

PRESENTER: Don't worry. I just want to make sure I start at the top of the hour because it's a really jam-packed class. And I have a few things that have nothing to do with the class, so I'm just going to entertain you until it's time to start. Well, I'm going to attempt to entertain you.

So it was cool, right, when I came on stage with the fabulous *Star Wars* characters? That made me cool, right? My cool factor went up a lot. Am I right? I'm right. I know I could tell I was cool. I was like, I've never been cooler, actually.

So then if you went to the technology trends yesterday, yeah, and remember I said, *Star Wars* is coming out this weekend, right? Cool factor straight back down. Did you notice that? Did you notice that? Stormtroopers cool, not knowing when *Star Wars* opens, straight down. And you get to see the *Star Wars* real fans out there just looked at me. They're like, oh. And they're like apparently it opens on the 18th.

OK, so I've been very concerned because I love the cool part, and then I realized I'm out again. So I just wanted to tell you that I actually am cool. I want you to know that I live in the same town as George Lucas lives in. Does that me cool? His house is just a little bit bigger than mine, a little tiny bit. But he actually grew up in the same town that I live in, San Anselmo, and then I think he bought like a hill or something. I don't know-- a great big huge mountain in the town.

It's a very small town in Northern California, just north of San Francisco. So now if you want to stalk me, now you know the town I live in, which is really important. But he dedicated a park in a town, called Imagination Park. For any of you who are a true *Star Wars* fans, this is like *Star Wars* mecca, and can you kind of see there that there are two statues in the park, one of Indiana Jones and the other one of Yoda. It's a little fountain.

It's very, very, very cool. And George Lucas paid for the park, and he came out and dedicated the park. And so am I cooler again? Cooler? A little bit? And he shops at the same supermarket I shop at. Well, I've heard that. I've never seen him there, but I heard that.

So anyway, so this town is a very small town. It has a little, tiny downtown area. And George Lucas looks the other way, and there are trademark infringements everywhere. There's like this ice cream store that has like Mookie Cookie and Darth Vader Chocolate, and they get away with it because George won't say anything. Because we're on a first name basis now,

me and George. I didn't want to say anything.

So anyway, this Imagination Park is very cool. It's a beautiful park. There's actually a plaque, which I didn't have a picture of, that says this is where *Star Wars* was dreamed up because he actually thought everything that became *Star Wars* there in San Anselmo and apparently spent a lot of time this particular location. And there's a little plaque.

So for those of you who lift your nose up at me and said I was out and not cool again, you come to San Anselmo, I would take you to the park, right? If I'm in town, that's the only catch. But anyway, so this is the best part of the park. There's a sign there that says no pets on the grass. And there's also this flood horn that goes off-- it's fabulous-- every Friday at noon.

But there's a sign that says no pets on the grass. And where I live in Marin County, that might as well say put all of your dogs right here on the grass and have them do whatever they want because where I live, dogs, people, just so you know. And then this is the best part; well, you can't see right next to that sign-- is that funny? Am I the only one that thinks that's funny? I'm like, I think you're sending mixed messages. I'm just saying.

OK anyway, that was my entertainment. Is there anything else I wanted to say before I started? Oh, that was it. Am I cool again, kind of? No. It would be cooler if I knew him. I should have said just said that because it's not like you would say, no, you don't. Unless you knew him, and you would ask him. That would be just my luck.

So I just wanted to also before we get started just mention that how many of you went to the fabulous Jeanne Aarhus's class this morning? That's the right answer. Only a few of you. So Jeanne has this kind of a similar topic. Hers isn't as fast paced. She has a fabulous class. Is Jeanne here? Jeanne? Jeanne's not here? She's always here. We try to sit-in on each other's classes.

I wasn't able to make it this morning. But I saw she had some similar to in her class. So I'm going to apologize for that ahead of time because we should talk more to each other. Each year we kind of go back and forth. I go first one year, and then she ends up having to do the repeats. And then the next year she goes first. And so anyway, so anything that she talked about this morning that has to do with the new release of AutoCAD, you will hear that again from me because of the tips and tricks booklets that you guys got when you walked in-- did you get them? So those are focused on 2015 and '16. So those will be in there.

I have to start now? OK, I have my fabulous time keeper, Lynette. And were any of you here that year that I fell? Do you remember that? Like I was running, and I tripped on part of the screen thing, and I when rolling in a ball. I was like bleeding. Do you remember that? Do you remember what I was mad at? No man helped me-- not one man. Two women-- one of them was one of my best friends and Lynette-- came running over to me-- no men. Exactly, all right, sure, he would have helped me. And so now she's my time keeper and my very good friend. See, it all works out.

If I fall this time, you're going to help, right? OK, all right. Moving right along, so the goal today I'm going to go through massive amount of tips, 60 minutes. And if I get all the way to the end, we'll get to your favorite part. Usually the favorite part on ways to torture your co-workers. Those are extra bonus tips, so I have to go pretty fast, or we can just go five minutes over, if that's OK with the next presenter.

There's no way I'm going to share with you 60 tips where you don't know any of them because you all know different things. So my goal is that you just walk away with maybe, well, the more the better, but at least a good dozen tips that maybe you didn't know about that you can put to work in the office when you go back to work, which hopefully is not Friday. Or did any of you tell your boss it was a two-week seminar? Smart, smart-- and there's also we have a game. And if you haven't been here before this is the part where am I going to tell you how you win. The rest of them know.

So the prize is the typical black knight from *Monty Python and the Holy Grail*, which is awesome because it's ah! It's just the flesh wound. Yeah, there's that. He has all the limbs come off. It's awesome. I actually used to have a picture of my dog walking around with one of the limbs it was hysterical, but anyway. Except he's missing a limb now. Anyway, and then for the *Big Bang Theory* people, remember this, rock, paper, scissors, lizard, very good. What is it? Scissors cuts paper. Paper covers rock. Rock crushes lizard. Lizard poisons Spock. Spock smashes scissors. Scissors decapitates lizard. Lizard eats paper. Paper just proves Spock. Spock vaporizes rock. And as it always has, rock crushes scissors. There you go.

So you get to pick. This is an extra large. But you know dryers fix everything. There we go. Here's the limb. I'll give you the limb later. So let's get going-- enough, enough, enough, enough. So I have a lot going on. I have to remember to do this and do that and do this.

So, dimensioning, AutoCAD 2016, my absolute favorite features are the new dimensioning

features. How many of you have tried the new dimensioning features in AutoCAD 2016? So just really quickly, and I'll run through these after I give it a little bit of a premise, how many of you have used AutoCAD long enough to remember the old DIM mode in AutoCAD?

So we used to go into DIM, right? And then we would go into our dimensioning commands. That's gone. So if you still use that, which you probably shouldn't, this one's newer. It's better. It's kind of a one-stop shop. Same idea-- you go into DIM mode, do your dimensions, and then you get out of DIM mode. And I love it. Do you guys like it? It's good stuff.

So I'm going to go very, very quickly. This is not a funny class. That's all the fun you got earlier because I have to go so fast, which is kind of a bummer. So here we are in AutoCAD, right? And I this is the deal; of course, you go to Annotate, and this is a new one-stop shop dimensioning tool. The old guys are still there. You can still do the regular dimensioning that we've been doing for years and years.

But I'm going to encourage you to try the new one-stop shop. And one of the main reasons why I suggest that is because there's this cool new drop-down that you can tell AutoCAD you want your dimensions to go on the dimension layer. You can set this ahead of time. You can tell it what layer you want for dimensioning, and then you don't have to worry about changing your current layer when you go to Dimension; it will just do that for you automatically but only if you use the new dimension tool. And, of course, there's a new system variable, because we don't have enough system variables, called DIM Layer. Taking off my bracelet because it's serious.

So you could type in anything you wanted. If the layer does not exist, it will create it. And if it does exist, it will just use it. It will use the defaults to create a new layer. But then you can put it in a script file because it's accessible from the command line.

Let's go into the new dimension tool, which is frickin' awesome. I love it. I love it because nobody goes into the office and says, yay, I get to dimension today, right? Nobody's ever said that ever. Well, if they did, they're not right in the head. So am I right? So this is so easy. You simply select an object, and then you pick where you want to dimension to go.

I currently have my object snaps off. You just keep going, pick anything you want, not that I would dimension that and pull it out-- very simple, very straightforward. Pick it, pull it out, very simple. If you turn your Object Snaps on, then you can pick the two corners. If you like to work harder, you're welcome to do that. But, of course, in some cases, you have to do that because

it's not a complete object.

If I decide I want dimension mention this spiral staircase-- I missed, bad shot. Did it take me out? Also very important, when you're DIM mode, if you do an extra enter or an escape, even though I made a mistake in my pick, it will take you back out to the command line. Can you see that? Very, very, very important-- if you want to undo the last dimension that you did, you have to do that in DIM mode while you're still in there.

If you go out to the command line and I did and Undo here, what would happen? All those dimensions will go away. You will all learn that the hard way. But can't say I didn't warn you. So let's go back into DIM because I fell out. And I was a bad shot because there's a lot of people looking at me.

So very simple, you pick the objects that you want. Let's zoom in a little bit so I can get that radius. And then it's doing Radius, and you want it to do Diameter or vice versa, you can see down at the command line, you can switch over back and forth. If you have Dynamic Input on, it'll be a little bit faster. But you could go back and forth and pick anything that you want-- very simple, very straightforward. Do not hit escape.

So what do you want to do Angular Dimensioning? Well, once you select two objects that are not parallel-- thank you, glad you came-- then it's easy enough. And you can see, if I zoom out, it's going to pick a variety of different angles based on what you pick, where you're moving the cursor-- very simple, very straightforward. And there's a lot more to it than what I'm showing you. But I think you get the general idea. It takes a little practice because you haven't been doing it that way. But once you get into it, I think you're going to love it.

What happens if you decide to put a dimension on top of another dimension? In fact, let me turn the Input on, so you can see that just a little bit better-- Dynamic Mode. Can you see that on there? So it gives you three options-- Move Away, Break Up. It sounds like my relationship, sorry. I'm kind of sad now that I'm showing this future, but anyway. Replace and None. So None will actually just leave it where it is, and you'll be able to hear your drafting teacher crying when you leave it there. But that's up to you.

So let's start out with the Move Away. You'll see that the dimension you just placed gets to stay where you put it, but the other dimension moves away from that one. So the other dimension kind of loses that. Let's do one more. And you can see I'm going to bouncing. I'm turning my object snaps on and off just to get this. But if I can break up, again, you'll see that it'll actually

turn into in, this case, a continued dimension, where it actually places it within the dimension it's on top of.

So like I said, these things take a little bit of time to get used to. So try it though. It's awesome. And last but not least, an AUGI wish list. I love the AUGI wish lists. Are you are going to the AUGI meeting tonight? Yeah, so every year they give an assortment of wish lists to AutoDesk. And then we run back in and try to make them all true. So quite a few wish lists were granted in 2016. Double click mine-- it's so hard when there's everybody looking at you. Go, go, go-- why aren't you doing it? I think it's too much coffee.

Now it did. Go, all right, thank you. So now, if you've ever wanted to do word wrap in your dimensions, you want it to be easy. So now you can very easily double click-- no coffee. And then you can simply grab the slider bars and control how wide it is, et cetera. So if you take a look at the PowerPoint-- I'm so spoiled this time because I actually have a screen up for the PowerPoint. New DIM command, DIM layer, the name, how to do it, angular, options and overlapping-- OK, I told you all that.

Let's move to the next one, the user interface. So there's a few changes in the user interface inside of AutoCAD 2016. To start off with, we have the Start tab that came out in 2015, but we called it New tab, and we're just trying to confuse you but changing the name. Yay, now it's called Start tab. Completely different, looks exactly the same.

Some of you like New tabs, Start tab. You pick your release. It's up to you. If you don't like it, you can actually turn it off by setting Start Mode to zero. You have to actually turn it off, and then leave AutoCAD and come back in before you will see it will happen. So don't think that you are losing your minds. And you can also, as you're deploying it, you can say, look, I don't want to Start tab. So that's up to you.

How many of you like the Start tab? How many of you want it to die a terrible death? If you've used AutoCAD for a long time, then, you don't want anything in the way between you and your command line that were kind of preprogrammed. But imagine opening AutoCAD for the first time and seeing an empty piece of paper with graph lines on it. It's not very friendly.

So there's some nice things in here. I'm going to actually show you something now that I'll talk about later. There's two tabs in here-- very simple to figure out. You don't need me to show you any of this. You start a new drawing. These are the previously viewed drawing. Make sure

in the Options dialog box you have the number of previously viewed drawings set to as high as it will go, which is the number 50, because it defaults to 9, which is a terrible awful default. Make sure you have it set to 50. I'm not going to show you that right now. Options-- you'll find it.

But what I do like about this, there's two tabs on here. There's Create and Learn, I found out. If for some reason, Create and Learn do not show up on the bottom of the screen, if you hit F5, they will. Who knew? Just so you know, in case you don't have it. But I love the Tip Of The Day, upper right-hand corner. Like I said, this is a tip for later on.

But it allows you to go back and take a look at what the-- it's supposed to change every day, make yourself smarter. It gives you a chance to, on all that spare time you have in the office, to take a look at the tips. And then you don't need me, really, if you just look at the tips. I haven't looked at them. I don't know if they're good tips or not. But they're tips. Those all look like they're the same tip. They're fabulous.

So let me see what else have I got on there. So galleries, do we have any ribbon rebels out there? Ribbon rebels, you guys all using the ribbon? You finally caved and used the ribbon, right? It's not going away. You're finally like, all right. So one of the nice things that I think they put into 2015 is the ability to when you go to the Insert tab of the ribbon, you go to the Insert Tool. You will see that all your blocks automatically show up. See, I think that's cool. Somebody didn't like it.

Oh, let's be in the Viewport, jeez, sorry. I mean, I think you get the idea. You can drag and drop it. Somebody didn't like it, so now there's a System Variables. You can turn the Gallery View to zero, for you who are gallery haters. The galleries also show up if you take a look at your Styles, your Text Styles, Dimension Styles, and Leader Styles, et cetera. Somebody didn't like them.

Anybody not like them? I'm just telling you. Cursor Badges-- you can see an example of a cursor badge. Those were put into 2000-- was that '15, too? Yeah, 2015 as well, and somebody complained about that. So now there's a system variable to turn those off. See how we roll? Except that this is the best part of that system variable. Can you see that up there? You set it to one to turn it off. And you can see what you set it to to turn it on? Two, of course. What does zero do? Nothing, yay.

So let's go back over to-- I don't have to go back over. Jeez, I'm so used to going back and

forth between the PowerPoints. I'm very, very spoiled. So just a couple of other things-- it was added in that you can actually click on this plus to create new layouts, which I like. It just numbers them. That's not a tip. It's not even on the screen. It's a bonus.

So maybe you are really layout crazy, and you're having a lot of layouts, and you'll see that the layouts are now in line with-- I'm going to keep adding them-- in line with the status bar, which I love because I'm really greedy with my screen real estate. If you have a lot of layouts, you may like it the old way. Bless you, you might like it the old way. You do a right click, you can put it back above the status bar.

That's too many layouts, in my opinion. And then also, I don't know if you noticed, inside of AutoCAD 2015 they left off at least one I think is a pretty essential thing that you have on the status bar. They accidentally left off Isolate Objects, which is awesome if you want to torture your coworkers. You know what isolate objects is right? You select a bunch of objects. You can do a right click, and then you can hide them. You could like hide a whole drawing, and nobody would ever know, unless they know by looking at the icon in the lower right-hand corner that you have objects that are isolated or hidden.

Well, they got rid of the icon in '15. That's funny, no? I think that's hysterical. So they realized they made a mistake. They put that one back. And the other one they put back is the-- there's so many screens-- the lock UI. So you can go in and lock things down. You can move them and lock them. You can not move them and lock them and things like that. So there you go.

What else have I got? If I do a right click on any file tab, there's cool things in here. One of the cool things was close all other drawing. So whatever was the tab you clicked on would stay open. All the rest of them would get closed down. And then someone said, that would be cool if it was a real-life command, so they did add in an actual command for that the Close All Other command. I guess if you want to write a script file, I don't know.

I like to right click and click now. I didn't use to, though. It was always used to be all typing. Is that all of them? She's raising her hand. I'm on 14. That's pretty good. I keep hitting page down. I'm too hyper for this.

Oh, I saw you first, even though there was probably someone else first. So this is a very complicated game. Rabbit shows up, and only a rabbit. Rabbit shows up, then you get to pick between these only two prizes because I have to go fast. Do you want a black knight that's already lost a couple limbs, or do you want the t-shirt? The shirt? OK, come up later and get it.

Is that OK?

Oh my, guys, there's like no enthusiasm. Come on, people, people, people-- yay. And I put chocolate on some of the chairs. How many of you got chocolate? That's my my way of bribing you. Actually, my thought process was to get people to sit in the front-- you know people never sit in the front. Then I had extra chocolate, so I sprinkled it around. But not enough chocolate for everybody. And my mom taught me to always make sure you have enough for everybody, so I'm sorry. Chocolate for everybody next year, OK?

So Revision Cloud, so a little trivia for you. I'm sure many of you use the Rev Cloud command for years. Used to be an express tool. Before that, it was actually a tool that went on the Bonus Tools. That was written by Dave Harrington, who used to be the AUGI president. I don't know if Dave's here or not. And so he wrote this tool, and everybody loved it because we had no way to easily make revision clouds. It became a Bonus Tool, and eventually the Express Tools got a hold of it. And then they kind of ramped it up and made it better. And then eventually, you know that a lot of the Express Tools grew up and became real-live AutoCAD commands. And so that's where we got the old Rev Cloud and the new Rev Cloud command.

So one of the things with the Rev Cloud command was, I mean it worked fine, but it was easy to make really wonky looking arcs, especially when it came to editing them, which is fine if you're like making shrubbery-- shrubbery-- I just wanted to say that-- or something like that. But if you want to make a nice looking revision cloud, it was always a drag when you tried to edit it. So now we have this awesome revision cloud.

So let's go to-- I think I moved it around because I didn't know my screen was going to be so big, and sometimes it falls off the end. Usually, this is at the end. So actually, let's go over to this other drawing. Let's go over here. Please hold. So very similar to the way it used to work, and don't worry; you can put it back to the way it used to work, if it makes you happy. Rectangular-- pretty straightforward, ya.

But if I click on it, you can see it has totally decent looking grips-- big deal. This was a big wish this request to make a better revision cloud command, right? Very straightforward-- of course, you can do polygonal, same deal. Very simple, very straightforward-- if you want to do circles or ellipses, you need to draw those objects first. Then you go into the Rev Cloud command, and you're going to select the Object, same idea. And once again, very easy to edit, that's one of the nicest things about it.

The big AUGI wish list request was the ability to take more than one revision cloud and basically put them together. So this isn't exactly the way I thought they were going to do it. You actually go back into the Rev Cloud command, and you do M for Modify, and then you select the one you want to work off of. And then you proceed to go ahead and draw your revision cloud, and then it wants to know which side you want to erase. You can see that wouldn't make a lot of sense. But you could, if you wanted to if you wanted a unique shape you didn't already have or, I guess, decided you couldn't draw it that way to begin with-- so very straightforward, very simple, just do modify.

So there is the Rev Cloud Scripts system variable, for those of you who want to put it back. It's literally a toggle. So once I turn that off to put it back to the legacy behavior, you can see that these guys are all the way they used to be. So you could make a tree or a plant or whatever you want to make, whatever makes you happy-- nice. But then if you do it again, turn it back on, they go back to-- they're smart again.

This class is hard to teach. We've all, over the years, figured out how to-- let me come back over here-- how to put frames around our texts-- use Rectangle commands. Some of us get very creative with M Leader. Well, now it's not an M text. It's not in the M Text Editor, which maybe is where I would have thought it would have gone. It's actually in Properties.

If you select existing M Text, and then you go over to Properties, you can actually pull it down to the very last option under Text, and you'll see that there's a new option for Text Frame. And I'm sure that there are some variables that control this. I don't know what any of them are. I tried to find them, couldn't find them. You control the size of how far away they are from the text. It's like this. So I'm sure that they will add some variables maybe in the next release. But it looks great. It's easy.

And then we added in 2015 the ability to do match properties. If I double click to go into the M Text Editor-- and actually, in Jeanne's class, I remember her talking about this that last year, Match Properties wasn't sticky. And do you know what I mean by that when I say sticky? It doesn't stay on. You can only do one match property at a time, and then you've got to click it again and do it again, select the one you want the properties to follow, and so on and so forth.

So now it is actually sticky. So I can select some text, and then I can say Match Properties. You can see it's a toggle. It stays on until you turn it off, and then you can just go ahead and select whatever text you want to have the same types of properties, and it will continue to do

that until you toggle back it off. So that was put into AutoCAD 2016.

Let's go to Geometric Center. This was also a wish list request. Always get out of the M Text dialog box first. Look at the command line. And big AUGI wish list request is the ability to find the geometric center of an object. We know how to get to the center of an arc or a circle. But we'd probably have to draw some type of construction lines or get really creative with a variety-- you'd have to probably get kind of creative-- I would say maybe object snap tracking-- to find the center of a triangle or a polygons and things like that.

So now, if you take a look under Object Snaps, we do have a new geometric center. It's GCE if you're a typer-- typist. Good English, Lynn. And if I go into any command and I click on these, you can see we have a new icon, actually, to indicate geometric center. It's a nice little asterisk. If I come down here and just move my cursor over the object in the bottom, you'll see there's a center of the arc, but there's the actual geometric center of the entire object. That was a big wish list request. And Xref Override-- I like Xref Override. So that one is-- let me go to it, because I don't remember.

Another system variable-- oh, get out of the command. So if you have xrefs in your drawing file and you want to change the properties of the layers from the xrefs, you can go into the dialog box, the layer dialog box, and you can change, for example, the color of those xref layers. And as long as the objects are by layer, the colors will change in your drawing.

If the objects are not by layer, it just will laugh at you and mock you and too bad. So there's a new override that allows you to tell it, I don't care what the properties are on the objects from the xref; I want you to allow me to control them in the layer dialog box. So let me show you what I'm talking about. It's kind of interesting. I'm not sure if CAD managers would like that or not. Kind of, maybe they would. I don't know. You could just have had a bunch of people that were bad at drawing, that didn't know what they were doing.

So here I have an xref in this drawing. And actually, inside of those three Viewports back there, those are all xrefs in there. And I'm going to go just to the xref layers. I'm going to grab all those layers just to kind of show you what I'm talking about. And I am going to select them all, and I'm going to change the color of those layers. Let's change them to green today.

So you can see some of the objects changed to green, and a bunch of them did not. That's because those objects are not by layer. So if I go into Xref Override, a new system variable--

because we don't have enough system variables, right-- and I set it to one, no watch. See, they're all going to change no matter what. It doesn't affect the drawing that was brought, in the original drawing. It only affects this drawing. And it's a toggle as well so you can change your mind at any point in time and put it back. It's only temporary. It's not going to cause any damage, any harm.

But if you want to print it out a certain way, you can override those. And then the Sys Var monitor, it's not even in the menu. It's not in the ribbon-- top secret. Have you ever loaded a LISP routine where it changed a bunch of system variables, and you didn't realize it until you tried to use AutoCAD and bad things were happening ever? No, just me? All your LISP routines are perfect, all right, good.

So there's a new system variable called Sys Var Monitor. I think maybe CAD managers would like this. Someone's computer is all messed up, and, who knows, maybe they did it themselves. You can just have this set up, so you can just run it at any given time, and it will make every everything back to the way it used to be.

So what you put in here is you put the system variables that you care about, and those are important ones like Attribute Dia, and if you don't know what that is, I'll show you in a minute, and pick first. And actually a lot of these are defaults that come with the Sys Var Monitor because the product support people are actually tired of answering the question on the phone and realizing that these system variables got turned off, either from running a routine, or because they accidentally turned it off.

So a lot of these are already in here. You can control them yourself. Add anything that is your pet peeve. You can say Edit List. You can grab anything, maybe an empty MT jig string. We'll be talking about that later. And you can bring it over. You can give it whatever setting you want it to be. And then the system variable editor will actually, if you have these selected, the system variable editor will let you know if things change, which is nice. You can tell it to violently tell you with a big bubble or just to let you know at the command line. It's up to you. I like the bubble. I want it to be clear.

So I'm going to run a LISP routine that I messed up called Burst It. Very similar to the Burst Express Tool, which allows you to explode a block with attributes, and keep the attribute values, not put it back to the attribute definition. I'm sure many of you have used Burst. You guys are sneezers today sneezing. I hear the sneezing, bless you.

So I'm just going to come over here. I'm going to select this block. And it does all kinds of great things, It explodes a block and leaves the attribute value. But you'll see in the lower right-hand corner of the screen, it also says, hey, one or more system variables has changed. So let's say I don't know that, and let's say-- let me just show you what it changed pick first got messed up. I'm going to select these objects first and then go into the erase command.

I would expect to be able to erase the objects I selected first. And it totally ignores me and asks me to select objects. That's one of the system variables a lot of people get mixed up on and that call product support on. That's one of the defaults. And this is actually a great way to torture your coworker. The next one, somebody turned off File Dia.

If I go into the Open command, you will see that it's actually asking you to-- I'll close this. At the command line, to input the directory structure for the joint file you want to open-- do you guys even know how to do that anymore? You know, C colon backslash, blah, blah, blah-- we don't even know how to do that anymore. We're used to picking it in a dialog box. Great way to torture your coworkers-- it will drive them nuts. At Dia, set it to zero. Make sure they're not using this new command, Sys Far Monitor.

So let's go back into the Sys Var Monitor. And you will see that it says, alert, alert, alert-- three things got changed. Mirror text in there by default as well. So it's very simple-- Reset All, and then we move on, and life is good again, very, very simple. So that's a Sys Var Monitor. That was way over a minute for that. But it's kind of important.

Click-- oh, what happened? I don't know what happened there. Doesn't matter. We're smart. WE can figure it out. And incidentally, there's a handout posted with all of this information in it. It goes to the tips, exactly the same way. Some of you probably already download it. It goes through the tips. It explains them all. It is up, just so you know.

Then I also posted the Tips And Tricks booklet up there. The PDF makes a great Christmas present. Mom'll love it. You can even take an extra one for mom. So Layer Translator-- have you ever been in a situation where you had a-- let's go over here-- a group of layers in a drawing, and then they change the standards on you? Now they want you to change the layer names and the properties and all that to match a different standard. And hopefully, you did not just go in the layer dialog box and change them all individually, unless you get paid by the hour, in which case, that's exactly what I would do.

So there's a very cool command called Lay Trans, and it's probably up there in that ribbon

somewhere. It stands for Translate Translayer Translate. And this is a listing of all the layers in the drawing I'm in. You do have to have a drawing file that has the correct layers. And then you would load that drawing file that has the correct layers. I'm just going to select any drawing file. But you would load the one that has the right layers in it for the new standard, and then you literally select a layer on the left in the current drawing, and you pick the one that you want to map it with on the right. Tedious, but way better than doing them individually in the layer property's manager. And you click it, and you say Map.

You can click Map Same, if you want to. And then any of them that have the same name, will just automatically be mapped. The key here really-- it tells you what happens, the new properties it's going to get. The real key here, though, is that you can save these settings. So let's say you have to do this to a whole bunch of drawing files; you don't want to do this for every drawing file. You can save the mapping, and then next time you come into Lay Trans, it saves it as a DWS file.

The next time you come to Lay Trans, when you click on Load, you're not going to pick the drawing file that has the right properties and standard set. You're going to click on the DWS file, and then it will map them, and then it's very, very fast. Really nice command-- been in AutoCAD a long time. A lot of people don't know about it. And what do we got? Lawalk, this is an easy one. I'll even pick it from the ribbon just because that's what I'm supposed to do.

Let's just go to the Layer's dialog box, the Layers panel, and you'll see it's the one with the feet. I'm sure many of you know this. It's just a really fast way to find out what's on each layer. And you can even do the opposite much better than going to the Layer dialog box and controlling it that way. You could even do the opposite. You can go into Laywalk. You can select Objects, and it will tell you what layers those objects are on. What did I just do?

Laywalk, let's try that again. Click on here, click the layers, there we go. What else? Laywalk-- this? We'll do it in this drawing. This came out a couple of releases-- Laymerge has been a command. It's been around a long time. Now they actually incorporated it into the Layer dialog box.

So let me actually switch to a different current layer. And here we have-- bless you-- three plant layers. Plant something shrubs, another one, and we want to merge them all into one. So I'm going to go ahead and I'm going to select these these two layers, right click, and then Merge Selected Layers To. You select the layer you want to merge those two layers onto. So I

want them to go on the Plants layer, so there's only one layer left when we're done. And it comes back and says the selected layers will be merged into layer Plants.

What it should say is we're about to delete those layers that you just selected, and they will be gone for your life forever. But that's too big to put into a dialog box. So, yes, I would like-- if you have fear of commitment, do not do that. So actually, if I take a look at the layers, you'll see that now I just have the one Plants layer. And you can and do it. It's not really forever. And then while we're at it, Laydel.

I'm sure many of you have used this. This is a fabulous tool, one of my favorite commands. If you've ever had that one layer that you can't get rid of no matter what, like you turn off all the other layers and there's nothing on the layer. Maybe somebody hit a space bar or something evil like that, and you can't get rid of a layer because there's still an object on there, even though you can't see it. And you go to purge then, and it won't let you get rid of it.

So it's not like those layers are really a problem. It's not like they're really slowing you down. But that is not the point. You want that layer to die and to go away, and it's bugging you. And every time you go in the Layer dialog box, there it is staring at you and taunting you. Maybe it's just me.

But anyway, so Laydel does not care what's on that layer. So often a layer is referenced in a block definition or for dimensions or something like that, and so Laydel is awesome because it will actually open up that block definition with the offending layer and rip out that layer and then redefine the block and delete the layer and now that is power.

[APPLAUSE]

Just remember, where there is power, there is danger. So keep that in mind. And two layers it won't let you get rid of zero and death points.

Set by layer-- so we've all worked with badly behaved AutoCAD users, correct? They just don't get that whole by-layer thing. Something is red; they make it red. I want it red. I will make it red. The whole layer thing is lost on them.

So if you take a look at this drawing file, you will see that all the layers are gray, which you would never do. And if you take a look at the drawing, clearly there are some things which are not gray, which means that somebody was misbehaved. Am I right? CAD managers are like, oh, it's awful. They should be locked up for a long time. Fire-- fire them all.

So if I select this object here and I go into Properties, you can see it has a color and a line type, not by layer. I could fix that. Not too hard to fix that. That's not the end of the world. This is a block. If I click on that and I go into the Layer properties, it tells me it's by layer. And like, you're a liar. Because if you were by layer, surely it would be gray.

But we all know what happens when you put objects into blocks that are not by layer, or even worse if there's a block inside of a block, a nested block, where they didn't do by layer. And if I have to fix that, I am cranky now. That's a bigger deal to fix. So a few releases ago, a lot of people don't know about it, is the fabulous Set By Layer. Come on. Don't do a zoom extents then. That's fine. Set By Layer makes everything-- there's no Y, right? No, wait, didn't I type-- wait. Oh, Study by Layer-- I'm like, wait a minute, I typed it in right. This is why I love this because the last few releases of AutoCAD you do not have to know how to spell anything. You can spell line L-N-I-E, and it's like, I got it. I got it. You meant line-- love it. You can even set up your own for if you keep making the mistake.

Like in my phone, the I is close to the l, I've spelled tomorrow wrong so many times it put it in the dictionary with an eye instead of with an O, which is really irritating. Because now it thinks it's OK for me to spell it that way, and it's just not. And so you can actually customize that. I think I showed that like last year or the year before that.

Anyway, Set By Layer-- I want everything to be fixed, accept change by block to by layer? You betcha. Including those nested blocks, those blocks? You betcha. And now everything is gray, and you don't have to fire the person, which is nice, yay. Copy to Layer, I'm not going to show that one to you. You guys are smart. It's easy to figure out.

Copy To Layer kills two birds with one stone. If you read the handout, I'm always like, why are we always killing birds? And why do we feel the need to do it with one stone? I don't know. But anyway, if you want to kill two birds with one stone-- if you ever wanted to copy objects, and after you copied them, then you ended up changing them to a different layer, Copy To Layer lets you kill two birds with one stone. It does a copy and then ask you what layer you want them to land on. And if you want to very quickly put a bunch of layers into-- let's go to one that doesn't have much, like this guy here.

If you want to put a bunch of layers from another drawing into a drawing that you already have, there's a really lazy way of doing this. Those of you who have used AutoCAD, let me just

show you the layers in here-- not many. If you've used AutoCAD for a long time, this used to be the only way we knew how to do it. You go on the Insert command, and you find the drawing file that has the layers that you want. And I'll say the Ribbon Drawing. Bless you, again.

Now, at this point in time, what do we do? What do we do? You hit Escape. So didn't we insert answer anything. There's nothing in there. But now if you take a look at all the layers in here, you will see I have a whole bunch of them. On the other drawing file, which seemed interesting. And if you go to Annotate, you'll actually see that if you have any text styles or dimension styles or M leader styles, those come across as well.

So it's just a speedy way when you don't have everything in the drawing that you want, but you have another drawing that has it, to bring it all in-- one way of doing it. And we'll take a look at another way of doing it in just a second. And then of I had it my way, there would be this one command that you can go into and you would say I want all my hatches on this layer. I want all my text on this layer. I want all my dimensions on this layer. And whatever it is else that you do.

But we don't have that. So they're kind of sprinkled around on the ribbon. I don't know if anybody from the Product team is here. I hope they wrote that down. Looking around anybody? No, all right. Let's go back over. Let's find a drawing with some hatching.

You can do it, however, for hatching. And I showed you how to do it for dimensioning. Just making sure you guys know it's in there. It's kind of hidden. If you drop down Properties here, you actually see that there is an option where you can set a default hatch layer. I highly recommend it. I'm all about saving clicks. I'm big into that. He who dies with the least clicks in AutoCAD wins, for sure.

Moving along, and I tried to use all new tips from last year. There's just a couple that I love so much I kept in. So if you were in the class last year, you shouldn't be sitting here saying, oh, she's already shown all that. I've been doing this for 15 years or whatever. I'm sure there's some from previous releases before that. But this should be almost all new. There are like 5 that are not.

So do you guys still use Design Center? Yeah? So I kind of feel like Design Center was really popular for a while, and then, I don't, it kind of disappeared off the face of the earth, and he's not cool anymore. It's almost like he walked up on the stage with Stormtroopers, but then did

not know when *Star Wars* opened. If you weren't here earlier, I'm not going to explain it again. And so Design Center kind of like lost favor with people.

But Design Center is actually a really cool tool, same deal. It allows you to take all kinds of things from one drawing to another. You can see here blocks and view styles and dimension styles and layers and so on and so forth. So another way to bring layers into a drawing file that doesn't bring a bunch of other stuff with it is literally you can just go into any drawing file and select whichever layers you want. Pick a whole bunch of them, whatever makes you happy.

Let's do a whole bunch. And then drag and drop them into the drawing. It's just that simple. And the same is true with any of those things that you saw on the list. I'm not on there anymore, but you can look over here. So it's the same idea. You can drag and drop from another drawing. And Design Center is really cool about that.

There's also this Create Search capability. If I come into Design Center, which is kind of broken. So how else do you get to Design Center? Control? Oh, OK. Control-2-- I'm big into Control key combinations-- Control-2. So it still has favor enough to have its own control key combination, which I think is good.

There is a very cool search capability, which is kind of broken. Did you just see that? It went, you want to search? And then it went, just kidding. Did you see that it went away? So if you're a programmer, you know that it lost focus, right. I'm losing it today. Too much going on this week-- too many star-- Storm Troopers. [INAUDIBLE] star troopers right back down. Let's pray that I didn't say *Star Trek* instead of *Star Wars* I would have been out forever-- never invited back.

So anyway, so it's still there. If I come down here, you'll see it's there. You don't have to go back and find him. You can Alt-Tab till you find him. It's up to you. But this is a great capability. If you're looking for something, you can remember where it is, look at all the things it will search for. It searches for-- it's probably easier for you to see this.

It's searches for all kinds of things. You basically just pick what it is you want it to search for. If I come up here to blocks, you pick the directory you want to search. If you start at the root directory, be patient, because it takes a while to go through all the files on your computer. It's better if you search specific directories, obviously. But you can search for a lot of things.

My favorite thing that it does is it does what I call a reverse search for xrefs. I can go into my

drawing file. I can see the xrefs in my drawing file from the Xref Manager. Have you ever wanted to go the other way? I want to know what other drawings is a specific drawing referenced into. If I change this drawing, how many other drawings is it going to affect? Does that makes sense?

There's no easy way of doing that in AutoCAD. The Vault has this great command called Where Used. So this is kind of how I would suggest doing it inside of AutoCAD. It's case sensitive, so let me make sure that you understand that. Let me show you this array. Where am I? I'm all the way down here. Good, that's good. Stair one-- and then I have the directory I want to search. I try to make it nice and precise so that we don't have to spend a lot of time waiting for it in Search now. Case sensitive-- don't forget that.

So you can see that it found-- doesn't look a sensitive. OK, it used to be case sensitive. It did. Because I remember I would type one thing, and it would be mad at me if I didn't get it exactly right, or they're not showing me exactly-- well, let's see. Will it show me? This is just all the names of the drawing files. So it shows me all the drawing files at that xref is referenced into.

Then you can see what would happen if you change that drawing file. It could be case sensitive. It could be not. That part I don't know. Yay, she's such a good teacher. I don't know if it is. You can try it. It's not like you wouldn't be able to figure that one out on your own.

So I showed you the tip of the day. If you want to learn all kinds of other things about AutoCAD, I thought I'd throw in a page that has some really good resources that I didn't even know existed, and I only found out because I visited the people that do it. I don't know if I have anybody here from the Autodesk Knowledge Network. Anybody here?

These guys work really hard providing us with information, and we don't even know. How many of you have been to the Autodesk Knowledge Network? Oh, that's so sad. So in your handouts, you can just click on them to get to the right URLs for everything I'm about to show you. I, on the other hand-- here's the Autodesk Knowledge Network.

You can ask it like any question. Pick the product you're talking. About ask it any question, and I'm sure someone's asked it before. And people ask questions, these fabulous people in Product Support answer the questions, or maybe it will find the research from somewhere else. So like if I said, let's see, how to turn off the Start tab. Let's ask asking them that. Hopefully I didn't pick one that didn't have an answer to. Turn off the Start tab. And then, this where I tap dance.

OK, so this guy goes into a bar-- it's thinking. Oh, that wasn't too bad. And it looks like, well, that's not what I asked-- how to turn off the Start tab in AutoCAD 2016. And you'll see that it goes into details on exactly how to do it and tells me to set Start Mode to zero and so on and so forth. And that's for any product, not just AutoCAD.

So that is the Autodesk Knowledge Network. In the handout yet it shows you exactly where to click. Of course, you can Google it as well. And then they also do this-- so it used to be like every two weeks, now I think it's just once a month, but you can go back and look at all the ones that they already did-- these webinars called Build Your AutoCADD IQ. And I have to tell you, these product support people are fabulous. They love what they do. They're really passionate about what they do. And so they're like, oh, we want to share it with other people. We know how to do these things that we learned, because we work in Product Support.

So they have these webinars that you can tune in on. Anybody been on them? Yeah, OK.

AUDIENCE: [INAUDIBLE]

PRESENTER: Pardon? You can find them on YouTube. Or you can--

AUDIENCE: [INAUDIBLE]

PRESENTER: Yeah, there's a listing. Actually, I also have a listing of how you can get to all the old ones as well in your handouts. And what's the other one I have? I did that one. She's looking at me to like-- and then the Help arrows. This is really mostly for those of you who took a while to get adjusted to the ribbon. And one of the frustrating things when you're adjusting to the ribbon is that you have a hard time finding all of the commands, so just a cool feature that they put in two releases ago.

I'm going to go into Help. No, I don't want to do it that way. I'm going to even be lazier than that. Let's just type it in right here. Let's say I'm looking for very complicated command to find like the Trim command. You will see that almost all of the tools have a little Find button and Help. And then it shows you where it is. I know; how cool is that? Where was that when the ribbon first came out, right?

[APPLAUSE]

Oh, you guys are so easy. Isodraft-- do you guys even know what that does? It's on the status

bar. It very quickly switches you over to Isometric Drawing mode. Let's go find it-- go find. You'll see that I still have a system variable change down there. You'll see that it also is showing you where it is in the status bar. It will also show you if it's in the Application menu-- Find.

I'm behind, huh? I'm behind. Oh, it's my dog. That's not a bunny rabbit. This is my dog Tiffany, and she is not a Steelers fan, despite what you see up there. She has sent switched to the Broncos. Oh, really, Peyton Manning, hello? She loves Peyton Manning. She has a little Peyton Manning Jersey maybe.

Autodesk Exchange. Who's been to Autodesk Exchange? Let's say you can't figure out how to do something on your own. Maybe someone else figured it out for you, and they wrote a nice routine. It's that X in the upper right-hand corner. Do not confuse it with this X. That does something completely different. And so click on the X, and you will see-- come on, you can do it for me. I know it.

It will take you to the Autodesk Exchange. If you're in AutoCADD, it will take you to the Apps for AutoCADD. A lot of these apps are free. Not a surprise, the most popular apps are the free ones, or a trial one, it's also free. And it has the most popular-- it used to just have the most popular apps, but none of the paid apps ever showed up. So anyway, you could go find all kinds of things you can do.

You can have it do a search. I can type in block, and it will find all of the various tools that have to do with blocks. Maybe you're not on AutoCADD 2016. You can tell it what releases you're after-- very friendly. A lot of them are free. Just nice people who wrote the apps, who put him up there. And if I go back in AutoCADD here, you will also see, there's like the Featured Apps tab that shows you-- apparently no featured apps. There we go. You can just take a look at if you're waiting for something to happen. And Add-Ins has the ones that you've installed.

Do I have time? My favorite-- Hangman, free app, somebody at Autodesk wrote it. It's posted. It's approved by Autodesk. I love it. So first thing you should know, it gives you this little dialog box that tells you it's easy to get rid of it very quickly in case your boss walks by. If you hit any key on the keyboard-- I love it. If you hit any key on keyboard or you click outside of Hangman, and it's gone.

To be honest, it's best on a black background, as you can see. I have a white background; boss is totally going to notice that. So make sure you have the background set to dark. And

then it's just really a matter-- it's hard to see, too, if you don't have the black background to see. I'm just going to-- [INAUDIBLE]?

I can't hear you.

AUDIENCE: [INAUDIBLE]

PRESENTER: L? T? Y? R. Are you guys glad you're in this class?

AUDIENCE: K.

PRESENTER: K? H? G. Oh, you lost. If you just like do that, you have to hit OK first. What if my boss walks over right then? You just click off of it, it's gone. Come on, it's fun. If you have a black background, you can see it better. I've got to hurry.

Hot Grips and things like that-- let's go over to this drawing file really, really fast. You can have more than one hot grip using the Shift key. You guys know that? Do whatever. Line to arc continuation, an oldie but goodie. If you go on the line command, you draw a line, and I will not have it orthogonal, just to kind of show you how this works. I go add a line command. You can always pick up off of the last line by going back in line command, hitting and extra enter. Did you guys know that? Just in case you didn't know that.

It's actually cooler with arcs. If you go on the Arc command and you hit an extra enter, it'll find the last line that was drawn. It will automatically draw an arc tangent to the line. Did you know that? Go back in the Arc command, hit an extra Enter. It will draw an arc tangent to the last arc that was drawn, if the last thing you do is an arc. It just depends whatever the last object was, if it was a line or an arc.

If you hold down the Control key, you can even reverse it so that it goes the other direction, which is a new feature came out 2015, '14. That if you hold down the Control key, it will reverse the direction of the arc, so they don't have to always be counterclockwise. And if I go back into the line command, hit an extra enter, and the last object that was drawn was an arc, you'll actually find that you can draw a line that's tangent to arc. And I mention Control to reverse an arc.

If you ever had a Viewport inside of another Viewport you tried to get to you ever? And that move in the one so you can get into it? Control-R will actually cycle through all of your Viewports until you get to the one that you need. I think that Jeanne showed this this morning.

I saw her handout later. I was like, oh, we're always on the same track.

So this is a polyline. I want to just get rid of that one segment of a polyline. I have to explode it and get rid of it. If you hold down the Control key and you click on it, that will allow you to select it individually. And then you can hit a Delete, and it gets rid of it. But it does maintain the fact that it is still a polyline.

Blend curves-- that one is-- blend is a command that came out a couple of releases ago, did not have a good press agent. A lot of people, I find, don't know about it. I love blend. How many of you use blend. See, terrible press agent. Just you, you're the only one that found it.

So if I wanted to just put a nice little curve from this curve to that curve, I could go into PEDIT, and we all know really bad things happen. You have this massive crazy tangent arc, and bad things would happen. So if you go to the Home tab on the ribbon, it's hiding underneath Fill It. There's an very cool command called Blend Curves. It allows you to pick the two endpoints of any curves. It puts a beautiful little curve in their. It's fabulous, saves you lots of time.

If I accidentally deleted the parts of this arc, you could use Blend or you could just draw a new circle, like you should. But it's not even quite right there. But if I didn't use PEDIT on this, I would get some crazy wonky arc. I can actually pick the two endpoints here, and it puts a nice curve. Now, there are a lot of variables involved as to what kind of curve you get, so definitely, you have to look into that, so you get the correct curve. And Join--

So Join's been around a long time. Join is a great way to get rid of extra objects in your drawing file and, I think, a fast, fast way to convert individual objects into polylines, for example. If you take a look at this, you can see you have all these individual little-- awful, shame on them-- all these individual little segments. What is up with that, right? They got paid by the object. If you get paid by the object, don't use Join.

I can go on the Join command. I could say, I want you to join everything. Didn't used to-- so if you used Join a long time ago, you probably gave up on it. It used to be so picky. You had to pick the first source object. And now I just say, all, I would like you to join everything. I'm going to have a great, big, huge party, join it all together.

Then it's simple. Just hit an extra enter. And then it tells you exactly what it did. And you can see how these guys are all joined together. It's fabulous. Don't do that if you get paid by the object. We're getting there. I never make it on time.

Super, super, super fast-- I might skip a couple of these because I'm running out of time. I know you want the last page of the coworker torture. So let me go over to-- what [INAUDIBLE] do I want? Think, think, think, back to tips. I'm sure many of you have discovered this is individual text. Maybe it was in an old drawing file. You really wish that it was M text. You can select them all. You can go into the fabulous, fabulous Express Tools, convert to M text. And now you can easily control the paragraph, which is often what we want to do with those old text strings.

If you go into single line text in a D text just making sure that you know-- let's make that height of like three, that first line. You can actually continue to click all over your drawing file. You don't have to go back in. Just keep clicking wherever you want that text to go. A lot of people don't know it. Fourth line, and then you can end it all.

If you actually fall out of D text, you didn't use M text for whatever reason, you want to place a line directly underneath the last D text. If you go back into the D text command, did you know if you hit an extra Enter, it automatically goes underneath the last one that you did? And then if you want to put it right underneath an existing one that was not the last one that you did, if you go back into D text-- let me turn my objects-- oh, they are on. You grab the-- oh, that's not D text anymore-- this one. You grab the insertion point, make sure it's the same height, of course, same rotation angle. Hit a space bar, hit an Enter. It will take you down to the next line.

And fast, fast, fast-- oh, I like this one. We'll see if you. If want to edit this attribute, if I double click on it, it takes me into the Attribute Editor. I like to see it in place. If you hold the Control key down and you double click, it will actually allow you to edit in place. So that's Control-double click.

[INAUDIBLE] area-- do I have time? OK, really, really fast-- I want to put text on here that tells me the area for this hatch, and I want it to be smart and be able to adapt if I change it. So fields are just a whole class in and of itself-- huge, huge, huge lot going on there. So very, very quickly, and I have this all laid out in your handout, I want to get a field that has to do with an object.

I'm going to go ahead and pick the object that I'm interested in. It's this hatch pattern. And then I'm interested in the area. And then it lets you pick the format. Do you want it to be architectural, engineering, whatever? I'll leave it at decimal. And you can pick the precision. Let's make it like two. Say OK, and then just pick basically where you want it to go.

So now you can tell it's a field because it has that gray background. That will not print. If I make a change to this, it looks like it didn't update, but if you do a region, it will adapt. Region not region-- it'll adapt. So as you continue to modify it, it will stay up to date. So that's a whole other class onto itself.

One of my favorite tips-- MT Jig String. You guys know this one, right? The sample text string is ABC. If I go into text, you can see that mine currently says Twitter. You can change that MT Jig String. Like you could say, go Broncos, even without Peyton. And now if I go in, you can see it changes. Or you could put I hate my job, or I need to raise. 10 characters-- you've got to keep it to 10 characters, and it doesn't let you do special characters.

The last three-- almost, last three-- this one. So for those of you who work in tables and are lazy like me and like less picks than necessary, I want 1.8 in all those squares. I click in that square, and there's this blue diamond. And it says click and drag to auto-fill cells. We don't ever read that. But I'm just going to show you. You can pull it down, and that will fill all the cells with the same amount.

Probably more than anything, you want it to be sequential. So I pick two cells, so it knows what number it needs to start with. It knows the differential between them. Grab it, pull down, and it will number for you. And so now that takes me to-- we'll just go over here.

If I go in the Insert command, you will see at the very end, and this is a whole topic too, Autodesk Seek. There's a fabulous group at Autodesk called Autodesk Seek, and they work really hard. It's the land of free content, essentially. Why should you draw a chair, when there's all kinds of chairs out there. Of course, it's not your personal content, but there's a lot of content up there because they want you to buy their chair.

So you'll see, I get all kinds of chairs. I get Revit files. I get out AutoCADD files. There's all kinds of options on here. And there's pages of them, and you could continue to go down and pick the chair that you want. There's 2D chairs. There's 3D chairs. You can select the chair you want, and then you can bring it into your drawing file. That's Autodesk Seek, also in the handout. So now, that was the next slide. I just happened to know what it was.

This is the best part of class, and then I'll be quiet.

[SHOUTING]

Oh, oh, oh, I need to look somewhere else. OK, you because you have a flashlight in the back. Don't come up, but you get the three-legged or the two-legged, one-legged, five-legged-- so let's move along,

This is the fun part. These are similar to last year because they're fun. These are my favorite. There's a couple of them that we didn't do last year. OK, so, Control-9, I love this-- you need to be quiet. That's because I changed MT Jig String.

This is just ways to torture your coworkers. Just do it to the mean ones or the new ones. It's up to you. Control-9 gets rid of the command line. You can actually abolish this, if you want to, so doesn't even tell you. Say yes, and then the guys like, um, make sure that dynamic input is off too. And then I have to go on the line command, wait. You can't see. I'm typing; nothing shows up. That's fun.

Zoom factor-- zoom factor controls the speed that you zoom in or zoom out. It's usually set 50, 60 whatever. I like to set it to three. So now let's go into a drawing it's a little bit more fun. Let's go into like this one. You see am I'm like zooming out. Zoom in-- that's fun. They won't know what's going on. You'll be like, come on, what's up with you? You're so slow. Zoom factor-- really? That's because I was in a different drawing. And then this next one, I don't even have to show you-- zoom wheel.

Oh, I have to show because I'm trying to remember which is which. But it's in the notes. Zoom wheel-- so zoom wheel reverses the zoom. So right now we have it set so that when you move forward, it zooms in, and when you move back, it zooms out. If you use Autodesk Inventor, completely opposite. If you use both products, you lose your mind.

So they decided that they would add a system variable, and they have one in Inventor too, that allows you to basically reverse the zoom-- so fun to do to your coworker. So if you set zoom wheel to one, when they go to zoom in, it's going to zoom back out. And it's fun. I'm just saying it's fun.

Pick Box-- set Pick Box, you could set it to zero. I go in the Erase command-- um, uh, um, right? Or you can set it to 50. It didn't go far enough. Do you guys use your arrow keys to go back through to previous commands?

[LAUGHTER]

Let me zoom in and get closer. Oh, it zooms slow. Undefine-- so this is my favorite. Well,

Alert's my favorite too, and Define. So under Finalize, you undefine any AutoCADD command. For example, I want to undefine the line command. Now when I go on the line command, it doesn't even show up. And if I try to type it in, is it showing? Oh, it did something else. Di you see that?

If I come up here, and I go to the Home tab on the ribbon-- because it found something else that had an L in it. And I click line, now it will tell you, unknown commad. OK? It's great. I prefer to do things like Save, Q Save, and Save All. All those are my favorite. Just do them all. You can do them all.

Now just so you know, in case somebody does this to you, there's a Redefine command. Do not undefine the Redefine command.

[LAUGHTER]

So I can put it back in, and now if I go on the line, it finds it. That's fun. OK, the last one, alert-- so this is LISP routine. It's in your handout in case you don't remember it. It's really fun though. Alert allows you to create a dialog box that says whatever you want it to say. Reformatting your hard drive, please wait, double click. So you put whatever you want it to say in double quotes, open paren, a closed paren. The format's in your handout. And then I love this because reformatting your hard drive, please wait. And then there's no cancel. It just says, OK.

This is great to do to the new guy. You can just see the new guy going, uh. Now, it used to be, way back when, you can click on the X now. But they didn't used to have that, so it was way more fun because there was nothing you could do to get rid of it. Anyway, so there you go.

I'm over my time, sorry. Not too far over my time. Remember, if you want to, a good portion of the classes from previous releases, all of my Tips and Tricks classes are posted on AU online. They're absolutely free. And this one will be posted to, in case you want to hear it all over again. Every couple of weeks I do those video tips and tricks. I'm sure many of you have seen those.

If you go to catalyst.com, you can find those up there. What else? That's my blog. If you want to-- look, you guys. are like, oh, I'm out of here. Bye. I'm a little hurt. Is this all I mean to you? After all we've been through?

[APPLAUSE]

Thank you.