

MERCER UNIVERSITY

# Instructional Design Internship Report

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Mercer Engineering Research Center

Jake Missall  
Spring 2016



This is the final report summarizing Jacob Missall's Spring Internship experience with Mercer's Engineering Research Center (MERCC) from February to May 2016. It adheres to the Technical Communication (TCO) guidelines listed in Mercer University's academic handbook.

**To:**  
Helen Grady, Ed.D  
Mercer University, School of Engineering  
Professor and Chair, Technical Communication



**From:**  
Jacob Missall  
Mercer Engineering Research Center (MERC)  
Engineering Intern

**Date:** May 26<sup>th</sup>, 2016

**Subject:** TCO Internship Report; Jacob Missall

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Dr. Grady,

I am writing to inform you that I have completed my final report, which details my time spent at MERC. It has been reviewed and is in compliance with TCO standards as specified in the document "Final Work Report, Portfolio, Display."

The report contains my reflections and evaluations toward my experience, as well as samples of some of my work. If you have any questions or concerns about the content, please feel free to contact me by e-mailing [JacobCoy9@gmail.com](mailto:JacobCoy9@gmail.com).

Respectfully yours,

Jacob Missall

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## Executive Summary

From Wednesday, February 24<sup>th</sup>, 2016 to May 20<sup>th</sup>, 2016, Mercer University student Jacob Missall worked a Technical Communication internship with the Mercer Engineering Research Center (MERC). While working at MERC, Jacob created multiple training modules using Adobe's Captivate 8. The modules were designed to train Air Force employees (both US and international) to use various pieces of software.

The learning objectives surrounding the experience were largely focused on Instructional Design as a concept, and were ultimately achieved and surpassed. Evaluations of the objectives are positive, and suggest that the student will continue to learn more about the topics. By the end of the internship contract, Jacob was offered a full-time position starting in Fall 2016.

The author recommends that students pursue an internship at MERC, and also suggests that the TCO department continues its work with the organization in the future.

## Introduction

Sometimes, life hands you lemons. Other times, like hands you the rest of the ingredients to make a really nice lemonade. While I was finishing up my last semester at Mercer, I was also working at a Mexican restaurant at the Riverside mall. I remember having a table of four guests at table 64, one night. One of these guests was Cliff Hammock.

We ended up talking about education, and I mentioned that I was a Technical Communication (TCO) major. He told me that he worked at MERC, and knew a few TCO students, since they had worked as interns for him. I decided to go for it.

“Is there any chance you’re hiring interns now?” It turns out that they were. Cliff shared with me his e-mail contact, and a few months later I was being interviewed in Warner Robins. It was a three-on-one interview between myself, Cliff, Billy Osbourne (the head of the Information Systems Division [ISD]), and Patrick Hobbs (a graduated TCO student; now working full-time at MERC).

The interview went well. They asked me about what skills I had, and what classes I had taken at school. I demonstrated a project that I had finished in my Instructional Design class taught by Dr. Brewer. The project was a slideshow presentation that taught learners how to set up a tripod camera for live broadcast. (I was involved with an organization on campus that broadcasted Mercer’s sports games, so I decided to choose a topic that would allow me to merge two of my areas of interest together.)

At the end of my interview, I was asked to come in to work on the following Thursday. They told me that I would be making computer-based training (CBT) for one of their systems. It was then that my experiences at MERC truly began.

The next Thursday I showed up at the front office early, and in a pressed shirt. After orientation, I was shown the AIRCAT<sup>1</sup> lab. The lab is basically a think tank of software engineers, where everybody works together on related projects. I met the individuals that built the programs I'd be making training for. They were (and are still) a friendly bunch, and they seemed like a good group to work with.

On Friday, May 20th, 2016, I completed the internship contract between Mercer's Technical Communication department and Mercer's Engineering Research Center. In my 90 days at MERC, I have worked on three web-based training programs. One has been published and is currently being used to train engineers at foreign air force bases. Another is being revised, and will eventually become mandatory training for thousands of US Air Force engineers stationed at different bases around the world.

I have also tested multiple web systems and computer programs, looking for bugs that would depreciate the integrity of the products. One of the issues identified was a cross-site scripting vulnerability. In the unlikely case that an experienced hacker was to gain access to one of the systems, that person would be able to parse through databases or even delete the data within them. The discovery of this vulnerability led

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<sup>1</sup> Automated Inspection Repair Corrosion and Aircraft Tracking (AIRCAT) is a collection of products that are used by the US Air Force. AIRCAT is made up of a number of different websites and applications, and is used to manage fleets of aircrafts including (but not limited to) the C-130 'Hercules' cargo plane and the UH-1N 'Twin Huey' helicopter.

to fixes within the coding of multiple web systems (outside of the one I was testing) within MERC's umbrella of AIRCAT products.

Overall, I've learned a lot of new skills and techniques, and have expanded on what I learned during my studies as an undergraduate TCO student at Mercer.

Obviously my Instruction Design class played a large part in my work. It was beneficial for me to see the teachings applied to real-world situations. Specifically, things like the ADDIE model and Gagne's nine steps helped me to organize my training, just like in class. Furthermore, I realized that there was so much more complexity to ID than I had originally thought. It's a rich specialization, and I've only just scratched the surface.

As I spent more time on the Instructional Design projects, I could tell my techniques were growing stronger and faster. I could add more elements to the modules with every update, and I felt more capable overall. The later projects are much more technically sound than my earlier projects, and I am now able to create them a lot faster than I could at the start.

The topic of Usability is tossed around MERC quite regularly. There's currently a push to build a usability lab based loosely on the TCO department's set-up in Macon. I was only recently made aware of just how valuable my TCO education is. Around the office, nobody is trained in usability testing except for one person (who had a [thorough] two-week certification course). Consequently, MERC is investing time into new interns who are being hired with Usability in mind. There's talk of a new team of 'experts' being put together, and it's looking like I may soon be taking a certification class, myself. With my experience from TCO's Usability course, I'm

quite comfortable with the topic, and feel qualified enough to handle assignments should I be given them.

My Document and Web Design class has helped me in many ways. To this day, that class has been one that has given me skills that I've used in various situations. Working as MERC has been no exception.

My Multimedia course is what opened my eyes to Adobe Captivate, since I had never seen nor used it before. Now I use it nearly every day, and I feel like I can do almost anything with it.

Not to be overlooked: TCO 341 (Technical Communication) has taught me invaluable skills regarding the workplace. My e-mails look sharp and professional when I send them, and any report or presentation I give is clear and concise. Of course, Technical Editing helps with my grammar and formatting, and makes me question literally every sentence I write. Together, these benefit me tremendously in areas of document professionalism.

Overall, I can't think of a single TCO course that has *not* helped me during this internship. I'm extremely grateful for the skill set that the TCO department has provided me with, and I don't feel like I would ever have been able to accomplish very much here without it.

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## Evaluation of Learning Objectives

Most of my learning objectives were fulfilled as I worked. I feel that I have learned everything I set out to learn, and then some more. Listed below are the revised objectives and my evaluations of each:

**“To continue learning Adobe Captivate well enough that basic tasks are familiar and quick to complete.”**

This goal has been met and surpassed. I am now familiar enough with Adobe Captivate that I am comfortable taking on any task relevant to the program. There's still more to learn (Captivate even has a new version out), but I know I could master it. Even if I encounter a problem, I'm familiar with the Adobe help forum, and can use that to figure out any issues.

**“To continue to utilize features such as ‘learning interactions,’ ‘advanced conditional actions,’ and the different simulation abilities to create a complex, high-quality multimedia product.”**

This has mostly been achieved over the different modules I've had to create. By the end of my TCO contract, there was a noticeable increase of quality in my later projects. Things like audio narration and advanced actions became more common as I became more familiar with Captivate's different functions.

**“To continue to learn the more complex social etiquettes and appropriate behaviors to exhibit within a workplace environment.”**

I'm still picking up on the small nuances of office life, but I'm enjoying it. I'm not so nervous in my discussions with other engineers, and I can comfortably talk

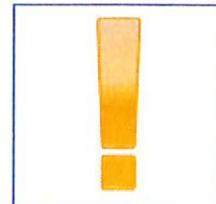
with my superiors if I need to speak with them. These communication skills are absolutely necessary to succeed in a work environment.

**“To continue to use skills and techniques learned in TCO classes to my internship work. Likewise, to continue to learn about Instructional Design through research and problem-solving.”**

In my “Revised Learning Objectives” submission, I commented that this objective was vague. Even so, I feel that I’ve fulfilled this objective entirely. Every day I work, I am thinking about what it means to be a TCO professional. I’ve become so proud to claim it lately, and I’m beginning to see it as my profession. I’m excited to grow it as much as I can.

**“To continue to learn the various tools and actions within Adobe Products. To learn how to troubleshoot Adobe Products using their support site.”**

As I continued my work, there were a few cases where I needed to learn another Adobe program quickly. One of these more recent times was a button suggestion for one of our developers. During a meeting, I used Adobe Illustrator to draft a “!” button (see right) to use within a system. Although my idea was not implemented, I impressed one of the other project leads with my quick creation.



**“To continue to look for opportunities to apply knowledge learned from my media studies minor and my time spent with Mercer Video Productions.”**

Unfortunately, I don’t feel that I completely achieved this objective. Although they may be beneficial in the future, my videography skills have not come into play in my current projects. Since I’m working mostly with software, video recording is not relevant. Still, I am applying knowledge gained from my Media Studies minor, and

am also referencing general experience from working at my Mercer Video Productions internship.

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## Recommendations to TCO

As previously mentioned, I'm very satisfied with my TCO education. From the hand-on projects in multiple classes (e.g.: the usability project with the 9-1-1 call centers, or the exhibit redesign project with the Macon Museum of Arts and Sciences), to the highly-interested teaching staff, I want to reinforce the current model, and encourage the department to keep moving in the current direction. I feel that as it continues to grow, the TCO department is going to provide even more students with skills that will make them successful in the right applications.

If there is any opportunity to collaborate with MERC in the future, I would highly recommend pursuing that work. MERC has many interesting projects that they work on daily, and the experts here are very knowledgeable about what they do. Many love to teach others, and are not shy about helping somebody who is eager to learn. With that being said, there could be a lot of good opportunities for TCO projects.

In regards to internships, I know that a number of TCO students have become interns here. MERC respects the work and abilities of Mercer's Technical Communication students, and really appreciates its interns. I would recommend that the TCO department continues to support students that are looking at MERC, and to encourage them to apply. It truly is a nice environment in which to work.

## Closing Thoughts

Ultimately, I judge my internship experience at MERC to be a complete success. I feel that I have graduated not only as a student, but as a person overall. From here I am setting goals for myself, so that I may always see progress. I want to continue to learn more in my field, and to create more opportunities for myself to take on new projects. Hopefully, my future work at MERC will help me achieve those goals.

Would I change anything? I think we all ask ourselves that. I've had some difficult experiences in my 23 years on the planet, but I don't think I'd change any of them. I feel like we are made into who we are by the experiences we face every day. We should our best with what we have. That being said, I would not change anything for fear that I would probably not be where I am today. I thank God for the opportunities I've been given, and look forward to what is in store for me down the road.

To all the readers, whomever they may be: I wish you the best of luck in your endeavors. Hopefully you work hard and are rewarded well. If not, then keep working hard anyway!

Regards,

-JM

## My Time at MERC

-Jake Missall

On February 25th, 2016, I started my internship at the Mercer Engineering Research Center (MERC) in Warner Robins, GA. Some of my main tasks include creating computer-based training for a new system created by the Automated Inspection Repair Corrosion and Aircraft Tracking (AIRCAT) lab, the spacious 'think tank' room in which I work. This daily journal consists of the experiences I have had each shift.

**Thursday, February 25th, 2016**

(Relevant Documents: "Assignment 1 - Hardware Installation Sheet 2.ai")

On day one of the internship, I woke up early and had a cheese danish for breakfast. I went through my daily routine, and then started my 25-minute commute to Warner Robins. The whole time, I was nervous, thinking about the internship, and what I was to be doing. Although I was excited, I still had those butterflies that anybody gets before moving to a new job. My mind was flooding with thoughts like "Will I be good enough?" "Can I keep up with the work they give me?" and "Will I fit in alright?"

I finally made it to the building, and told the receptionist that I was here. I was 15 minutes early on the first day - that's a good habit to start. Ms. Twila Forbes took me to a nice conference room, and started my orientation. We filled out a number of papers, and she gave me a map of the building. The building is mostly a grid, so I haven't had too many problems getting around. Besides, the AIRCAT lab is in the back corner of the building, so it's pretty easy to find.

After the tour, we went to the IT department, so that I could be entered into 'the system,' and get my ID card. I got to meet the IT guy (named Chris), and he showed me a little bit of behind-the-scenes info about the server room. It was a pretty big operation, because of the large amount of offices.

Next, we went to the AIRCAT lab, where I met up with Patrick Hobbs. Currently, Patrick is acting as a sort of unofficial, middle supervisor between Billy Osborne and me. He was to be giving me my work for the day, since my orientation was complete.

Patrick said that it was time for lunch, so we got tacos with another employee named Michael. During the lunch, I learned that Michael is responsible for a different MERC project involving mid-air refueling of helicopters. I also learned that I'm not a big fan of Lengua (in traditional Mexican cuisine, beef tongue is considered a delicacy).

Once we got back from lunch, I was assigned my first task. Patrick took me to meet Misty, who is in charge of the 'LineArt' project. In a nutshell, this will be my secondary project throughout the next few weeks at least. Misty was very friendly, and welcomed me to the internship. She explained the LineArt project in brevity, as she pulled up the first assignment on her computer. Basically, MERC does a lot of work with the Warner Robins Air Force base. The base is home to a unit of aircrafts known as C-130s, a massive model of airplane (pictured right) that has been in production since the 1950s. Because it was

such a simple design, the model has been able to be used for many years without many changes. The problem, however, is that many of the documents in circulation have lost resolution due to copying. MERC's task is to recreate the old figures and diagrams, using Adobe Illustrator.

It was at this point that I began to get excited; I had done something very similar to this in one of my classes. In Professor Coleman's Art 116 class, called "Design & Color on Computers." I got even more eager to try the assignment when both Patrick and Misty commented on the difficulty of the particular figure they were giving to me. Apparently it was a hand-drawn diagram, and was going to be more difficult than some of the previous pieces. They were implying that it may be too difficult for a first-task for a new intern, but I still felt confident that I could complete it. I am familiar with drafting, thanks to my drafting class and also to my Dad. He's an engineer at a fabrication company in Sebring, FL, and has worked with autocad since I was young. He's often times sat down with me and showed me what he does, as well as how he does it.

With all that in mind, I told Misty that I felt comfortable, and was willing to accept the task. They gave me the file, and then Patrick set me up in the standalone multimedia lab. Because my AIRCAT computer did not have the necessary software on it, I was going to have to work alone. I spent the rest of the day (about 3-4 hours) processing the old document. It went very well, and I was interested and involved in the task from start to finish. Once I completed it, I was excited to show my work to Patrick. He gave me excellent feedback, saying that I did a good job. By that point it was time to leave, so we would have to show Misty in the morning (on Friday).

As I shutdown my computer for the day, I felt a number of feelings hit me. Pride in a job well done. Satisfaction at having completed my first day. Happiness, because I was doing something I'd invested time learning how to do. It truly was a new day for me, and I am now eagerly looking forward to where the rest of the internship goes.

*Fun Fact: When I was given my new employee MERC coffee mug, it slipped out of my hands and shattered into a million pieces on the floor. After sweeping and making some jokes, we decided it was a good way to meet some of the other staff. A sort of 'ice-breaker,' if you will.*

**Friday, February 26th, 2016**

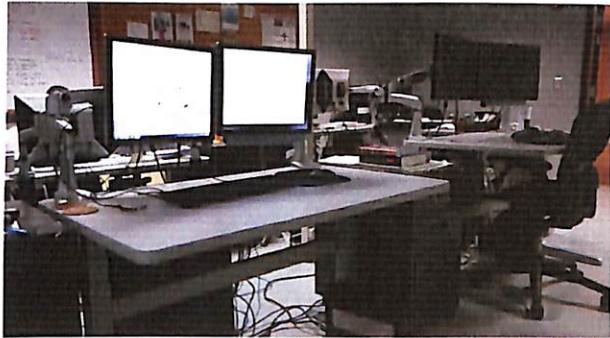
*(Relevant Documents: Assignment 2 - Tailboom Electronic Shelves and Supports.ai)*

The second day at MERC, I parked in the back of the building with the rest of the employees. I walked through the employee door at the back, and unlocked the door with my employee badge. Although I still felt new, that was the first time that the new job started feeling real.

By the time I had arrived, neither Patrick nor my managers was in the building yet (they would be showing up within the hour). I was instructed to get feedback from Misty while I waited, so I took my document to her. She also said that I did a great job, and said that she would be sending me another to



work on whenever I had with time. She remarked that this one was going to be even more difficult, and I would later find out that she was right.



Once I had finished getting feedback from Misty, Patrick found me, and we met with Billy in his office. For my primary task involving the CBTs, it was necessary that I have Adobe Captivate on my office computer (shown left). I also needed Adobe Illustrator so that I could work on my LineArt tasks inside the AIRCAT lab. Hence, our next task was to install the programs.

Unfortunately, this would not be as easy as it seemed, for a number of reasons. First, the AIRCAT lab has an isolated internet system with a small bandwidth (only 3 mb/s download speed). Since it is shared by the whole lab, downloading both Adobe products from the website was out of the question. Downloading the 3gb files would render the internet unusable for at least a couple hours. Naturally, the other engineers need to work, so we would need to find another way.

The workaround was to download the files using an office in the main section of the building (with the main internet connection), and then to transfer the files via my flashdrive. We found an office, and started downloading the necessary programs. After the downloads completed, we would need to install them and input MERC's serial key numbers that I was given by Billy. These would unlock the Adobe programs for full professional usage, and I could begin work as normal. We managed to install Illustrator, but Captivate was going to require more work. We decided to download the file using the wifi, but at the end of the day (when nobody would be bothered by the slow connection).

By this point, it was time to start the new LineArt assignment. This time, I was remastering a diagram having to do with Tailboom Electronic Shelves and Supports. I still have no idea what that is, but the work was straightforward enough. Should have been the same as last time.

However, this one offered a challenge. While the figure from Thursday was a three-piece drawing with flat views for front, side, and top, the new drawing I was working on for Friday was an isometric drawing (meaning it's a faux 3d drawing, with the viewpoint at a lower-left angle). Not only was it an isometric drawing, but it was based around a cylinder, which means it would be necessary to use ellipses. Furthermore, the drawing was much more pixelated than the one from the day before. Many spots on the new drawing lacked a considerate amount of data, which would make recreation difficult.

It ended up taking me the next 5 hours, with a lunch break in between. It was frustrating, and I was struggling to relearn the older version of Illustrator (the Mac in the multimedia lab runs on Adobe Creative Cloud, while my PC has Illustrator 5.1). I had problems with the ellipses not wanting to lock to

the same angle. I had problems with the lack of definition at more complex spots. It was ultimately a test of patience that ran me until the end of the day. I would have to finish on Monday.

The last task would be to set up the Captivate download before leaving the office. Patrick and I launched the installer from the flash drive, and were prompted for an Adobe login before the download would start. Since we didn't have MERC's credentials, and we were worried about my personal credentials interfering with the validation, we decided to close the installer and try again after the weekend.

So, my second day had finished, and my weekend had begun. I had a pretty busy day, and was looking forward to coming back on Monday.

*Fun Fact: I keep walking too far down the hallways and having to double-back to get to the different offices I'm looking for. Apparently this is normal.*

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**Monday, February 29th, 2016**

*(Relevant Documents: Assignment 2 - Tailboom Electronic Shelves and Supports.ai)*

Today is a Monday, as well as the beginning of my first full week. I came in and went straight to my desk to begin on the LineArt from Friday. After looking at it with a fresh, new viewpoint, it actually didn't seem as bad as I thought it did the previous day. It was also pretty nice that I had decided to start with the harder part of the drawing. The rest of the drawing turned out to be fairly simple, and I managed to finish it within a couple hours. I sent it off to Misty, and then went to get feedback.

As I pointed my trouble areas out to her, she told me that it looked great and that I need not worry about the difficulties. She told me that most of the previous drawings contained similar problems, and that the client would be checking over and clarifying any issues. Overall, I'm proud of the work I did.

Since LineArt was caught up for the time, I headed back to the Aircat lab. I figured it would be a good time to work on the daily entries and make sure they were ready to be submitted for the last two day. Once I was done with those, I went to lunch at Panera Bread today.

Upon returning, I found Cliff, my other supervisor, and we decided to troubleshoot the Captivate issues I was having. The problem we were (and are still) facing was that MERC had a copy of Captivate for Mac, but we needed one for PC. According to the Adobe website, we need to call customer support and have them crossgrade the program to the new computer.

At the present time of writing, I am standing-by waiting for the crossgrade process to be figured out. A trial version of Captivate has just finished installing on this computer, and I am about to use that to begin familiarizing myself with the program. Once I am feeling comfortable with Captivate, and once the developers have finished the final touches on the Aircat program, I will be able to officially start on the

**Comment [1]:** Sounds familiar. :(

CBTs. In order to familiarize myself, I'm going to be watching [some instructional videos on Adobe's Website](#).

Although the day isn't yet over, I'm going to conclude here for now. I will probably add an update before I leave. If not, then expect an explanation of the AIRCAT system in tomorrow's entry.

### Update

It's the end of the day, and I've just completed the last of the training videos on Adobe's website. I feel even more confident now than I did before. The website gave me a lot of really good ideas, and taught me how to use a lot of simple features that will help make the final project look professional. I already have some solid plans, and I am eager to start working.

I am excited about the prospect of developing training in multiple languages. Since the system is being marketed to other countries, English may not be the first language of many of the users. Although MERC's contract with its clients does not require anything other than English, it would add a bit more depth to the project, and would also allow me to go above and beyond my supervisors' expectations. Apparently Captivate 8 has some features designed around multi-language projects. I am going to do more research and see what I can expect.

*Fun Fact: Today the intercom system was undergoing some maintenance. Consequently, the AIRCAT lab and all the hallways were filled with a sort of humming sound similar to the sound made by that demon girl from 'The Grudge'. Jokes were made.*

**Tuesday, March 1st, 2016**

*(Relevant Documents: Time Tracker Training FIRST DRAFT - MAR 1.zip  
Extract folder and run the file titled "index")*

Today was a hugely productive day. I came in earlier than I had the last few days. I decided I was going to work on a training program for a native program used within MERC. It's basically the clock-in/clock-out system used by all the employees. Although it's fairly easy enough to use without training, the system provides a great opportunity to practice my Captivate skills.

I worked on the training from 8am until 4:30pm today, with just a 45-minute break for lunch. The work was pretty constant, and I managed to grind away at it with few problems. I'm very proud of my work (the first draft is in the MERC folder), and I can't wait to show my supervisor tomorrow.

I am going to have to make this entry short, since I've still got to wrap up some office tasks before leaving. I will write more tomorrow.

-Jake

*Fun Fact: Today I made plans to see the movie 'Revenant'. I'll be seeing it with a Warner Robins girl after work on Thursday. Not a bad day, this one.*

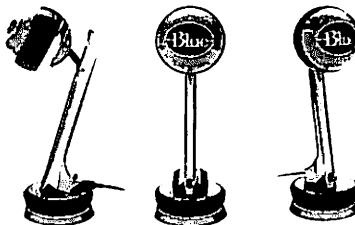
**Comment [2]:** Not one of my favorites.

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Wednesday, March 2nd, 2016

I am starting my journal entry before the day, since I arrived early and am currently waiting to get feedback on the training. Today is a pretty nice day out, and I got a lot of sleep last night. I'm eager to get into another task, but I'm worried that such quick progress yesterday might leave me with a light workload today. We're out of LineArt at the moment, so I may just be instructed to practice Captivate more. I'll probably get some instruction after meeting with Cliff.

I already have plans to create a narration today, so I will probably just start recording that once Patrick can unlock the Multimedia Lab. I brought in a "Blue Nessie" microphone (see right) that I picked up several months ago for personal music recording. It has a pretty good recording quality, so I decided to use it for the training. We'll see how it goes.



#### AIRCAT Project

In a previous entry, I mentioned that I would go over the AIRCAT International system. Also as mentioned before, AIRCAT stands for Automated Inspection Repair Corrosion and Aircraft Tracking. Basically, it was designed for the United States Air Force to log flight hours for the C-130 planes. Because planes need maintenance just like commuter cars do, a well-organized maintenance schedule is of the utmost importance. This is especially true when dealing with military vehicles, since it's crucial in many situations that all aircraft systems are working properly.

The AIRCAT system is an online database of all flight logs for each and every individual aircraft. After every trip, the plane's mileage (air travel uses the nautical mile, which is roughly equivalent to 1.15 miles) is input to the database under and logged under the plane's tail number. When scheduled service is needed, an alert is sent to the maintenance crew. The system even labels the priority of the repair as "high," "medium," or "low," depending on the nature of the maintenance.

The AIRCAT International system is almost exactly similar, except it is marketed to international clients that aren't the USAF. Many of our customers are representatives of Air Forces in different countries (such as S. Korea, Israel, Saudi Arabia, if I heard the other engineers correctly). Whenever these countries buy C-130's from Lockheed Martin, the AIRCAT system is suggested to be sold with the aircrafts. If all goes well with my internship, the training that I create will be included with the package.

That's pretty cool, if you think about it.

(more to be added later)

#### Update

I just finished the second draft of my practice program, and I'm really happy with it. Adding in audio worked like a sort of extra layer to the module. At face value, it looks a lot more professional. The music I found for the introduction fits nicely, and I managed to sync the graphics to the beat.

When making the intro, I took a lot of reference from different video games I've played. It's common to see a couple logos fade-in and then -out, so that's basically what I did. It's this sort of on-the-fly emulation that's keeping me going. I'm liking Captivate a lot, and it's been pretty good to me so far. I am still needing feedback, since practically nobody has seen the work yet. Going to try to meet with him right now.

I'm wondering how well the ending is going to be received. I got a little creative with it, and added some cheering and confetti. That took a little extra work blending the audio files, but I like how it ended up. It's more "fun" than "strictly professional," but I think it's a nice touch. The animated confetti .gif looks pretty good actually. We'll see how it goes over.

Will update once I have comments back.

#### Update #2

I showed Cliff my module, making comments as we went through. I pointed out areas in which I struggled, and also explained how and where I came up with different ideas. He commented on a few things, such as the narration and the music. As expected, the audio made a big difference. The celebration noise at the end got a few chuckles. He said that I needed to put something on there about 'Miller time,' so maybe I'll throw that into a future draft for fun.

I feel like I'm going to get more detailed comments once I show the product to Billy, my actual supervisor. (3/22 edit: This information is incorrect - Cliff is my actual manager. Billy is his supervisor. I was confused at the beginning, but it is Cliff that oversees my work.) He's out-of-office all this week, so I won't be able to show him until Monday. It sounds like Cliff is expecting me to create a second practice project to work on until then. I'm a little burned out, since I went so hard on this first practice one. I used basically all the tools I was interested in using, so I guess my second module will utilize a lot more of the advanced features. I like varied tasks, so it looks like I'll need to get creative here. Let the brainstorming commence!

*Fun Fact: Using the microphone for narration yielded excellent results, and it was super-easy to do. That's a great opportunity I'll have to take advantage of.*

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**Thursday, March 3rd, 2016**

I started this morning on a new Captivate project. I think that I'm going to just start getting pieces in place for the AIRCAT tutorial, now. I'm still a little unsure about the full scope of the project. I need to make a list of questions to ask and have them answered.

Most of my questions are about the users. I need to make a sort of user profile so that I can know exactly how to direct my instructions. Do I need to teach them how to use every little part of the website, or is it assumed that they know what they're doing and just need some help with a feature? From using the website today (Brandy gave me access earlier), I don't see it as that difficult to use. I guess that gives me a very obvious path to use for the training, then.

I like the design scheme for the project. I based it off the AIRCAT logo, and it looks pretty nice so far. It would be nice to use some red accents somewhere, though - I haven't used much red.

Earlier in the afternoon I recreated a handful of different logos and graphics in illustrator. It was basically more of the LineArt assignment, since the technique was similar. Now I can use different size logos anywhere in the program. I managed to do them pretty quickly, too. This week has really helped me learn my Adobe suite pretty well. I'm a lot faster now, and I'm getting better with the different tools as well. I'm actually considering getting the adobe creative cloud subscription for my home computer. For \$19.99/mo, I can get illustrator on my home PC. For \$49.99/mo, I can get the whole Creative Cloud and be basically unstoppable. Since I have access at school and work though, I may just use them there. It's something to think about.

Anyway, it looks like I'll be working on more of the AIRCAT tutorial in the morning. Going to conclude and start wrapping up now.

*Fun Fact: Today I found out that my headphones share music with the rest of the office, if turned up too loud. ♫♫♫♫*

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**Friday, March 4th, 2016**

*(Relevant Documents: [This article](#), [Estimating Costs and Time in Instructional Design](#))*

I got a lot done on the main project today. I got here just before 8am, and started working on more formatting of the layout. I'm going with a sort of multi-sectioned module, with different sections going over different tasks within the system. I touched up the intro, and worked in a way to get Captivate to fade-to-black before going to the home screen. Basically, I just put a large, black box in front of the entire slide, and then timed it to fade in at the end (essentially hiding the content before cutting to slide two). It's dirty, but it works great in the presentation.



I also did a lot more graphical work, including replacing the navigational buttons. The stock buttons work well enough, but are very ugly. I got some hi-res buttons (see left) off of a Google search (paying attention to royalty-free downloads), and imported those. They look a lot cleaner now, and I've got a wide array of buttons to use now, too.

I used one of the buttons (a small airplane at the bottom-right of the image) as a sort of hidden feature. If you click it on the home screen, it'll open up a secret slide at the end. I found a puzzle widget, when I was looking through the Captivate features. It's just a simple, little app that you can import a photo to. I got a picture of a C-130 from [the US Air Force website](#), and used that.

It's funny that I get very worked up about hours, and making sure to stay busy. Naturally this is really important, but I think I'm a little uptight about it due to the whole "If you have time to lean, you have time to clean!" motto that was thrown around at the restaurant. It's a little more laid-back here, and I have to be reassured that what I'm doing is okay. Things like water breaks and bathroom visits aren't as large of an issue in an office environment, so I'm still getting used to that. Cliff actually said something today about not working too quickly. For the next couple days, I'm going to focus more on creating a good, quality product, and less on "staying busy."

A lot of this is because the AIRCAT system is still in production as I type. It's not fully ready for screengrabs and the sort, so I'm still waiting. I'm going to start doing more research, on Monday. Today I found a couple really helpful articles that I've included as today's two "relevant documents." The first article is about a 2009 Instructional Design study based around the time estimates of training synthesis. The second also regards content creation times, but is based on other academic writings.

So far, I've been having problems trying to get a good frame of reference for my project. I haven't known if I've been moving quickly or slowly, since I've only done this sort of thing a couple times. As one would imagine, there are many variables involved in the estimations, but the articles each provide a ballpark figure of around 100-200 hours of labor for every hour of training (e-learning).

My training module probably won't be an hour long though. Also, I'm not sure how much longer it would take an intern than a professional Instructional Designer. Regardless, it looks like I'm currently at around 15 hours on my current module, and I've got a good bit in place already. Tomorrow I'm going to plan out my time, and create a solid outline for when I'll do what. A Gantt chart may be helpful (and I think I was supposed to turn one into you earlier, anyway).

Well the week is over and I'm the last one in the lab. I will write more on Monday.

-Jake

**Comment [3]:** sounds like you are settling in well and making substantive contributions. Proud of you!

*Fun Fact: Yesterday, I was given an AIRCAT account for training purposes. Today, I have my own aircraft squadron. There's only one unit in the squadron and that aircraft doesn't actually exist, but it's kinda like I have my own plane.*

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**Monday, March 7th, 2016**

*(Relevant Documents: "Early Draft of AIRCAT Training (WIP).zip"  
Extract .zip folder. run "Index" file)*

Today I continued work on the AIRCAT training. Recently I had been setting up the 'floorplan' of the training module. I managed to work on everything from the outline to the visual design to the beginning login process (since that's something that would probably not be changing before the final draft).

I've been pretty self-managed, these last few days. It still feels so unnatural to me to not have somebody over my back the whole time. I've had problems with that in the past, but I guess it's a mixture of new environment and maturity that's keeping me on track. I've constantly been productive, and I've had a lot of confidence in my work.

Even my social interactions are getting a little more relaxed. I've been talking more with the other engineers in the lab, even feeling confident to speak up when I needed info for the training. I'd been encouraged to ask them questions since day one, but it's only today that I've broken past that sort of mental barrier that's been blocking me. It's been good, too! They're fun to chat with. I like to listen in on the joking and bantering that gets tossed around. Since they're all pretty 'tech-y,' a lot of the jokes are quirky and pointed. I'm enjoying myself.

As far as my work goes, I've been doing a lot. After today, I have almost 50 slides on my AIRCAT training. My TimeTracker training only had nine. The large difference is due in part to the fact that I'm utilizing "software simulation" features that I ignored in the previous training module. The software simulation technique creates many more slides on its own, but each slide still has to be checked and then formatted for proper flow. It's a complex process, and I feel that I've done it well so far. Again, I'm excited to show it off.

That being said, I've exported a current draft to upload to the MERC Internship folder. The draft is far from being completed (a few of the sections haven't been started yet and are marked accordingly), but there's a lot to go on so far. I'm also having problems with the widgets not working after exporting. That's something I'll have to do some work on before I'm finished. I'm only using two widgets currently. One is the puzzle so scrapping it isn't a problem. However, the other is a glossary that I'm trying hard to make a "above and beyond" kind of feature. I will try to troubleshoot them in the morning.

I learned a bit about graphic design today. Earlier when creating the visual design, I matched the slide color scheme to that of the website. I managed to use screen-grabs and color codes to match the palette, which gave the design a very authentic look to the website. This makes it look very nice, and let the different screenshots sit well in the middle of the slides. The downside of such a seamless color scheme is that it's a little confusing switching from screengrabs slides. While previewing the project, there was one point where I didn't know if I was looking at the website or the next slide. In future projects I will create a layout BASED ON the website design, but different to it in an obvious way. This will look nice paired together, but still be distinguishable apart.

I came across a problem today that I had to overcome. I was doing screengrabs for the login process (very similar to the TimeTracker project), but this time I had to fill in sample account details. I didn't know if I should write a sample name, or use the common "John Doe," or just simply type out "FirstName." I did some research on the topic, and didn't find too much. Eventually, I had to go with my gut. I used the third approach which was pretty easy to keep going up until the "Country" space. Since it was a drop-down menu, I had to choose an existing country (as opposed to just typing in 'Country'). For the recording, I chose "United States" and made a note that the US was selected for demonstrative purposes. I will bring up the predicament to my supervisor when I meet with him for more feedback. I will probably do this in the morning, since I'm at a bit of a standstill again.

I'm finally at the point where I'm officially waiting on the engineers. I'll start to research some more advanced features of Captivate, so that I'll be able to slow down a little and at the same time have access to better tools for the remainder of the project. Currently, I've still got a bit of steam going, so I have high hopes for the rest of the slides.

It's about time to head out, so I'm going to wrap up now.

-Jake

*Fun Fact: I got a Panera card today. I like Panera bread, and they're right nearby. I've been headed there on a couple different lunch breaks. Now I can get free pastries every several visits!*

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Tuesday, March 8th, 2016

(Relevant Documents:)

Today was another day of grinding away at the module. I got a little creative while creating a progress bar. I decided to use a series of check marks, each of which would activate once the user completed each of the three tutorials. To create this, I had to learn to use some more of the “Advanced Actions,” which are actions you can program into Captivate. (See below)

They work similarly to actual programming statements. I had to assign variables to different objects on the slides, and then check to see the values of the objects. Basically, I would assign each of the green checks as “check\_\#”, and then assign their values to “0.” Once the user landed on the final slide of a tutorial, it changes the value to “1” for the corresponding checkmark .

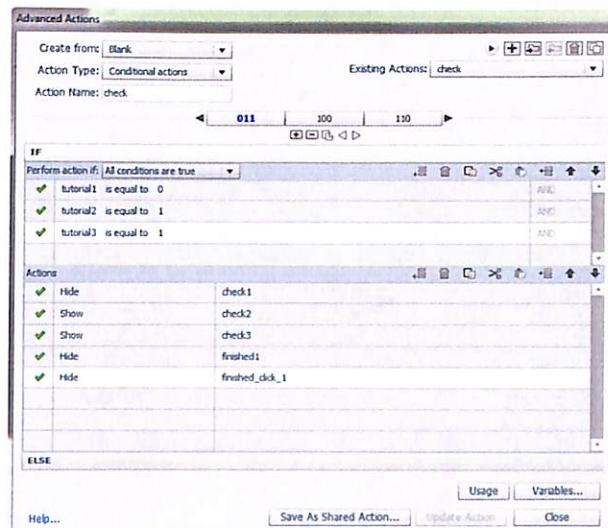
In order to monitor progress for the session, I created a program that would check the value for each of the three checks. I labelled these checks using binary notation. For instance, if the user had completed the first and third tutorials, the script titled “101” will be triggered (because the values received are 1, 0, and 1), and the first and third green checks will be displayed on the training.

I also added a clever way to exit the module using these arrows. As the module existed before, there was no solid way to leave the simulation without simply exiting the browser tab. However thanks to the new progress system, I can display a prompt with the “111” script (where all three tutorials have been completed). When the three checkmarks are valued as “1”s, the script will also display a text box with “Training Complete” across the slide. Once the user clicks on the box, it takes them to the final slide.

...Which begins to play a vintage Miller Time commercial. ([Video Link](#))

I think it's actually the perfect video for the little “Miller Time” joke that Cliff made while watching the TimeTracker tutorial. Naturally the video won't be part of the final draft, but I'm looking forward to showing it.

Well ultimately there was a lot done today on the assignment. I believe I have completed the first draft of the first tutorial, leaving just the two others. I'm still waiting on the “Okay” to start grabbing screenshots for those, so I'll probably work on a “skip” button for the simulation, tomorrow. I want to



create a way for the button to only display on the second pass (if the user repeats the video), but I was having trouble with the Advanced Actions. I've tried a couple approaches, but Captivate is being difficult.

Because you can't have the same object on different slides (instead it creates a copy), I can't use a specific variable for the one "skip" button. I would have to copy-and-paste the button onto almost 30 slides. This will make 30 copies of the button. Since the Advanced Actions rely on unique variables, I would need to make 30 copies of the "Display\_Skip\_Button" program I was trying. Ultimately I scrapped the idea for today, and I will try another method after doing more research.

I've noticed that I tend to take little "Brainstorming" breaks every once in awhile. I kind of just stop touching the keyboard and mouse, and take a step back. It's really helpful if I'm stuck on something. I'll just stare at the screen and ponder what I need to do. Then after a minute or two, I do it.

Overall, I've had a good day. I think I get my first paycheck this week, so I'm excited for that. I might decide to have a small celebration of sorts. Maybe I'll go see a movie after all!

-Jake

*Fun Fact: I was watching a training video today. One of the narrators said the other had been in e-learning since before there was an 'e'. If I'm ever an experienced, tried-and-true Instructional Designer, I'm going to remember that one.*

"Another day, another dollar." I opened up this morning by creating a Google Form that I will be using to gather customer feedback about the training module. I'm pleased to hear that the customers are anxiously waiting for the training. Brandy mentioned that they've asked for it a few times. Hopefully they'll be happy with the result. If not, then the feedback form will give me insight on what needs to change.

It's interesting because I'm working for MERC, and MERC is working for their customers. The result is that I get two rounds of feedback now. I know have a sort of layered request system. If MERC wants a big, blue button on slide 9, I'll do it. Then if the customer wants a bigger label on that button, then I'll do that, too. What's really cool is that I talked to Cliff about working the tutorial almost like a agile project. He liked that idea, and was also impressed by my Google Form. We're going to try to get a draft on the training site pretty quickly, and then edit it from there.

This makes the whole project (and the intern experience) a lot more dynamic. I'm also excited because I'll be (maybe) interacting with people across the world. The fact that my work will be distributed to different countries is pretty cool. I've mentioned a few times already that this whole work has been super satisfying so far.

After finishing the form, I practiced using the AIRCAT website. I'm still needing to familiarize myself with it. I created and submitted a TAR about a broken pilot's seat. "Chair is unusable." I really

don't know what goes in a TAR, so that's the sample maintenance report. It can be changed later, and it was just practice anyway.

Next I researched different C-130 variations. It's a special aircraft, and it's fun to be working with them (albeit in a distant way). I'm wondering if I'll ever get the opportunity to see one in person. There are wing assemblies being stored in the parking lot, fenced off and just out of sight. They're massive!

I was told that I'd be showing my work to Cliff after the bi-weekly meeting that's held every Wednesday at 1:30pm. The meeting was fairly uneventful. A lot of information that didn't involve me, so I just continued readying my draft for the presentation.

When the meeting concluded, Cliff wheeled a chair up next to my desk. I started the module preview and explained in great detail all I'd worked on so far. So far I've put almost 50 hours into it, and there's a lot to show for it. He said it looked great, and he laughed at the Miller Time video.

I had a good opportunity to talk about the research I'd been doing, and we had a brief discussion about the gamification of e-learning. As I mentioned in an earlier entry, I've been taking references from video games, since they typically require a mandatory training at the beginning of each game.

When I was doing some research a couple of days ago, I found a good article written by a professor of Instructional Design. Apparently gamification is huge in e-learning right now. It's simply a great way to teach users, since they respond very positively and typically retain more information. Using subtle features like achievements can make training a lot more effective.

This was exactly the inspiration for the green check marks that I implemented yesterday. I showed Cliff how I programmed in the small 'progress' application. I also showed off the glossary, which went over nicely as well. (Update: I've been bolding the glossary terms the first time they appear on slides. This is a strategy I took direct from school textbooks. It breaks up and cleans up the large blocks of text, too.)

So it seems like I'm on the right track so far. Cliff even made a comment about how the module will hopefully impress the customers.

As I run out of time, I'll have to conclude quickly. I found a good solution to the visual design problem I was having. While I had thought the issue was that my slide design looked too similar to the website, the true issue was actually that I wasn't setting them apart from the slide well enough. All it needed was a grey rectangle which I filled with a gradient and then gave a shadow for more depth. Now, every screenshot in the module is on a "raised" space that immediately presents them as a screenshot of the website. The result is now looks more clear and easy to follow. The grey boxes also make the whole thing look a lot more professional.

Tomorrow I will continue more on the "TAR creation" section of the tutorial.

-Jake

*Fun Fact: I think I want to look into getting an R/C plane. I've noticed MERC employees flying them behind the parking lot from time to time (usually after work). I will try and ask around for more information. That would be a cool hobby to get into, and I keep thinking of all the opportunities for video-mounted flights.*

*Fun Fact II: I don't know if I mentioned yet - I ordered in a virtual reality headset, this weekend (check out [Google Cardboard](#)). Patrick showed me how MERC is using the technology within the lab. That's something I'm going to try to get involved with, too.*

*PS: I meant to write about the glossary help I'm getting from the other engineers. I will cover it in tomorrow's entry.*

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**Thursday, March 10th, 2016**

*(Relevant Documents:)*

As I said my 'hello's and started up my computer, I was told there were donuts and milk up for grabs at the front of the lab. It's one of the engineers' birthdays today, so somebody brought in some donuts. Not a bad start to the day! There was a pretty jovial mood about the office as well. There was some joking going on about cat food. Thinking it was the name of a brand, somebody asked what 'duck' is.

"A duck is a bird," was the response. Teasing ensued.

I spent a large part of the day on a couple of spots I was having problems with. As I mentioned in a previous entry, I wanted to put a 'next' button on a section so that-

-- I was just asked for an update, so I'm unable to finish my entry today. I will write more in the morning.

-Jake

**Friday, March 11th, 2016**

*(Relevant Documents:)*

I have my first deadline. Cliff told me that we'd be sending some documents to a customer on Monday, so I will have just that morning to put the final touches on my first showing draft. So far, the project has come a long way from the one blank slide it was at the beginning.

While I'm close to completion, I still have a bit I need to do before the module is considered complete. From my understanding, an early, working draft is what's expected. Although I've gotten good feedback so far, I'm working about the customer's impression of it. It's not quite as clean as I'd like, since I still have a lot I'd like to do to it.

I had to make an interesting decision because of the deadline. The last section of my training happens to be the bulk of the information. Whereas the first two sections covered logging in and TAR<sup>1</sup> creation, the third section covers actually creating the TAR.

Naturally, the first two sections took a little less time to create. I was using them as practice before attempting the third section, so that the core lesson was the best part of the training.

When I received my deadline yesterday (that was part of the update I had to give), I needed to make a decision: Do I create a quick, sort-of-working section, or do I create an incomplete version of the idea I've had since the beginning (which is ultimately how I'd like to do it)?

My main plan is to create a "software" simulation, just like I used during the "logging in" part of the tutorial. This method is slow, and requires a great deal of tinkering around in order to get the timing elements just right. I also have to add in step-by-step instructions that appear as the simulation plays out in front of the user. This worked really well the first time, and results in a nice product. It's really one of the core abilities of Captivate, and the program does a nice job of it. Hence, it's the best choice for the final product.

However, that's not feasible for the Monday morning due-date. That meant that I needed to create a completely separate tutorial section. I am basing this on the TimeTracker tutorial that I made during my first week here. This uses a sort of info button that toggles help boxes directly on top of the form. Each help box explains what the different fields mean, and what should go into them. It's simple, intuitive, and gets the job done.

The problem with this is that I don't feel it's good enough. I'm worried that it won't look good compared to the complexity of the rest of the project. Unless I'm told to leave it be, I'll probably delete the entire section and re-start using the plans for the original design. Doing so would undo everything I worked on today. On the one side, it feels like a waste of today's time. On the other hand, I see it as a cool chance to juxtapose the two versions of the training so that I can possibly put them into a portfolio. If I save both drafts, I'd be able to show future employers (or project leaders, or whomever) how I progressed and learned while interning.

Anyway, I plan to get to the office as soon as it opens on Monday. If I should up around 6am (I'm usually here at 8am), I should have plenty of time to work on the draft. I really want it to look good, especially if this is going to the customer.

Well, the weekend is here! Time to go enjoy it.

-Jake

Comment [4]: Good work, Jake.

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<sup>1</sup> Technical Assistance Request - A request form that the AIRCAT system is based around. These documents contain information about the aircraft, as well as the nature of the maintenance.

*Fun Fact: Patrick rides a scooter around the long hallway sometimes, and he's trying to make it to the coffee pot and back now. I've just wished him luck on not spilling.*

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**Monday, March 14th, 2016**

*(Relevant Documents:)*

Today was another good day. I just finished showing Cliff my draft for the customer. I was worried all day about my deadline. I was planning for a hard deadline at or before lunch, and I was ready for that. My draft was clean, put-together, and ready for review before I left the office.

It turned out to be more of a soft deadline than I anticipated. I've submitted the e-mail containing my draft, and it should be going out to the customer tomorrow. I'm excited to get feedback, and to have some solid, tangible "do this like this now" tasks to complete. I feel like the whole draft looks a lot like I want it to (other than the whole recreation of the create-a-TAR section), so it'll be nice to have some outside minds give suggestions.

I plan to create a presentation in the morning. I want to make a small module that I would show the AIRCAT staff (the ones creating the system) at the front of the lab. If I were to get just 30 minutes of their time, I would gain a lot of solid information with which I could improve the module. I brought this up to Cliff, and he seemed to think it was a good idea. He said that customer feedback would probably be best to get first. I'm convinced that showing the draft to both parties would be best. That would allow me to edit one draft based on two sets of feedback, rather than editing two drafts based on two sets of feedback. I will bring this concern up again tomorrow.

Once my update with Cliff was done, I asked if he'd like to get lunch together sometime. In my spare time last week, I read a couple articles about interning and what to do during an internship. One good suggestion was to ask to have lunch with your supervisor. Naturally this is a good way to meet your boss, but it also helps to purposefully establish yourself as an intern. Of course I don't feel as if I'm blending into the walls or anything, but I did find that to be a really good idea. Cliff said "yes," and I'm going with a group of engineers to lunch tomorrow. Apparently the place is an old-fashioned restaurant specializing in southern comfort food. I was instructed to not eat breakfast beforehand, so we'll see how this goes.

Other than working on Captivate, I also did a lot more research on e-Learning, specifically the psychology behind instruction. I found [an excellent presentation by Dr. Lloyd Espiritu](#) speaking at a TED talk seminar. He spoke mostly about how learning has changed in the last 30 years he's taught, and how we need to focus our teaching nowadays towards modern learners. He made a lot of excellent points, including a quote about learning motivators being different than just the face-value. "*[Learners] don't care about grades, they care about bragging rights.*"

While I learned a lot from my research, I'm starting to pick apart my design more and more because of it. By the time the final project is done, It's not going to look anything like the start.

It's almost time to go, so I've got to wrap up. I got your comments today, and they were really good to read. I hope you're enjoying reading along as much as I'm enjoying working. I will work on the updated objectives tomorrow as well. We'll have to schedule the visit sometime. I'm looking forward to showing off the office.

Until tomorrow!

-Jake Missall

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**Tuesday, March 15th, 2016**  
(Relevant Documents: "Changelog v3.1.txt")

As 5 o'clock rolls around, we're currently uploading the completed first draft, version 3.1, to the website it will be hosted on. After some moderate revisions (I'm now keeping changelogs. The log for this version has been uploaded to the folder) with Cliff's guidance, I finally published the project. It's come a long way since being a 1-slide, empty presentation, and I'm anxious to see what the customers think.

I want to make this entry brief, so I won't go into too much detail about today's tasks. Again, the changelog is fairly detailed about today's work, so I'd recommend looking there if you're interested.

As far as non-work-related activities, I went out to lunch with a few other members of the AIRCAT lab today, including Cliff. We went to a boarding house for lunch. Basically, it was an old house that had been converted to a restaurant. Everybody sits at the table and there's just a bunch of entrees and sides already prepared on plates. We passed the bowls and grabbed what we wanted and ate. It was basically a "good ole' southern homestyle meal". I like interacting with the other staff, and it was pretty nice to hang out and chat about movies and other restaurants and what's around Warner Robins.

Well, the lab is almost empty. I'm going to head home and get on some laundry.

-Jake

*Fun Fact: I got a good laugh out of the whole lab today. I overheard Brandy and Stanton talking about how another intern had a nameplate (I didn't catch the beginning). It progressed to talking about how some interns even have their own offices. I have neither a name plate nor an office, and was just sitting here minding my own business.*

Brandy: "Do YOU have an office?"

Me: "Nah, I'm a real intern."

Got 'em all. :]

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**Wednesday, March 16th, 2016**

(Relevant Documents:)

I didn't realize until after I wrote yesterday's entry: that was my first publication. Michael congratulated me, and mentioned that when I told him I had uploaded. I hadn't really thought of that, but technically that was the first time I've published anything outside of school. As far as I remember, this is the first bit of work I've ever done in a professional environment like this (at least outside of school assignments). **That's a big accomplishment!**

**Comment [5]:** Yes it is!

I worked out some more bugs this morning. Finally fixed the password section that I was having issues with. They now check for each others' values, too. That was a pretty complex puzzle, but I figured it out in the end.

After that, I solved another good puzzle on the work queue section. Basically, I had a section where clicking a column would activate an info bubble. The problem was that the bubble could not be brought back except by visiting the next slide and then pressing "back." The only reason I found the solution was because it built off of earlier experiences with the advanced actions. I managed to work a multi-tier 'program' for the toggle buttons, and it worked nicely. I can now toggle the bubbles on or off, and it still tallies the number of bubbles (Users must view all help bubbles before they're allowed to continue to the next slide).

Once I got back from lunch, I had some serious writer's block. I'm waiting on feedback from the customer still. I don't want to venture too much further without their responses, since I may have to re-work a lot of parts.

**In the meantime, I've started creating a more immersive training simulation.** I found a photo of a c-130 hangar and placed an actor (just a picture of an aircraft mechanic) on the front. I'd like to work in a way to have the user interact with the mechanic in order to get the information needed for TAR input. I've already got some sample dialogue to show the idea, so I'll probably run it by Cliff in the morning. If he says to keep going with the idea, I'm going to clean it up and devote a lot of time to that. It would be a bit of an overhaul from what we have now, so he might task me with something else.

**Comment [6]:** Best cure for serious writer's block is another project. :)

I guess tomorrow will tell.

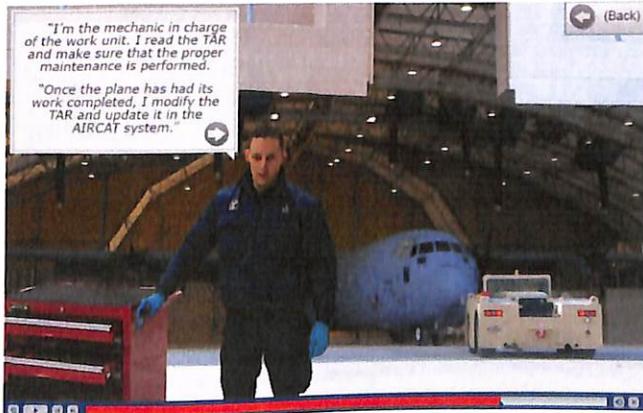
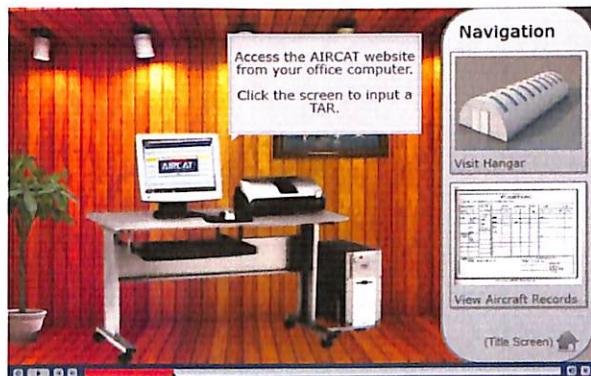
-Jake

**Thursday, March 17th, 2016**

*(Relevant Documents:)*

This morning I got a lot done on the new version of the training. I haven't been putting serious effort into the content, since I'm focused more on the framework. By the end, I was able to create a short demo of what I wanted. It currently works like a visual simulation of a workspace, rather than a website.

The opening slide displays a computer desk in an office. The user is required to click on the computer which brings up the TAR to fill out. From here, it's found out that there's more information needed to fill out the TAR. for instance, the user doesn't know how many hours of flight are on the aircraft, nor what the tail number is. For this reason, the user is directed to visit the aircraft hangar.



For the hangar slide, I stitched together an image of a C-130 in its hangar, and an image (that I found on the internet) of a flight mechanic. Users are provided with some dialogue, and can ask the mechanic about various things (like the plane, or his task as a head mechanic).

Once the user has the required information, he or she will go back to the 'office' and continue to fill in the TAR.

Unfortunately, I was told by

Brandy that there's no mechanic in the AIRCAT process, so I'm thinking my efforts today might not be seen in the final product. Still, this was great practice, and it offers a whole new world of ideas to use in future projects.

**Comment [7]:** Still, it was a very creative idea.

Plus it was kinda fun.

Cliff said it was something we may come back to it later on. We might use it for a sort of exhibition event that MERC hosts in October. I don't have many details about that, but it's piqued my curiosity.

An exciting thing happened today: with about two hours left in the day, Brandy told me that we need a standalone tutorial for just the account creation/login processes. It's not permissible to host the AIRCAT tutorial on an open site, since there's some sensitive information on there regarding AIRCAT as a product. Hence, the main tutorial will need to be behind the user's login credentials. Since the user has to login before viewing the tutorials, that means they have to be trained how to login first. The solution is to put the login tutorial on the open page, then the rest behind the login side.

I was a little worried about having to hack the whole project apart, and also that I might not be done by the morning. I then realized the reality of the overly-particular organization I've been maintaining from the start of the project; all I had to do was crop around the first section's slide group, and I was all done. Each slide object was already in place, and all the cross-slide references were nicely put-together, so nothing really broke when I converted to a standalone.

**Comment [8]:** Clever solution.

This took what could have been hours of piecing things together, and made it a 30-minute streamlining process. From here, I can still add or remove anything I need, and can then just copy/paste the slide group on top of the outdated version within the main tutorial.

It was a pretty good accomplishment that I was proud of. Even if it goes unnoticed, the fact that a well-designed layout led to an easy solution will let me go home satisfied with my work. It was another great day. Tomorrow we upload the new drafts and move on from there.

**Comment [9]:** Some times you do not get external validation for a job well done.

-Jake

**Friday, March 18th, 2016**

(Relevant Documents: "Aircat TAR Process.png")

Friday again! The drafts were uploaded, and I got some more feedback - this time from Brandy. I got an email with some notes, and I worked on solving some more of the problems. One of the issues was something I'd thought about earlier: Some of the instructions were unclear about what they meant. When I was explaining future processes (i.e., "when you log in later, click the 'login' button"), it was sometimes confusing the trainee. I needed to make sure I worded immediate actions and later actions differently.

**Comment [10]:** Can you do some usability testing?

I also made some general improvements to timing and visual design. One of the largest accomplishments of the day was the graphic I put on the "What Is AIRCAT" slide. I made a simple flowchart using a program called Draw.io. I've included it in the Google Drive folder, so feel free to check it out. Basically, Draw.io is a powerful, browser-based program used for making flowcharts and

other diagrams. I had used it briefly in Dr. Brewer's class, but never really made anything with it. I'm really happy to have found it again, and I'm sure I'll use it in the future. It's another tool for me to play with.

My workload is running a little low, as of late. It's largely due to the fact that my project has been uploaded, and is being reviewed. I don't want to do any heavy revisions, just in case I'm told to scrap something. This means I'm just doing little clean-ups, and making the program run a little smoother every day. I mentioned this to Cliff. He said that I could help Patrick with some tasks until we get some more instruction. I expect we'll know more on Monday.

As I got here this morning, I heard some of the engineers talking about another intern. One was talking about how she was walking through a hallway and saw the person lying down on a desk in an office. It was idle chitchat and the tone was a bit of amused disbelief. I wouldn't even think of lying down on a table here! That's not professional at all.

Comment [11]: I agree.

Anyway, I'm going to see what else there is to do before I leave. I'm going to clean the house with my roommate tonight. We're hosting a party with a few friends tomorrow night, so we have to straighten up. We went for a bike ride with a local biking group, yesterday. It was a lot of fun - something I'd wanted to try, but never had the opportunity to do. It's nice to have some time off with which I can do some things.

Until Monday,  
-Jake

**Monday, March 21st, 2016**  
(Relevant Documents: "")

Today was a little frustrating, I'll be honest. Monday's always seem to have their charm, don't they? I was a little fired up over an online exchange I'd been having with somebody (a complete stranger, at that), and that embedded itself since sitting in my chair in the morning. It was admittedly something pointless, but these sorts of situations aren't built around "points" or any sort of logic at all. Sometimes people just get you mad.

Anyway, I obviously couldn't let this affect my work, so I put my feelings aside and got started. As mentioned on Friday, I'm nearing completion of my overall project. I knew that the third section's overhaul was inevitably going to happen, so I decided to work on that. My plan was to make each entry field an individual object, thus simulating a working TAR form. This was a really easy way to approach the section, but it's something I hadn't thought of before. It should have been no problem...

...and it wasn't, until I decided to place it into the main project file. I was working on the new section inside of its own Captivate project, so that I could focus on the five slides I needed, rather than the whole 60-slide project. This would normally have been fine, but I (again) encountered a major problem I've been struggling with since the beginning of the AIRCAT tutorial creation process.

Basically, my main project is a type of Captivate project called a “responsive project.” When dealing with media or website creation, the term ‘responsive’ has to do with how a project reacts to being viewed on a mobile or tablet device. Since both types of devices are significantly different sizes than a PC monitor, each must have a different resolution that they use to arrange objects. A responsive project allows special formatting so that when the user opens the project on his or her phone, the content is still properly laid out and ready for use.

When I created the project, I assumed that a responsive project was the default file type. This is because Captivate 8 lists it as the first selection when you start a new project. Since the AIRCAT training will be strictly used on PC devices, it was pointless for me to create a responsive project. I should have created a “blank project” like I did when I started the section today.

In essence, my overall project:

- has been limited to being exported as an HTML5 file (which is a newer file type than .swf files, and isn't guaranteed to work in all browsers)
- will not work in Chrome (see above)
- does not support the usage of some Captivate features (like roll-over captions, which I was excited to implement)
- contains loads of extra, unused buttons/data/objects/etc that are associated with the tablet/mobile views (both of which I'm ignoring completely)
- displays the third section's type-boxes incorrectly
- will not convert to a standard project type (without me having to spend time recreating every custom master slide in the theme I've been using)

Most of these I've been working around, and haven't been much of a problem. The last two were the problems I ran into today. After finishing the whole recreation of the TAR form, I had to resize and replace objects for almost two hours, trying to get the “highlight boxes” to display on top of the “text entry boxes.” I couldn't understand why I was literally copying-and-pasting the slides from the one (nonresponsive) project to the other (responsive project), and the slides were breaking. It wasn't fun.

Combined with the fact that that was my primary task for the day, I had absolutely no opportunity to drop the task and come back to it. I had to take a couple trips to the coffee pot just to clear my mind.

At the end of the day, I managed to remain level-headed and even completed the section. It's in the current draft, and will probably be uploaded soon. All-in-all, it wasn't a bad day. I'm glad it got done - it was an element I needed to get around to. Finally it's accomplished. Looks like today taught me a lesson in patience, and I think I did okay. Now it's time to go home.

Until tomorrow!  
-Jake Missall

PS: After judging the tone of this entry, I want to make clear that it wasn't a HUGE issue. I pretty much just put in my podcast and listened. Not a big deal. Just part of the job! :]

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**Tuesday, March 22nd, 2016**

*(Relevant Documents: "AIRCAT Training v4.0.zip"  
Extract files. Run "index" using Internet Explorer.)*

I'd like to open today's entry with a reflection on experience. I was watching the Adobe help topic videos for inspiration and ideas to use on the AIRCAT training module. I found a 13-hour-long training course on Adobe Photoshop, which was led by a man named Andy Anderson (of the website "InfiniteSkills.com"). In it, I was very impressed by the loose, relaxed manner of instruction that Andy taught with. He straight-up told jokes in the video, and was welcoming from start to finish (of the first chapter, that is. I didn't watch the full 13 hours). It was very entertaining, and I was largely interested in what he had to say.

Contrasting to my project, Andy's presentation primarily utilized narrated video. Mine currently has no narration, and only one video (which is of a plane taking off). Andy's is loose and fun, while mine is rigid and formal.

A lot has to do with the nature of the work. Andy's target audience is much larger: individuals from all over the world that want to learn how to use photoshop. My audience consists of a handful of specialized individuals within different military organizations in other countries. Naturally, military employees need entertainment too, but I feel massively limited due to the strict professional nature of the task. I don't really understand where I can use more light-hearted techniques, or even if I can.

So far, it hasn't been an issue. I've never been told that I can't do something, but I definitely am holding back some things I'd like to try. Going back to the Andy's Photoshop tutorial, I realized that it was Mr. Anderson's experience that allowed him to take the liberties he does. He can do what he's doing because he's an expert in what he does. He has experience that's allowed him to try different approaches and earn different results. He mentioned that he's been using photoshop for over 20 years, and it was obvious that he knew what he was talking about. This meant that he could basically take whatever approach he wanted, so long as it fits some form of working instructional design model.

On the other hand, I'm just now learning how to create practical training programs. I still need to try out different things, and to learn from different people. I've noticed the shift towards narrated video, and would like to try that out next. Hence, I'm assigning myself a project for the next few days. I want to create a captive project using structured video and audio, and to see how far I can go with brand-new approach to Captivate.

It is exactly that, too: a brand-new approach. Currently Adobe Captivate sits in my mind right next to Microsoft Powerpoint (although naturally it's much more powerful). Both of their core structures are similar, being built around their slide-based navigation designs. In my newer, video-central approach, I would be using Captivate a lot more like a piece of video editing software (eg., Final Cut Pro, or Adobe Premiere). Using this mentality, I feel like I could create a much more dynamic learning experience.

This is exciting to me, and I already have ideas for my next project. This will be a good opportunity to further my audio/video skills (which I'd really like to hone), and will also make a much better final project. Let's be real: in today's society, a training program without some sort of video is hardly training at all.

**Comment [12]:** I agree. That's why interns are valuable; they bring fresh ideas to the company.

My current draft does hold its own, however. I still plan to attach audio narration, but that will take a good solid day or two. To be completely honest, I could probably start that tomorrow. My only holdup is finding a voice talent. During the TimeTracker, I recorded my own narration so that I could try out the process. I found it to be pretty simple to create and attach audio, and I learned a lot from doing it (my reflections can be read in the Mar 2nd, 2016 entry). When I was showing off the project though, there was a comment made about using one of the other employees in the office (specifically, one of the other men in the office does voice work for CNN).

At the time, I took this as a comment about the quality of my voice as used for narration. Many people dislike the sound of their own voices, and I'm no exception. I'm still not sure if the comment was actually that my voice wasn't good, or if it was simply that this unnamed co-worker has a remarkably good voice. Either way, I'd rather get this gentleman involved, than to use my own voice again. Simply creating a script could be a good way to record everything in one sitting and then edit at my leisure. As it turns out, this offers some good experience for me. I'll be comfortable using guest talent in the future, if this is something I need to do again. That's a win in itself.

Anyway, Cliff has just walked into the office, and I need to meet with him. I will possibly write an update before leaving today.

-Jake Missall

#### Update

I showed Cliff my work on the new drafts, and he seemed to like it. I then explained the idea I have for the new project, and worked out camera/equipment rental with Patrick. I'm pretty excited to start something new, and will be working on that for the remainder of the day. Expect to see something tomorrow!

-Jake

PS: I've uploaded a current draft, version 4.0 of the aircat training. Check the MERC folder. As always, extract the .zip folder and then run the "index" file, but this time try opening it with Internet Explorer.

**Wednesday, March 23rd, 2016**

*(Relevant Documents: "10 things I learned during my first month as a MERC Intern"  
File is in "10 things" folder, in Google Drive)*

I just finished my script, and I'm really happy with it so far. I need to do some edits and revisions tomorrow, but I've got plenty of time to put this all together. I keep wavering between thinking "this is a really good idea that's going to be the pinnacle of my talent currently," and "This is a bad idea - what you have to say isn't good - you're going to embarrass yourself." I'm sure the second set of thoughts are untrue, but it's that sort of limiting inhibitions that I struggle with when it comes to production. I think that's a small part of why I've never done too much like this project. I've decided it's time. I have things to say, and I'm going to say them. If people don't want to listen, they can exit out of the presentation.

...except for Cliff, who's going to watch the whole thing. If it comes out poorly, or if I can't do it with the right tone/confidence/value/oomph, then it would really be poor use of these next few days. I can't let that happen.

That being said, I'll have to be on my game. This is a big step, and I have a lot of artistic and creative freedoms. I'm wondering if true content creators feel this every time they start or finish their own projects. I'd imagine the first one is always the most difficult, so hopefully I'll be able to follow this one up pretty easily, if it goes well.

Of course if it goes well, I'm sure following it up would be little problem.

Qualms aside, I think I'm ready to start filming tomorrow. I've still got to follow up with Patrick about the camera usage. If he doesn't have that all set by tomorrow, I will make do with a workaround or will focus on the narration for the aircat tutorial. I think that would be a really good thing that will make the whole project a lot more "real." It's something I've been meaning to come back to for a while. I'm debating whether or not that should be my main task instead of the "10 Things" presentation. Cliff doesn't seem to mind one way or the other, and it's nice to not look at the AIRCAT for a couple days, so I think I'll queue it up after. We'll see how things go.

[The good news is that I've using what I've learned a few times the hard way: communicate! I'm being completely transparent, giving frequent updates and inviting my managers to see what I'm working on all the time. This keeps me busy, makes me accountable for my work, and also eliminates the chance of getting dinged on the work I'm doing. I.e., this assignment isn't directly MERC-related, and I intend to host it on my personal website as a personal project. With my new mindset of "open communication," I was very clear about my intentions and my worries, and it was approved anyway. Talking things out clearly worked well, and now I can work without worrying about such issues arising.]

**Comment [13]:** insightful comments.

Of course, I shouldn't say the assignment isn't MERC related. The underlying reason of creating the presentation was because I wanted to learn to better use videos within my Captivate projects. Since a video of somebody logging into a website (as opposed to screen-recording) would be arguably useless for

training, I just needed something to practice on. It's just like the beginning of the internship when I was told simply to learn Captivate. That's truly what this project is about.

I guess in a way that's what it boils down to: this "Top 10 Things" is just round two of the "TimeTracker tutorial," but with extra challenges and features. I'm going to try to get it done as quickly as I can - not in a rushing way, but more in an "I know the tools and buttons and where everything is, so I can throw this together way faster than me-from-three-weeks-ago" kind of way (Sorry if the grammar in that one didn't hold up, Dr. Grady. I did what I could).

That's the goal - create something quality quickly. After looking at the lengthy script, I realize I've got a lot to do.

-Jake

*Fun Fact: According to what I gathered from the office chatter from this morning, our collective opinion on restaurant hotdogs is that we're against them.*

**Comment [14]:** Me too.

**Thursday, March 24th, 2016**  
(Relevant Documents: "")

Well it's 5:22, and I've been here for longer than I intended. That's good - I'll be able to leave early tomorrow and start my weekend!

The reason I'm so late is that I've just finished recording all my videos for the "10 Things" presentation. I'm going to arrange them on the slide tomorrow, and hopefully it'll be done by the end of the day.

I tried today to get Adobe After Effects on my computer. It's part of Creative Cloud, and is an extremely powerful video editing tool. Specifically, it's one that I've been wanting to learn for a long while, but have never had the opportunity to do so. Well, now I have access to the full line-up of Adobe products, and I can use whichever I feel will make the training better.

I was a little overwhelmed at the fact that this is (at least for now) my job. As I was recording, I got thinking about just how freeing it felt. I'm currently in complete creative control of what I'm doing, and I can just feel the experience, if that makes any sense at all.

**Comment [15]:** Nice!

Well, it's been a pretty good week. If I get this project done by tomorrow, I will have created a substantial product within half-a-week. This is really exciting for me, since lots of videos on the web are created and released weekly (youtube entertainers, Cracked.com videos, etc). If I can make content in three days, I could easily get into this sort of hobby in the future. Many people make money off of their videos too, so it's definitely something to think about.

That's down the road though. For right now, I'm planning to make an amazing, animated MERC logo. Let's see how that comes out first!

-Jake

*Fun Fact: I coincidentally wore my ESPN polo today, and I got some nostalgia setting up the tripod. It was the same model as one that we had at the production office.*

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**Friday, March 25th, 2016**

(Relevant Documents: "Animated MERC Logo (Compressed).wmv,"  
"AIRCAT Practice Logo (Compressed).wmv")

Today was a huge day for me.

We got After Effects (AE) installed this morning, and that was it. I just took off from there. I spent the first half of the day using [this tutorial](#) to create a video project. It was really helpful, and I'm extremely happy with how the product came out. It looks like a professional video like one would see in a commercial or a movie. I'm amazed by what this program can do.

**Comment [16]:** Am pleased with your initiative.

The first thing I wanted to do was learn how to use "3D lights." It's a complex task that I felt would force-teach me all the basics of AE while I practiced. In essence, the project was to create a light source that would shine through text and simulated smoke. The instructions were clear, and I had few problems getting started. After a while, I had a cool, little clip on my desktop.

By this point, I was really excited by what was happening. It's worth noting that I've never used AE for more than a few minutes once. I was completely immersed in the work though, and decided to implement knowledge from [this tutorial](#) as well. I needed to make the red line go across the top of the logo, and I knew exactly what I wanted it to look like.

Blending the new knowledge into the existing project took some figuring out, but ultimately it got done. From this, I felt I had a good feel of the program, and decided to start on what was the original plan: create an animated MERC logo.

The idea I had for this was much simpler than what I had been doing at the start, so I decided to simply try to make the logo without internet help. I wanted to make the bars fly in from the side, and then the line appear and reveal the text. After playing around with some different features, I figured out how to use solid boxes to hide the elements I didn't want to show, and then revealed them as the animation progressed.

After just a couple of hours, I had a product that looked exactly like what was in my head. I showed Patrick, and he gave me a good idea about slowing down the objects before they come to such a

harsh stop. After fiddling around with the timing, I managed to work his suggestion into the clip, and it looked really smooth after.

It's kind of cool that he's coincidentally taking an After Effects training course for MERC as well. I didn't know that when I started today, but it'll be interesting to see how we work together if we ever get the chance to do so. His training has been much different than mine, as it's taught from a different viewpoint than the videos i was watching. I'd be receptive to learning more from him, based on his training. Maybe another time.

Well, I'm going to wrap up and then head out. I spent some extra time working, yesterday, as I mentioned in the previous entry. I am ahead of my hours currently, so I'm going to start my weekend a little early. These flexible hours are pretty nice!

Until Monday,  
-Jake Missall

PS: Haven't showed Cliff, yet. I'm going to try to catch him as I walk out of the building.

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**Monday, March 28th, 2016**  
(Relevant Documents: "")

Oh boy, it's been a Monday.

I got back to the office, and spent the first half of the morning trying to make another logo in AE. I found a cool way to make a logo, using the "saber" plugin. I can alter the in- and end-points of a text's strokes, and created what looks like a bunch of lasers drawing each letter simultaneously. I like how it looks, but I don't currently have a use for it.

After toying around some more with that, and once Patrick arrived to let me into the lab (he currently has one of two keys, and is working on getting a copy made for me), I moved to the computer I was using while filming. I still needed to review and edit the recordings I took Thursday afternoon.

I transferred them from the camera to the computer, and then watched them through. With this fresh look at the footage, I've decided that I'm not happy with the recordings at all. On-screen, I seem extremely tense, and nothing feels natural. I don't like how I look nor sound, and I'm now a little self-conscious about my personal image (only a little, though). Comment [17]: :)

Basically, I've decided this could all be chalked off as inexperience on-camera. I've never filmed myself before, and I've only ever acted for movies a couple of times (both of which, I wasn't very proud

of). I did briefly research the topic, and I've found a couple sources suggesting this could be the case. Still, I have a theory that it could be specifically that I'm not good at being recorded.

I haven't found any articles or research to support that. I got a little discouraged, and went to lunch. Once back, I talked with Cliff. I told him where I was at, the troubles I was encountering, and gave him the options I'm leaning towards:

- 1) I can re-shoot the videos
- 2) I can alter the project to be something other than a video recording
- 3) I can drop the project

Option 1 seems like the most obvious, except for the wall I've hit. I would need to learn as much as I can about enhancing my on-screen presence. I'm sure there are tons of resources out there about video recording and public speaking in general. If it's possible to learn, this is an option.

The second option would be to find another vehicle for the content. Because most of the topics discussed are behavioral in nature, it would be hard to find enough footage to make this a video with a voice-over. I could do a narrated blog entry, similarly to how NPR does their website, but that doesn't really seem to fit the style of what I had in mind.

Although it seems like failure, the last option is to cancel the project, and move onto something else that would benefit all parties involved. While this sounds like an admitted defeat, the reality is that I did accomplish the primary task of this project. When I suggested this idea, I was excited mostly to learn After Effects. I feel I accomplished that at least.

If I were to drop the project, I would alter the script so that it reads like an essay or article, and would use it like that. I'm still happy with the content itself, so I would want to use that somewhere.

Also, Cliff has mentioned that he wants to see what I have. Naturally he has to see my work, but I'm really reluctant to show it. It seems as though there's more to do before we get to that point.

Currently, I'm waiting for Melissa to arrive at the lab. Cliff says I'll be working with her to test some software, today. It will be a nice change of pace, I think. Hopefully I'll be able to get my momentum back from last week. That was a good week, and this hiccup has slowed it considerably.

I'll probably update more at the end of the day. (To be continued...)

[Update](#)

Well, I met with Melissa, and I'm beginning a new task entirely - software testing. This is an area that is new to me. It's something I didn't truly realize had such a structured process to it. Naturally, there are systematic processes for everything. This is no exception. I've been given articles to read through, and I've noticed that software testing has its own niche interest area similarly to instructional design.

I'm excited to start. We're using Microsoft Visual Studio to organize our testing procedures. Basically, it's all sorted out into web of elements that all link to other, relevant items. When testing code, bugs need to be isolated. These links help capture bugs so that they can be solved within the main scripts.

It was interesting to see how tried-and-true methods of testing compared to the methods I had put in place for my own program. I was already having to test my product, and the methods I used were very similar to the ones that I'd developed out of necessity. From writing test cases, to highlighting links, most of the official testing process is similar to what I've been doing, but on a larger, more well-defined scale.

Comment [18]: interesting.

It took a bit for me to understand the system, though. It's mostly the terminology that's been tripping me up. Already, I'm catching on, though. So far I've had plenty of kind help, too. Melissa seems to be very friendly, and she's expressed a couple times during chatting that I seem to grasp the concept better than previous interns. I'll have to wait until I finish my first assignment to see how she truly feels.

My first project is to create "test cases" for the FMS AIRCAT website's current issues. I'm still getting more info, but tomorrow should be the day I get most of that done. My deadline is Wednesday. I was told that should be plenty of time to get it done.

Anyway, it's time to go now.

-Jake

*Fun Fact/PS: I realized that I didn't log feedback on my animations. Cliff was impressed! He brought up the "marketing/promotional thing" again. Maybe there will be some good opportunities for this in the future.*

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**Tuesday, March 29th, 2016**  
(Relevant Documents: "")

I started working with the actual testing of the website today. I had trouble getting started, though. Unfortunately, most of the information placed into the Team Foundation Server<sup>2</sup> client was limited. They were mostly placeholders, and gave me no information to go off of. Although I had sent an e-mail to one of the AIRCAT staff, a meeting today delayed my response until lunchtime. Finally, I was able to get into the website and begin my first set of testing.

The process was pretty enjoyable, all things considered. Basically, my job is to do the exact opposite of what I've learned to do my whole life. Usually when I use a program, I adhere strictly to the intended uses of the program. I put in the correct information into the correct spot, and click the link that I believe will do what I want it to do.

When it comes to testing, the intention is the opposite. I am being told to click the nonsensical. I have to think of ways to effectively destroy the code that my co-workers have been writing for months.

I feel a little like the bad guy.

**Comment [19]:** consider yourself the devil's advocate. :)

Honestly, that's kind of the right mentality to have. The articles I was given as instruction mention testing with a "diabolical" mindset. It suggested putting in negative letters. It wrote about forcing division by 0. There are a number of common breakages in programs, and I've just got to find them.

It was pretty nice that as Melissa (the testing overseer) was reviewing my work, I managed to find a bug in one of the primary features. It was a coincidence that there was an error right in front of me which served as a good teaching tool.

I have more to do tomorrow, and I'm also going to start learning how to setup automated testing. This is an area that Melissa is interested in utilizing, but is one that requires a lot of work on the front-end. It requires some coding, so hopefully I can pick it up. I always had a knack for it, the couple times I've had to code during classes. We'll see how it goes.

Until tomorrow!

-Jake

*Fun Fact: Today, Patrick mentioned to me that there's another TCO Intern that was interviewing, today. Cliff mentioned that this would be my competition for a full-time offer. While "competition is good for business," I'm not a very competitive person by nature. This will be an interesting turn of events.*

**Wednesday, March 30th, 2016**  
(Relevant Documents: "")

<sup>2</sup> Or "TFS," this is a program created by Microsoft for collective, organized testing of software.

Today I started with a bit of heavy reading. Melissa had e-mailed me some materials about testing. It was mostly about the “scrum” method of work.

A type of Agile development, scrum focuses on team-management and communication across divisions. One of the biggest defining traits of the scrum method is a daily meeting that gathers all members of the team around a progress board. Users explain what they did yesterday, what they plan to do today, and any discrepancies they might be encountering. The meeting is intended to keep the team members focused, and on the same path towards progress. It’s a pretty good process, and is what MERC has refined to meet their development needs.

After learning about the process, I met with Melissa, who taught me more about the automation of testing. I will definitely need to brush up on my coding skills, since that’s most of the work in the next process. She said that she started working here with only limited IT experience, and is now pretty much an SME using Visual Studios. We both feel that I’ll get the hang of it.

I don’t have much time left to write. The rest of the day was spent transferring requirements from the customer’s notes into the developer system. All requirements have to be listed properly, so that they can be assigned to the devs.

Tomorrow I’ll be doing more bug hunting. For now, I’m off to go home!

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-Jake

**Thursday, March 31st, 2016**  
(Relevant Documents: "")

Here’s a short entry, because I need to leave at 4:30 (that’s in five minutes. I’ll be picking up a new bicycle, which I’m really excited about!).

Today was all testing. I managed to finish up the test cases for the main AIRCAT website, and then did exploratory testing for the remainder of the day. I found a lot of bugs, as well as some minor (and very well-hidden) formatting issue throughout the two websites.

I have this mental image about software testing: Imagine an artist on a hill, spending hours and hours and even days creating a masterpiece. This artist has painstakingly created this *thing*, whatever it may be. It’s like a child to this person. He or she will nurture the artwork, and care for it. It’s a product of that person’s soul.

Now, some big, burly caveman character walks up the hill, asks to see it, and then throws it down the hill. To the artist’s dismay, the artwork smashes and breaks apart into chunks of code, with a big error report at the bottom.

That’s kind of how I feel every time I tell the devs I’ve found a bug.

**Comment [20]:** Awesome. What kind?

**Comment [21]:** It’s a Fuji road bike. I’ve only ever had a one-speed, beach cruiser. The new one is a little different.

-Jake

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**Friday, April 1st, 2016**  
(Relevant Documents: "")

Well this looks like my last entry - I got fired today. I was playing a quick round of Candy Crush, and my supervisor came up behind me. Told me to pack up my things.

No, I'm just kidding; it's April Fools day today. |

Comment [22]: Good one!

I made a lot of test cases during today's shift. It took a good amount of struggling before I was finally able to figure out the system. I can't even truly isolate the problem. I just seemed to get caught up on every little thing I tried. I kept taking different approaches, and trying new organizational techniques. Eventually I had to just stop trying and go to lunch.

After coming back with a fresh mindset, I decided to go to paper. I got my notepad and jotted down a quick branching diagram of how the test cases should be laid out. This helped, and eventually allowed me to finish the task.

There was a powerful storm in the area last night. Everybody was talking about it as we worked, earlier. They also asked about my new bike, and gave me some pointers on where, how, and with whom to ride. I think it would be fun to meet outside of the office and go for a ride. I think they would be interested, but I'll bring it up later on, if it comes back up. It's too early now to suggest such a thing.

Other than that, today went pretty well. This morning I felt completely out of place, walking down the hall. It's casual Friday, again, and my outfit (while it was appropriate, and on-par with the rest of the staff) just didn't feel right. I keep walking down the hall, expecting there to be some uniform inspection or something like that.

Monday holds more of the same work I did today. It's tedious work, and I'm not strictly looking forward to it. There's a good chance that the rest will be easier, since I've learned the technique. I know how to organize it a little better now, so maybe it'll go more smoothly than I'm anticipating.

We'll see.

-Jake

**Monday, April 4th, 2016**  
(Relevant Documents: "")

It did, indeed, get easier! I was able to go through the rest of the test cases with little problem. I had to get a little creative with the last one. It was the only test case that didn't have figures and images to go with it. Hence, I had to create the the test case based on the instructions alone.

Once I finished, I went over all of the “Shared Steps” that were to be created. As the name would suggest, these steps are repeated from test case to test case. Rather than repeat one’s self multiple times across different cases, that person can create a unit of steps that can be put in once. These shared steps can even be altered within the program, and these steps will carry throughout all usage objects.

That’s what Melissa and I are working on now. If we can get these in place, then it will be a lot easier to create test cases in the future. My idea is to create a set of navigational steps for every relevant page. That’s where a large amount of the repetitive steps happen to be. Since most of the websites require a login, this is one of the necessary processes to go through.

**Comment [23]:** excellent idea.

Now, I’m sure that any website tester would know how to login and navigate to a home page. This sort of step-by-step process, though, will be good for the automated testing that we will soon be getting into.

I think that’s a logical next step for me. Currently we’re at the end of a sprint (a work period in Agile development), so there’s a chance I might be put on more test cases when the new sprint begins. We’ll see what they decide, soon.

At the end of the shared steps task, I went back to the test cases from last week, and looked them over. I found a huge discrepancy with my steps. What I had written was exactly incorrect, and I had no idea what I was thinking when I wrote the steps down.

At step two, I had entered that clicking the “TAR” button would navigate to another page. On the contrary, clicking that button on the AIRCAT International website will open a drop-down menu. This is something I should have known when I was writing these steps, since I had to recreate that button for the training module.

I simply could not find out what I was looking at.

At first, I thought I was on the wrong work board. I was on the AIRCAT International website, and couldn’t find the reports that I was listing the steps for. They were nowhere on the website anywhere! I decided to look at the domestic AIRCAT website to see if the reports were there, and I was confused. Still, I couldn’t find them anywhere! I remembered using the reports to test out the functionality, so I knew they had to be somewhere!

I decided I needed a top-down view to help me. I drafted an e-mail to Melissa, and asked her to look into it. In the meantime, I kept clicking around, hoping to find some explanation. After another few moments of turning my mind over and over, I asked Hillarie.

She reminded me that she had logged me into a third website, specifically for USAF AIRCAT. It was there that I’d seen the reports, and had worked on the test cases. I remembered as soon as she mentioned it, too. It was a bit of a “duh!” moment, but I was glad to have the problem figured out.

I sent another e-mail to Melissa, informing her that we’d sorted it out. I modified the test cases to reflect what would actually be the proper test cases. Once these reports are actually implemented, they

will be put on the “TAR” drop-down menu, under a new selection titled “TAR Reports.” This makes a lot more sense to me.

So, the mystery was solved. I was able to keep working, and that was pretty much it. It's those little challenged like these that we learn from, the best.

**Comment [24]:** Yes indeed.

-Jake

*Fun Fact: When I came in, this morning, one of the developers was showing off XKCD's April Fools' prank. It's a nice zen garden that is meant to help you relax. You place your lamps, change their colors, and grow a garden from the ground! It was funny to see everybody in the lab pull up the page in another window, and keep an eye on their plants.*

*So, on lunch break, I came back with a potted Hyacinth that I got from Kroger. (Unfortunately, it's a full-sun plant, so it won't work as a desk plant. I'll probably put it in my yard.)*

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**Tuesday, April 5th, 2016**

*(Relevant Documents: "")*

I'm going to make a short entry, today. I got a lot of work done. I'm starting to do more work with a program called “MERCMS.” From what I gather, it's a system of calculations that are run based on a large amount of user-input data. As a tester, I have to create a list of steps that will effectively check all of the calculations within the system.

It's not as hard as it seems, though. All I have to do is use the sample data I was given to check the inputs/outputs of the website, and compare them to the inputs/outputs of an excel file that streamlines the mathematical processes. If the numbers going in generate the correct numbers coming out, then I win.

Tomorrow I start doing similar work with AFFIRM, another system.

-Jake

**Thursday, April 7th, 2016**

*(Relevant Documents: "")*

I didn't have a chance to write any, yesterday. I was pretty busy up and until the end of the day. The AFIRM program had a big push to test, and there were a lot of things that needed to be addressed during testing.

I found four bugs, and a few opportunities to improve the program. Most of my bugs were simple problems to fix, but the overall functionality improved throughout. One of them was a pretty nice catch, though. Deep within one of the pages' details lists, I found a matrix that decided the criticality of a part. It was calculated using the volume and the susceptibility to fire.

While testing, I decided to follow the data from input to output. When started changing the values around, I discovered that the second matrix was receiving faulty information from the first matrix. Even though the size/density were changing, the criticality was not.

It was interesting that Patrick and I both found complementing errors. In the summary e-mails he and I each sent to the AFIRM team, we described different ways to improve the module. He had found a lot of formatting issues, which was something I hadn't noticed. I usually just spend my first run-through trying to break everything, then I come back and read things.

I managed to complete my proper time for last week. Since I had left early to pick up the bike, on thursday, I needed to stay a little later each day for the rest of the week. My plan worked well - I worked 8 hours and 15 minutes each day until yesterday, when I finished with 8 hours, 30 minutes. In the end, I had my required 40 hours, and wasn't burned out from any one long work day.

I will probably write more, later.

#### Update

I decided to take a complete step-back from the testing and re-approach it. While yesterday (and this morning) I had focused mostly on breaking the website, I decided to look at it this time from a usability standpoint. Instead of thinking "Do all these buttons work?" I kept asking myself "Do all these buttons make sense?"

This opened up a whole new set of observations for me. I found all sorts of things I hadn't really thought of before. I noticed things like selection colors, and project title places. I compiled all my notes into a nicely formatted Word doc, complete with screenshots. When I sent it to Melissa, she said that they were good suggestions, and then passed them to the developers.

I'm pretty proud of today's work. Until tomorrow!  
-Jake Missall

**Comment [25]:** good approach.

am really pleased with your progress, Jacob. Will contact you to schedule a site visit in early May.

**Comment [26]:** Sounds good! I will mention it to Cliff in the morning (he is out sick today.)

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4/11/16 quick note: I haven't put in entries today (monday) or last shift (friday) because I've been working right up until the end of the day. I will write an update in the AM. -JM

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**Tuesday, April 12th, 2016**  
(Relevant Documents: "")

Today was kind of a weird day for me. I don't feel I was the most productive I have been. I was having trouble focusing since getting here, and it took everything I had to stay on-task. I think a lot of it

has to do with this weird breathing problem I've been having for the last couple days. I feel like I can't catch a full breath. It's like I'm only filling 90% of my lungs with most of my breaths. I'm not in danger of passing out, or anything, but it's made me irritable, tired, and just a bit of a mess all day. I'm hoping it goes away soon.

Personal issues aside, I've been tasked with creating a new training module. This time, I'll be creating it for the "ICARR" system. This program is a great way to document damage (specifically, cracks and corrosion) on aircrafts. The users are presented with a 3D model of each part on the C-130 aircraft, which they can use to record and report issues for maintenance. By drawing on the 3D models, the users can communicate exactly where the issues can be located on the plane.

My job, of course, is to teach others how to use it. Everything from the 3D diagrams, to forms, to exporting of tables. I'll be honest: looking at a blank Captivate project again is a little daunting. I'm thinking back to all the hours I spent on the AIRCAT International training, and I know that I've got a lot of work ahead of me.

Luckily, most of it will take shape naturally as I go along. It's just a matter of knowing where to start. I already know most of the functions and features, so I should be able to get it done nicely. I also have the fortune of being able to look at the previous, outdated training from a while back. Although it's old, the other training will give me some good ideas on what approach to take. I can even copy it directly, if I want. Stanton told me that as long as the info was up-to-date, that would be a viable option (at least at some parts). I'm not a big fan of the current design though, so I will most-likely recreate everything.

The last challenge to overcome is the different nature of the program. Whereas the AIRCAT International module was mostly filling out an online form, this program is more complex. It's inevitable that I'm going to have to utilize the "software simulation" features in Captivate. While these are easy to create, they're extremely finicky, and offer a considerable amount of fine-tuning to get right. As you may recall, this method gave me a bit of trouble the last time; I'm partly afraid to dive into it again.

Maybe it won't be so bad.

Anyway, I've got to clock out and get going. Until next time!

-Jake Missall

*Fun Fact: I was eating lunch outside in the courtyard today, and a bird flew into the window right behind me. The bird was okay (it flew off right after the collision), but it was kinda weird. I guess I never realized that that happens outside of movies.*

**Comment [27]:** We've had them fly into the windows in the back of our house. Most times, they survive!

**Wednesday, April 13th, 2016**  
(Relevant Files: [In "ICARR" folder])

Today was a pretty good day for getting my bearing. I spent a lot of time talking with Stanton, and planning ahead for the training. Currently, the screenshots I've based the draft on do not accurately

represent the next release. I'm going to have to re-record all of the work I've done this morning and yesterday, but that doesn't mean my efforts went to waste. I managed to get some good feedback on the approach I'm taking, and I'm now able to move ahead with a solid outline.

I also talked briefly with Darren, who seems to be the liaison between the air force base and MERC. He's in and out of the lab a lot, but I've never known what his official position is. Well, he's the one we're going to with questions.

Over lunch, I went to a meeting for the MERC Makerspace that Michael is starting. We've talked a bit before, about his ideas for new equipment. He does a lot with robots and A.I., and is always friendly enough to share what he's working on. Recently, he's been working to create a makerspace just like the one in Macon ("SPARK Macon"). Already, there are a couple 3D printers, and a large number of robotic equipment. There's a lot to play with, and I'm excited to maybe get involved in a side-project during my off-hours. (Such a thing could lead to many possibilities down the road, so I think it's a really good investment of time.)

I realized that I didn't upload my logo redesigns from yesterday. I'm placing them in the ICARR folder on Google Drive. I had to base them off of tiny, pixelated icons, but they came out nicely.

Anyway, I have some things to wrap up before I go. Until tomorrow!

-Jake Missall

*Fun Fact: I think a couple of the engineers at the makerspace meeting were impressed by the small amount of electric knowledge I had. I owed it all to my Electric Fundamentals labs.*

**Comment [28]:** Knowledge is never wasted....

**Thursday, April 14th, 2016**

(Relevant Files: )

More work got done today on the ICARR-3D training. I got the updated module from Stanton, and then created the first section of the training. The process went smoothly enough. I'm still trying to work out the flow of the training. I am having to set them up a little differently than the last time, because of the learning management system being hosted on the website, instead of within Captivate (like in the Aircat International training).

I think this may be easier by the end, since I just have to focus on the individual lessons. I'm trying to break each lesson down into specific tasks. I'm not going to be able to fulfill the "teach ICARR" goal in just one lesson. I think breaking it down into basic, basic sections would be the best way to go. It's hard to figure out where the breaks are, though. At least I still have the old modules for reference.

The new ICARR-3D version uses the icon files I made yesterday. It's neat to see my own icon on the desktop now. I've never done something quite like that before. We had some trouble with the sizing. As always, Adobe has to be quirky and unique, and use "points" as measurement instead of "pixels." I know there's a way to change them, too, but I couldn't find the "preferences" feature anywhere.

If I had a dollar for every time I thought an Adobe project needed to be more user-friendly...

Anyway, I've still got a lot of work ahead of me tomorrow. Until then!

-Jake Missall

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Friday, April 15th, 2016

(Relevant Files: )

Very productive day. I'm glad, too! I'd been having trouble focusing lately. Not sure what the definite cause was, and I was afraid it had to do with my podcast. Today I didn't have problems listening and working. Whatever the problem was, it's gone now. I came in today, motivated and ready to go.

Most of the work today was done on the ICARR-3D training. I had to recreate a couple modules to fit the new release. Not a huge deal, and it's easy work. I just have to adjust the text boxes generated by the software recording. I've worked out a system for recording, where I practice the steps a few times before recording. This saves a lot of time, since my last click-through will usually be void of stray clicks. The first time through, I tend to get lost. It would just result in having to delete the slides and start again.

I've also dropped the rigorous mindset I had been using previously. I used to take an approach that looked at the application's visual layout and built the training based on that. For instance, I'd look at the list of buttons, and work left-to-right across the top. This sounds logical, but it made it hard to focus.

Today, I took a step back and thought "If I were to show this program to a friend sitting in a chair next to me, how would I do it?"

My approach changed drastically. Instead of "Okay, let's start at the top," I worked through a logical, more organic plan. Of course, this caused the instruction to move around the screen more. I covered the four buttons on the top-left, then moved to the bottom, then to the top-right, then finally back to the top middle. Regardless of the movement, the training progressed a lot easier. It flowed better. An interesting lesson that I'm excited to expand upon throughout the rest of the training sections in the project.

-Jake

*Fun Fact #1: As I pulled into the parking lot this morning, I saw a fire truck and a handful of firemen. They had their gear on, and were packing up to leave the building. Apparently a light fixture caught fire near the machine shop. It was extinguished even before the fire service arrived, so everything was okay. Still, it was an interesting way to start the day. We're saying it's "Casual Fire-day."*

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**Monday, April 18th, 2016**

*(Relevant Files: )*

The work for today was to finish the first draft of the 3D tutorial. I went through the timing of the text boxes today. I'm starting to refine my process into a few steps that will be consistent from the first to the last module. So far, it breaks down to Recording, Correcting, and Timing.

The first step is to mark the steps using Captivate. It creates most of the elements automatically, so it's really simple to complete the first step. Still, I have to make sure that I plan out the clicks, and do them in the right order.

The second step is to go through and change all of the text created during the first step. Most of these are very basic steps, created by computer-programmed logic. For each text box, I have to change the instruction to be more clear for the user. So far, this takes most of the time to complete.

Lastly, I have to handle the timing. Since the instruction is displayed automatically, I have to think about the read-speed of the users. For many of the trainees, English will not be their first language. I need to make the text a little slower, so that they are not left behind. On the other hand, I can't make the text display so slowly that the faster readers lose interest. A balance is necessary to keep the information moving smoothly.

I'm currently using a 30% rule that I found while researching answers. A rule of thumb is to read the instruction out loud, and then add about 30% more of the time. I have to get feedback in order to test this out. I like the approach.

**Comment [29]:** interesting rule.

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-Jake

**Tuesday, April 19th, 2016**

*(Relevant Files: )*

Today's work was split between more ICARR-3D training, and more AFIRM bug testing. I'm going to make another short entry, because I have to meet with somebody in a little over an hour. Still have to drive home. I just don't have as much time to waffle on like I used to!

My training is going fairly well. I got a whole new module nearly completed today. I just have to do some clean-up, and it will be done. The approach I've taken is so bare-bones that it's almost painful. It's a whole different kind of training, and by nature there's little room for creative leeway. I need to find some way to jazz it up a little bit. Gotta keep my eyes open for that opportunity to make the product special, or I won't stand apart from any other intern with Captivate know-how.

The testing aspect of things was pretty fun, today. Not sure if I mentioned this previously or not, but it's special to see one's own influence in something like this. The comments I made to Melissa got

relayed to the developers. Many of my ideas got used, and the program looks a little different in its current draft. It's nice to see suggestions implemented like that. Somebody, somewhere in the world is going to have their life changed in a subtle, small way. That helps me sleep at night. Haha

Anyway, It's time to go. Cliff leaves for Europe in the morning. Of course I won't be self-managed, since I'll be working with/under both Stanton and Melissa. Furthermore, Billy (Cliff's supervisor) checks-in, too. Still, I kind of feel like a dog off its leash.

Of course, this isn't an issue to me. I've no intention of 'leaving the yard.' This is one dog that doesn't want to go to the pound!

-JM

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**Wednesday, April 20th, 2016**  
(Relevant Files: )

Today I got a full module completed, and a large part of a second one done as well. I made pretty good progress. Just like suspected in last Thursday's entry, each section is getting a little faster.

Still not a lot to write today. Most of this current task is similar to previous work, so there aren't that many surprises. I had to merge two software recordings together, in order to get the intended result. That was new, but not foreign.

I will mention that I'm having trouble finding an answer to a problem. When creating today's tutorial, I have used the word "we" to explain the instructions (e.g.: "To sort the table by dates, we will click 'Date,' at the top of the column."). This sounds much more inviting, since it's more of a collective pronoun. It also helps to distinguish between commands like "Click the button," and explanations like "This button opens the interface."

**Comment [30]:** I am not a fan of using we in instructions, since it's usually just one person who's reading/using them.

I don't know all the proper terminology to search the web for an answer, so I'm having to go with my instinct for now. I think it works well enough. If Stanton doesn't like it when he reviews the first drafts, it won't be very difficult to change back.

Well, I've stayed too late again. Until tomorrow!

-JM

*Fun Fact: Today I got a large tub of potato salad from Kroger, like I often do for (part of my) lunch. Unfortunately I did not see the large, open split down the side of the tub. Not only did I not get full for lunch, but now I have to return it on my way home. Woe is me!*

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**Thursday, April 21st, 2016**  
(Relevant Files: )

I got a lot done today. I completed two-and-a-half modules for ICARR-3D today. That's a significant amount, considering both the timeframe I'm allocated, and the amount of work involved in making a module. I'm pretty happy with my overall progress, too. I'm up to nine projects that all link together.

Tomorrow I'm going to start working on the test simulation. It will compile all the information together, and test the learner for their retention. It's going to be big, and I'm not entirely sure how I'm going to do it. It will probably flesh out similarly to the software simulations.

I have to go now. I will write more tomorrow!

-JM

*Fun Fact: We got talking about doughnuts, this morning. Brought back a box of Krispy Kreme for the lab. It was well-received, to say the least.*

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**Friday, April 22nd, 2016**  
(Relevant Files: )

Let's see... What did we accomplish today?

Well, I was planning to show my training modules to Stanton today, but he isn't feeling well. That kind of threw off my plans, since I can't really move forward with the rest of the training until I get the information I have verified. For instance, if I create the end-of-training simulation meant to test the users' knowledge, I have to make sure it tests the correct knowledge. If my training is incorrect in any one aspect, the entire test will have to be re-worked. That being said, I worked on general timing issues and cleaned up problems with the functionality.

So, with a light work-load for the day, I decided to pick up After Effects again, and to make another animated logo - this time for ICARR-3D. If you remember from early this week (or last week), I re-created the logo for the ICARR icon. I used the same Illustrator file to make the animated logo. I was able to have the nut fade in, and then the wrench attach and rotate it.

An issue I encountered was that my rotation animation wasn't linking up very well to the nut. The wrench was rotating, and had to be moved downwards at the same time. I felt like I was in my

Dynamics class all over again, working out problems with rotation and translation around a mechanical part!

To create the effect, I had to move the wrench to the correct position, frame-by-frame. The result wasn't *terrible*, but it looked extremely amateur.

I asked Patrick for his opinion, and he agreed that the movement didn't look great. His suggestion was to make the nut a parent to the wrench. In other words, I had to make the wrench's layer attach to the nut's layer, and then rotate them together. I had to search for a moment to find the "parent" tab, but in about a minute-and-a-half, I'd successfully solved the problem. Thanks, Patrick!

He also pointed me to an add-on that he had been learning about, called "Ease and Wizz." Ease and Wizz is a plugin that moves objects in a softer way. It helped to make the resulting project look a lot more polished. I'm happy with the result.

Well, it's Friday, and I've got a ton of energy right now. Not sure what the plans are, but something's going down tonight. Until Monday!

-JM

*Fun Fact: I got to show Patrick my training modules, since he'd not seen them yet. He was really impressed by them.*

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Tuesday, April 26th, 2016  
(Relevant Files: )

After doing all the polishing I could possibly do, I decided to start on the simulation. I was told that tomorrow morning I'll be showing my work to Don, so I still had time to work before getting feedback. I went for a bare-bones teaching approach. I'll give the trainees a scenario, and have them work out the steps. By this point, they should know enough to complete the simple task. If they don't, the program pushes them through it by giving them prompts every time they make mistakes.

I had some trouble with a simple, simple "advanced action." I've made a dozen of these conditional actions during the last couple trainings. I decided to make a simple check for the user's progress, with the intention of showing/hiding a button. Although I'm convinced everything I did was correct, I could not get the button to show up when I wanted it to.

So, in proper work-around fashion, I threw the relevant slide to the end of the project, and skipped to-and-from it when I needed to. Since I exit the program on the slide before that, it works nicely. "More than one way to skin a cat."

Until tomorrow!

-JM

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Wednesday, April 27th, 2016  
(Relevant Files: )

I got my feedback on the ICARR-3D training module, this morning. Well, half of it. Still, that gave me a lot of work to do today. There were many parts in which my terminology was off. That was kind of what I expected, since I was learning the system as I went. Luckily those were easy fixes. The current draft is pretty close to completion.

Don really liked what I had so far. He says he's excited to see the simulation, and I'm excited to show it. I've edited the work-around from yesterday. Now I'm using roll-over slidelets to display the scenario, and I really like the effect. It looks really good, and doesn't distract the user (before, the users were brought to a separate slide. Now, the scenario displays over the current slide when the user mouses-over a scroll symbol.

I get the second part of my feedback in the morning. Both Stanton and Don will be there for that, so I should get plenty of info to go off of.

-JM

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Thursday, April 28th, 2016  
(Relevant Files: )

I got some more feedback from Don, this morning. We still haven't gotten through all of it, but I got to show him the simulation I'd been working on. He really liked it, and said it's way further than the current training on the website. It's funny because I don't really see it as anything overtly fancy, but his reception to it made me eager to show it to Stanton and (eventually) Cliff. It still needs a bit of tweaking (Don got stuck a couple times), but the concept seemed to go over nicely.

I asked Patrick in passing today about his job offer process. I only have three more weeks scheduled until the proposed end of my internship, so I'm starting to wonder about the hiring process. Patrick brought Michael (a senior-level engineer whom I like a lot) into the conversation, and we decided that I need to go talk to Billy (the head of our department). I think it's still a little early to talk to him about the prospect, but I was told 'the earlier the better.' I'll most likely wait until the ICARR-3D training is complete, since that will demonstrate my main focus.

During the conversation though, I got a really good compliment from Michael. He said something along the lines of "Just from hearing conversations around the lab, you seem to be doing very well. You weren't given much to start with on ICARR, and you've apparently done really nice work. That's the sort of members I like on *my* team." That felt good.

-JM

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**Monday, May 2nd, 2016**

*(Relevant Files: )*

I wasn't able to write on Friday, because I had to leave early for the TCO picnic. I did manage to get my feedback from Stanton, and I now have a lot more work to do. That's not to make it sound like it was bad feedback, or that I didn't do anything right; there's just more to the training than I originally thought.

One of these tasks is to teach how to submit a TAR from AIRCAT after initializing it using ICARR. (All these acronyms! Can you tell we work with the military?) That shouldn't be a problem except that I am using the test servers, and those aren't linked up properly. As such, I'm not able to record the trainings as they're supposed to work. I will have to login to AIRCAT manually, and then record that process.

By itself that wouldn't be so much of an issue, but ICARR populates most of the TAR data automatically. I'm not sure if the test servers are able to communicate with each other like that, or if I will have to manually input the info (to make it look like it was automatically done). If the latter is the case, my problem is that I don't know what information is sent!

Most of these problems will be resolved once Hillary and Stanton get back in the morning. They know the inner workings, and will direct me nicely I'm sure. Still - that's what I have to write about.

Other than that, I had trouble focusing, this morning and afternoon. It's a little tough to think you're almost done with something, and then be told there's a lot more to do. I've been looking at these tutorials for more than 80 hours, by now. At least I know what direction to take.

I'm going to ask Billy to meet with me tomorrow. He's here in the lab, talking to Michael. I almost sent an e-mail earlier, but I got nervous and erased it. I need to be confident when I speak with him, but I'm a little unsure about how to do it. Obviously I can't seem too eager, so there's a line to walk. I'm sure it'll be okay, though. Billy is a friendly guy, and this is a conversation that needs to happen sooner or later. Might as well get it over with.

Wish me luck!

---

-JM

**Tuesday, May 3rd, 2016**

*(Relevant Files: )*

Another short post, today. On such a cliff-hanger, too!

I ended up meeting with Billy this morning, instead of after work yesterday evening. Since he was talking with two other employees, and I had somewhere to be, I decided to hold off until I came in. I was nervous about it, but I managed to speak with confidence and professionalism. I don't remember exactly how it played out, but it seemed like he'd already made a decision before I started asking about it. When I asked, he said that if I was still around, I'd be welcome to work with MERC continuing on through the summer and then beyond!

My only catch is that I'll still be an intern until I officially complete my degree (which will be at the end of the summer, with the TCO presentations). After that, there will be a hiring process, and I'll be on as a full-time employee. That's pretty exciting stuff!

I'm excited. Of course a lot can happen between now and then, but that's with anything. I just have to keep doing the best job I can do.

-JM

*Fun Fact: I was getting lunch at Steak n' Shake, which is fairly usual for me (For anybody reading this who doesn't know, I used to work at one in Macon for about eight months). I overheard somebody asking their waitress if they had the garlic burgers in smaller sizes. The waitress said 'no,' so I politely reminded her that they have garlic shooters (the little burgers).*

---

*Turns out that was the service manager. She thanked me, and we got talking, and as I was cashing out my ticket, she offered me a server position! How different of a person am I now than I was when I was offered that position roughly three years ago. Funny to think about.*

**Friday, May 6th, 2016**

*(Relevant Files: )*

The last couple days, I've been working on the new ICARR-3D modules. I've got one for a Bolt-hole Eddy Current inspection, which is an inspection using a small, electric probe. The probe is dragged along the inside of holes, and micro-cracks are detected and displayed on a screen. These cracks typically run along the depth of the hole, and are repaired by boring out the hole to make it a little larger.

The other module is a TAR submission tutorial. It's a continuation of a previous module, so it's pretty straight forward. I got that taken care of on Wednesday. I did have an incident, however. While trying to resize the one training project, I mis-clicked and overwrote a good save with a broken save. I had to re-create 3-hours of work. No biggie, though.

Today was spent downloading Captivate's voice packs, and then using them to create narration for a couple of the projects. I'm not terribly crazy about the program captivate uses. The voices are pretty good, but they're ridiculously difficult to adjust. The functionality is there, but it's masked behind a trial version, which makes the editing program almost unusable. I don't know why there's a trial version of it, since it was downloaded alongside Captivate (which MERC paid for). That's Adobe for you...

Anyway, it's a nice Friday, and I've got some plans for the weekend. We'll see how it goes.

Until Monday!

-JM

---

*Fun Fact: I was the last one in the lab today, and I had to answer the phone. I felt bad because the lady had such a simple question, and I just didn't know how to answer it. It all was fine though; I took a message.*

**Monday, May 9th, 2016**

*(Relevant Files: )*

I had a good weekend, this last weekend. Spent some good time with my roommate and his girlfriend. We had pizza, and went for a walk with the dog around the neighborhood. I got a lot of sleep, and that put me in a good frame of mind for today.

I got to work this morning, and went straight into creating the narrations for the remaining modules. I showed Stanton one of the first two that were done, and he said that it wasn't that bad of a voice. I was worried it was too robotic, but I think the finished version came out alright.

After the next couple modules, I got really fast at making the narration. It was a systematic process for each slide, and the repetition got faster and faster. I had been expecting this to tie me up for the next couple days, but I was done before lunch. I reviewed the modules after lunch, and then packaged v1.3 of the training.

Tomorrow I'm going to show the current draft to Stanton and Don, and see where they think I should go from here. Until then!

-JM

*Fun Fact: I just found out that I won the lottery for an extra graduation tickets. Unfortunately I need six and have only five. At least with the original allocation of four, two of my siblings could buddy-up. Now it seems one will be alone in the overflow room. Sheesh!*

**Tuesday, May 10th, 2016**

*(Relevant Files: )*

There were a ton of people in the lab today, when I came in. I don't who they all were, but there were too many unfamiliar faces there for me to warrant making my breakfast crossandwich. Instead, I went straight into my task. I spent a little bit of time polishing up my narration, and then looked to the internet for new ideas.

A quick search for "instructional design CBT top ten things" yielded some thoughts. Most of what I found was already included in my current draft (since it was a lot of elementary info). What I didn't have was any confirmations of my learning objectives. I edited the endings of each module to include a "you now know how to..." text box. This will help with uniformity and will also provide a more polished set of instructions.

**It's time to go, now.**

---

-JM

**Wednesday, May 11th, 2016**

*(Relevant Files: )*

It's the middle of the week and I am completely burned out for the day. As I must have mentioned earlier, Wednesdays are when the employees each upload their timesheets for the week. Since I arrived late last Thursday, I've been at a 15-minute deficit all week. I've managed to push that off until today, and it's time to pay the piper. These last ten minutes are dragging on and on.

It hasn't been a bad day though. I got a lot done today with testing. Melissa made a comment when she saw my findings summary. Apparently I found a lot. I was tasked with testing the AIRCAT International website again. They've just finished up some changes, and there was a lot that wasn't working quite right, when I tested.

I've also been tasked with another training module. This one is intended to train new interns that will be working primarily on testing in MERC. Since it's an in-house training, I'm a lot more relaxed on how I approach it. I'm going to be more free to try out some different techniques. I'll also be a little more loose with my dialogue, since this isn't going directly to the military.

One new technique I'm starting with this time is to start from a script. I'm basically writing an essay, and will use that as the outline for the slides. Previously, I've written down a brief outline that resembled more of a thought cloud than anything. I'm excited to see if this essay method proves helpful.

Until then, I'm fighting that overwhelming "blank project" hurdle I experienced when starting the ICARR-3D training. What a tough feeling!

-JM

**Monday, May 16th, 2016**

*(Relevant Files: )*

*Foreword: This section is a little strange to write, since I'm writing to Dr. Grady about Dr. Grady. Since this journal is meant to also be viewed by prospective interns, I will retain the first-person voice.)*

Today was scheduled to be the day that Dr. Grady came to visit. I was a little nervous, since my boss from school was meeting my boss from work. I think it went very well, though. After I finished the morning task of testing the most recent module (that I had completed, start-to-finish, on Friday), I got the announcement that there was a visitor for me at the front of the building.

It was nice to show her the building. We walked down the hall to the AIRCAT lab, and she said 'hello,' to Patrick and Michael, whom she knew both. Afterwards, we went over the projects I've worked on since the beginning of the internship. It was interesting to see my progression from module to module; I hadn't actually gone back and looked at the older modules in a while. There were lots of differences from the older versions to the new ones, and it was clear which techniques built on others.

After we finished going over my work, Dr. Grady met with Cliff, and they talked about my work. I don't know what was said, but I was told "good things." That's enough for me!

After Dr. Grady departed, I finished the day by testing ICARR-3D. Exploratory testing a computer program is quite different from testing a web application. Programs are much more restrictive. They don't allow you to break them in the same ways that websites do. With that being said, I feel like I ran out of ideas rather quickly. I had found some good bugs, but I don't feel like I found anything special. Special or not, they're still important, I guess.

**Comment [31]:** Jacob. I enjoyed visiting with you on Monday. You are doing really fine work for MERC and I am very proud of your contributions. Seems like you were paying attention in class after all!!

Tomorrow we package the new module, and then do some testing. We're scheduled to demonstrate the training and the new program build by the end of this week. I could be 100% done with it, or I might have to overhaul it. We'll see what happens.

-JM

**Tuesday, May 17th, 2016**

*(Relevant Files: )*

Today was a good day. I spent a bit of this morning watching Stanton work on the ICARR-3D code. He was trying to finish packaging the latest build, so that we could test it some more on my machine. We're trying hard to get all the bugs out before it gets run past Darren this week. I identified a couple, the other day. A few of the systems are causing crashes when you click them.

There are also a couple minor problems with some of the data entry, as well. For instance, there was no upper limit on a couple of fields. Users were allowed to enter a crack with length 513452531453e228 inches, if they wanted. Naturally this is nonsensical, since that's a crack that would probably wrap around the Earth (Edit: After a quick Google search, I found out that the crack would wrap around the Earth more than a few times).

I also was able to help Hillarie with a usability issue she was having. One of her users was struggling to figure out a drag-and-drop functionality within AIRCAT. I suggested looking into the code on another website (imgur.com; if you drag an image over the page, it brings up a graphic before the user drops the file) to find a solution.

For lunch, I attended a training meeting for the 3D printers in the Maker Space. We have two very nice printers, and I'm excited to be able to use them. I'm not sure what I'll make yet, but I have the option to make practically anything. A quick look through the "Thingiverse" website should prove helpful. (Thingiverse is a website that hosts user-uploaded 3D print files for download.)

Once the training was done, I finished testing the new ICARR-3D build. There are still a few problems to discuss with Stanton tomorrow. Until then!

-JM

*Fun Fact: There are about 200 little frogs accumulated by the back door. Apparently this is a normal thing, this time of year.*

---

**Wednesday, May 18th, 2016**

*(Relevant Files: )*

So much happened today. I did more ICARR-3D testing, and was able to identify a few good bugs. Poor Stanton has gotten so many e-mails from me. We're scheduled officially to present our respective products to Darren on Friday morning. I'm a little anxious about it, but I think it will go well. Stanton says I've done a good job, and he knows Darren well.

There was a big luncheon in the auditorium, this afternoon. A lot of staff was recognized for their 5, 10, 15, 20, and (for one person) 25 years with MERC. I also had my name called as one of the new hires. The lady reading the names mispronounced my last name though, so I had to correct her in front of the entire staff. It was kind of funny, and it got a chuckle.

I was also brought into a meeting with Patrick, Melissa, Elizabeth, and Michael. It was a meeting about bringing Usability to MERC. We've got plans to pitch a concrete plan to Billy (head of ISD) tomorrow. There's been a lot of resistance to Usability so far. Many of the older staff prefer the "Waterfall" method of release (as opposed to AGILE). We have to develop a quick Usability test for MSG-3 that will demonstrate the importance. It's an exciting new task that may lead to a Technical Communications department within MERC. Only time will tell.

JM

**Monday, May 23rd, 2016**

*(Relevant Files: )*

Last Friday (May 20th) marked the final day of my TCO internship contract. It was a big day for me. I finally met with Darren, the representative for the customer in the contract. He saw the training for the first time. Cliff oversaw the review, and told me later that it went well. Unfortunately, I have a lot of

**Comment [32]:** Jacob, As we discussed during my visit, I suggest you write your final report as soon as your "official" internship period is over. That way there will be no confusion as to what you accomplished during your internship vs your later projects.

work to do over the next week to update the training. It seems like I'm going to have to completely revise a few of the sections. I've got quite the task set ahead of me.

I guess I'm going to have to stop writing a log now. This one, at least. It's been a fun three months working here, and it all went by so quickly. I remember being so nervous, the first day. It's funny because I'm so much more comfortable and relaxed. Now that the new interns are in, I feel like I'm in a whole different place. I've changed a lot in three months.

Some of the biggest lessons I've learned surround that idea of professionalism. Things like how to present ideas, or how to ask for help on a task. I've learned a lot about Captivate, naturally. I've learned about project management, and self-management, at that. I've learned how to research something that I need to learn about, and how to implement those findings within a project.

These are things that have helped me over and over again, these last few months. I'm eager to build on the knowledge I have as I continue to work for MERC. I'm anxious to see where my career leads. Who know where I'll be in ten years? For now, I'm going to take it week-by-week. I'm setting goals now, and achieving them. I need to make sure I'm continuing to grow, and that one day I'll look back and see a multitude of progress.

If you're reading this and you've been with me through this adventure: Thanks for being there. It's been a big journey, and it's been nice writing to you. If you've read through this log while pursuing your own internship, then I wish you the best of luck! I hope what you read was helpful, and that you can use some of my experiences as references for your own (for better or worse).

Sincerely,  
-JM



**AIRCAT** International **Introduction**

**Welcome to the AIRCAT Tutorial!**

The purpose of this tutorial is to train you on how to work the AIRCAT system. It will be broken into three sections:

This first covers login and account creation. The second section explains the work queue. Lastly, the third section demonstrates TAR creation and submission.

This is your navigation toolbar. It will help you move around the training.

(Some sections will instead use a player bar that will be located at the bottom of the presentation.)

**Previous Slide** **Home** **Glossary** **Next Slide**

Click 'Next' at the top-right to continue.

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**AIRCAT**  
International

# Title Screen

[Login](#)

**Logging In**  
Use this tutorial for creating or managing AIRCAT user accounts

**Work Queue**  
[Create TAR](#)  
[Advanced Search](#)

**The Work Queue**  
The work queue lists all Technical Assistance Requests

**Work Queue**  
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**Create/Edit a TAR**  
Click here to learn how to create a Technical Assistance Request

[Click here for definitions](#)  
[Glossary Terms in bold font](#)

**What Is AIRCAT?**



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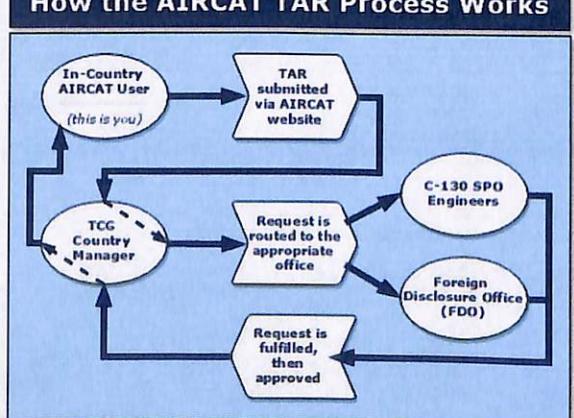
## What is AIRCAT?

**"The Automated Inspection Repair Corrosion and Aircraft Tracking system (AIRCAT) is a system used to log data for active aircrafts within a fleet.**

- Once a mission has been completed, AIRCAT users submit flight data into **Usage Data Input (UDI)**. The flight data includes information about how the mission was performed such as takeoff and landings, altitude, airspeed, cargo and fuel weights, etc.
- After the flight is submitted, the AIRCAT system analyzes the data. A **Severity Factor** is applied for any maneuvers that create extra wear on the aircraft. The result is a total of **"Equivalent Flight Hours"** that will be used to represent the wear on the aircraft's components.
- Finally, the system will alert the user to upcoming, necessary maintenance.

**The AIRCAT system is a convenient, reliable way to ensure that the fleet is always well-maintained and ready to be used."**

**How the AIRCAT TAR Process Works**



**For more information, visit the MERC website**

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This section of the tutorial covers logging into your AIRCAT account.

To start, we will go over first-time login procedures, which include account creation. Once the account creation process has been covered, we will explore the normal login procedure. Lastly, we will look at some basic account management features.



Use the navigation at the top-right to go to the next section.

(If you already have an account, click "Skip.")

Click here  
to open  
AIRCAT  
website

### Please Login

User Name:

Password:

Login

OR

CAC Login

[About CAC Login](#)

[Request Account](#)

[Forgot Password](#)

### First-Time Login

When using the AIRCAT system for the first time, new users will need to create an account.

To do so, click the "Request Account" link at the bottom of the login page.

(This will start a simulation that you can follow along to.)

## Request Account

To start, you will need to enter the user's first name.

Fields with an asterisk \* are required.

First Name\*

F

Middle Initial

Last Name\*

Email Address\*

Country\*

Base\*

United States

Base\*

Atlantic City International Airport

Phone

1(123)555-1234

Primary Intended Use\*

- TAR User
- Flight Entry
- Flight Review
- Other

If you choose "Other" for your primary intended use, please be sure to add additional information about your reason for requesting an account.

Reason For Account

I

United States

**Base\***

Atlantic City International Airport

**Phone**

1(123)555-1234

**Primary Intended Use\***

- TAR User
- Flight Entry
- Flight Review
- Other

Select the Primary intended use for the account.

- **TAR User** - allows member countries to obtain technical assistance from TCG personnel
- **Flight Entry** - Used by Flight Engineers to submit flight history data for their aircraft for **Aircraft Structural Integrity Program (ASIP)** tracking
- **Flight Review** - Used only by administrative personnel, this application enables the editing/correction of flight records entered by Flight Engineers

If you choose "Other" for your primary intended use, please be sure to add additional information about your reason for requesting an account.

**Reason For Account**

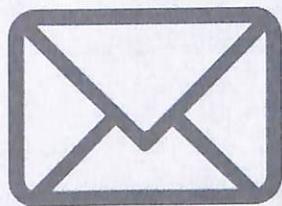


## Logging In



### Email Verification

Once you have submitted the account creation request, you should receive an e-mail at the e-mail address you submitted. You will need to navigate to this e-mail and verify your contact information in order to continue.



The email will also contain your login username and initial password. Once you have this e-mail, you may log in using the standard procedure. Click "next" to go on.

(If you already know how to log in, click "Skip.")



Next, you will enter the password from the e-mail.

Note: The password is case-sensitive. You will be given an opportunity to change your password once you are logged in.

## Please Login

User Name:

Username

Password:

OR

[About CAC Login](#)

[Request Account](#)



## Logging In



[Help/FAQ](#)

[My Profile](#)

**Change Password**

[Associate CAC Credentials](#)

[Logout](#)

### Account Management

You should now be logged in, and viewing the home page. [Click "Username"](#) to activate the account settings menu.

Here is where you can manage your profile's settings.

Click "Change Password" to continue.

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**AIRCAT** International **Logging In**

Change Password

Current Password

New Password

Confirm New Password

**Submit Change**

**(Note:** The above form is a simulation, and cannot affect your account settings.

To actually change your password, you will have to login to the official AIRCAT website. Click here to open it your web browser.)

**Account Management**

The password reset form will look similar to this.

In the top space, enter the password you were given. In the bottom two, enter the new password twice.

When you are finished, click "Submit Change."

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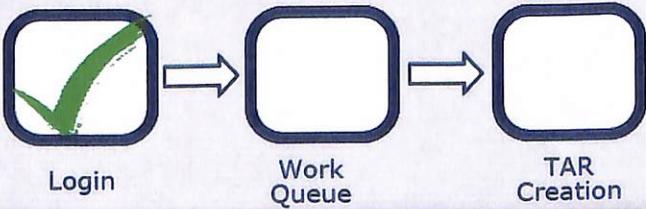
**AIRCAT** International **Logging In**

**"Login" Conclusion**

By this point you should be able to:

- Login for the first time
- Login using the normal procedure
- Change account password (and other settings)

**You are now ready to start the next tutorial. Click the 'home' button at the top right of this slide.**

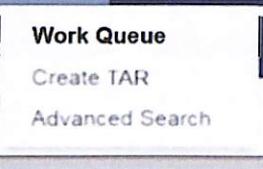


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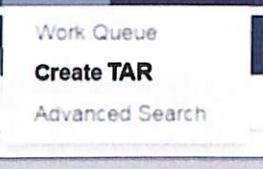
**AIRCAT International** **Title Screen**

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**The Work Queue**  
The work queue lists all Technical Assistance Requests

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**Create/Edit a TAR**  
Click here to learn how to create a Technical Assistance Request

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**Click here for definitions**  
**Glossary Terms in bold font**

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**AIRCAT International** **The Work Queue**

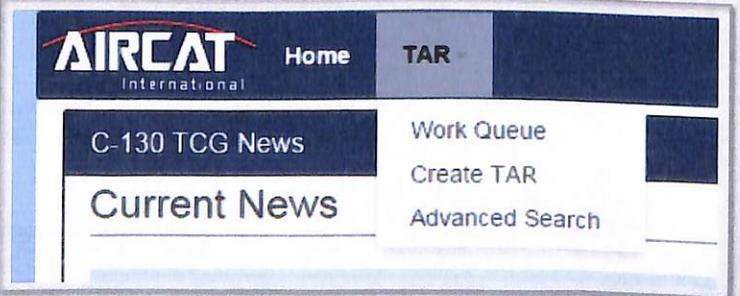
**“Technical Assistance Requests” and the Work Queue**

**A Technical Assistance Request (TAR)** is the main object that the AIRCAT system handles. Basically, it is a form that is filled out and sent to the appropriate maintenance team.

The TARs are stored in the **work queue**. This is a central part of the AIRCAT system, and will be the starting point for most AIRCAT tasks.

To begin the training, we will need to navigate to the work queue.

Click the TAR menu in the header, and then click “Work Queue.”

 **AIRCAT International** [Home](#) [TAR](#)  
**C-130 TCG News** [Work Queue](#)  
**Current News** [Create TAR](#)  
[Advanced Search](#)

**AIRCAT International The Work Queue**

Technical Assistance Request Tracking System

Enter control number:  Go

TAR Work Queue

Status: All Open Request Assigned To: **AIRCAT User**

# Records to Display: 20  Show MouseOver Text Refresh Queue

Here is where one can find the name of the Country Manager handling the TAR.

Control Number	Country	Tail #	Date	Status	Priority	Assigned To	Submitted By	Subject
2016-00017	Training	TR-CCC9	3/9/2016	Initiated	Routine	AIRCAT Operator	TCG	AIRCAT User
Pilot needs new chair								

Back to Top

This is the work queue screen. This is where you can find all TARs associated with your account.

Take a moment to click on each column label for explanations of what they are. When you have explored them all, click the 'Next' button.

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**AIRCAT International The Work Queue**

Technical Assistance Request Tracking System

Enter control number:  Go

TAR Work Queue

Status: All Open Request Assigned To: **AIRCAT User**

# Records to Display: 20  Show MouseOver Text Refresh Queue

Control Number	Country	Tail #	Date	Status	Priority	Assigned To	Submitted By	Subject
2016-00017	Training	TR-CCC9	3/9/2016	Initiated	Routine	AIRCAT Operator	TCG	AIRCAT User
Pilot needs new chair								

Back to Top

Some more functions of the work queue include sorting/organizational tools, and even a search tool for TAR Control numbers.

Next, we will view an existing TAR. Click the control number for the sample TAR to view the full request.

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**AIRCAT** International **The Work Queue**

**Viewing a TAR**

This is an example of what a TAR looks like. Each request contains a variety of information which can be broken into three main parts:

**TAR Information:** This section lists contact information and relevant details like the date, country number, and request priority.

**Aircraft Information:** Here is where details about the aircraft are displayed. These include the tail number, previous maintenance dates, and total flight hours.

**Discrepancy Details:** The third part contains necessary details the user has included in the request. User will select what system (structural, avionics, etc.) is being affected, and include an explanation of the problem.

**AIRCRAFT INFORMATION**

MDS

LAST PDM/PMP OUTPUT DATE (MM/DD/YYYY)  
12/5/2015

LAST ISO NUMBER/LETTER CHECK DATE (MM/DD/YYYY)  
Letter Check A ▾ 12/1/2015

to schedule appointment

**DISCREPANCY DETAILS**

ART NUMBER NATIONAL STOCK NUMBER

TECHNICAL ORDER

(Interact with the above image. Click to zoom in and pan around.)

**AIRCAT** International **The Work Queue**

**"Work Queue" Conclusion**

You now know how to use the work queue interface to locate and view a TAR. Next, we will go over how to create and submit one.

Click 'home' to return to the home screen, and select the next tutorial.



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International

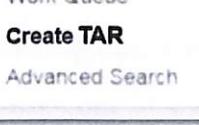
## Title Screen

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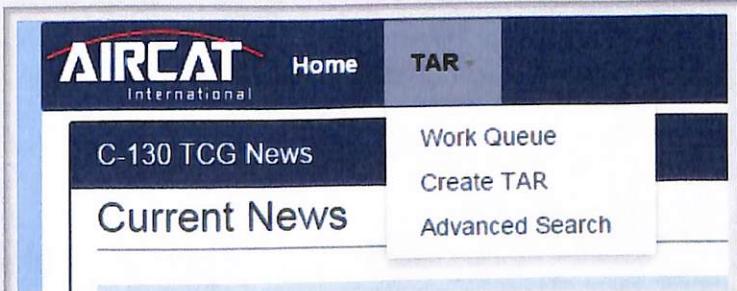
## Creating a TAR

### Submitting a Request in AIRCAT

Next, we will learn how to create and submit a request in the AIRCAT system. This will be the primary task for most users.

You're familiar with the TAR drop-down menu from the previous section. We will use this again for the creation process.

Click the TAR menu in the header, and then click "Create TAR."



## New (Awaiting submission)

AIRCAT User

### PART 1: REQUEST

#### ► TAR INFORMATION

#### ▼ AIRCRAFT INFORMATION

SERIAL/TAIL NUMBER REQUIRED

FL-9954 ▾

NEXT PDM/PMP INPUT DATE (MM/DD/YYYY)

Testing

NEXT PDM/PMP LOCATION

You can type in them durin

MJS

LAST PDM/PMP OUTPUT DATE (MM/DD/YYYY)

LAST PDM/PMP LOCATION

NEXT ISO/LETTER CHECK DATE (MM/DD/YYYY)

These fields are interactive

NEXT ISO NUMBER/LETTER CHECK

LAST ISO/LETTER CHECK DATE (MM/DD/YYYY)

LAST ISO NUMBER/LETTER CHECK

AIRCRAFT AVAILABILITY

CURRENT AIRFRAME HOURS

AIRFRAME HOURS AT LAST SC

#### ► DISCREPANCY DETAILS

[Request History](#) [Form Changes History](#) [Printer Friendly Version](#) [Save to File](#)

Use this section to practice using the TAR page. Click the "i" for information on each input field.

Submit Request

Save Changes

Cancel Changes

Cancel Request

Make sure to fill out all three sections. Clicking the section titles will expand their details.

When you are finished, click "Submit Request."

**New PAR** These two fields show the reference number for the aircraft, and the next scheduled maintenance

SERIAL/TAIL NUMBER REQUIRED

FL-9954 ▾

NEXT PDM/PMP INPUT DATE (MM/DD/YYYY)

Testing

This is where the next maintenance will be done.

Aircraft Model, and date of the previous maintenance

NEXT ISO/LETTER CHECK DATE (MM/DD/YYYY)  
These fields are interactive

NEXT ISO NUMBER/LETTER CHECK

Indicates the type of maintenance next scheduled

Indicates where the previous maintenance was done, and what kind

AIRCRAFT AVAILABILITY

Next scheduled maintenance, and times that the aircraft will be available for maintenance.

NEXT PDM/PMP LOCATION

You can type in them durin

MJS

LAST PDM/PMP OUTPUT DATE (MM/DD/YYYY)

LAST ISO/LETTER CHECK DATE (MM/DD/YYYY)

LAST ISO NUMBER/LETTER CHECK

Click again to hide

CURRENT AIRFRAME HOURS

AIRFRAME HOURS AT LAST SC

Shows the number of hours the airframe has flown, and the number at last inspection.

Use this section to practice using the TAR page. Click the "i" for information on each input field.

Submit Request

Save Changes

Cancel Changes

Cancel Request

Make sure to complete all three sections. Clicking the section titles will expand their details.

When you are finished, click "Submit Request."

## Technical Assistance Requests

Status updated from New to Initiated.

[Return to Queue](#)



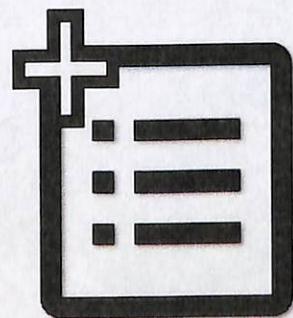
## Creating a TAR



### "Create a TAR" Conclusion

After submitting your TAR, an e-mail will be sent to your account and to TCG staff. They will review and route your request, and the AIRCAT system will begin to work.

At this point, you have completed the "Creating a TAR" tutorial. You may click the "home" button to go back to the main screen.



**Training Complete!**

(Click to go to the final slide)

Login

Work Queue

TAR Creation

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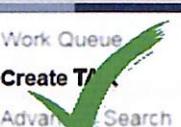
**AIRCAT**  
International

## Title Screen



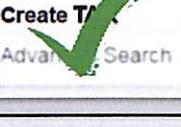
**Logging In**  
Use this tutorial for creating or managing AIRCAT user accounts

**Training Complete!**  
(Click here to go to the final slide)



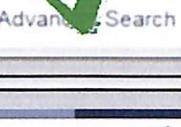
**Work Queue**  
Create TAR  
Advanced Search

The work queue lists all Technical Assistance Requests



**Work Queue**  
Create TAR  
Advanced Search

**Create/Edit a TAR**  
Click here to learn how to create a Technical Assistance Request



What Is AIRCAT?  


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version 4.1, 4/11/16

**AIRCAT**  
International

## Finished



**You have completed the training!**

Click the 'x' at the top-right, or feel free to go back to the home page and take the tutorials again.

To view your certificate of completion, [click here](#).

[Submit Feedback](#)

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# Certificate of Completion

This certificate it to proclaim that

Donald Duck

has completed all parts of the Automated Inspection Repair Corrosion and Aircraft Tracking system's Technical Assistance Request training program on

9/2/2016,

and has the knowledge and ability to enter TARs as needed.



Jacob Missall, AIRCAT Instructor



Donald Duck

Donald Duck, TAR User



## AIRCAT International Glossary of Terms

A C E F I N P S T U W

Search:

**F**

**FLO - Foreign Liaison Officer**

This is the individual that officially represents a government or organization. The FLO can be either civilian or military, depending on the organization. They are tasked with overseeing security assistance systems.

**A**

Airframe Hours

**C**

ASIP - Aircraft Structural Integrity Program

Component Serial Number

Country Control Number

**E**

EFH - Equivalent Flight Hours

**I**

ICARR - Inspection Corrosion and Repair Recording

IPT - Integrated Product Team

ISO - Isochronal Inspection

**N**

National Stock Number

Nautical Mile

## C-130 Hercules Puzzle



Time: 01 : 12



Reset



Have fun putting together this cool picture of a C-130 aircraft!

## C-130 Hercules Puzzle



Time: 00 : 50



Have fun putting together this cool picture of a C-130 aircraft!