

Operator: Greetings, and welcome to the Astronics Corporation Second Quarter 2019 Financial Results Conference Call. At this time, all participants are in a listen-only mode. A brief question-and-answer session will follow the formal presentation. [Operator Instructions] As a reminder, this conference is being recorded.

It is now my pleasure to introduce your host, Deborah Pawlowski, Investor Relations. Thank you. You may begin.

Deborah Pawlowski: Thanks, Christina, and good morning, everyone. We appreciate your time today and your interest in Astronics. Joining me on the call are Pete Gundermann, our President and CEO; and Dave Burney, our Chief Financial Officer. You should have a copy of the second quarter 2019 financial results, which were released earlier this morning. If not, you can find them on our website at www.astronics.com.

Let me mention first, and you're likely aware, that we may make some forward-looking statements during the formal discussion, as well as during the Q&A session. 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 what is stated here today. These risks and uncertainties and other factors are provided in the earnings release as well as with other documents filed with the Securities and Exchange Commission. These documents can be found on our website or at sec.gov.

During today's call, we will also discuss some non-GAAP financial measures. We believe these will be useful in evaluating our performance. You should not consider the presentation of this additional information in isolation or as a substitute for results prepared in accordance with GAAP. We have provided reconciliations of non-GAAP measures to comparable GAAP measures in the tables that accompany today's release.

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

Pete Gundermann: Thank you, Deborah, and good morning everybody. Thanks for tuning in to our call. Our agenda, as usual, will start off with a summary on our quarter and some of the developments that we're seeing in the market; Dave will plow through the numbers, both on the income statement and the balance sheet; and then, I'll take it back and talk about our revised forecast for the top line for the second half of the year; and then, we'll close with Q&A.

So, a summary of the quarter. Revenue was lighter than our first quarter, but was about where we actually expected it to be. It compared well with last year, with adjusted sales up 5.4%. I'm assuming some knowledge here, but in the first quarter, we sold our semiconductor test business, so most of the numbers that we're going to be talking about today are adjusted numbers excluding the effects of that semiconductor test business, both from the current periods and from the comparative periods. We'll try to make that clear as we go through, but that is a good assumption as you listen to the call.

So the adjusted revenue was about \$187 million, up 5% from last year's second quarter, and both segments contributed to the growth. It is down sequentially from the first quarter, when we had very strong revenue of \$205 million. For the year, our adjusted sales are up 12% to \$392 million, again with both segments contributing. The lower volume from the first quarter to the second quarter did put pressure on margins. Our adjusted net income for the second quarter was similar to last year at 3.4% of sales, but was down from the first quarter's 7.9%. For the year so far, our adjusted net income is 5.7% of sales, double what it was last year for the first six months.

Dave is going to go through the numbers in more detail, but I thought I'd spend some time on the major issues that we're seeing and facing that are influencing our perspective and our numbers. One is, we continue to see pretty strong tariff costs, unfortunately. In the second quarter, our tariff charges were \$2.3 million. Year-to-date, through six months, they come to \$4 million. Also, in the second quarter, we faced some pretty strong restructuring costs, especially in our Test Segment as the Test Segment adjusted to life after semiconductor test. The total charge for that restructuring cost in the quarter was



\$2.2 million. That restructuring, we expect, will save somewhere around \$8 million to \$9 million on an annual basis going forward, beginning in the third quarter of 2019.

We've talked quite a bit in recent periods about our three stragglers or three struggling businesses. In the second quarter, those businesses had a collective operating loss of \$7.7 million. That is well above the \$5 million that we predicted, and there's some good news here and some unexpected bad news. The good news is that, in two of the three businesses, we have very strong line of sight to resolution. Resolution, in this case, is getting them at or near the neighborhood of breakeven, and those two are CCC and Armstrong. Both had predictable quarters and both have a path we feel going forward will get to approaching breakeven by year-end, such that we won't plan on talking about these two in this context afterwards.

The third one, AeroSat, had a setback in the quarter, and that is our ambitions for our tail-mount business jet connectivity system, which we are taking to market with a couple of partners. It had a setback when one of the critical satellites used to make up the system failed and went out of orbit and has basically been lost. That, in turn, has resulted in the team deciding to put sales on hold until replacement capacity that's suitable in nature, both from a cost and a performance standpoint, can be developed. Realistically, we don't expect that to happen until towards the very end of the year at the earliest.

So, AeroSat did not go down the path that we expected. Of the \$7.7 million collective loss for the group, AeroSat drove 70% of it. With this delay in the tail-mount program, our path towards breakeven is significantly complicated. Basically, we are on hold until later this year, when we can figure out what the options are with the satellite network that we're going to use for the system going forward.

Additionally, we've seen some program slides in the market, including the 737 MAX, which is a favorite topic for everybody in the industry these days. It became clearer as the quarter wore on, that the reduced production rate would continue longer than we originally expected. We started the year at 52 units a month. We thought we were going to be down around 40 to 42 units, starting say in April until about June or July, then go back to 52 units, and then up to the goal of 58 units towards the end of the year, but as of now, it appears that lower production rate will go on indefinitely, with the hope of going up towards the end of the year.

We have about \$85,000 direct to Boeing on the 737 and another \$10,000 that goes through other customers to get on the airplane. So, the cumulative drop in production estimates as we understand it right now comes to about a \$10 million revenue drop over the course of the year. With all that on us, our bookings for the quarter were \$170 million. That's a relatively low level compared with what we've seen in recent years. To some extent that maybe shouldn't be a surprise, because we've had very strong quarters for the last three or four quarters leading up to this quarter. So maybe it was just a break in the action, but there is some evidence that, with the MAX grounding, the airline industry in general has tight capacity. Tight capacity means that the airlines are very reluctant to take their aircraft down for upgrades and upgrades are essentially what much of our IFE and IFEC sales are all about. We've seen some evidence on some airlines that are particularly MAX dependent, that they want to delay their programs until the MAX situation is resolved. We obviously don't have any information on that beyond what everybody else has in the industry, but at this point, the MAX situation is clearly an evolving scenario.

So, those were my overall color comments to begin the summary of the quarter. I'll turn it over to Dave now to plow through some of the numbers.

Dave Burney: Okay. Thanks, Pete. As expected heading into the quarter, sales in the second quarter were light compared with the trailing first quarter of the year. It's still up about 5.4% on an adjusted basis from the 2018 second quarter, when you exclude from both periods the sale of the semiconductor test business that we divested in the first quarter of this year.

Aerospace segment sales were up \$8.1 million, or 4.9%, compared with the last year second quarter. The increase was broad based across most product lines, driven by higher OEM build rates, increased content and airline retrofit programs. In particular, Electrical Power & Motion sales were strong up \$16.4 million, or 24%, driven by strong in-seat power sales. Lighting & Safety was also strong up \$2.6 million, or 6%, with



all of that increase coming from the lighting products partially offset by lower PSU sales. Avionics was our weakest point in the quarter, down \$10.6 million, or 29%, from the prior year's comparator quarter, primarily due to the decrease in sales of IFEC hardware. Test Segment sales, excluding the divested semiconductor test business, were up 14% to \$12.6 million compared with the second quarter of 2018. The increase was driven broadly by an increase in volume from multiple A&D customers.

Going to our margins, on consolidated margins, our consolidated operating income decreased from \$20.1 million to \$10.6 million, due primarily to the divestment of the semiconductor test business, which accounted for \$10.2 million of operating income last year and \$2.1 million this year. Adjusted income from operations, excluding the semiconductor activity from both periods, calculates to \$8.5 million, or 4.6% of adjusted sales, compared with \$9.9 million, or 5.6% on adjusted sales of \$186.9 million and \$177.2 million for the 2019 and 2018 second quarters, respectively.

Still talking to consolidated margins, items affecting the quarter this year included tariff costs of \$2.3 million, inventory reserve of \$1.6 million and workforce reduction cost of \$2.2 million, all totaled about \$6.1 million or about 300 basis points of margin. Absent these charges, consolidated operating margin would have been roughly 8.6%.

Regarding the tariffs, our supply chain management continues to work with our suppliers to reduce the impact of tariffs. Several of our suppliers are actively relocating or moving production from China to other low cost countries, but the process doesn't happen quickly. In the long run, we expect to be able to reduce the impacts of tariffs, but it will not happen this year. As we had said going into the year, we're anticipating tariff costs to be in the ballpark of \$10 million this year and we saw \$2.3 million in the second quarter this year, which was up from what we saw in the first quarter. Timing of tariffs really depends on the cadence with which we're importing some of our electrical components and cables from China.

So looking to the segment operations, Aerospace operating margins were 8.3% versus 11% in the 2018 second quarter. The lower operating margin is attributable to several factors. Two of the factors I spoke about affected the Aerospace segment. The impact of tariffs during the quarter was \$2.3 million and the \$1.6 million inventory reserve. Absent these factors, Aerospace operating margin would have been about 10.4%. Also affecting the margins was a somewhat unfavorable sales mix with a larger mix of slightly lower margin sales in the quarter. We initiated a restructuring effort in our antenna business that we talked about on the last quarterly call. With that restructuring, we expect we will reduce annual fixed costs by more than \$3 million. Restructuring costs in the quarter were minimal and we'll begin to see the benefits in the third quarter.

We're making headway regarding the operations of our three problem businesses. The losses for those three during the quarter, as Pete mentioned, totaled \$7.7 million, with AeroSat accounting for about 70% of the loss. As we said before, our goal this year is to move those three to breakeven and we think we're getting there with two of the three. AeroSat will struggle a bit longer for the reasons Pete had mentioned, with the satellite failure, but we're still waiting for alternatives and we expect the situation will evolve as we move through the year. Additionally, we will begin co-locating certain aspects of the Armstrong business from Itasca into a newly-leased facility that CSC occupies in Waukegan. This will provide additional savings and synergies once the process is completed, over the next 12 months or so.

Test Segment operated at roughly breakeven for the quarter. Adjusting out the estimated impact of the semiconductor test business, the segment would have had an operating loss of about \$2 million compared with an adjusted operating loss in the 2018 second quarter of \$3.9 million; however, the quarter included a \$2 million charge related to severance as we resized the Test organization after the sale of the semiconductor test business. The resizing will result in annual savings of about \$5 million to \$6 million in that segment, which we expect to see starting in the third quarter. In July, we signed a deal to sell our noncore airfield lighting business. Proceeds for that will be roughly \$1 million and we expect in the third quarter will result in a non-cash charge of about \$1.5 million, primarily relating to the removal of the goodwill related to that business that was on our balance sheet.



Onto our balance sheet. The balance sheet continues to be strong. At the end of the second quarter, we had \$122 million of long-term debt outstanding, which translates to a multiple of about 1.2 times EBITDA if you exclude the gain on the sale of the semiconductor business. Including the gain, we are levered for debt covenant purposes at about 0.5 times adjusted EBITDA. This gives us a great deal of flexibility in the working capital deployment.

We do have a \$50 million share buyback plan in place and a 10b-5 plan filed to repurchase shares at predetermined quantities based on market prices. We've not disclosed the details of the plan and we did not purchase any shares during the quarter. In addition to the share repurchase plan, our focus for capital deployment continues to be on M&A opportunities in both Aerospace and then Test Segments.

Pete, I think that concludes my comments.

Pete Gundermann: Okay. Turning to our sales forecast for the rest of the year, you saw in the press release that we are adjusting down our cumulative sales expectations, for Aerospace in particular; Test actually goes up a little bit. Aerospace is now predicted to be \$680 million to \$700 million for the year. Last year, in 2018, we came in at \$676 million, so the midpoint of that range would represent about \$15 million of growth. Test is now predicted to be \$60 million to \$75 million. Last year, without semiconductor, it was \$48 million, so that's pretty substantial growth. Part of that growth will come from our new Freedom Communication Technologies acquisition, a smaller company that we bought in the quarter. Freedom represents a nice tack-on addition to our technical capabilities and our market reach. They operate out of Texas and we expect to continue operating that facility and that organization with those people going forward. We're happy to have Freedom as part of the business. That would bring our total adjusted sales forecast for the year to be somewhere between \$740 million and \$775 million. Last year, excluding semiconductor, we did \$719 million, so the midpoint of the new range is just 5% growth.

The reason for the reductions are based on my earlier comments. If you assume tail-mount antennas move out of this year, the \$10 million for the 737, our later booking performance in the second quarter pretty much explains the drop in the expectations over the next six months. We obviously believe that our business is very well-positioned and we're in some very nice markets for the long-term. It'll be nice when the 737 gets resolved; it'll will be nice when the airlines can more reliably count on what kind of fleet they're going to have and what they're going to do going forward; and it will be nice when we can develop satellites that can somehow guard against meteorites.

I think that's the end of our prepared comments. Christina. Let's open it up for questions.

Operator: Thank you. We will now be conducting a question-and-answer session. [Operator Instructions] Thank you. Our first question comes from the line of Jon Tanwanteng with CJS Securities. Please proceed with your question.

Jon Tanwanteng: Good morning, gentlemen. Thank you for taking my questions.

Pete Gundermann: Good morning.

Jon Tanwanteng: Pete, Can you first provide an update on the operating income loss you're expecting from the three businesses over the next couple quarters, given the issues with AeroSat and the satellite into 2020?

Pete Gundermann: I would if I could. We're moving here as we go with respect to AeroSat in particular. I previously said, I think, on our last quarterly announcement that we expected the three combined to be at \$5 million in the second quarter and \$2.5 million in the third quarter. That, obviously, was based on certain revenue assumptions out of AeroSat, which are now seriously in question. The other two, I think, we're going to move towards breakeven to the point where it's not worthy of discussion essentially in the current quarter onward. I'll give you an update as we get there, but, I think, we're down to one struggling business for practical purposes. The other two are null and void at this point. And with AeroSat, I think we said 70% of the \$7.7 million cumulative operating loss was responsible to AeroSat this quarter and I don't think it's going to be any worse than that. I don't know if we're going to get it to be a whole lot better. That's what



we're trying to assess and trying to figure out. Obviously, there are costs that need to be managed. There's also the opportunity that you don't want to flush away in the short-term. So we're balancing that and we'll provide updates as soon as we can, but at this point, that's about the best we can do.

Jon Tanwanteng: Okay. But you are expecting to reduce costs at Aerosat by \$3 million a year, but what is the cost to achieve that?

Pete Gundermann: Well, you have an organization that's staffed for a certain level of volume and the volume has taken some big hits. That's the challenge.

Jon Tanwanteng: Okay, got it. And then, on the core Aerospace margins, you gave this color last quarter. I think they were 19% ex the problem businesses and the charges incurred. It looks like, this quarter, they stepped down significantly. What was the reason for that? Dave mentioned a lighter sales mix and, obviously, you have little higher tariffs, but what else is going on there?

Pete Gundermann: I think it's mostly driven by volume. We didn't actually prepare the comparable number, at least I don't have it in front of me, but if you were to reallocate back tariffs and material reserve and assume that the three struggling Aerospace businesses get to breakeven, I think you get up in that same neighborhood, not 19%, but I think they're in the 15% or 16% range.

Jon Tanwanteng: Okay. Got it. As you go forward into the rest of year, should we use that same 15% to 16% as the base rate, given that the volumes are unlikely to be as high as Q1?

Pete Gundermann: Well, that's the problem. I think that big assumption has to do with AeroSat, and our plan with AeroSat is being reformulated in the current situation.

Dave Burney: Yeah. Jon, if you look at the midpoint of our guidance for the year, subtract out the first half sales, you can see the expected run rate for the last half of the year and it's not nearly where we were in the first quarter.

Jon Tanwanteng: Okay. Great. And then, can you provide any color on the accretion from the acquisitions that you did for the rest of the year?

Dave Burney: I think it will have a minor impact. We'll have the usual early amortization costs for some of the short-term intangibles, so I don't expect it to have a significant impact on GAAP income. I do expect it to contribute positively to EBITDA. It's a business that, typically, has been growing over the last couple years and has had an EBITDA run rate that's mid-to-upper teens.

Jon Tanwanteng: Is that an absolute level or margin? I believe margin, right?

Dave Burney: I didn't hear what you said?

Jon Tanwanteng: That mid-to-upper teens is on the margin basis, right?

Dave Burney: EBITDA.

Pete Gundermann: Percentage.

Dave Burney: Yes, percentage.

Jon Tanwanteng: Thank you. I'll jump back in queue.

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

Ken Herbert: Good morning, Pete and Dave.

Pete Gundermann: Good morning.

Ken Herbert: I just wanted to, first, ask about the restructuring. Do you start to see the expected, call it, \$2 million to \$2.5 million in benefit this quarter or does that have any ramp as we go from third to fourth quarter?



Dave Burney: We should start seeing it immediately in the third quarter. Most of the adjustments are largely related to severance and all the moves, I believe, were made in the second quarter, so we accrued the cost there and the people that were involved were terminated in the second quarter or retired.

Ken Herbert: So, it sounds like, with the exception of AeroSat, all of the restructuring activity, at least as you've identified it, is essentially complete?

Dave Burney: We're starting to co-locate some of the business that's in Itasca up to Waukegan. We haven't seen any of the synergies yet that we expect to see from that. That's going to be a process that'll probably take 12 months to do and that's going to be a slow move to help get some more synergies out of those businesses that are all located in the Chicago area.

Ken Herbert: Okay, that's helpful. And, Pete, it sounds like for the legacy connectivity or in-flight entertainment product line, the MAX is clearly having an impact as it pushes maybe some modification work to the right, just to your comments around capacity constraints there, but are you seeing anything else on wide-bodies or any other platforms that may be contributing to some of your cautious comments in that outlook or anything else in the market dynamics on that market that we should be thinking about?

Pete Gundermann: Well, it's a technically dynamic marketplace, so there are always all kinds of things happening. I'm a little cautious about overplaying these comments, Ken, because I don't want to make too much out of it. I mean, we had really great booking quarters for the three or four quarters right up to this quarter, so one quarter does not a trend make. I want to be a little bit cautious there. There are certain dynamics in the market, there are Ku connectivity systems yielding to some extent to Ka-based systems and now the industry is abuzz about low Earth orbit types of constructs or satellite constellations and how those work and how they play. It's up in the air. There is the trend in the narrow-body world towards streaming content and away from seat back systems, and so on and so forth.

And then, at the aircraft level, the 777 being wound down and the 777X not here yet probably has an impact, but these are all the punches that we roll with every day. The reason that I brought a little bit of a comment to the 737 situation is that we have become aware of a couple of situations where airlines that are dependent or had been expecting to be flying the 737 MAX in higher quantities have pushed programs off. That makes sense when you think about it, because IFE is generally an aftermarket type of installation that's usually a fleet-wide installation and, when they don't have the airplanes they thought they would have, then all of a sudden their capacity shrinks; and when their capacity shrinks, the last thing they want to do is take airplanes out of service if they don't have to do. I wish I knew how long the 737 MAX is going to be grounded. We all obviously do. The longer it goes, the more this dynamic could be an influencer. We don't know what to do other than wait and see and stay in touch with our customers, but it is a conversation that we had not had up until recently. That's something that we did not sense up until recently.

Ken Herbert: Okay. No, that's very helpful. And one final question on AeroSat, as we look at a couple of the next key milestones between now and the end of the year, is there anything you could specifically highlight in terms of how we should think about the satellite capacity or what we should watch out for in terms of the next key signpost there to get that business back on track?

Pete Gundermann: It's a little bit beyond our scope unfortunately. I mean, our partners, again, as you know, are Satcom Direct and Intelsat, and Intelsat flies and owns the satellites and is the one that really has the big problem here. The satellite in question was a pretty important one and it was in a pretty critical region of North America and over the Atlantic. Our tail-mount business was an incremental add-on initiative from their perspective relative to what they otherwise have going on that satellite, so they have to figure it out. They have other satellites in orbit that they can offload some of that work to. Our sense is that, at this point, they have not been able or willing to give us the capacity that we would need to make our system competitive technically and price-wise on the market. We may not like that, but we understand it. They have got a bunch of initiatives underway, and I can't speak for them, but long story short, they either put up a new satellite, which isn't something you can do very quickly unless they are otherwise



planning to do it anyway, or you move a satellite. You have to offload traffic to some other satellite and that may involve borrowing capacity from somebody else or it may mean moving a satellite in orbit. I've told you more than I know about satellites right there, but obviously, we're an interested observer. We've spent a lot of time and money on this, as has Intelsat and Satcom Direct. All I can say is, we'll break the news when we have the news and, at this point, we just don't have anything yet.

Ken Herbert: All right. Well, thank you very much for the updates, Pete.

Pete Gundermann: Sure.

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

Mike Ciarmoli: Good morning. Thanks for taking the questions.

Pete Gundermann: Sure.

Mike Ciarmoli: Pete, on the revenue bridge, you took \$40 million out of Aerospace and, I think, last quarter you talked about AeroSat being down from \$85 million to \$70 million. You presumably contemplated the MAX at a 42 per month run rate. So, what were the other bridges to that \$40 million reduction, assuming that you took out the \$25 million that you called out last quarter?

Pete Gundermann: Last quarter, we left it as it was. And you're right, we saw some of the reductions last quarter, but we felt we had enough positives offsetting the negatives that we didn't need to move the range. When we closed the first quarter, we thought MAX production would be back up to its original plan by now actually or moving in that direction, but basically, to give you a rough order of magnitude, \$20 million or \$25 million coming out of the antenna systems, \$10 million coming out of 737 line-fit, and then, about another \$5 million to \$10 million of other related programs across the business. Some of it might be linked to the capacity issues that I've been talking about, but it's a broad based set of things. Obviously, it's disappointing relative to our original expectation for the year. The good news is, most of it is moving to the right, and actually if we hit the midpoint of our revised range, we still have a year of 5% growth over our adjusted non-semiconductor 2018 numbers. We're disappointed with the reset, but we still think we have pretty good momentum and potential in the business at the same time.

Mike Ciarmoli: Got it. You mentioned the 737 line-fit. What about the buyer furnished equipment that would presumably be getting purchased from the airlines? I guess you would be just in time with Boeing on some of the interiors, we've seen other suppliers call out weakness. Do you have any idea what kind of inventory is in the channel at United Technologies or Safran or Panasonic? The bookings were down, but I'm assuming that all of those suppliers had been ordering at a rate of 57 per month. Can you provide any color on what you think is in the channel there and even potential revenue headwinds? If you look at the airlines who should have been taking MAXs - Air Canada, United, I don't know Copa - there were certainly a lot that would have had full power and connectivity in there.

Pete Gundermann: We don't really think that's a big headwind. Most of our hardware is pretty highly modular. It's not dedicated to a certain type of airframe. United is a good example. They're a customer of ours and have been for a really long time. A lot of the things we sell to them that could be fitted on a 737 can also go on a 787 or a 767 or a 757 or 320 or whatever, so I don't think there is a whole lot of 737 specific hardware in the distribution channel waiting for Boeing to start building airplanes.

Our aftermarket sales are more fleet sales to airlines, and I think the airlines are hedging maybe a little bit just because of busy summer travel. They don't have the airplanes that they thought they'd have, so why buy something that they don't want to put on right now. I think it's more driven by that, but we'll find out. I would expect when the 737 gets released that there's going to be a big rush to get a lot of things reestablished. We're looking forward to that day, but I don't think there would be a terrible lag once that happens while built-up inventory gets addressed.



Mike Ciarmoli: I have one last one, and then, I'll get out of the way. Can you just talk about the passing of your chairman of your board, Kevin Keane? How is that situation evolving from an estate planning perspective? He owns 25% of the B shares with the stronger voting rights. How are you thinking about managing that situation, because when those B shares are sold, I think they convert into A shares and lose the voting rights. Do you have any color on what's happening with his estate and that large holder?

Pete Gundermann: No, I don't really have any perspective on that. It's, obviously, a family decision. We miss Kevin terribly in many respects. He loved the company and his family does too. I wouldn't expect anything rash or anything damaging to happen, but I can't speak for them as to what their intentions are.

Mike Ciarmoli: Got it. All right. Thanks. I'll jump back in the queue.

Operator: Our next question comes from line of George Godfrey with C.L. King. Please proceed with your question.

George Godfrey: Thank you. Good morning. Just two questions. One is, you said AeroSat is about 70% of the operating loss. If I back out the inventory charge, is the operating loss for that business over the next two quarters about \$4 million or \$4.5 million? Is that a right operating loss to assume?

Pete Gundermann: That would be a baseline assumption, assuming we don't do anything different to the business, and that's part of what we're trying to figure out.

George Godfrey: Got it. And then, Pete, you said you wouldn't expect that this satellite capacity would be resolved any earlier than the end of next year.

Pete Gundermann: The end of *this* year, George.

George Godfrey: Yeah, if we took a more conservative or less optimistic approach, could this extend into a 2021 type of thing or is this something that likely gets resolved in calendar 2020?

Pete Gundermann: That's a good question. I sure hope it's resolved. It has been an incredibly frustrating process as you can imagine. We've been at this now, I have to think, probably for a year-and-a-half or two years. We've been around the horn with one satellite provider already, and here we were in the starting blocks waiting for the gun to go off. Actually, the gun did go off, but it was a false start, so everybody got back on the blocks and then this thing happens. I don't want to tempt fate by saying there's absolutely no way it'll wait till 2021, but I sure hope not.

George Godfrey: Got it. Okay, thank you very much.

Pete Gundermann: But, two years ago, I wouldn't have dreamt that we'd be in this spot right now either.

George Godfrey: Understood. Thank you for taking my questions.

Pete Gundermann: Sure.

Operator: Our next question comes from the line of Josh Sullivan with Seaport Global. Please proceed with your question.

Josh Sullivan: Good morning.

Pete Gundermann: Good morning.

Josh Sullivan: Just following up on the AeroSat question, I understand the loss of satellite coverage and the impact has you on hold right now, but is there a point where the AeroSat assets might be better suited in an external portfolio? How much more investment are you thinking you're going to endure just to pursue the opportunity or when that changes over and I understand that's hard to know at this point?

Pete Gundermann: It's a good question. I guess I would answer it this way. We have a number of opportunities and pursuits with that business for antennas that collectively could be very meaningful to the company. It has been a tough road and it has really been an amazing set of circumstances that have led us to where we are, but remarkably the opportunities that we have been seeing still exist.



So the question isn't whether there are opportunities to pursue, the question is what is the best way to pursue them? I'm not sure if your question was could we or should we sell the business? I'm not sure it's salable right now in its current situation, frankly. I think it's more a situation of how we best organize ourselves and manage ourselves to execute the opportunities that we see in front of us and do it in a cost efficient or cost effective manner. We have some efforts underway to try to figure that out. Obviously, it's a little bit of a moving picture when we don't know what some of our best near term opportunities look like exactly. But, your question gets to the right issue, which is, what do we do going forward? I don't think we're necessarily committed to maintaining the exact same path that we had in the past.

Josh Sullivan: That's helpful. And then, on the Delta piloting some free Wi-Fi, can you talk about how Astronics might fit into that opportunity or where that market might develop?

Pete Gundermann: So for those who don't know, Delta, obviously a major influential airline for the entire world and a long-term customer of ours, has a couple of interesting initiatives underway. One of them is to basically develop much more of a customized home grown IFE type system and that IFE system needs a lot of the same components that any other IFE system needs and we're heavily involved with them on this effort. Your question specifically, Josh, was there is an experiment that they're running or a trial that they're running where they want to basically allow their customers free Wi-Fi, free Internet access? The issue, from a technical standpoint, is that the take rate on any particular airplane, as you might expect, will probably go through the roof. Instead of it being somewhere in the 4% to 15% of passengers range, I would expect it to be somewhere closer to 75% to 85% to 95%, just like it is in restaurants, hotels, conference centers and everywhere else in the world.

What happens to the system when you have that kind of loading onboard? From our perspective, for Astronics, this is a big deal, because an airplane is one of the last places these days where people are actually expected to pay for Wi-Fi, and they're being taught that they shouldn't have to pay for it, because fewer and fewer hotels these days charge for that kind of service, for example. At one time, they did and it's expected to be free now. Getting the Wi-Fi on an airplane is technically much more of a challenge than the average person is aware of or can think about. They just think they should be able to log on like they do in their bedroom or wherever.

But for us, if this march towards lower cost and higher connectivity continues, if Delta decides that this is something they want to offer, it's going to put a lot of competitive pressure on everybody else to do something similar. If that starts happening, we would expect a big increase in wired airplanes, connected airplanes and better capacity airplanes. A lot of the airplanes that are out there, even though they have relatively new connectivity systems that have been put on in the last three or four or five years, are not going to be able to handle 95% take rates as well as they handle the current 10% take rates. We would expect this to be a major propelling move, so airplanes that are not connected now will become connected and airplanes, even those that are connected, will have to be upgraded substantially. We're, obviously, involved in this test and we're watching it very closely.

Josh Sullivan: Okay. Thank you for the answers.

Pete Gundermann: Sure.

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

Dick Ryan: Thank you. So, Pete, I have a couple of questions on the other two businesses. Armstrong was just over breakeven, I think, in Q1. How did that perform in Q2? Did it stay in the profitable range? And on CCC, I think you were supposed to have some key deliveries in July/August. Have they occurred, that is, giving you the better line of sight for their outlook?

Pete Gundermann: Neither of them are profitable at this point but both of them are close enough that it's not worthy of a whole lot of discussion going forward. I think that's the way I'd paraphrase it. As Dave said, we have three facilities in the Chicago area, and we're going down to two. The Armstrong organization is



going to be absorbed into CSC, mostly up in Waukegan, over the next year or so, so that'll be, I think, a hopeful set of developments for that operation.

CCC continues to make pretty good progress on its big development program, which has been a source of frustration for the last year and a half. You're correct in that there are some buyoffs expected, actually about July/August/September. It turns out that one of them has been moved to a little bit later, like November, but the organization is increasingly confident that we'll be able to get through that without an increase in the estimate to complete, which has been what's been driving a lot of the cost overruns in that business and driving a lot of the losses.

At the same time, the better news picture is that demand for VVIP airplanes continues to look pretty positive and we think we're going to come out of the other side here with a technically superior program capability at a time when the market is returning to normal levels of health, and the market's returning to normal levels of health in part because there are more airplanes available to modify, 737 MAX excluded at this point. The A320neo is there, the A350 is there, the 787 is there and the 777X is getting close, so there are more airplanes for customers to choose from, and despite certain tensions around the world, the geopolitical situation is such that wealthy individuals in various countries around the world are more comfortable buying these airplanes today than maybe they were over the last couple years. The combination is pretty positive and competitively, again, once we get this program developed, we think we're going to have something that's going to be hard for others to match. So, it's a good combination. As such, I'm shooting from the hip here a little bit, we expect sales at CCC to almost double this year versus last year, heavily weighted for the second half, and the bookings, we expect, will drive further an idea of what's going into next year, so it's a reasonably positive picture.

Dick Ryan: Great. One last one on Test. Regarding your increased expectations on that, is that business you already have in house or is that still some business needed to book? And what's driving your visibility there?

Dave Burney: Part of the increase there is the acquisition of Freedom, included in the sales guidance, and just some further refining; we're halfway through the year now and where we see the backlog shaping up for the balance of the year.

Dick Ryan: Okay, great. Thank you.

Operator: Our next question is a follow-up question from Jon Tanwanteng with CJS Securities. Please proceed with your question.

Jon Tanwanteng: Yes, just a quick one from me. What are your tariff expectations for the rest of the year?

Dave Burney: I think what we saw in the second quarter is what we've built into our internal models, \$2.5 million a quarter, but it could change though. Like I said, the first quarter was a little bit late, but if we take delivery of a bunch of imported raw materials from China, it could be a higher quarter. Overall for the year, we're still looking at about \$2.5 million per quarter.

Jon Tanwanteng: Okay. And does that consider the round of tweets that have come out from the White House in the past week or so?

Dave Burney: We don't update our forecast on a tweet by tweet basis.

Pete Gundermann: Maybe, we should though.

Jon Tanwanteng: Okay, understood. Thank you.

Dave Burney: I will say, in the long run, when we get into the next year, if the tariffs stay at this 25% rate, I think we will see some reduction in the tariff cost for us as our suppliers are able to relocate some of their facilities and we can source things to countries outside of China.



Jon Tanwanteng: Okay, great. Thank you. Just one more follow-up, corporate expenses were lower quarter-on-quarter. Is that run rate the right one to use going forward or how should we think about it?

Dave Burney: I think if you take a blended first quarter and second quarter run rate, that's what I'd use.

Jon Tanwanteng: Okay. Thank you.

Operator: We have reached the end of the question-and-answer session. I would now like to turn the floor back over to management for closing comments.

Pete Gundermann: Thanks for your attention. We look forward to the drama this year as we work through some of these issues and get to better results. Thanks for your time today and have a good day.

Operator: Ladies and gentlemen, this does conclude today's teleconference. You may disconnect your lines at this time. Thank you for your participation and have a wonderful day.