

**Operator:** Greetings and welcome to Astronics Corporation Fourth Quarter 2018 and Full Year 2018 Financial Results. At this time, all participants are in a listen-only mode. A question-and-answer session will follow the formal presentation. [Operator Instructions] As a reminder, this conference is being recorded.

I would now like to turn the conference over to your host, Deborah Pawlowski, Investor Relations for Astronics Corporation.

**Deborah K. Pawlowski:** Thanks, Dana, and good morning everyone. We certainly appreciate your joining us here today. I've got Pete Gundermann, our President and CEO; and Dave Burney, our Chief Financial Officer, with me here on the call.

You should have the news release sent across the wires earlier this morning. And, if not, it is available on our website at [astronics.com](http://astronics.com).

As you are aware, we may make some forward-looking statements during this teleconference, including during the Q&A portion. These statements apply to future events that are subject to risks and uncertainties as well as other factors that could cause actual results to differ materially from where we are today. These factors are outlined in the earnings release as well as in documents filed by the company with the Securities and Exchange Commission. You can find these documents both at our website and at [sec.gov](http://sec.gov).

So, with that, let me turn over the call to Pete to begin. Peter?

**Pete Gundermann:** Thanks, Debbie, and good morning, everybody. Before we get going, I should assure you that I am in fact Pete although my voice doesn't sound normal. I've been assured that whatever I have you can't catch over the phone. I apologize in advance. I may get hit with a coughing attack here sometime over the course of the call and I've got a mute button ready to go. I'm not afraid to use it. So if I go silent for a minute, that's what that's all about.

We'll talk about our fourth quarter results, which we feel good about and do a post-mortem on 2018, which we feel was a pretty strong year for the company, and then we'll turn our attention to 2019. As usual, there are some items to talk about there, primarily relating to the sale of the semi-test business that we closed on the 13th of this month. There also some of the issues that are likely to affect our 2019, including primarily the three businesses that we've dedicated some space to over the last couple calls. We'll continue to do that today.

So, with that as a backdrop, our fourth quarter ended up strong. Consolidated revenue of \$203 million was our third highest ever after the previous two quarters, the second and third quarters of 2018. Our fourth quarter results were up 18% over the comparator period of a year ago, that's about \$32 million of growth. Acquisitions contributed \$12 million of the \$32 million of growth and organic was the rest, \$20 million or about 12% organic growth year-over-year.

Our Aerospace segment had a particularly strong quarter. We set another revenue record of \$175 million in the fourth quarter. That's our fourth record quarter in a row and up 25% over the comparator period at the end of 2017.

Our Test business was relatively light with revenue of \$27.7 million. That was pretty much what we expected and predicted on our last quarterly conference call. That result of \$27.7 million was below both the comparator period of a year ago and well below the second and third periods of 2018. The second and third quarters of 2018 were relatively strong for our Test business.

Net income in the quarter was strong at \$12.5 million, or 6.2% of sales. That's up dramatically from the comparator period, when we had a large impairment charge at our Armstrong business at the end of 2017 of \$16.2 million. That colors the year-over-year comparisons substantially, so keep that in mind as you look at the older numbers.

Aerospace, again, was a solid contributor with operating margins of 12.7%. That's not where we wanted to be, but it's the highest we've had in quite a while and it shows signs of improvement. Our three struggling businesses that we've talked about: CCC, AeroSat, and Armstrong, that we've talked about collectively as a group now for about nine months, turned in a combined operating loss in the fourth quarter of \$6.4 million.

We're not particularly happy with that. That's below where we thought we would be, but it is improved substantially from the third quarter when the three turned in an operating loss of \$11.2 million. So, \$11.2 million to \$6.4 million, we think is pretty good improvement. We expect continued improvement from here. We'll talk about that more specifically at the end of the call.

Diluted earnings per share in the fourth quarter were \$0.37 versus a loss of \$0.18 in the comparator period a year ago, again, because of that impairment charge at Armstrong in the prior year period.

We had not only good shipments and margins, but bookings were pretty strong, too. We ended up with consolidated bookings in the fourth quarter at \$220 million; that's a book-to-bill of 1.09.

Aerospace bookings were right there with shipments, even on an all-time record shipping quarter; a book-to-bill of 1. Test had a pretty strong booking quarter of \$45 million; a book-to-bill of 1.62. The star in that arsenal has to do with a number of things, but the progress we made with the New York City program for \$30 million helped achieve part of that.

Backlog at the end of the year was \$415 million, a record high. Included in that total is \$12 million of backlog that was essentially sold with the semi-test business in February to our friends at Advantest.

For 2018, we ended up with revenue of \$803 million. That was up pretty substantially, 28% from \$624 million in 2017. That's total growth of \$179 million and roughly split equally between acquisitions and organic growth. Acquisitions contributed \$85 million of the \$179 million of growth. Organically, we generated \$94 million of growth.

Net income for the year ended up at \$46.9 million, or 5.8% of sales, up 138% from \$19.7 million in 2017, or \$1.41 per diluted share versus \$0.58 per diluted share in 2017. Net income for the year was positively impacted by the lower federal tax rate and a change in our state tax position that we talked about on the last call, and negatively affected by the combined operating losses of \$34.7 million of the struggling three businesses.

Again, we're not happy with \$34.7 million loss. It compares about the same as 2017 when those three businesses combined for \$47.1 million, inclusive of the impairment charge at Armstrong. So, \$47.1 million in 2017, \$34.7 million in 2018, we're looking for substantial improvement in 2019 and we'll get to that in a minute.

Total bookings for 2018 came in at \$837 million, that's besting shipments by about 4%. Aerospace bookings were up about 5%. Test bookings were down about 2%.

Looking more specifically on our segments, our Aerospace quarter, as I said, was a really strong quarter; record revenue of \$175.2 million, up 25% compared to \$140 million in the comparator period. That's our fourth new record in a row for our Aerospace segment. Operating profit came in at \$22.2 million or 12.7% of sales, not exactly where we are striving to be, but it is the highest we've achieved in three years.

If one were inclined to run the exercise and back out the losses from three stragglers of \$6.4 million or assume that we could get those businesses to breakeven, operating profit in the quarter would have been 16.4%. So, we continue to believe that our best margin improvement opportunity is to continue to focus on reducing the operating losses of those three businesses and we think we're making progress.

Bookings, as I mentioned moments ago, for the Aerospace segment in the fourth quarter, were \$175.5 million, slightly ahead of shipments for a book-to-bill of 1 and our Aerospace ending backlog of \$326 million is our highest ever, and sets us up well for entry into 2019.

Looking back at the whole year for our Aerospace segment, revenues of \$676 million were up 26% from 2017. They made up 84% of our consolidated total. With the sale of our semi-test business, that 84% will increase to over 90% of our total.

Operating profit for the year was \$70 million or 10.3% of sales compared with \$39 million in 2017. Again, for the year, the three troubled businesses that we're working with, had an operating loss of \$34.7 million. If you were to do the exercise to assume they were at breakeven, our Aerospace segment operating profit would have come in at about 15.4%.

Bookings for the year were \$712 million, so even with the record shipments, bookings exceeded shipments by 5% over the course of the year.

Looking at some of the tables that we put in our press release, and specifically at the sales by product line table on the bottom of page 10 of our press release, our Aerospace business these days continues to be well balanced in my opinion. Our Electrical Power & Motion product line makes up about 38% of our consolidated sales. Our Lighting & Safety product line makes up about 22% and Avionics adds in about 16%, and they're all doing pretty well.

Electrical Power & Motion was up almost 15% for the year and 29% for the quarter. That's driven by a combination of things. Primarily in that grouping is our in-seat power product, which continues to do very well. Increasingly, the other big contributor there is a seat motion capability that we have. We have picked up quite a bit of market share over the last year-and-a-half and it's becoming a pretty good contributor to our overall consolidated result, certainly helping to explain that growth.

Our Avionics product line is up 144% for the year. That is largely because the revenue that comes from our Telefonix acquisition of December of 2017 ends up being categorized mostly in our Avionics product line. Lighting & Safety is up 10% for the year. So, obviously a good indicator when your three biggest product groupings are up strongly. That's nice to be able to report that at the end of the year.

Switching over to our Test business, in the quarter, revenue was light, as expected, at \$27.7 million, that's down about 13% from last year and well behind the pace from the second quarter and third quarter. The volume was pretty much dictated by schedules, which are dictated by customers, so we knew it was coming, we were not surprised. Our operating profit for the segment in the fourth quarter on that lower volume was pretty meager, \$600,000, or 2% of sales.

However, Test had a pretty strong 2018. Revenue for the year was \$127.7 million, that's up 42% from \$90 million in 2017. Operating profit on that volume was \$10.7 million, or 8.4% of sales. If you look at the charts again on page 10 of our press release, you can see pretty easily that the year was driven by relatively strong semiconductor demand. Semiconductor demand more than doubled going from \$32 million in revenue in 2017 up to \$84 million in 2018. We'll come back to semiconductor in just a minute.

Bookings for the quarter were \$45 million; it's a book-to-bill of 1.62, as I mentioned, very strong. Bookings for the year were \$125 million versus shipments at a \$127 million, that's a book-to-bill of 0.98. It ends our quarter with a Test backlog of \$90 million.

So, a few words on the sale of the semiconductor product line. No doubt, people remember that in November, we announced a planned transaction to sell the product line to a company called Advantest for \$185 million cash at closing, an earn out opportunity of \$30 million and a contract manufacturing arrangement, which was to last for approximately four years. Last week, on February 14, we issued a press release saying we had closed, but under substantially different terms. It was \$100 million cash at closing with an earn-out opportunity of \$35 million and no contract manufacturing arrangement. The simple explanation for what happened there is, at the end of the year, we were badly surprised by some changes in expectations on the part of some programs that we had been working towards. The change in forecast was substantial enough to cause the change in the valuation of the business.

If I bring you back to page 10 of the release again, those product line tables, you can see in 2017 we had semiconductor revenue of about \$32 million; in 2018, it was \$84 million. We had been expecting a 2019 that was roughly at that same elevated level. We expected, based on visibility, that 2020 would be a step change above that. Instead, we learned in late-December that, if the business stayed in our hands, 2019 was likely to revert back to 2017 more than anything else.

So, that was disappointing for us and it was a surprise to us also. When you look at it in context of what's going on in the world, with trade tensions, general semiconductor industry trends, and general consumer electronics trends, in retrospect, maybe not such a surprise. So, we weren't happy going down from \$185 million cash to \$100 million at closing, but at the end of the day, we decided that was a better thing to do.

First of all, the business is better off with Advantest than us. They have a global reach, they're not a U.S. company, which has some benefit in today's world. They have a much more comprehensive product line, and presence in a wider array of customers around the world.

What it allows us to do is to focus more specifically on our primary Aerospace business. That's focusing both in our internal operations, and also in our external communications and dealing with the investor community. Missing the contract manufacturing piece means that we will have a little bit more of an abrupt change, but we believe that we're ready for that and we think we can make it work. Also, when we get to the forecast section, looking at the backlog that we have in place for Aerospace and Defense Test business, we think we're in pretty good shape to have this event happen today.

I think I'm going to go on mute for a second, Dave, and let you talk about balance sheet because we've generated some cash not only with the sale, but also with our results in the fourth quarter.

**Dave Burney:** Thanks. Pete just finished talking about the sale of the semi business that was certainly a big event for us in February. But going back to the fourth quarter, we had very strong cash flow, generating about \$40 million of cash from operations in the quarter that brought our 2018 cash from operations up to about \$55 million, which is a very strong year for us; one we've been waiting for to get back to where we think we should be in terms of cash flow generation.

Outstanding debt at the end of the year was about \$234 million, down from \$272 million at the end of 2017. Our current borrowing rate on our senior credit facility is LIBOR plus 125 basis points. I expect that could go down somewhat when we conclude the first quarter, as I expect our debt load to be a little bit lower by then as we use the proceeds from the sale of the semiconductor business, which were about \$100 million pre-tax, to further reduce our revolver down to about \$134 million.

We also have a \$500 million senior credit facility, with about \$250 million available on that based on our trailing four quarter adjusted EBITDA. We expect to have another strong year of cash flow from operations. So, there's plenty of flexibility in our capital structure to fund continued growth.

Our capital deployment, as it has over the last several years, will continue to focus on growth and acquisitions. We do have an authorization to buy back shares if they present the right opportunity when measured against alternatives, but our focus continues to be on growing the business.

We had two 10% customers for the year; both in the Aerospace segment, each was about 14% of our full year sales.

That was all I had. Pete?

**Pete Gundermann:** Thank you. So, switching to look at 2019, in December we issued initial Aerospace guidance of \$710 million to \$745 million, at the midpoint that would represent 8% growth and we are sticking with that forecast for today.

We are initiating Test guidance of \$50 million to \$60 million in 2019. If you were to back out semiconductor proceeds that we sold from the 2018 base, that guidance at the midpoint would represent about 14% growth for 2019.

So our consolidated revenue guidance for 2019 is a range of \$760 million and \$805 million. Again, consolidated at the midpoint of that range would be about 8% growth.

We don't issue bottom line guidance, but I do want to talk about a couple of things that you might be curious about and be thinking about as we move into 2019. The first is the potential for increased tariff costs. We've talked about incremental tariff expense in 2019, based on a whole set of possible assumptions, of about \$10 million compared with \$2.6 million in 2018. So, that's our best guess at this point. A lot of things could happen, the tariffs could go away, suppliers could re-source production, there could be other hidden tariffs that we're not aware of, but \$10 million is the number we're thinking.

A little more about our three troubled businesses: AeroSat, CCC and Armstrong. We're not happy with the progress to date, but there is progress. In the third quarter of last year, we had combined operating losses of about \$11.2 million, and \$28.3 million through three quarters. So, through three quarters, we've been averaging a little more than \$9 million operating loss per quarter.

Fourth quarter was \$6.4 million. So, we're starting to see some predictability as to where we think things should settle out. \$6.4 million annualized would be \$25 million, which would be down from our 2018 total of \$35 million, but we think we're going to do quite a bit better than that.

In fact, we think the first quarter will be about \$6.4 million, similar to the fourth quarter. We expect it to drop from there, to a rough range of about \$2.5 million in the fourth quarter. We originally talked about being breakeven in the fourth quarter, we think that's less likely now for a number of reasons, but we think we're going to go from \$6.4 million in the first quarter, we're going to end up about \$2.5 million in the fourth quarter. That would be a pretty dramatic improvement over the \$35 million loss we saw in 2018.

So, how is that going to happen? Well, one thing that's going to happen by our plan is that revenue for those three companies will substantially uptick in 2019. They collectively ended 2018 at about \$45 million in revenue. We believe they're going to be somewhere in the neighborhood of \$80 million, and there's substantial upside potential in the future, but when you're dealing with a year, you're dealing with a firm cutout. So, we think second half of this year we're going to be seeing some ramps that are going to get us into that range. That's critical for a bunch of things, but it's critical for seeing that operating loss start to be manageable by the end of the year.



So, why are we sticking with it? That's part of the reason we're sticking with it. We see that there are substantial opportunities in the market. We think we have some competitive offerings that are advantageous and desired by customers, and there is some inherent demand. Our goal is not to operate these businesses at losses indefinitely. Our goal is to make them profitable, contributing members of the company just like most other businesses. But we have to get them to breakeven before we can do that. So, that continues to be our goal. We think we will continue to make progress, and draw attention to it as needed on calls like this going forward.

So, we're pretty excited. We think the semi-test move was a good move. We think it's good for us. We think it's good for our employees that went with the business, and a fair number of them did, pretty much all the engineers and program managers, and professional people that drove that business are now employees of Advantest.

We think that it's a good time for our A&D business to stand on its own. We think our Aerospace business, which is more than 90%, has never been better situated than it is right now. We're looking forward to another strong year in 2019.

So with that, Dana, I think we'll open it up for questions.

**Operator:** [Operator Instructions] Our first question comes from the line of George Godfrey with C.L. King & Associates. Please proceed with your question.

**George Godfrey:** Thank you. Good morning, Dave, Pete.

**Pete Gundermann:** Good morning.

**George Godfrey:** Pete, on the three businesses, can you talk about what is holding up the ramp on each one? What I mean by that is, do you have to have product ready, do you have to sell the customer that's buying the product, but you need partners to fulfill their obligations, in order for you to then be able to sell your product? Maybe if you could just shed light on what holds or how that revenue ramp goes up on each of the three businesses. Thanks.

**Pete Gundermann:** There are different answers for each of the three. Maybe I'll move from West to East. The big issue with CCC that they've been struggling with, really since we bought the company, is a development program for a pretty high profile customer, and we've had to incur substantially greater investment to make the program work than we thought we would. A smaller company or a less involved company might walk away from it.

We do not feel like that is even the slightest option given this is our industry and it's a pretty core customer and a pretty core market, so we want to make it work. The key there is to get that technology proven out, get it functional and then get it delivered. The major milestone for them over the course of this year is to get that done. From a revenue expectation standpoint, we're looking at well more than doubling revenues at CCC based in part on the successful execution of this program.

At Armstrong, it's a little bit of a different deal. Armstrong is a certification company, but an engineering company first and foremost. We merged it into Telefonix. They've done a really good job of integrating the skills back and forth that they need to be more successful in their business. So, it's been a one-two punch of building up competency and strengthening weaknesses, and going out to the market to find new opportunities to apply those capabilities. They're well under way. I'd say of the three, Armstrong is actually in the best shape right now in terms of low risk and a bigger opportunity. So, if we were to start this discussion today, instead of talking about three troubled businesses, I might talk about two, and Armstrong would not be on the list.

That leaves us with AeroSat on the East Coast. AeroSat is an antenna company. It seems we have been stuck at the starting line for about a year and a half on a few programs, most prominently a tail mount program. It's basically a smaller antenna that sits up in the tail of bigger business jets for primarily transoceanic services for Wi-Fi access.

We came out with a partnership group to bring that program to life about a year and a half ago. I think it was one of those things everybody thought to be about a six month development effort. Six months turned into nine months, turned into 12 months, turned into 15 months, and eventually, the teaming structure fell apart and a new teaming structure came together. That new teaming structure is, by our account, way above where the old one was. We have a handful of airplanes flying and they're doing quite well from our perspective. The plan is that program is going to get kicked off from a sales perspective in earnest early in the second quarter.

So, we think we'll be wrapping up the test sequence of it. We're ready to go. We think, as the year ramps, it will become more and more of a significant program. That was part of my comment earlier, whether we're going to reach double sales, or 90% of sales, or 110% of sales, is a little bit arbitrary based on some of these things getting kicked off in time. That gives you a little bit of a flavor of the three companies.

We think we have a good plan in place for the three. We think that plan, if we come close to the revenue expectations, should bring those operating losses down to a much more manageable level in short order.

**George Godfrey:** Got it. Thank you, Pete, for that. And Dave, just one question for you. What does the margin look like in the Aerospace & Defense Test portion of the business if we take out semiconductor, just to get an idea for 2019 what that business is going to look like? Thank you for taking my questions.

**Dave Burney:** I think Pete mentioned for 2019, our expectation is to be in the ballpark of breakeven on the Test business, absent any structural changes that we'll be looking at throughout the year. That's our forecast right now, to be within spitting distance of breakeven, little above or a little below, but that's where we think it will be.

**George Godfrey:** That includes the New York City deal, correct?

**Dave Burney:** Yes.

**George Godfrey:** Great. Thank you very much.

**Operator:** Our next question comes from the line of Ken Herbert with Canaccord. Please proceed with your question.

**Ken Herbert:** Hi, good morning.

**Pete Gundermann:** Good morning.

**Ken Herbert:** Pete, just to maybe take it one step further, it sounds like the loss you expect this year from the three businesses, CCC, Armstrong and AeroSat, is about half of what it was in 2018, or about \$17 million to \$18 million. As I think about the cadence from the first to the fourth quarter numbers you provided, is that a realistic assumption?

**Pete Gundermann:** I would hope that's conservative.

**Ken Herbert:** Okay. So, it sounds like you see a bit of a step improvement from the first to the second or second to the third quarter as you get into the back half of the year?

**Pete Gundermann:** Correct.

**Ken Herbert:** Okay. As I look at those businesses, specifically on AeroSat – I know you’ve historically talked about this as a retrofit opportunity, but is there a forward-fit opportunity for this antenna? Also, is that a part of the mix or is that meaningful in the 2019 opportunity? Or is that really something that could kick in at a later date?

**Pete Gundermann:** There certainly are forward-fit opportunities. Connectivity is a hot topic for anybody buying an airplane, new or used. We think our quickest bang for the buck, so to speak, is the retrofit opportunity because there is an installed base of airplanes that needs to do something and that’s the biggest initial target for us to go after. But as you might expect, the OEMs in that space are very observant and very interested in what’s going on in the aftermarket. If they find an aftermarket trend or product they really like, there is certainly a pull to the lines of that side of the house. So, we’re pursuing both with our partners and doing what we can to be ready, but we think to begin with, it’s primarily an aftermarket opportunity.

**Ken Herbert:** Okay. That’s helpful. Just a couple of points of clarification; you highlighted the tariff impact. I think you said an incremental \$10 million versus a \$2.6 million incremental in 2018. Is the headwind \$7.5 million this year or is the headwind really \$10 million versus the \$2.6 million last year.

**Pete Gundermann:** What I meant to say was the incremental \$7.4 million versus the \$2.6 million last year, so \$10 million of tariff expense total.

**Ken Herbert:** Okay. Great. That’s helpful. Also, you haven’t talked about the E&D spend for the year. I’m just wondering where that ended in 2018 and how we should think about that in 2019, either on an absolute level or percent of sales or however you’d like to talk about it.

**Dave Burney:** We ended up at about \$114 million for the year. We began talking about E&D spend about 10 or more years ago when it was an important driver in understanding the fluctuations period over period or year-over-year. The last couple of years, it’s leveled out, absent acquired E&D costs when we buy businesses. So, the plan going forward is to talk about it when there is some significant change to the run rate. We had about \$114 million in 2018. I would expect, going forward, we would see some inflationary change, maybe a couple of percentage points, since a lot of it is dependent on salaries. Looking out in 2019, it looks like the run rate we expect in 2019 will be similar to what we saw in 2018.

**Ken Herbert:** Okay. Very helpful. Finally, we don’t really get to talk about the in-seat power segment much with everything else going on in the other businesses, but really nice growth there. It sounds like you’re taking share with a seat motion product. Can you talk high level about some of what you’re seeing at your airline customers around discretionary spend in terms of interiors and modification efforts? Also, how that’s growing as part of the backlog growth in Aerospace?

**Pete Gundermann:** In general, we see continued strong demand for in-seat power. It’s been a very strong platform for us for a long time and it continues to be so. I would say the trend towards standalone power systems, in other words, power systems without seatback IFE (in-flight entertainment), continues to gain in prominence in narrow-body airplanes around the world. In wide-bodies, most do get and will continue to get seatback IFE. Our approach to getting on those airplanes continues to be through the IFE providers who are very large customers of ours.

The narrow-body airplanes increasingly are more of a streaming content type of application in terms of IFE, so no seatback displays. Our approach there is to go directly to the airlines. So, we work with about 250 airlines around the world.

In general, people aren’t buying as many cellphones as they used to, but they all have them, and same with iPads and computers. The increasing prominence of connectivity on airplanes, in the narrow-body



world in particular, means that demand for our product continues to grow and we're doing really well with it.

**Ken Herbert:** Great. Thank you very much.

**Pete Gundermann:** Sure.

**Operator:** Our next question comes from the line of Michael Ciarmoli with SunTrust. Please proceed with your question.

**Mike Ciarmoli:** Hey, good morning, guys. Thanks for taking the questions here.

**Pete Gundermann:** Sure.

**Mike Ciarmoli:** Pete, you're assuming that those three businesses go from \$45 million to \$80 million. Is that growth embedded in the guidance? If I assume \$80 million for those three companies at the mid-point, it implies that the rest of your Aerospace business only grows at something like 3%. So, can you give us what you're thinking or is that type of growth baked into the guidance?

**Pete Gundermann:** It is baked into the guidance, not exactly the way you're doing the math. We put that guidance in there at the higher end of the range and we discounted it for risk as we move to the lower end of the range.

**Mike Ciarmoli:** Okay. Fair enough. Then, if you're going to get that growth, 77% growth, but being less confident or less likely to see breakeven, what are some of those puts and takes? And are we going to see antenna sales in 2019? I think, when you last gave us the update, we were waiting to see how the antenna performed on the network. Is there any broad update you can give about the antenna? Is it in the marketplace yet or what's the status there?

**Pete Gundermann:** It's out. It's in the marketplace in the sense that it's flying around on a bunch of airplanes. You might remember we had a handful of airplanes flying under the old network and those systems, I believe, have all been swapped out at this point. So, those airplanes are essentially acting as test nodes for the new network, and we believe that's all going very well.

As for expectations, we prefer not to get too granular in terms of what company is doing what. But I can tell you, we're not going to come anywhere near to that \$80 million level without substantial antenna sales.

**Mike Ciarmoli:** Okay. Do you anticipate what the timing would be for the first sales? Is there significant testing left that has to be accomplished?

**Pete Gundermann:** No, I think it's more getting the sales cycle warmed up, getting the contract structure established; things that are actually beyond our scope. We've done what we need to do we think, there might be incremental things here and there, but we think we're ready to go.

**Mike Ciarmoli:** Okay. Then, if you could just educate me on this. If I'm a business jet owner, if I'm a corporation and I'm already flying transoceanic in my business jet, I probably already have connectivity. There's a lot of players out there, whether it's Viasat, Honeywell, Collins. What's going to create the retrofit? Why am I going to say we need to go out and retrofit our existing solution? I'm just trying to figure out what drives this sales cycle against all those other established players.

**Pete Gundermann:** Well, they would be competitors to some extent. There's a whole debate. Most of the competitors you listed are Ka versus Ku.

So, there's a whole lengthy debate as to pros and cons. Our belief, is that Ku offers better global coverage, and with high throughput satellites coming online, the competitive differentiators between Ka

and Ku tend to disappear. So, we think there's not an overly intimidating field of competitors out there at this point.

The other thing is the starting assumption that most airplanes flying over the ocean are already connected. That is true, but a lot of it is much older technology, not Ka, not Ku, even lower levels. So, we think that there is pent-up demand for these older airplanes to be brought up to the modern standards and that's where we're targeting.

It could be that Ka right now is line offerable. I think, at the OEMs, there is a Ka presence there. Part of the reason we want to go aftermarket to begin with is we think that's where the bigger volume is, that's where we think we can make more of a splash. We believe that as Ku proves itself with high throughput satellites, the price point becomes apparent, and the user community starts talking, we have a good opportunity to move upward and displace Ka with Ku.

**Mike Ciarmoli:** Got it. Okay. That's helpful. Then on an operating income bridge, if I can. You talked about the three businesses. So, maybe those losses get cut in half. I think you also had earlier this year a range of legal and some other one-time items, maybe around \$10 million. Is that the right way to think about bridging operating income growth from 2018 into 2019? Cutting those losses in half, adding back some of those legal and other one-timers. Also, can you give us what the amortization might be in 2019?

**Dave Burney:** The amortization rate that we saw in the fourth quarter is going to run through most of 2019. I can get that for you in a second, Mike. But as far as the one-time costs that you're thinking of, I know in the first quarter we talked about \$1 million accrual for a legal issue. We had, throughout the first three quarters, some increased loss accruals each quarter relating to that one long-term program at CCC. We did not have that in the fourth quarter. So, we don't expect that to continue into next year. Those were the big things. So, for the amortization expense, it's about \$16.5 million for 2019.

**Operator:** Our next question comes from the line of Jon Tanwanteng with CJS Securities. Please proceed with your question.

**Jon Tanwanteng:** Good morning and nice quarter. So you had 16.4% operating margins ex the problem businesses in Q4. Do you expect that to hold up through the next year?

**Pete Gundermann:** We're pretty comfortable with our margin profile in general. If I back up the clock, the whole reason we started talking about these three businesses is that there was some concern and pressure, basically in the investor community, about what was happening to our business in general.

Our perspective was most of it doing great. We have these two or three things that are dragging us down that we need to fix. We still feel that way. I don't think, we expect anything else to bottom out on us here. I think we're pretty comfortable with where we are. It's a competitive world and we have some difficult customers, but in general, our hope is not only to get the three struggling ones to breakeven, but to have them become part of the contributing crowd. If we do that, and the contributing crowd continues to maintain itself, 16.4%, or whatever, was low, it should be higher.

**Jon Tanwanteng:** Okay. Great. Thank you. Then, just going back to another question and what you disclosed in the press release about the Test business being flat or modestly profitable this year. Was that on an EBIT basis that you were describing? And secondly, what do you want those target margins to be and what revenue or cost-cutting efforts do you have to make to get there?

**Pete Gundermann:** We're hedging a little bit. We think we can get to a breakeven EBIT basis over the course of the year. I should mention this for clarity. In our first quarter press release, you're going to see some semiconductor revenue, in part because, we didn't close until February 13, but also we have some service obligations that we're going to continue to have over the next couple years. So there will be some

residual semiconductor involvement and revenue there. Nothing that's market-related, it's more contractual service based on past sales. So you will see that.

But it's definitely a turning point for our business. Semiconductor has been lumpy and it's been stressful at times. When it's good, it's really good. When it's bad, we've had to adjust. One of the things that I've learned to appreciate is that the crew that we have in the Test business is pretty resourceful and they tend to do pretty well responding to a challenge. This is a challenge. This is a changing of the structure of the business.

On the one hand, a lot of the overhead structure that was dedicated to semiconductor has gone with the sale. So our head count is way down in our Irvine, California operation related to that, but there's a lot of the structure that was shared that did not go. We have that still.

So we have to do an analysis of where this transaction leaves us and what our prospects are going forward in other businesses and other things that we might do to diversify ourselves and bring in more volume. But we're pretty pleased with the plan we have in place. We didn't go out trying to instigate the sale, it came to us. But given that it did and we felt we should pursue it, our remainder business, looking at 14% organic growth in a year like this, it's a good time to have it. So we're pretty pleased with that.

We'll provide updates on the Test business as the year goes on. We don't pretend to have all the answers at this point, but we certainly don't think it's a crisis. We're not going to be talking about our Test business like we've been talking about our three struggling businesses on the Aerospace side.

**Jon Tanwanteng:** Okay. Great. But from a margin perspective, is it going to start off pretty rough and then progressively improve or how do you see that going through the year?

**Pete Gundermann:** Well, it's going to show a pretty substantial gain in the first quarter, I can tell you that. But it's probably going to start off weaker. You back out the proceeds of the sale and then it'll stabilize and normalize towards the end of the year.

**Jon Tanwanteng:** Okay. Great. Thank you.

**Dave Burney:** We expect the revenue relating to that rail program to pick up as the year goes on.

**Operator:** Our next question comes from the line of Dick Ryan with Dougherty & Company. Please proceed with your question.

**Dick Ryan:** Thank you. So, Pete, to follow up on some of your latest commentary there, on the A&D test, you have two facilities supporting \$50 million or \$60 million in revenue, maybe some rationalization going on there. But a broader question, how does the pipeline of opportunity look there? I know you were striving to get into a prime position versus a supplier position. Can you just talk about the pipeline of opportunity for that business?

**Pete Gundermann:** We think it's as strong, or stronger, than it's been in quite a while. We have been waiting for more of a robust market in response to regime change in Washington. Then, it's happened over the last couple years, but it appears to us that there are certainly more opportunities happening and our bookings have been reasonably strong. Our quoting activity has been reasonably strong.

So I'd say we are more and more comfortable. It's going to be a lumpy business. So it has to be a business that when the times are good, they have to be good, because there are going to be times when the volume is lower and the margins are worse. So we have to keep that in mind as we restructure the business. But it's not 50% of our overall business, it's going to be about 7% or 8% at least this year, and barring substantial growth or acquisition or something like that, I expect it will stay in that range.

We do have the two facilities that you talked about. We're going in with eyes wide open as to how we navigate this. The two facilities are not plug-replaceable. We do different things in different places. So it's really not a slam dunk go-forward option. We have some people right now trying to figure that out, trying to decide where we go from here.

As you can imagine, where we thought we were going to be with the semiconductor sale up until late-December was very different than where we ended up. That was not a trivial exercise in and of itself. So our primary focus has been to bring that sale to a successful conclusion. Now, the exercise is to figure out what we have left and where we go from here. So, more on that as it comes, and I expect we'll certainly know more by the time we release first quarter results.

**Dick Ryan:** Okay. Great. Any updates on the EPDS opportunities, the current contracts you have and any potential wins down the road?

**Pete Gundermann:** EPDS, Electronic Power Distribution, I don't have anything specific for you, Dick. Maybe one of these days we should start to do an overview, because it is certainly an active part of the business and we have established ourselves, in my humble opinion, as the go-to people for that flight-critical power in smaller aircraft. There was a time when we had to look long and hard to find people willing to even consider us.

I think we've established ourselves as the people, such that now I would dare say, in the industry around the world, an airplane doesn't get developed without us being invited to at least consider participation. We don't jump at everything, we don't do everything, but we have a very, very high hit rate when we decide to pursue something and it's because we have the scars to prove it.

We have the capabilities and the maturity of the architecture to do it well and the industry knows that. We're about at the point, in 2019, maybe a little bit more in 2020, 2021, where this is going to be more and more of a meaningful part of our financial results. So why don't you let me have the homework of doing a little side exposé of that on one of these calls over the next coming quarters and we'll revisit the topic.

**Dick Ryan:** Sounds good. Thanks, Pete.

**Pete Gundermann:** Thank you.

**Operator:** [Operator Instructions] Our next question is a follow-up question from Ken Herbert with Canaccord. Please proceed with your question.

**Ken Herbert:** Thanks. Hi, Pete. Just one quick follow-up. You have, on the Aerospace business, another one to two quarters, with much easier comparisons than in the second half. As we think about the organic growth, is there anything from a cadence standpoint across 2019 we should be aware of considering the comps and how 2018 progressed?

**Pete Gundermann:** The way it looks right now, we expect the first half of the year to be stronger than the second half. But there are a bunch of moving parts in there. There are lot of orders that could pop up between now and then that aren't in the books yet. So I was intentionally vague there, because I don't think we really know, but at this point, it looks like the first half is going to be a little bit stronger.

**Ken Herbert:** Okay. Great. Thank you.

**Pete Gundermann:** Sure.

**Operator:** Our next question comes from the line of Michael Ciarmoli with SunTrust. Please proceed with your question.

**Mike Ciarmoli:** Hey, thanks for taking the follow-up, guys. Pete, on the Test business, on the subway program, how are you thinking about that program? Are there going to be any start-up costs or learning curves associated with that? Just trying to think about how that program ramps up.

**Pete Gundermann:** It's a substantial award. We feel, in part, because it's a little bit outside the bounds of what we've done in the past, it would look that way to the outside observer. On the other hand, it's right up our alley, in that the philosophy of Test that the customer in this case wants to drive towards is remarkably similar to what we've done in certain other arenas, including defense arenas like with the Marines or the Navy.

So we're bringing in our skill set to a new customer. I'm sure there will be learning curves and we think we have it pretty well circled in terms of what the risks are, but definitely it's a little bit different. Anytime you do something different, there is some risk of learning opportunities.

At the same time, let me just say that our sense is there's a substantial body of demand in this arena. I'm talking about rail and subways, specifically. Around the world there are lots of cities that use rail and subways. So, our feeling is the way things have been done prior to this award and prior to our involvement are a little bit different than the way they're going to be done in the future.

If the world shifts towards the New York City model, we could have a pretty good opportunity here. We are involved in various other discussions and conversations that could lead to bidding activity that could lead to other awards. This is going to be an interesting thing. Obviously, as developments go over the course of the year, we'll know how our engineering efforts, which are already well under way, are proceeding and we'll know how the market is responding.

You might imagine that if you were responsible for the subway system, I'm just going to pick a city, DC, I'm just picking them at random, but pretty much every city in the U.S. that has a rail system will pay attention to what New York City is doing. New York City made a big statement going in our direction on this program. So we think if we do it right and we do it well, we can solve some of the problems that New York City has historically had. If we do that right, it could lead to other opportunities in other cities. So who knows? We're pretty excited about it though.

**Mike Ciarmoli:** Perfect. Thanks a lot, guys.

**Pete Gundermann:** Sure.

**Operator:** Our next question comes from the line of Mike Wallace with White Pine Capital. Please proceed with your question.

**Mike Wallace:** Good morning, Peter.

**Pete Gundermann:** Good morning.

**Mike Wallace:** Nice job on generating some good cash flow from the business this year and paying down some of the debt and that's despite the receivable balance at \$47 million at the end of the year. We're going to get \$100 million from the Test business in cash. Can you talk a little bit about what do you plan to do with that? Looks like we reduced some debt over the year. Just give us some thoughts on that. Thank you.

**Pete Gundermann:** Dave, do you want to answer this question?

**Dave Burney:** I mentioned earlier that we took the \$100 million and paid down debt initially. There will be a tax bill due on it probably later this quarter or beginning of the second quarter. That will be about



\$25 million, I think, our estimate is on the cash taxes on that. But the short-term plan, we paid down \$100 million on our revolver.

**Mike Wallace:** Okay. Good. There wasn't really any share repurchase activity last year. What's your thoughts on that?

**Dave Burney:** Again, the focus is on growing the business, reinvesting and continuing to look at acquisitions as the priority.

**Mike Wallace:** Okay. Operating margins in the Aerospace business saw some nice improvement year-over-year. As the three troubled companies started to show a little bit of improvement in some other volumes, how should we think about operating margins as we look out into 2019 for the Aerospace business?

**Dave Burney:** I think the fourth quarter was a good example of some nice improvement in the Aerospace operating margins. If we operate at that level of revenue, I expect that's an achievable number there. We continue to look at opportunities to expand that. As Pete mentioned earlier, we are facing a \$10 million headwind mainly in our Aerospace segment relating to increased cost for the tariffs, I should say, incremental \$7.5 million there.

So that presents a little bit of a challenge to us as we continue to explore alternatives to buying some of those electronics from China. So, my comment is the fourth quarter was a good solid Aerospace quarter with no real strange muddiness to it.

**Mike Wallace:** Okay. So, would that be a good base to think about as we build off of for 2019?

**Dave Burney:** For Aerospace, certainly. Unfortunately for the last year or two, we've continued to have a lot of muddiness and one-off things that have happened. We didn't have any of that in the fourth quarter. So it is a good representative quarter for us.

**Mike Wallace:** It's probably one of the cleaner quarters we've seen in the last several of them. Could we see a lift of 100 points to 200 points over the next 12 months in that as you look through your backlog and think about converting it to revenues and running it through the business. How should we think about improvements from the 12.7%?

**Dave Burney:** A lot of it will depend on sales mix. We intentionally stay away from providing specific guidance on operating margins, but I would say there is opportunity to expand margins. As Pete said, when you carve out the three problem businesses, the remaining operating margin for the rest of the Aerospace segment is really strong.

So the challenge and the big opportunity to increase our margins is to improve those three, or probably more appropriately, those two real problem areas that are dropping our Aerospace margins down, and that's what we expect to happen. We mentioned earlier that with regard to CCC and AeroSat, it's a top line thing there. We need to get top line growth there to see the margin improvement. At CCC, we had a really strong booking quarter, we don't generally call out specific bookings for our different business units, but the bookings were good. The best bookings we had at CCC since we bought the business were in the fourth quarter.

**Operator:** Our last question comes from the line of George Godfrey with C.L. King & Associates. Please proceed with your question.

**George Godfrey:** Thank you. Just a quick one. Dave, what is the remaining share authorization? Also, I heard you say you're focused on M&A activity with the proceeds, but is it safe to assume we get those

three businesses fully fixed and functioning where you want them before we see any more M&A activity?  
Thanks.

**Dave Burney:** There is a \$50 million share repurchase authorization. I wouldn't say that the fixing of the two problem businesses that remain is mutually exclusive from continuing to look at acquisition opportunities. We have a solid team behind us with the people that are running those businesses now. While those people focused on the businesses are doing most of the work at those two businesses, we have others that continue to look at acquisition opportunities. I don't view fixing those two businesses as diluting our ability to continue to look at acquisitions.

**Pete Gundermann:** I would add that if you could script the world perfectly, that might be the way to do it, but you can't script the world perfectly. So if and when you find things that are good acquisition candidates, whether you're ideally ready for them with other things going on with your business or not, you have to take them. The best case in point is our last acquisition, which was the Telefonix acquisition of a year and two months ago, which has worked out to be super.

That was in the face of all these other three things working their way out. Most people who are involved in the acquisition game will tell you that you need to have the big hits every once in a while to compensate for the ones that are more of a struggle, and Telefonix is one of those big hits. We've had a few of them, but we're really pleased with that acquisition, that's one of the better ones in recent history.

**George Godfrey:** Understood. Thank you very much.

**Pete Gundermann:** Sure.

**Operator:** Ladies and gentlemen, we have reached the end of the question-and-answer session. And I would like to turn the call back to Peter for closing remarks.

**Pete Gundermann:** Well, thanks for your attention today. Again, we're pretty pleased with how 2018 worked out. There were struggles, there are always struggles, but overall, we felt it was a really good year. We think we're really well-positioned going into 2019. So thanks for your attention. We look forward to talking to you again at the end of the first quarter. Have a good day.

**Operator:** This concludes today's conference. You may disconnect your lines at this time. Thank you for your participation.