to steal a little of Pappy's thunder. In Vertex Aerospace, we actually went eight and one in our competitions last year, which was a great turnaround over the previous year, and I'm exceptionally proud of that team that we have there now in Vertex.

We also made penetration into a new international market, taking away market share from one of our largest competitors. In addition, we started a new international program that over the life of the program will lead to about \$1 billion in sales. And I think you've heard Mike talk on many occasions about that international is lumpy and they are slow to start and somewhat unpredictable. But as both Mike and Chris have talked about, we're going to step up our international business development, putting key people in key locations and improving some of those relationships. So I'm very happy with the couple markets that we did win this year, but we're certainly going to be stepping that up over the years going forward.

In another big win for us, we took the EMARSS program away from Boeing and that was with our Rapids technology, as Mike has talked about on several occasions, and we are actually this next year, putting Rapids on another aircraft and we'll be rolling it out. The aircraft took its maiden flight earlier in this week, a beautiful flight. The pilot said it flew as well as it did before we modified the aircraft. But we extended our Rapids technology to yet another aircraft. And what that ultimately means for our customers is they can take their mission system kits and then put it on a portfolio of aircraft with our Rapid Systems technology. So we'll make not only single aircraft much more flexible, but entire fleets much more flexible as we go forward.

I like the opportunities that I see in front of us. The teams worked very hard. Over the next three years, I see in the neighborhood of about \$40 billion in opportunities. But in the short term, we're specially focused on the \$17 billion worth of opportunities that are immediately in front of us. And, of course, the largest one is the Special Operations Forces contract, which is about \$8 billion. And that selection we expect to occur in this next year. I am going to let Pappy talk about some of the other ones that are up there that are in Pappy's space.

This, a look at our operations. We modify and maintain about 3,000 aircraft per year. We have about 17,000 employees, about 15,000 here in the United States, and then a couple of thousand employees scattered around the world, as Andy said, some in difficult places with our customers. But we support all types of aircraft; combat aircraft, ISR aircraft, transport aircraft and training aircraft. Our headquarters is in Texas, along with our MID, PID and ComCept divisions. We have divisions in Oklahoma, in Florida, Georgia and our Military Aviation Services in Quebec, Canada. And last but not least is Vertex Aerospace in Madison, Mississippi.

And over the last 15 months, frankly, two-thirds of our leadership is new to their positions and that includes results-based internal promotions and rotational promotions of exceptional performers, along with key external hires. And our Head of Vertex Aerospace is one of those key external hires. He started his military career as an army soldier and finished it as an Admiral. So go figure that one. But he previously ran Vertex Aerospace for us from 2007 to 2009. I happened to be in charge of Group operations, so I had to go inspect his business from time to time and be a pain to Pappy. But one thing I knew about Pappy is he ran an exceptional business. The customers loved him, the mission availability rates were always there. And so I asked Pappy to come back and run it for us again. So, Pappy Boyington.

Ed Boyington - *L-3 Communications Holdings, Inc. - President of L-3 Vertex Aerospace*

Thank you very much Mark and very kind of you. It's not lost on me that I'm the last person between you and a break either. So I will keep that in mind as we move through this. As Mark said, we're Vertex Aerospace, we're located in Madison, Mississippi, we're about 7,500 people, primarily in the field. We've been there for about 42 years under different names. We are a CLS business, that's a contractor logistic support in the aerospace business. So, primarily we are in maintenance, repair, overhaul, all facets of that and modifications. And as General Cody was talking about this morning that is our sweet spot. That's on fixed-wing, rotary wing, manned and unmanned aircraft. We are recognized as a market leader in the fixed-wing side. We are the market leader in the rotary wing side, and we're very proud of that.

We've been distinguished quite frankly for years within our customer focus. I might say we may have lost a little bit of that, but we have regained that over this last year, thanks to some great people that are trying to support me. I think he joined me out of curiosity, more than anything else. But regardless of why they came on board, I have got a great team right now, I am we're very proud of them.

The other thing is our quality and our responsiveness. As you look at the products that we produce, and really what we produce is readiness, affordable readiness for the customer. We don't work well on the shallow end of the CLS business; that is the cost type programs, where you are in a cost shootout, the LPTA environment. We work much better and the best value and we've recognized that and we've moved in that direction over the year, under the direction of Mark and his support.

Our customers are military services, all services and other government agencies. We've got some growth in the other government agencies as we go forward and select foreign governments. We primarily are in the FMS/FMF type world. We do have a little bit of commercial work and that's certainly an area that we can grow in as well, and we'll talk about that a little bit. We do about \$1.3 billion this year in sales.

General Cody talked about it and he was very succinct about the customer environment for us, our customers, they've been in a wartime footing for a long time. When you do that and you are in -- you've got downward budget pressures, what happens, you tend to defer maintenance, you defer modernization and we've really come to a point now where it's a critical point for the Services. We've seen the [hand strength] frozen for a while. We're seeing a little bit of that loosen up, but I don't think you're going to see it on the civilian side. And all the Services, over this last year, have recognized a severe shortage in pilots. Now a lot of that is due to retention, because now they're getting out, they see that airline shortage as well that Todd talked about, so we've got that piece of it to work with. And then, quite frankly, there were some ascension miscalculations in some of the Services. So, overall, there's about 1,500 pilots short in the military right now and that it's a terrible situation for the military, but it certainly opens some opportunities for us.

And as we see it right now, we've got contract vehicles within our portfolio that allow us to rapidly take advantage of O&M funding. Almost all our programs are O&M funded programs. An example, we had the United States Marine Corps, I think is the one who published it, particularly their aviation arm, their readiness was significantly down. They took an opportunity on one of our Army programs to get to us on the CH-53 Echo reset. In very short order, within a month, we had them on contract and we stood up that organization and successfully we delivered our first aircraft. We have another one in work today. And the Marines are very proud of that. Actually, the comment I'd pointed that out directly is one of the success stories.

On the graduate pilot training, again, we are going to see an increase in flying hours. The budget set this year, we will see a little bit maybe of an increase. But we are not going to see much, again, has been pointed out from this morning. But we will see that ramp up as we go into 2018 and 2019, for sure. We are well positioned there for the undergraduate helicopter pilot training. We actually are positioned very well. I'm very proud to say that that L-3 logo has been seen by every man and woman who has earned their wings as a helicopter pilot in any service since 2003, and we're very proud of that.

On the fixed-wing side, we're well placed on several basis within Air Force, the Navy and the T-45 program, as well as their TH-57 program. So we are very well positioned to take advantage of what we see as an increase in O&M, they have to with their readiness. We can't sustain combat operations if we don't get some of our readiness up to speed.

Our growth strategies, first of all, we've got to maintain our base. We'll do that through strong operational performance. We focus very much this year and into next year on program execution and challenging our program managers. We're going to expand our position and sustain that market. What does that mean exactly? Well, we are a narrow piece of that overall sustainment, that aftermarket, after production piece of the business. And so, things like -- we have component repair shops. We have Part-145 repair stations, that's much higher margin business and we really haven't grown that business in the past. So we're going to focus on that as we go forward.

The commercial and international, there are opportunities there. We will be very cautious with that. We tend to lead with FMS work in a country and then pick up once we're there, some commercial work and we've done that very successfully in the past. It's a good model for us. Probably in a market -- again, because we're there, we've got 7,500 representatives of L-3 out, doing a deck plate just about every day with eyes and ears open. So, staying close to the customer, understanding what their needs are and solving their problems before they know it, is what we have to do and what we will be doing.

The turnkey mission solutions, we have opportunities here in the future on the government side, and foreign government side as well, and really kind of dovetailing with Todd and his team on some of the things that they're doing on the pilot training on a commercial side. But there are turnkey



solutions. We've played International [head] for decades and that's providing the total mission support, to include the platforms and very good margins on those. So we're going to expand that business. We obviously would do it in a measured fashion, but we'll be working at as we go into next year. We will start actually with playing international next year.

And we'll continue to improve our cost structure. We have -- probably our biggest initiative on that, I'll talk just a little bit more about it, but our supply chain management, we do have a lot of inventory. And management of that inventory, it's been very manual in the past, we really didn't integrate SAP the way it should have been. We are now including their warehouse management module, and that's up and aligned. We've got a great gentleman who is running our supply chain for us now. And that's come around very quickly. But there's a lot of savings for us in that side of the house, as well as just keeping our headcount down and maintaining our cost as we grow the business.

These are some of the key opportunities. I'd just point out, again, these are all O&M, and they're all best value. They're not everything that we're pursuing. But they are some of the key things and they show the variety, different types of business that we have. Embedded in there is about -- and these are all estimated contract values, but embedded there is about \$7 billion of new business. There are some recompetes in here. Certainly Mitch and Fort Rucker is our biggest recompetes, and we are in the process of billing the proposal at this point. The RFP is not out. We expect that out in the next couple of weeks. So clearly that's our focus here over the holidays. So Merry Christmas.

The other things I would say about our programs, when you see these, these are [O&M] programs. Our programs tend to be long-term programs. So, could be five to seven year programs, sometimes 10-year programs. So, they have long legs on them as well. And, again, all of these are best value programs. So it shows that we've shifted our focus and we'll be pursuing as we go forward.

Just mention quickly the margin expansion strategies. Obviously, the margins in Vertex have been low, not where we want them to be, not where we expect them to be. There is a lot we have to do. There is a lot of things we can do internally. Obviously, topline growth helps through absorption and driving your rates down. Long-term agreements -- that's what I say in our supply chain piece and getting some of these long-term agreements that we've let languish, back in place, and we've made great headway this year on that. Our maintenance cost in automation and really just program execution, because we've got some legacy programs, they are going to be with us for a while. So we've got to figure out how to execute those more crisply and increase our margins.

The indirect cost, therefore topline growth, we talked about, but really streamlining and our process improvements in our whole organization. These, in turn, consolidate, integrate and automate in the organization and we're certainly moving in that direction.

The 2016 focus and accomplishments for us. I'm really proud of it. We've got a consolidated organization and infrastructure. We moved a lot from Rockwall into Madison, Mississippi. We shut down quite a bit of our Huntsville operation, except for our PMO operations. We will continue to consolidate that, as well as our supply chain management. We have aligned a lot of the process and talent. And I had mentioned the branding and marketing. We re-branded. We were a logistic solutions at one time, it did confuse our customers. The Corporation, during the discussions in January said we got to come up with a different name. It turns out that every time I talk to one of our senior customers out there and he would say, what are you doing there? You're logistics solution. We go, you remember the old Vertex? And go, oh yes, now I know what you are doing. So we realized we had a brand, and we had a legacy of high quality work with the customer and the decision was made again by the Corporation to approve us going back and so the entire segment as Vertex Aerospace.

Leadership team, as I mentioned before, I'm very, very fortunate with the team that's joined me. We didn't have time, we don't have time to have a lot of OJT and try-outs. So I brought in a team, very, very experienced people in this kind of business, proven talent and they haven't let me down. We've had a very good year this year. We continue to get out and meet with the customers, reengage in some cases, particularly, we just kind of lost our way a little bit with the airports, in particular ATC, where we have a lot of business. And we closed the gap on that. We've built a very, very strong business development group. We consolidated that group again and the successes speak for themselves. Probably the KC-10 that's been mentioned before is our biggest. That gets us into the wide-body side. We've also had some classified program that's in that eight wins as well.

In summary, for us, we've got to build on our confidence this year. I mean, it has been a good year, but it's a journey for us. We are going to continue to focus on margin improvement. Some of that's going to be through topline growth. Some of that is going to be through reducing our cost

internally. Program execution on legacy programs, and it's going to be taking advantage of the leverage we have on existing capabilities, expanding that both on the commercial, international side, and turnkey solutions and in our MRO component repair. Thank you.

Heidi Wood - *L-3 Communications Holdings, Inc. - VP & Chief Analytics Officer*

Thanks very much Pappy. Thanks very much to everyone. We are going to take about a 20-minute break and get back together again at 11.40, in which case we'll listen to Ralph and then we'll have Q&A. (inaudible) minutes of Q&A, not only with Mike, Ralph and Chris, but also with the other executives that we have here in the first two rows. So, be my guest. Questions that you have, we'd like to have a good, thorough Q&A session before we have our lunch.

So now, without further ado, I'm going to introduce Ralph D'Ambrosio.

Ralph D'Ambrosio - *L-3 Communications Holdings, Inc. - SVP & CFO*

Thank you, Heidi. Good morning. I'm pleased to be here and to review the Company's financials with you. We've covered a lot of ground this morning. So I'm just going to add some financial details. The charts that I will present have been handed out this morning to each of you and they're also available on the company's website.

So to begin with our financial outlook, trends for 2017. We expect our sales to grow in our US government market and in the commercial markets, which is great news for L-3, because 70% of our sales are derived from US government, predominantly the US Military or Department of Defense. And that market is growing again. It grew in 2016 or FY 2016, the government's fiscal year just ended, and it's going to grow again in 2017 and we expect for the next several years. We think 2016 marked the beginning of an upturn. And that compares to a decline in defense budgets for the last five or six years before this year. So that's excellent news for L-3.

Our international sales are about flat for 2017, and we have some upside opportunities. You heard about some of those today. To the extent that we can capitalize on them, we'll be able to grow the international sales as well in 2017. We expect that we're going to expand our margin, operating income and EPS again in 2017, building upon the increases that we had in 2016.

Our free cash flow is going to increase to \$865 million, and we're going to continue to deploy that cash flow on a balanced and disciplined basis. You heard about some of that from Mike and Chris earlier. And when we say balanced, that means we pay a dividend and we want to continue to modestly increase the dividend and then we also opportunistically look to acquire businesses that strengthen the Company. And if we can't find them, we'll buy back our stock. The last couple years, we also did some debt repayments and that was to improve and shore up our leverage situation. And as Mike said, we believe that the debt repayments are behind us and we don't expect to be required to make any for the next several years.

Here's a look at our consolidated guidance for 2017. It's slightly changed from what we provided at the end of October with our third quarter earnings report. And what this does is it updates the guidance to incorporate the MacDonald Humfrey's acquisition, which closed a couple of weeks ago and that adds about \$135 million of sales, about \$20 million to operating income and it's EPS neutral, because we bought back less of our stock to pay for the acquisition. And then there's about \$15 million of additional free cash flow after taxes that comes from that acquisition.

A couple other key points about our guidance for next year. It continues to assume that we'll have higher pension expense as a result of the decline in interest rates since the beginning of the year. And we had made our initial estimates at the end of October. But as you know, since the election a few weeks ago, interest rates have moved dramatically higher and if we were to set the discount rate today for the pension expense for next year, we would have no pension expense headwind at all, probably a reduction in pension of \$2 million or \$3 million and that will translate into about another \$30 million of operating income and \$0.25 of EPS, which is not presented in this guidance update. We'll update the guidance for the actual pension discount rate at the end of this year. But right now it looks very positive in terms of additional earnings and additional operating income.



Here's a look at our sales growth and this is total sales growth, except for the bottom line, which is organic. And as you can see, the trends are improving over the last couple of years, where we now expect that we'll grow organically in 2017 and we expect that to continue thereafter. Most of the delta between total growth and organic growth, which is the impact of acquisitions and divestitures is in the Electronic Systems segment.

Here's a look at our operating margins. They've been expanding or improving. On the column on the right-hand side, shaded in blue, you see what our margins would be for next year without the higher pension expense. As I just said a couple of minutes ago, if we were to set the discount rate today that's where the margins will be for next year; 13.1% for Electronic Systems, 7.1% for Aerospace Systems, and 10.7% for Communication Systems, netting to a consolidated operating margin of 10.3%. And our goal is to do better with the operating margins across the companies, and you heard that from all of our presenters earlier this morning.

Here's a look at our free cash flow for this year's estimate and the 2017 estimate. The key takeaways when it comes to our free cash flow are that one, our businesses are very cash generative; two, we have a lot of non-cash expenses; three, we don't have any onerous working capital requirements and the businesses are low capital intensity. So that translates into high or robust free cash flow with a very healthy conversion from earnings to cash flow and it's about 130% for 2016 and 2017. And I expect that after 2017, we should continue to convert at least 125% of our earnings to free cash flow.

On this page, we'll take a look at our cash deployment for the last couple of years, including 2016 and what we expect that we'll do in 2017. As I said at the beginning, it's a balanced and disciplined capital allocation or cash deployment strategy with a combination of modestly increasing cash dividends, share buybacks, and opportunistic acquisitions. Our placeholder for 2017 is that we will commit \$600 million to buy back our stock or acquire additional businesses. The Implant Science's acquisition agreement which we announced, if we succeed on closing on that, that's \$120 million that will be used of that \$600 million there. And we have a couple of other acquisitions that we're currently working on and Steve Kantor alluded to a couple of them.

With respect to our balance sheet, or our capitalization and leverage, here we have improvement that's occurred over the last couple of years. The combination of higher operating income, plus some debt reduction has improved our leverage metrics. We expect to end 2016 with a debt ratio of about 2.8 times, declining to 2.6 times by the end of next year and that's with the higher pension expense. Without it, it would be about 2.5 times and that's where we'd like it to stay. The Company has ample liquidity with a combination of our cash balances and a \$1 billion revolver, which is presently unused.

So finally, a few summary points. As Mike said at the beginning, the last couple years, we reshaped and sharpened our portfolio and now we are increasing our investments for growth, both in research & development, as well as in new business acquisitions. The Company has a very broad and diverse position or exposure to the US Military market, in particular, and we believe that that's going to support organic growth over the next several years. We're growing our sales, increasing operating margins, and EPS and continuing to generate very high free cash flow conversion.

We believe we have a very efficient capital structure, and by that I mean that we will use debt in our capital structure, I would say, aggressively and constructively to enhance and increase returns to our shareholders, while maintaining our investment grade credit ratings. And lastly, I talked about how we deploy our cash flow on a balanced and disciplined basis.

Thank you. And we'll now begin the Q&A.

QUESTIONS AND ANSWERS

Heidi Wood - L-3 Communications Holdings, Inc. - VP & Chief Analytics Officer

Thank you very much Ralph. So we are going to do about 30 minutes of Q&A. We'll bring Mike and Chris up to the front. But again, we have executives. Here we have roving microphones. So, I see a number of questions already. We'll kick it off.



Unidentified Audience Member

Ralph, on the M&A, so you did about \$387 million in 2016, you've got \$600 million earmarked for M&A and share repurchase next year. One of the things about the next two years, the M&A side of that, what would your budget be, since you have some of this baked in anyway, you know some of what you're going to do. So next two years, and what target multiple of EBITDA?

Ralph D'Ambrosio - *L-3 Communications Holdings, Inc. - SVP & CFO*

So as we've said all morning, our M&A is opportunistic and that means we look for good values and remain disciplined on price and not try to force issue. And I expect that we're going to continue to make acquisitions the next several years, at least a few million per year and probably more than that. When it comes to valuation multiples, we want to pay less than our own multiple. Today we are trading at about 12 times next year's EBITDA. We don't want to pay 12 times EBITDA on 2017 earnings for acquisitions. We want to pay less than that. We generally believe that whatever company we look at, they are going to be riskier than L-3, because we simply don't know everything about those companies like we do about L-3. There's always an information asymmetry element to an acquisition, which we believe we don't have when it comes to buying our stock. And then, everything we look at, it's going to be smaller and less diversified than L-3. So everything else being equal, it should be a lower valuation. And then lastly, the way we're going to create value for our shareholders is by paying attractive, reasonable prices for acquisitions that enhance the Company's and the shareholders' value proposition going forward. Does that answer your question, Rob?

Unidentified Audience Member

(Inaudible - Microphone Inaccessible)

Ralph D'Ambrosio - *L-3 Communications Holdings, Inc. - SVP & CFO*

That's a reasonable assumption. You don't include acquisitions in our guidance until they are completed. And I would encourage you to not do that as well.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Yes. That's never been the practice, and it's kind of an opportunistic game. We can only really buy what's available. You can't create it. So that's where we have the bulk of the placeholder, in share repurchases, because that you can count on.

Unidentified Audience Member

You put together a bit of a more integrated and I'll call it more disciplined growth business as you see going forward. I think Chris alluded to the \$1 billion or the \$500-plus million business units as sort of a foundational element of how you want to grow. Could you address a little bit how this new organizational focus will give you more clout in the marketplace and some of the specifics? I think we saw it in some of the presentations, but --

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Well I'd start by saying, if you looked at Electronic Systems with Steve and you listed all his sectors, whether it's airport security, LIR, many of them are close to the \$1 billion mark. So, that's nothing new. We've been doing that last 5 or 10 years, building what I would call critical mass in those areas. So most, but not all, are there. For the ones that aren't there yet we'd like to get them there. Why? Because what we've learned from doing that is it's a lot more efficient to spread R&D out among a much bigger base, right. It's a lot more efficient and more affordable when you're doing with a base of a \$1 billion or so, could be \$750 million and up, to get a really good BD organization together that represents the entire Group. It's just having enough sales base support, a top shelf infrastructure that will be able to fuel that business unit's growth. So as in R&D, resources in

business development, overseas sales forces, if you will, even some of the internal back-office stuff that's consolidated when we do that. So that's kind of like, I would say, a bar, and not necessarily a target, but we like to at least get them up to that range.

Unidentified Audience Member

And then just a follow-up. I mean, at one point there were a whole host of what I call mid-tier, or what you call mid-tier defense companies. And today there is maybe three of you left. I mean, do you see a need to be substantially bigger? I mean will you lose your adroitness and depth if you do that?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Well, there is always that risk; that wouldn't be the plan, but I would tell you that as long as we're able to keep winning programs like the tanker program from Northrop or take EMARs away from Boeing, some of the bigger players in there, I don't see our size as a hindrance; it's never been. We've been able to go toe to toe with the primes and walk away with our fair share of programs. So if that day changes, then we'll have to take a relook at the model, but right now I think our model provides us the flexibility of being a little more agile, a little fast to respond to customers, just because we are leaner and small, the Group guys can get to Chris or myself with a phone call. We've been continually working to upgrade the staff within the Company, the staffing, and we've been moving forward. This is the basis here. But probably the question on growing that critical mass is always to make the business better. I think you get the idea that that extra mass makes you a little bit more of a player in the area. So if you look at like -- a little bit more of that avionics, while we're Number 1 and Number 2 in black boxes, we are Number 1 and Number 2 in TCAS, and we're probably Number 1 and Number 2 in standby instrumentation gauges (inaudible), it's a good story. The EOIR, the Wescam systems, they're virtually I would say on every airborne system, including all UAVs and everything up to the new (inaudible) to new platforms. While I stand back and look at are we in the right place with our portfolio, well, just about everything new that comes out that has an ISR capability, you have sensors and you have data links to move the data down to the users and develop intelligence out of it. And usually it's L-3 in both on those seeds, on the comp side and on the sensor side. So we're all very proud of that that we have been -- but it gives us the ability to create businesses that are market leaders and that's where -- the old saying, if it's worth doing, it's worth doing right and we'll work to do it right. We have to put the business units together in a way that we could be Number 1 and 2 in those spaces. And I think that's true for just about everything we do. Maybe an exception here or there, but just about everything we do, we manage to get there. We have been working on airport security lately. Even though I think -- even though we weren't \$1 billion, we're still pretty much a leader in that space. You may not like it, but if you are in the airport, there is only one machine in the world that does that. We have a 100% market share in the US, and well, it's got to be globally if we are the only ones that have it. So, now, I think a little more mass in that area, a little more capability, little more technology, because that market is really, not every airport. You can think of it differently. It's every lane, in every terminal, in every airport, it's much bigger than one would think. That's where this goes. And this is putting information in the hands of the TSA and the users, so they can do intelligent things, like they'll be able to track what lines are faster ones, what lines are slower, which lines are experiencing more false alarm. Todd, I don't know if you want to add anything, but that's really what this MacDonald Humfrey has got to do. It's going to give so much data back to the user community that they should be able to make some great steps in getting the congestion out of those lines. And we can network everything together with our existing portfolio. We have the new machine that Tom showed that was introduced last summer actually and just think about for the women, how many bottles of hand lotion you had taken away over the years. It shouldn't happen again once they have those machines or a bottle of water in your bag. You don't need to take that computer out and turn it on. That should keep the lines moving. I haven't seen it in an airport. I know it's in Schiphol, but I haven't seen it in the States here anywhere, but they have to start embracing the technology and stop complaining about the delays. I mean we've got some of the solutions.

Unidentified Audience Member

Michael, I appreciate the color on what you think might happen under Trump administration with the budgets and I thought you might expand on that a little bit. Was wondering what your thought may be just about how business conditions might change under a Trump administration. You've been talking things about like repatriation of cash. I was wondering, it seems to me we may be moving into a better growth environment. But maybe bit of more of a difficult contracting environment. Just wondering if you've given any thought to how the business environment might change in the new administration.



Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Well, I would just say as a general notion here, a little less regulatory -- maybe regulatory light. And when you think of that, think about deployment of labor stuff, the healthcare was a hoist of binders of regs on companies that just amassed (inaudible). I don't know why you said it would be a difficult contracting environment. I don't think so. I think it probably couldn't get more difficult, probably better.

Unidentified Audience Member

Good morning. It was like a news item out this morning they were putting. Trump was tweeting that he is calling for cancellation of the Air Force One contract with Boeing, because it's a cost overrun issue or things like that. So I'm just wondering how you're just thinking about that sort of thing?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

I haven't failed to notice the fact that he is a business guy and he's surrounded by business guys. And they may take an approach that hey, we are tough cost cutters too, and we think things are expensive that we're out of the days of the \$200 hammer, of course, but there are other headline worthy overruns out there. And I could see it kind of annoying the President in particular.

Unidentified Company Representative

Actually we expected that on the Power Program. That's two new 747- 800s with the entire new systems. So we actually expected that whether -- and I saw the tweet from President-elect Trump this morning. I think that might have happened anyway. But the truth of the matter is, then what they're going to have to do is the service life extension program to the existing capabilities and upgrade those. What I would tell you is we were positioned for either one of those that will be our systems going into those aircraft.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Are you alright with that [Rich]. So, I'd say the general theme, I would call it regulatory light, meaning, not quite as heavy as it's been, and I think that can only be positive. And I think folks in this administration understand rolling back some of the burdens on business might help keeping companies here. They understand what's going on with the migration out of the country for manufacturing and the like. So I think they may take a bit of a different tactic, maybe more business friendly. But the part about overruns and things hasn't gotten lost on us. That's something that they get a little more scrutiny with this gang. They want to hold people accountable, for sure.

Unidentified Audience Member

So on the issue of end strength, and we think about the expansion of the size of the Army, should we think of that being in terms of equipping the Army that being kind of a one-for-one thing, or does the fact that 8 or 10 years ago, the Army was much bigger than it is today, meaning that there is sort of a backlog of equipment that's already there that doesn't need to be purchased to equip an army of 500,000 or 540,000 or whatever (multiple speakers)?

Dick Cody - *L-3 Communications Holdings, Inc. - SVP - Washington Operations*

So in the authorization act that just got passed, 16,000 more additional troops for the Army. The Army was going to go down to about [420,000]. And so, it's not a one-to-one conversion in many aspects, but the issue is like WIN-T. So that's four brigades basically what they're trying to buyback, because they're short brigades. So that means there's four more brigades on the battlefield, they're going to need the WIN-T terminals from brigade to battalion to company. And there's some other ancillary things. Also, since the war, when we started buying a lot of night vision goggles, we have

new night vision goggles and they want to have them upgraded. And so, it is almost a one-to-one there, depending upon how they look at it in terms of the new 14s that Steve's guys make or the new white phosphorus and stuff like that. But I think that's just a small increase what's coming. The Marines, the same way, they want to increase the range up to about 200,000 and that's there also. So we're going to have to wait and see how they do it. But it goes back to the buy back the readiness part of that. Readiness is their ability to sustain the amount of deployments they have right now. And so, right off the bat, I can tell you WIN-T is going to benefit from an increase of four brigades and I think our night vision goggles, as well as our sites and other things, because the sites we've built to [surge] in 2003, 2004, 2005, there's newer sites out there that they already want, the ENVG program. They want to get those replaced. So as you add more end strength, they're going to get more ENVGs.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Yes, just to recap that, we have a high correlation to that military end strength or headcount with our Warrior Systems Group, for example. So as that moves -- and it's not like that all this stuff is really serviceable, since there's been a couple of newer generations released, like white phosphorus. Now, in terms of like, with this vehicles hanging around and stuff like that, that's not really what we do anyway. And a lot of the equipment was left over in Iraq and destroyed, especially the MRAPs and things, it's kind of amazing.

Unidentified Audience Member

And then, just as a quick follow-up, maybe more broadly, you talked about R&D this year, 2.5% of sales, I think it's about \$250 million or so. When you think about that going forward as a percentage of sales, or in dollars, where you see it? And I don't ask as like, oh no, what's going to happen to the margins if R&D goes up? I'm more interested in how you think about the importance of R&D spending and the opportunities that you see out there, if the Department continues with a focus on technology, how you see the opportunities out there unrolling for you and what is going to take to realize them?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Well, first of all, if you look across the Company, it's not necessarily 2.5% in every business segment. As you'd expect, electronics and comms, it's probably closer to the 3%, whereas the Aerospace Systems, with Mark -- like Vertex, does not have a lot of R&D, there would be some proposal for us, which is kind of another color of R&D, if you will. Now, I think he who gets to the customer first with a solution that solves a problem they are having is the one who is going to win, and I think getting there is going to be a function of who is most efficient with using their R&D and putting it in the right place. That begins with listening to their problems and at least being at the table and understanding where the issues are, whether it's operating in a GPS-denied environment, we need backup kits for our ordinance that if it's a GPS-denied environment and you have GPS guided weapons, you have a backup kit that you could sell that goes on them.

Do you want to take a shot at any of that, Dave? I see you sitting there, you look like you're chopping [it a bit].

Dave Micha - *L-3 Communications Holdings, Inc. - President, Advanced Communications*

No, I think of the agility and how we move faster to the market from a customer background, it gives us an advantage. As Mike says, we're positioned in those areas where we have growth markets and so, we tend to be a little bit more focused than somebody that would (inaudible).

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Like I'd give you other examples, but an example that's kind of real-time has been, there are certain unfriendly countries that have the ability to disrupt space assets. So the trend has been, well let's not put all our eggs on a national basis, in one big basket. Maybe there's a constellation approach, or disaggregate some of them. So if one gets hit, you still have more. Well, we happen to have available most of the sensors in Comms and things and that go in optical systems that go on these payloads, don't necessarily have a bus, though. And I don't know who'll go that way. But it would be nice to have -- we may be able to secure -- through Dave's good efforts with the Air Force and the intelligence community, a prime

spot for us in there, because we've been so far ahead of everybody else in R&D in these systems. So we're like a payload prime is fair to say, and it's a space we've never been before with the customers. We are working that aspect of it and identifying where their white space is and where they need solutions, and feeding it back to our organization. We have a corporate lead for R&D. We've a very tight community there. We have some partnerships we've done with some very smart companies on the West Coast, like I'm not going to name that one, but just last week, and it's not that we've outsourced innovation, but we certainly knew that it was going to be important to be innovative in the new world order, as they have a lot of smart people looking at some of these problems. And by the way, we'll never forget, (inaudible) is our lead director. He also has another side job, he is Chairman of MIT. So there's a lot of relationships and people with capabilities. We didn't even know about that Bob can help us with and we participate in some of their working groups and sponsor some programs and I know the desire is to do more and we need to do more.

Unidentified Audience Member

You're not going to acquire or anything, right?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

No, we're not going to acquire. Maybe they'd like to acquire us. But, it's open to the industry for the taking. MIT is working on a lot of technical problems with the DoD, much more than you'd ever think about. I mean there's much more going on there. I mean I was surprised the first time I went up to this -- the depth and -- first of all, it's access to the best minds in the world coming out of there, that in and of itself is worth the price of admission, if you will, just getting access to some of the people. And their focusing is on some of the more critical problems that we're having and they are free to team with industry if we can form a team and the like. So that -- going hand in hand with a partner like that to solve problems is a good thing for us. Bob is the Chairman of MIT, that helps. So that's how we look at the R&D.

Unidentified Audience Member

I want to get to a comment that Ralph made at Rob's conference, where you said the margins would get back to the 11.4% or above in the next couple of years, and how much that implies improvement in the Vertex business and with eight of nine contracts that you won, it seems like Vertex is a pretty key here in 2017. So, what's kind of the expectations from that perspective?

Ralph D'Ambrosio - *L-3 Communications Holdings, Inc. - SVP & CFO*

So what I explained at that conference was where our margins were at the peak of the last defense budget cycle, which was in 2010-2011 timeframe. And at that time, our consolidated operating margin peaked at 11.4%. So given that we're in an upturn now, we're here to do better and improve margins. I said that we expect to go back to at least 11.4% over the next few years and try to do better. That was the context around the comment and that's going to entail margin improvements across all three of our segments, including in the Vertex Aerospace sector within the Aerospace segment. And Ed Boyington talked about some of things we're doing there to enhance margins and you also heard about what we are doing elsewhere in our segments and sectors to increase the operating margin.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

It's also part of Chris' mission. So let's hear from Chris on the margin expansion story.

Christopher Kubasik - *L-3 Communications Holdings, Inc. - President & COO*

And now let me go back to Vertex. So, I talked a little bit about the culture and our approach. And to be candid, the easy answer would have been to sell it a year ago and that's what everybody else tells right. You got a problem, you sell it, get the \$100 million, take a tax loss and move on and forget about it and then show your 11.4% margin. But we sat down and we talked about it and we looked at some discussions with our customers

and they want companies like L-3, who care about the mission and understand it and there was a study done that showed the correlation to the LPTA and the margins of the smaller companies, sometimes owned by financial buyers, relative to the mission availability rate and they were completely inverse. So Mike and I and others, Dick, of course, had discussions with customers and we sat down as a team for a day in New York, back in January, despite all the rumors of us trying to sell Vertex and said, I think we can fix it. And Mike said, Chris, you and Ed and Mark and the team, let's give it a year and see what happens. So here we are 12 months later, hit out a [\$9 million, \$1.3 billion] growing. Now there seems to be a potential surge, the budget's coming up. People are now calling asking to buy Vertex. They just leave a voice mail, because I don't answer the phone, because I know the numbers from a year ago. And we're quite proud of that. Now, there's more work to do and that's kind of the attitude and the approach we're going to take. We are looking at this over long term and the right answer was to keep it and fix it. And I would argue that we're on our way and because again, strategically, it made sense to have that in our portfolio.

So on the margins, you've heard me forever talk about the importance of margins, but the end of the day we're looking for more cash, which is driven by more [leads] and that comes from two sources; the margin improvement, winning new business and acquisitions and we were making progress on that front. I think we're negotiating better contract. Some of those issues from the past were due to poor contracts, if we're honest. And I think we had a little better oversight and control. So, support Ralph, and 11.4% in a couple of years, is that what you said?

Ralph D'Ambrosio - *L-3 Communications Holdings, Inc. - SVP & CFO*

I said a few years.

Christopher Kubasik - *L-3 Communications Holdings, Inc. - President & COO*

Few year. Few or couple?

Unidentified Audience Member

How do you trade-off, like, say the KC-10 contract you won, probably had a pretty low margin to win it. You need more volume to absorb the added overhead. So kind of how do you trade that off as to ultimately getting to what you would think would be 7%, 8%, 9% margins in that business?

Christopher Kubasik - *L-3 Communications Holdings, Inc. - President & COO*

That's a fair question. I mean, we look at two additional calculations. We look at the absorption ratio and what it does to the rest of our business. So in theory, every time you win a program, maybe minor, but every other program in theory becomes a little more profitable and we still look at ROIC and the capital investment on some of these service type contracts is zero and your ROIC is effectively infinite, other than maybe a two-week billing lag. So, you look at all aspects of the financials and it's just not a single focus on margins. But, we're proud of what we've done and we're going to continue to grow it, but I would not walk away from a single margin program with infinite ROIC that helps to absorb costs. Said that for decades and I continue to say it, and Mike, Ralph and I are all on the same page.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Very much so. In addition, having access to all these aircrafts, whether it's the rotary wing or the fixed-wing, kind of gives us an unique opportunity to understand where the problems are, what systems needing upgrading. And we do have many Avionics business and a sensor business and a comms business. Last year, we introduced the product called MUMTX. It is based on having accesses, which enables the rotary wings to team with unmanned systems and machine-to-machine interface. The take-up on that was incredible, because customers really loved that. Just levered every asset they had by being able to give it a factor of two in terms of being able to see things and forward deploy the unmanned system and keep the pilots back a little bit. So this is also a business reason to have this in the portfolio, beyond just the margin story that it does help the rest of the Company. And I think the first step in getting it better is the volume and we're well on our way this year. I mean, Ed and his team has done a fabulous job to costs. And then the less, but not least, is we need to educate the customer and I've been doing that -- much on the margin story. The question



is still like, why is the industry buying back so much stock, why aren't they investing in our future with more R&D, like the companies on the West Coast, yes, like the ones that make 40% margins? There's a reason for it. So, I think we got a little bit of attention in that regard, but I sat through a presentation that I would love to share with you. I just scratched my head with that guy, trouble understanding it. But there was a presentation that suggested that if the industry margins as a whole went up, you have a better buying power. And how could that possibly be? (inaudible) little more carefully, just because everybody divest in Services. That's really why the margins went up and nothing to do it with better buying power, was a fall out for better buying power. So, I think we need to get that understanding and hopefully we need some of it to come from the customer side in terms of help on the margins. I mean they can expect credible companies who want to go out and fix helicopters on a runway overseas at 3%, it's just not going to happen. We're not shy about not bidding if we find it just too ridiculous in terms of the direction of the margins. And there's been a few contractors that have very low bid to get on and they've defaulted. So they're starting to risk weight some of these bids in terms of, you are not kidding if you do it at 2%, and for how long, because it doesn't really work as what you'd might think. So, I'm optimistic that this business will get better slowly. It's not going to turn to a 10% business next year. But I think we can pick it back up over a couple of years to something more respectable. That's our goal.

Unidentified Audience Member

So if you look at your business, you have obviously lots of different product areas on to which to buy products and to integrate the NIM. And you mentioned you have no plan of going back to 12 to 14 deals a year. But as you think about your business, on average, over the next five years, how big could M&A be per year, I mean both in terms of what you can finance and what kind of properties you think are out there?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Putting a number to that [Cai], I don't know how we will do that.

Unidentified Audience Member

Well, a range. I mean you understand your business, obviously, I don't expect Lockheed and Northrop to be able to do much in deals, because they have impediments. The Services guys could do lots of deals, because it's easy to -- you understand that business and you're kind of in between. I'm just wanting kind of a range. You said probably more than \$200 million to \$300 million. Is it \$600 million? Is it like \$300 million to \$700 million, because obviously you're opportunistic. Some years, you may not find anything, but some years you may find more.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Right. I think it's dangerous to set a goal and then try to make it, because you don't want to drop the quality of what you're buying, just to make (multiple speakers).

Unidentified Audience Member

I'm just asking, assuming right now, we have relatively low interest rates. If they skyrocket up that's something different. But given where interest rates, you can buy something like Mac D and the numbers work pretty well and you get a growth accelerator.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Will the company be willing to use more leverage? I guess under the current environment, probably, but thinking that investment grade rating is something that we need to do, my opinion. Our opinion that we will discuss this internally and it's kind of well understood that to execute our capital deployment strategy that we've just talked about with dividends and share repurchases, we need an investment grade covenant package, covenant light. That doesn't come in high-yield package. You end up with restricted payment baskets and limits on everything. So that means



we're funding predominantly out of our own free cash flow. [To wing] a number, \$0.5 billion -- \$0.5 billion to [\$750 million] might be a range in an active market with a lot of properties going through. Chris has been -- how did you leave on the table, Chris? You looked at a ton of things this year.

Christopher Kubasik - *L-3 Communications Holdings, Inc. - President & COO*

I just look at a lot. I think one point I publicly said, we had 12 in the hopper, meaning serious due diligence exclusivity and to close that loop about six or seven of those we could not reach agreement with the seller. And interestingly, in all cases, because they have better offers, we've been following them for months and they've yet to announce the deal. So I think these guys will come back in a year or so when they realize their expectations were too high. But I mean over the next several years if you look, the free cash flow is going to be in the \$900 million, potentially. Take a couple hundred off for dividends, \$500 million to \$750 million to \$800 million is a no-brainer, without even borrowing any money. So, that's the range.

Internally, we had a goal, as Mike said, of disciplined growth. And in July, I recall, we're getting ready for a Board meeting and we were sitting around, then, doesn't look like we're going to get anything done this year. I mean it was frustrating, because we couldn't get anything done, and one month later we've got 12 in the hopper and we've announced five, and closed four. So, we were prepared to end the year with \$127 million acquisition in January and just move on, but I'm excited that we got the five done, may get a sixth, as Steve said here, in the next couple of weeks. But for 2017, I'd love to do a few. But if we did none, I wouldn't be disappointed. Would wake up in the morning and try again in 2018. I'm not going to do a bad deal. But a lot of people are calling us, right, because we can make a decision quickly and we can execute on it, we don't have hundreds of attorneys and thousands of people doing due diligence. We do a thorough job, we make a decision, we make an offer and we move forward. So lot of people we bought are still with us and we use them as witnesses. I mean number one in that, the gentleman who runs Mac H, he wanted to talk to a few people that we have acquired years ago, and they said, it's a great experience, they love working at L-3. And other guys would have forced him out. We've consolidated them. And I think that's a differentiation. So I think we're going to get a lot of first shots.

Unidentified Audience Member

Mike, you guys have had some nice third offset wins as a prime that you showed us, other classified work that you've won and you talked about how well aligned your portfolio is with DoD's priorities. So I am wondering how much do you guys have extrapolated internally, or how much we should extrapolate externally your topline outlook over this cycle. Are you a big company now, where you think you'll grow in line with the budget growth, whatever the CAGR turns out to be when we find that out, or with some of these new wins and how well aligned you are, can you outgrow the CAGR by a point, or two, or three, or whatever?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

That's our internal goal, which I had to share with everyone is to outgrow the defense budget growth by additional market share, or to go in those areas, whether it's classified or space payloads whatever that are growing in and of themselves faster than everything else in the budget, areas of greatest need, where they are going to put the most funding. So we've been very -- we have Dick with a bunch of folks in Washington that really do that all day long. They will watch the budget and analyze it and bring it back to us with how the business is aligning. But, I think that we have a good shot, given our mix that outperforming the growth in the yearly budget that certainly got to be our bellwethers, we should be at least in line, if not a little bit better.

Unidentified Audience Member

Do you see 2017 as kind of a launch pad to acceleration?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

Yes. But no one really has a good idea of what is going to get done. It's not like there are no headwinds. We still have budget talks in Congress, that they are so keen about an 18% growth in defense, and a \$1 trillion highway bill and a big tax cut. Who knows what that does for the deficit numbers. And you might see more of a fight than you did back when it was not all one party. So what was interesting also is, I guess, just an observation at the Pentagon, I was speaking with somebody last week that heads one of the Services. He said, well, we have an unprecedented time over the next two years that really do needs to be done and rebuild the force structure and equip it correctly. And he said, no Mike, it's four years, that's about mid-term. Apparently, I didn't realize the spend. But he is watching it. There's not enough seed up for grabs in the mid-term to change the mix. So lose control of that. So they are taking a long-term view at the Pentagon that they have four years to get their mission done. Is that fair? He was with me on the phone. And our view is we want to be in contact as quickly as we can as people get named and kind of have that dialog as to what the long-term plan is going to be. But there is no debate about what has to get done in terms of the [equipment in Iraq] and how we've fallen behind, and it's kind of well-known and it's upsetting a lot of people. The discussion I would watch for, just having a dialog with everyone is this national debate that has to happen about what the US Military role is. Is it underwriting global security, is it the world policemen or it was just take care of the homeland, because that drives very different numbers and things like that. I don't know when that debate happens or who's going to have with. The notion here is that for a change, maybe we should adopt a national strategy and then construct a budget that achieves that strategy, rather than just throwing numbers around. [Joe], you would agree with that. Right. I agree with you. They are just throwing numbers around. But it would be nice to be funding to an objective. Used to be (inaudible) would have those -- we need to win two major regional conflicts or win two out of three, which I never liked. [It's not to say] I am losing anything, but there used to be a way to structure the force. There was a plan. And I think there is a growing sentiment that there should be some kind of plan and the big debate is what is the US role going to be. Will it be global peacekeeper, or underwriter of security or something less, or you've heard the President elect say many times, we should be compensated for providing security to other nations. I don't know if that works. But there is a bunch of things in play here, moving parts. So, it's hard to come down on what those numbers are going to be. But we know they're up. Is that a 5% 10% or 15%, just don't know yet.

Unidentified Audience Member

Actually a question for Mark. And it's a question on the Aerospace Systems growth overall, in particular aircraft systems, when does that drop out, where does it drop out? And then the SOF CLSS contract, assuming a win, what kind of annual run rate does that provide to you, over what period of time?

Mark Von Schwarz - *L-3 Communications Holdings, Inc. - President of Aerospace Systems*

So I'll address SOF CLSS first. The proposals are in. And Lockheed is the incumbent and I think we put a very, very good proposal in there. We expect an award in 2017, but we really don't expect any revenue or profit from it in 2017, because I can guarantee, if we win there'll be a protest. There is probably going to be a protest from one of the competitors anyway. So it's going to push the revenue and profit into 2018. But we expect about \$600 million to \$800 million a year in revenue from that program with a five-year base, and five-year options, so most probably about 10 years of revenue out of that program.

Now with regard to Waco, and of course that F/A-18 win that Mike talked about, and we talked about a little bit. Mike and I talked a few years back that in our business, it was just going to be a tough time on the playground. We're going to have to take market share away from our competitors, take your lunch money away and that's what you saw in the KC-10, the F/A-18 and the EMARs program, because we knew it was going to be a heck of a battle to hold that topline. And in Waco, we're transitioning that facility away from the high-end, more into the MRO so that F/A-18 was a critical strategic win. We're putting in the proposal for the P-8 program and frankly, I do expect to win that. You never know until the competition is over. We've won some awards on an E-6 program down there. And so, when I look at -- and frankly some C-30 work that we'll be having come in there. So when I look out on Waco, frankly, the better day is going to be about towards the end of the year, as we clear out some of the existing backlog and then start to process some of this new backlog. Just as you know, we won the Japanese Coast Guard program down there out of Waco and just took another order for another aircraft. We anticipate the award, a total of eight to ten aircraft and I expect to do well on those production aircraft going forward. And frankly, we have a host of other opportunities down there at Waco. So that's kind of how I see that going forward.



Unidentified Audience Member

And what's the margin progression two years from now in terms of expansion at Waco?

Mark Von Schwarz - *L-3 Communications Holdings, Inc. - President of Aerospace Systems*

Well, I expect actually in Waco it to go up significantly in --

Unidentified Audience Member

Quantify it?

Mark Von Schwarz - *L-3 Communications Holdings, Inc. - President of Aerospace Systems*

Well, I really do believe that Waco will be in the 10% to 12% range overall. But what I can't tell you is the mix that I'll have about 24 months out, because the MRO business is going to tend to be in the 8% range, but the international business is going to tend to be in the 20% -- 18%, 20% range. So it's really going to depend on the overall mix; but I would tell you we certainly expect it to be north of 8%, we certainly expect it to be north of 10%.

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

I would add also that I am particularly happy with what went on at Waco was, after years or decades of being the heavy maintenance house for P-3s, re-winging, re-engineering et cetera that aircraft is being retired that they were able to go out and win F/A-18 indeed, a much bigger company that's the OEM. So the question about size, as long as our guys keep winning contracts of that nature from OEMs, and the bigger primes and the like, I don't see the size being an issue at all. I mean customers have a lot of confidence in our ability to handle these types of programs better than the OEMs, and at a much more attractive price. So that is always been the strategy at Waco and it's going to continue.

Unidentified Audience Member

Last year was an internal operational focus and this year it's turning toward growth and the Company seems to be operating better, the margins are up. But from an outside perspective, it seems more focused on getting rid of a few problems that you had. And my question is, is the Company anymore integrated today than it was 12 or 18 months ago in terms of how it develops the opportunities, bids for them, even executes them, or was it just the elimination of some isolated problems that you had that has the margins up? And separately, is it worthwhile goal to have some of the divisions more integrated?

Michael Strianese - *L-3 Communications Holdings, Inc. - Chairman & CEO*

What was your last remark?

Unidentified Audience Member

Is it a goal of management to have more integration or do you have the appropriate level already in your mind?



Michael Strianese - L-3 Communications Holdings, Inc. - Chairman & CEO

The integration meaning consolidation as well, that's one of the things Chris's world tour that he was -- I asked him to look for those opportunities. So Chris, you want to take a little bit of that?

Christopher Kubasik - L-3 Communications Holdings, Inc. - President & COO

Yes, just a couple of quick. I think the integration starts with leadership. But my experience in the past year, the gentleman and others that you haven't met yet are clearly all on the same page. We commonly invite each other to their offsites where we had an unmanned vehicle strategy, everybody comes in, we try to do a specialty company, not necessarily figure out who bids is the lead, who gets credit and all that nonsense that sometimes happens at big corporations. So it starts with the leadership. I think we got a great team. We're all rolling in the same direction. But secondarily, we're looking at ways to gather the data, so that we all know what's going on, so that we'll coordinate it. But, physical relocations, we'd announced the largest one ever back in June to space unit. We'll see how that goes. But on a quick view, I think most of the opportunity is going to be in the backroom operations, kind of a shared service concept and continue to have either the tools to allow us to collaborate and communicate quickly. So, I like our position and we'll give you an update in a year, but I'm optimistic.

Michael Strianese - L-3 Communications Holdings, Inc. - Chairman & CEO

I'd add, we certainly have gone after the low hanging fruit, the electron tube business, et cetera. And, one of the things that I've asked our folks to do, and they're bringing M&A candidates into New York for approval is, if it's a business that's smaller, \$50 million or in that neighborhood, I'd like to see the rationale as to how it's going to get consolidated or integrated to an existing facility. Not a lot of interest at this point in our lives of adding \$50 million storefronts all over the country. I mean, from an efficiency standpoint, it's not the way to really grow. And John Mega did it this year with his -- what was it -- ATM or (inaudible) we have duly closed and consolidated right in this [large] facility, right, we put the facilities together, which generated synergy right out of the gate, right, just knocked out a whole facility. Plus we'll collect whatever we get if we sell their assets and the like. So we're focused on it and not getting any more decentralized and fragmented. So if you want to build that into the model.

All right. Well with that, please join us for lunch and management will be available, if you want to continuing any dialog. And then thanks very much for coming. Thank you.

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