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Osiris: A short film

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Osiris

A Capstone Project Submitted in Partial Fulfillment of the Requirements of the Renée Crown University Honors Program at Syracuse University

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Honors Capstone Project in Film	
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\$10,512 II CHENCO DIRECTOR

ABSTRACT

Osiris is a narrative short film which emphasizes renewable energy as Earth's one Hail Mary, placing the power of science and engineering into the hands of a female protagonist. Directed and produced by the up and coming filmmaker, Kathryn Ferentchak, Osiris is unique among student films for its incredible production value. The independent film industry is often hampered by an incomplete or poor understanding of how to successfully plan for and execute the five essential steps of filmmaking. Analyzing Osiris will demonstrate how a successful film can move from Development to Distribution. There is never only one way to make a film, but certain pieces of the puzzle cannot ever be substituted or ignored. At the end of the day, moviemaking is a business.

EXECUTIVE SUMMARY

The challenge of a Capstone Project is to create a professional work that goes beyond the parameters of a student project—to both test and showcase the abilities of the creator. In my film, *Osiris*, I brought together a volunteer team of talented, seasoned film professionals, attracted by my script and vision, to produce a short film that provides a portfolio asset not only for me as a Director/Producer but for the entire cast and crew. Osiris is a futuristic vision of life on a new frontier where wind power and the determination to survive push a young woman to her limits. A strong plot and unexpected ending, coupled with the dynamic visual impact of Wyoming landscape are used to create a memorable story and film.

The 21st century marks an epoch in filmmaking history where the equipment and resources needed to make a professional-level film are available in abundance. Properly utilizing these resources is the point on which many filmmakers fall short. In *Osiris*, I have integrated my knowledge, experience and education to create a truly Capstone quality film.

There are five distinct stages in building a film: Development, Pre-Production,
Production, Post-Production and Distribution. All too often development and distribution are
neglected entirely in the independent film world and it is tragically common for the demands of
the three middle stages to be similarly underestimated. This is why, of the 1600 feature films
finished last year, only 200 received meaningful distribution. (Of those, not all were profitable.)
Worth must be built into a film from the very first step and maintained and enhanced until its
completion and distribution.

How can a student film have value built into it? By making a damn good film. The industry consensus on student films is unflattering. *Osiris* set out to prove otherwise—to be so exceptional that the filmmakers involved could not be ignored.

What can one person accomplish? Very little by his/herself. But one person can build a team. Film is a collaboration. Together, a film crew is a smoothly working machine, a factory in and of itself, producing not machine parts, but content. Film is the business of emotion—and can only be achieved by collaboration and teamwork.

This is how to make a movie. Broken into five steps, *Osiris*' production will give a clear insight into the process of filmmaking on all levels.

ACKNOWLEDGMENTS

A film cannot be made in isolation. There are many people whose contributions made *Osiris* possible. From the incredible crew to the numerous donors and to the good teachers who gave me their support and advice. Each one of these individuals has his/her name in the *Osiris* credits and on the International Movie Database, so I will not enumerate each one here. Suffice it to say, filmmaking takes a village.

I must however offer a special thank you to the Renee Crown Honors program, without whom this film would not have been made, to my mentor Eric C. Wood, to my advisor Alex Mendez, to my reader, Keith Coene, and to my Capstone teachers Ryan Jefferies and Vas Papaioannu. The support offered by these organizations and individuals was unparalleled. It is difficult for me not to list the entire crew, department by department, or to list the wonderful locations or the wonderful donors. *Osiris* is yours too. I hope it will make you proud.

ADVICE TO FUTURE STUDENTS

Hustle. If you want to get to the top, then do not wait around for the elevator (it is already full). Scale the wall.

Plan. I started conceptualizing *Osiris* over two years in advance and began recruiting my team before I even applied for the Crown-Wise Funding.

Apply for the Crown-Wise funding. Seriously. Film is not cheap. Also, money likes company—it is magnetic. The first money in is always the hardest.

Make yourself a business plan. Set your goals down on paper. Studies show that writing things down correlates to improved achievement rates.

Never underestimate the power of lists or spreadsheets.

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CHAPTER 1: DEVELOPMENT

"Creativity is the process of having original ideas that have value. It is a process; it's not random" (Ken Robinson).

Development is the first stage of filmmaking. During development an idea is turned into a story which is then pinned to the page as a screenplay. The script is a fluid piece of literature and will continue to change until the film is officially in the can¹. The script is blueprint for the movie, and with that in hand, the producer can begin attaching the essential elements. These *essential* elements are the ones that give a potential production value: talent (above and below the line), equity and distribution. Two out of the three are required to *make* a movie, but having all three will vastly improve your odds² as a viable film in the marketplace.

Osiris Logline: A small community survives our impending nuclear holocaust thanks to their wind-powered shield. When the wind farm breaks down, Natasha and her brother Lysander are humanity's last hope.

The Story

Most commercial films begin as works-for-hire. A screenwriter is typically employed to pen the story by the production company. If a writer is registered with the Writers Guild of American (WGA), he/she is entitled to specific minimum payments for a screenplay's creation as well as subsequent payments for the treatment, re-writes and polishes. In the case of *Osiris*, the

¹ "In the can": jargon describing the wrapping up of a film shoot, when all the film/video that will be recorded has been. This term dates back to the origin of cinema when film really did refer to celluloid strips. At the end of the shooting day the film would be carefully sealed in a light-tight canister for development at a lab.

² Exceptions to the rule are do exist. Most are genre-based exceptions, for instance, horror can sell incredibly well without A list actors.

script was written in-house, an adaptation of a short story written by me, Kathryn Ferentchak.

Thus while the original screenplay is copyrighted, no chain of title was necessary for Black Start LLC³ to acquire the motion picture rights.

As a writer and a consumer of written and visual stories, I have always been first and foremost a student of the female perspective. I am very tied to my identity as a woman and it colors everything I do. Thus, when I write, my protagonists are heroines, not damsels in distress. Who doesn't want to "save the world?"—writing is cathartic in that respect.

Osiris grew from an image. On my road trips between Syracuse, New York and Denver, Colorado, I was stunned by the awesome vision of Wind Farms lining the highway. The towers themselves have an organic aesthetic, white steel, like dandelion stalks, stitching the flat expanse of golden fields to a dizzyingly blue sky. How funny that we could make something so mechanical to harness the natural kinetic power of the wind. How fitting that a wind turbine should be a thing of grace and natural lines.

From there arose a story. In my mind's eye I pondered a world where Wind Energy was the saving grace that renewable energy is purported to be. Power, energy, and the ability to work not by the sweat of our brows but by the fire of our machines, is what separates humanity from the rest of the natural world. We have built tools for millennia, but it was the innovation of the internal combustion engines that launched humanity into a new epoch. In the past century, communication has been revolutionized. Progress is aided by the free exchange of ideas and knowledge. Our technological evolution is accelerating. Yet, our species is incredibly fragile. We are isolated in our outreach, vulnerable to a mass extinction event, be it of the anthropocene or

³ Black Start is owned by Kathryn Ferentchak, created for the purpose of producing "Osiris." You should set up a new LLC for every film you make in order to keep the accounting straight and limit liability.

from external influences. We, as a sub-Type I civilization⁴, could be so easily broken. I pictured her, Natasha—a girl who lives on a wind farm in isolation with her brother. Pragmatic, she maintains the farm and the machines, while he is obsessed by the ghost of digital communication.

The devil is in the details and I firmly believe everything in a film should have meaning. Part of writing a story for me is combing through lists of "name meanings." Natasha means "rebirth." Lysander means "liberator." Talib and Maud, who were not introduced to the story until after the 6th draft of the script, are respectively "student" and "warrior queen." In the very first iteration of *Osiris*, Lysander dies without connecting to anyone via his broadcast, a victim of his own hubris. The latitude/longitude coordinates Natasha gives to the "outside-contact" correspond to Last Chance, Colorado—a real town, east of Denver.

The story underwent drastic changes prior to production. I relied heavily on the

Dramatica Story Theory⁵ to develop an engaging plot which would lend itself to the film format.

Other edits to the story and scene structure took place in collusion with my pre-production as various assets became or ceased to be available. (For instance, with the addition of the Laramie County Community College's wind energy training facility, the Nacelle interior scenes were added.)

I still love the *Osiris* story, even as its trappings continued to change from the short story written in the Fall of 2015. My heart still races as the final act rises to its climax and my pulse quickens as Natasha races through the wind farm. The particulars may have changed but the core

⁴ The Kardashev scale is a method for measuring the development of a civilization's technological advancement. Type I civilizations can store all the power from their nearest star that reaches their planet, approximately $7x10^{17}$ watts. We are not a Type I civilizations, not by a long shot.

⁵ http://dramatica.com/theory/book

of the story remains: Look outside yourself for the hope of humanity—We will find our future in space; technology both liberates and oppresses.

The Research

Osiris is a science-fiction film. I have some serious views regarding scientific accuracy in the sci-fi genre and as such undertook considerable effort to ensure that Osiris was factual enough to please even a wind farm engineer. I owe my continual thanks to Bryan Boatright (the Director of Wind Technology at LCCC), Bruce Cotie (Senior Operations Manager, Hydro-West, Peaking & Wind), Randy Bachmeier (Plant Superintendent, Hydro-West), John Valerius (Facility Manager at Happy Jack Wind Farm), my uncle David Burleigh (Professor of Metallurgy at New Mexico Tech) and my father, Jim Ferentchak (Senior Engineer at W.W. Wheeler & Assoc.).

Between them, these six men hold over 150 years of engineering experience and I am incredibly thankful to have accessed some of it through this process.

THE SCIENCE BEHIND THE STORY

Wind Turbines: As of 2016, wind turbines power 82,183 MW in the US. Thus, wind energy provides approximately 1.8% of total power consumed in the US (significantly less than Biomass and Hydropower). To build a wind turbine tower costs between \$1.75 and \$4 million. Wind Turbines require tremendous upkeep and typically need to be replaced within a few decades. I visited the Xcel Northern Colorado wind farm when they were in process decommissioning the small wind turbines of the 1980s. Wind turbines have their own enormous power requirements which must be met before they can generate power. (It is insufficient just spin the blade and hop out of the way.) This means they are in fact *not especially efficient*—a sentiment expressed by

most engineers. If a wind turbine goes down, and there is no power grid to restart it externally, then your farm is sunk. This is where the black start comes into play.

Black Start: A black start is "The process of restoring an electric power station or part of an electric grid without relying on the external transmission network" (National Grid). Normally all power stations are dependent on an electrical supply to generate power. Thus, if a wind farm goes down, the easiest way to bring it back online is to first divert power from the regional grid. If the entire grid is down, however, you face the problem of opening a box with the crowbar inside it.

JBG Super Battery: John Bannister Goodenough invented the Lithium-ion rechargeable battery. In other words, you can thank him for the cellphone in your pocket, the laptop on your desk, even the golf carts you drive on the back nine. He currently is a professor at the University of Austin Texas where he and his team are working on—you guessed it—a battery to store power from renewable energy sources. Neither wind nor solar power currently can store their own excess yield—it is use it or lose it for those particular energy sources. I reached out to Dr. Goodenough after stumbling across his project during my research and he happily agreed to be homaged in *Osiris*.

Figure 1.1 - Duke Energy's Happy Jack Windfarm. Photograph courtesy of Eric C. Wood, taken during our location scout in January 2016.



The Attachments

In the entertainment industry, individuals have monetary value. This is the business of emotions and you can *actually bank* on a person's ability to make an audience feel. That is star power. Directors can have it too, but A-list actors have something special. When making a film, you try to bring on the most *valuable* actors you can. Good, established actors have a fan base that can be counted on to buy movie-theatre tickets and purchase DVDs⁶. These kinds of attachments can be used to sign foreign sales agents or domestic deals. When you get famous, they give you a price tag, which is why celebrities have a certain extra right that mere plebs do not—the right to publicity, the right to protect the value their *selves* can relay.

Osiris, as a low-budget student film did not have "named talent." I cast strategically from the Colorado film community, recruiting the up-coming talent of Meggie Maddock and Alex Graff as the film's leads. While these two may not be household names, they have considerable ability and a serious passion for their chosen vocation.

The Finance

Osiris to be supported my volunteer crew, including equipment provided by my Director of Photography, Steve Roberts, and a trailer lent by Gaffer⁷ Chris Gerding. I have known these individuals for years and cultivated relationships with them. If I was paying full rate, the film would have easily cost \$50,000 if not more. As it was, I organized the out-of-state shoot for a mere \$20,000.

⁶ DVDs are almost obsolete today, replaced by online streaming services. This has cost the mainstream industry dearly while at the same time opening new doors to independent segments.

⁷ A gaffer is the head of the electric department, the person in charge of "painting with the light."

Film financing is an investment. Money is placed into a film in the anticipation of a profit. Investors are taking the risk, which, with a well-planned film business plan, will probably pay off. Net profits on a film are split between the financiers and the producer's pool, typically 50/50. It is important to remember that all investment is risk and in the world of investment, a 20% gain is considered very profitable. It is the production company's duty to minimize risk, through the use of foreign sales agreements, negative pick-ups and "soft-money" such as taxincentives.

Raising money for *Osiris* was incredibly hard work. The \$4,500 awarded to me by Crown-Wise funding was invaluable. This became the "first-money in," the money I pointed to when asking for donations and recruiting assets By the end of this production process, I had invested \$5,000 of my own money and collected approximately \$10,500 through crowd sourcing. It can be extra difficult to raise money for a short film. While less cost is involved, there is also less chance of turning a profit. Those who "invested" in *Osiris* were in fact investing in *my career*. This will pay off.

The Intent

When developing *Osiris*, my intention was to be, as it says on my resume, "so exceptional that I cannot be ignored." I want to be a pioneer, to go where no one else has, to accomplish things that have not yet been conceived. Most *impossible* things today simply have not been done yet. *Osiris* would be made correctly, I vowed. There was no need to follow precedent set by other student films—e.g. crewed by students, under-produced and underplanned. I do not want my peer group to be only students. I want my peers to be professionals, to be compared to the people who make their living in the film industry. *Osiris* is the work of

professionals, something to look good on *everyone's* reel. I began developing this film when I was 20 years old. I am 22 now and my career is just beginning.

There has only ever been one woman to win the Best Director Oscar, Kathryn Bigelow for *The Hurt Locker*. The film industry is still male dominated, although the balance is shifting to include more women behind the camera as well as in front. It is important to me that there are films where women can be the action heroes and luckily the zeitgeist seems to be in agreement. Films like *The Hunger Games* have succeeded in spite of traditional tropes⁸. If the story is great —you will sell the movie. I will make smart science fiction epics with strong female protagonists.

⁸ Made for \$78 million, the first *Hunger Games* grossed \$755.4 million.

CHAPTER 2: PRE-PRODUCTION

"In the beginning there was nothing, which exploded" (Terry Pratchett).

Pre-production officially begins as soon as your movie is greenlit. In a well organized world, your film is entirely funded or at the very least money is sitting in an Escrow account waiting for the last legal paperwork to be signed and submitted. The world of independent film, however, is seldom so cherubic. As described by Tom Malloy in his book on film finance, *Bankroll*, there's nothing like the "Dangerous Approach" to motivate a producer. If your movie will start shooting in a week and you *don't have the money*, it really lights a fire under your tail to close on the remaining equity. With *Osiris*, I raised a majority of my finances during a hybrid development/pre-production stage. An entire Capstone could be written on cold-calling and email chains, but this paper will gloss over the nitty-gritty and instead examine pre-production in its textbook pure form.

Pre-production encompasses everything arranged before the camera rolls. This is the planning and logistics stage. If filmmaking was waging a war, then this is the battle plan. Your generals strategize every possible move and develop a scheduled plan of attack. I love this stage.

In pre-production you must account for:

Insurance
 Additional casting

LocationsHousing

Crew positionsTransportation

- Shotlist - Camera equipment

Storyboards
 Grip and electric gear

Shooting scheduleTrailers/trucks

 Props and Set-Dressings 	- Crew Agreements
- Costume, Hair &Make-up	- Cast Agreements
- Meals	- Pay-per Play
- Craft Service	- Agents/Lawyers
- Gas/Mileage	- Signatory Requirements
- Per Diem	- WGA
- Department Meetings	- DGA
- Department Prep	- PGA
- Petty Cash	- SAG
- The BUDGET	- IATSE
- Fringes and Padding	- Rate Cards
- Globals	- Behind the Scenes
- Special Effects	- Permits
- Stunts	- Errors and Omissions
- Safety Equipment	- Clearances (branding, casting)
- Animals	- Image Release
- Fire Marshals	- Star Wagons
- Location Permits	- Honey Wagons
- Location Agreements	- etc.
For a start. Successful careers are based on not	thing but Pre-production coordination.

Producer Duties

Money is the blood of civilized society, coursing through its veins in the form of the economy. Film is no exception. Now that all that money has been raised in development, you get to start spending in pre-production. As a responsible producer, you had a budget drafted before your financing sub-section of development (otherwise, how would you know how much money to ask for?), but things are solidified and truly eked out in Pre-production. A lot of money is about to be spent—very fast.

Let me give you an example: I have producer friend under a Deal² with Lionsgate who once took me on a tour of the company headquarters. An entire floor is dedicated to the accounting. He pointed me to a double line of file cabinets 50 feet long, with stacks of boxes two deep, piled on top—the total receipts for the recent blockbuster *Godzilla*. That, I realized, is what \$160 million looks like.

Osiris, thus far, is a \$20,000 film. In pre-production I began parceling the money out to my departments: money to rent equipment, to arrange hotels and meals, to cover insurance, to pay for the horse, to buy props and equipment, to compensate the crew and casts' mileage expenses, etc. During this time, Eric C. Wood, my producing partner, and I recruited the crew for the film, making any and all necessary arrangements. On a more heavily staffed project, logistics and finance are the responsibility of the Line Producer and Unit Production Manager. In

¹ See the Appendices for the Osiris Top Sheet.

² When under a Deal with a studio, an individual or a smaller company is hired to produce content under the larger umbrella of a major/mini-major company. Lionsgate is the largest independent studio, although their major holder, AT&T, is in talks to buy Time Warner.

There are two kinds of Deals. The Overall Deal is most restrictive on a filmmaker—anything the filmmaker develops during the deal is property of the studio. First Look Deals mean that a studio has the first option on any project, but if they pass, then the filmmakers can shop their development elsewhere.

Casting Director, the Location Scout and Manager as well as the Accountant, Producer and Director. The most important lesson I learned during this process was: Just ask. Do not be afraid to tell people the truth and ask for their participation. For instance, we used honesty, integrity and enthusiasm to acquire a farmhouse backing onto Happy Jack Wind Farm. We were incredibly fortunate in making an agreement with the owners, John and Kathy Stevens, who became our gracious hosts for five days of on-location filming. How did we land such an ideal location, a comfortable little ranch house with wind turbines visible just outside the window? Eric and I knocked on their door. It was that simple. They talked to us for an hour, we exchanged information and coordinated the shooting dates to fit both our and their schedule. When working with good people, just be good to them too.

Directorial Duties

A film director has *one* job. It is the most important, in many ways, for the director—must become the audience. He/she assumes the position of the audience, he/she makes a film for the viewers, not for the executive producers or the company CEO. In pre-production, the visualization begins. What is the *color* of a character? How do you achieve a *feeling* and a *texture* with only images? Should the *movement* of an actor within a set be choreographed like a dance or loosely guided, leaving a place for improvisation? What camera angles will tell a compelling story? Is total coverage essential? What can replace it? And the montage? How about planning for the visual effects?

It is not possible for one human to keep it all straight in their mind without an external aid. As such, the director creates a series of tools to not only cement their *vision*, but to make it

communicable to his/her crew. Film is a *production*. There are so many moving parts that it is absolutely imperative to have them moving in the same direction.

My process begins with a script breakdown which I then divide into shots. From there I compile a *shotlist*, denoting the size of the shot, the portion of each scene covered by the shot, which actors are in the shot, whether or not synchronized sound is necessary, any special moves the camera will perform, what type of equipment is necessary to accomplish each move, etc. The list is extensive. From there, I draw my storyboards. (Many people would start with storyboards and back into a shotlist. No approach is more correct than another, per say, but I prefer the breakdown to shotlist because it allows me to "plan for coverage." Lack of coverage is often what kills you in the editing room and, frankly, separates the amateurs from the seasoned filmmakers.) Storyboards are the best way to communicate a film. A picture is worth a 1000 words and film is inherently a visual language. You do not have to be an especially good artist, happily, just good enough.

On professional sets, the crew and cast are not just paid for their time on set. In their contracts, department heads are guaranteed a certain number of paid prep days. During preproduction a director must get his/her team on all on the same page. Numerous pre-production meetings entail, and usually these are quite fun. As the pieces of the puzzle fall together, it is like watching a TV tune in—the fuzziness dissipates and suddenly the image is clear. Rehearsals take place during this prep period too. Performances are eked out and polished.

I worked with my actors. I discussed at length, both on the phone and in person, with my department heads. Together with Eric Wood I plotted the battle plan, our filming schedule—day by day, scene by scene, shot by shot. (See STRIPBOARD in the Appendices for an example of





Figure 2.1 - From Storyboard to Final Shot, OSIRIS Scene 7





Figure 2.2 - From Storyboard to Final Shot, OSIRIS Scene 45

how *Osiris* was scheduled.) I spent several entire nights re-visiting my storyboards and simply *picturing* the story. I visited the locations multiple times. I would have gone more often if the distance to Cheyenne was not a prohibitive two hour drive³. Making a movie is not a 9:00 to 5:00. Making a movie will take your every living breathe and pull the very blood from your veins. Making a movie is the best thing in the world.

³ Two hours up, two hours down, unless you have the misfortune to catch the rush hour out of Denver on the I-25. This burned through a lot of gas, especially for someone who was taking the first summer in six years without a paying job. Making a film *was* my job. I took \$600 to live off of (and a further \$5000 to make a film) out of my savings and then made do.

CHAPTER 3 - PRODUCTION

"Cinema is a matter of what's in the frame and what's out" (Martin Socrsese).

Production is the most exciting stage of making a film. While, of course, a movie is vulnerable during every stage of the filmmaking process (it can be killed in development, lose funding in pre-production, etc.), production is the pivot around which the entire process revolves. Production is a train careening down a mountain. If you planned well, then the tracks are well laid and reinforced. You have, for instance, a backup genny (slang for generator) and a cover-set in case of inclement weather. Nonetheless, there are always freak acts of nature, god or man to upset your process—the worst possible thing for any set is to have the momentum stop. No matter what, the show must go on.



Figures 3.1, **3.2**, **3.3**, Behind the Scenes for *Osiris*. Photographs courtesy of Lucas Roberts. **F-3.1** Christina McDonagh, Key Costumer, photographs Meggie Maddock for continuity. **F-3.2** Director of Photography Steve Robert's camera van catches the sunlight on a beautiful Wyoming afternoon. **F-3.3** Director Kathryn Ferentchak confirms framing with DoP Steve Roberts.

In the fictitious ideal world, your pre-production will account for every eventuality. And, if wishes were horses, then beggars would ride. Anything can happen. There can be a lightning storm on a wind farm (picture a field of very tall lightning rods), your costumer may forget one very essential costume piece when you are a mile and a half from base-camp¹, the sun may start coming up at 4:30am while you still have one last shot for the night time exterior scenes, or you may lose a prop in Cheyenne that is needed two weekends from now in Denver. On *Osiris*, we led a charmed life. Happy accidents were by far the norm, while we avoided many pitfalls we had anticipated could come up.

Production is exciting. It is a good idea, when in production, to bring your investors or distributors to the set. Moviemaking fascinates and intrigues, and outsiders are especially vulnerable. In his book *Bankroll*, Tom Malloy refers to production as a "crack high." It's infectious, it feels good. On a smooth set, you can really believe you are making something unique, something that is one of a kind, the best of the best. (Of course, you will never know for sure until you make it to the editing room.)

Production - Unions and the Law

Production is *hard*. Production will take you to incredibly grueling locations, have you exposed to the elements, make you freeze, ache, overheat, sunburn and dehydrate. During production, you begin spending money with both hands. Suddenly, everyone is payroll. You have to watch overtime like a hawk. Film sets have *long* days. In decades past, some film sets have been hugely exploitative of their crew. To combat this, legislation had to be enacted and unions

¹ Basecamp—just like in hiking you set up your major supplies somewhere safer and headset from there. Osiris utilized the garage and downstairs of John and Kathy Steven's home.

organized to protect the filmmakers. Brent's Rule is an example of one such law. In 1997, following a grueling 19-hour day, Assistant Cameraman Brent Herschman died in a car accident at 2:00am leaving set. This galvanized the crew, who led a successful campaign to limit the unethically long days which were standard on film sets of the 1990s. Improved legislation regarding work and overtime on both Federal and State levels have benefitted film crews on the whole, although the word overtime is sure to make a Line Producer wince.

Unions were revitalized by Brent's Law and similar legal changes in the 1990s. Unions have been a part of American cinema since the early 1900s, which saw a boom in American proUnion legislation. The McCarthy Era, however, saw a major breakup of Unions, from which they did not entirely recover until nearly half a century. Some major unions in the Film industry include (in order of precedence): The Screen Actor's Guild (SAG), The Director's Guild of America (DGA), The Writer's Guild of America (WGA), the Producer's Guild of America (PGA), the International Alliance of Theatrical Stage Employees (IATSE), the Teamsters, etc..

These guilds hold enormous power in the film industry. It is unthinkable to make a major motion picture that is not signatory with at least the DGA and SAG. As soon as a multi-million dollar figure is attached to the budget, it is nearly impossible to keep from signing with the others as well. Guilds provide professional workers. The cream of the crop *do in fact* work union.

Union can be a lot more trouble than it's worth, however, depending on the project. The International Brotherhood of Teamsters, for instance, is often the *single biggest drain* on an film. Transport has the longest days, needing to arrive first on set and leaving last. If you have even *one guy*, who, every day for a 28-day film shoot, clocks double overtime, then you've lost *big*

money. It is *literally cheaper to hire another man, or two men*. Teamsters, naturally, would prefer that you do not. Keep overtime in the family.

Osiris was far too small of a film for Signatory to be practical. Outside of the US film hubs of California, New York and Austin, there is seldom enough work to make guilds feasible, much less profitable. The only signatory films shot in Colorado originate in a Los Angeles or New York production office. That said, both Meggie Maddock and Alex Graff are SAG eligible², and Alex will soon be making the transition to full member. When dealing with unions, remember that these people are your friends—not just cut-throat labor representatives trying to bankrupt your production. Unions really are just looking out for their people. If you cannot afford full rate, try negotiating—you may be able to contribute to their pension fund instead, or in some other way make sure you value their priorities.

OSIRIS - Welcome to the Set

I set out to make *Osiris* as professional as possible. We had *great* days on set. The only time we ran over the scheduled 10 hour day was during our final night shoot. We had had an hour delay due to lightning in the wind farm and nonetheless managed to wrap at hour 10:30. We did not waste time on set. *Time is money*. On unpaid or low-paid projects, people can ... forget this. Just because you are not paying people is *absolutely no reason to disrespect the value of their time*. For me, time is currency. Your entire life is chopped into seconds and then taken away from you moment by moment. To waste time is like taking deep, hyperventilating breathes when the room is running out of air. It is irresponsible and disrespectful.

² SAG eligible is an excellent status—after working on three or more union shoots and being Taft-Hartley-ed, *you can join SAG!* But you do not have to. This limbo state allows you to work on union and non-union pictures, which is an enviable position for actors living outside major film hubs.

We handled *Osiris* like professionals. We did not waste time discussing shots on set or making conversation when the scene was set and the actors through the works³. Instead, we filmed. I had planned meticulously and was prepared. I knew not only what we were doing first, but what we were doing next all the way through the day and into next week. Before the general calltime I was on set, walking through the blocking and camera movements *again*, making sure nothing had changed and that the plan would work. When a question arose out of necessity, I made a choice and stuck by it. *We made our days*. I have never felt so alive as I did those seven and a half days conducting the well-oiled machine that was our *Osiris* crew and production.



Figures 3.4, **3.5**, **3.6**, **3.7** Osiris film set. Photographs courtesy of John Stevens. *Top Left to Bottom Right*—**F-3.4** The crew sets up 40 feet of Dolly track on a Cheyenne County Service Road. **F-3.5** Producer Eric Wood and Director Kathryn Ferentchak watch from "video village." **F-3.6** *Osiris* crew between scenes as the camera is rigged inside the wind turbine tower. **F-3.7** Best boy Adam Elbeck at the turbine hatch.

³ Costume, Hair and Makeup.

CHAPTER FOUR: POST-PRODUCTION

"First you shoot the movie, then you make the movie" (Keenen Ivory Wayans).

You may start spending serious money in production, but brace yourself—you may spend as much if not more in post-production. There are many sub-divisions of post-production. First is the picture lock. Only once the edit is sealed in stone can serious work be undertaken in the other post-departments: ADR, folley, scoring, overall sound mix, visual effects, CGI, color correction, color grading, titles and graphics, credits and then the final on-lining and synthesis. *Osiris* went from almost four terabytes of 6K R3D Raw footage at the end of production to a 2K DCP of less than 10 gigabytes by the end of post-production.

Picture Lock

In the purer and much more expensive era of moviemaking days bygone, Film was made of celluloid frames not pixels composites. The original film editors literally *made cuts* in the film and *glued* strips together. They accessed the footage by standing over a flat-bed machine¹ and reeling through the workprint of the film. The terminology used for digital editing, as with much of the jargon in this business is a hold-over from classical filmmaking. We "cut," "splice," "matte," etc. Digital non-linear editing has facilitated the editing process, utterly changing the game. Imagine, if you will, *having to watch through multiple 400 ft reels of 35mm film squares*, locating the cuts and divvying your footage up by hand. As a consequence of using film, people were much more frugal with their resources (something I try to imitate on set). The ratio of usable footage to film shot was typically 1:3 on a good, highly functioning set. Today, with the

¹ Before non-linear editing became the norm with the introduction of digital transfers, "flatbed" machines like the K.E.M., Moviola or Steenbeck were used.

luxury afforded to filmmakers using digital, I have seen simple, easy scenes shot at 1:15, which is frankly wanton and wasteful.

Just as software like Avid, Adobe Premiere, and Final Cut have radically changed the job of an editor, the new set-etiquette associated with digital filmmaking has changed filmmaking from pre-to-post. On set, during production, there is a person referred to as the "script supervisor." This person takes detailed notes of the process, even timing scenes and writing down how dialogue and blocking shift throughout a movie, a job made infinitely easier now that digital technologies have opened the door to video monitors². They record very important information that will be used by the editor. This job is more important than ever now that there is a pervasive "Let's roll on rehearsal and get one for safety" approach to filmmaking. Editors sift through up to five times more footage than was the case twenty years ago. Having the script supervisor note that in Scene 11, Take 5 "Dog runs across set, knocking over light fixture" will save the editor time that might otherwise be wasted trying to make an unusable shot work. If the only time the actress said her *essential* line correctly was in Take 8, then that means you can probably gloss over Takes 1-7.

In the professional world of filmmaking it behooves a production to have the editor be a separate person from the director. In *Osiris*, alas, this was not the case. I edited the film, spending almost an entire semester massaging the rhythm of cuts and flow of scenes. This is an important experience for a director as it may help him/her empathize with their editor and understand how to best "shoot for the edit." Once the picture was "locked," I could begin working with the other members of my post-production team.

² It used to be that only the cinematographer knew what it looked like through the viewfinder.

Sound Mix

There is a saying in the film industry, "The audience might forgive bad video, but no one forgives bad sound." Humans have an analytical relationship with visuals, but their connection to audio is very subconscious. Sight is heavily involved in how we make decisions; while sound is as well, it is processed on a different level. Thus we are highly critical of noise. Bad sound destroys the illusory quality of filmmaking more fundamentally that any but the worst of cinematography. Our aural receptors have a direct line to emotional response. If you get the sound right you are halfway there.

On *Osiris*, Doug Gallob acted as the supervising sound editor, while Simon Finley was the composer. I have known Doug as a sound man since I was 16, working on my first film set and his commitment to the sound mix of *Osiris* was a complete game-changer. Luckily the onset audio recorded by Steve Swedt, Aaron DelGrosso and Doug himself was pristine. If your onset audio is a disaster...well, you cannot put lipstick on a pig. Doug acted as ADR³ technician and foley⁴ artist as well as the supervising mixer.

The Look of the Thing

Osiris has serious VFX for a student film. Visual Effects are not the same as Computer Generate Images (CGI). VFX is composite based—it layers 2-D elements instead of working

³ Audio Dialogue Replacement (ADR) is the difficult but often necessary practice of dubbing audio after the filming has taken place. Forty years ago, this was the only way to get quality sound for a movie. Film cameras can be incredibly loud. Even today there is no way to take usable synchronous sound when using a 35mm much less a 70mm (or IMAX-quality) camera—not unless your mic is about 50 ft away, and even then you run a risk. Thus, back in the golden age of moviemaking, every line was dubbed in posthumously, an incredible feat of not only skill but money.

⁴ The term 'foley' is in honor of Jack Foley, the father of motion picture sound effects. Foley is the art of "creating sound." Some popular examples include using the crunch of celery to simulate breaking bones and banging coconuts for the "clip-clop" of horse hooves.

with 3-D objects. Steve Wright, the Visual Effects coordinator, has literally written the book on Visual Effects. A self-described "Hollywood-escapee," Steve and his wife, Diane, currently live in Thornton, Colorado where they run an online VFX-education program. How do I happen to have a visual effects guy in possession of serious credits (*Night at the Museum*, *Shutter Island*, etc.) working for this project? We asked. Wright proposed a deal—I would give him all the plates⁵ from *Osiris*, including outtakes, for his use in teaching and to package with his educational materials, and in exchange he would be responsible for the VFX of *Osiris* and enlist some of his students to work on it as well. This presented an interesting opportunity to exchange assets. An indie director often has an abundance of film, but a lack of effects, while the visual effects artist, never short of effects, merely lacks new film on which to apply said effects.

Apparently you can get sick of the same "zombie-graveyard" scene. Thus, I would contribute to his assets and he gave *Osiris* its sensational shield and the impending nuclear storm clouds.

Good effects need to be planned for. In shooting a film, professionals not only extensively consult with their post-production team *before*, but will likely have the specialists on set during tricky scenes. For *Osiris*, the Wrights joined us to oversee the green screen as we filmed in the LCCC Nacelle. There is the Hollywood equivalent of an old wives' tale, a tongue-in-cheek story about consulting with the VFX artist on set. During the filming of *Titanic*⁶, a movie where each individual lighting set up, in terms of equipment used and manpower employed, cost more than the entire budget of *Osiris*, there was one shot with a particularly annoying lens flare. James Cameron, reportedly turned to his gaffer and asked "How much will it

⁵ Plate in this case refers to the footage which lays underneath an effect.

⁶ Accuracy cannot be verified, but the story is nonetheless compelling. I first heard this version from Nuke Compositor and lead VFX artist on *Osiris*, Steve Wright.

cost to move that light?" His gaffer replied, with the kind of confidence 30 years shooting blockbusters gives a man, "\$15,000." Cameron then turns to his on-set visual effects artist and asks, "How much to fix it in post?" The man thinks and replies, "\$5,000." They left the lights exactly where they were.

The VFX are not finished, however, until they have been colored. There are two categories of post-color in filmmaking. The first is color correction, wherein a colorist simply makes the footage look good—e.g. there is no clipping,⁷ no crunching,⁸ and the color is well balanced⁹. Digital film is typically shot in a codec called "RAW," which preserves the maximum amount of sensor data, but is not, in any real sense, video. You cannot make a movie in RAW, which when viewed (through appropriate software) looks undersaturated and very low contrast. It must be converted and one of the most important things in this first conversion is the color correction. This helps give a realistic/plausible sense of how a film will look¹⁰ and keeps the team on the same page. A film with color correction is "good enough."

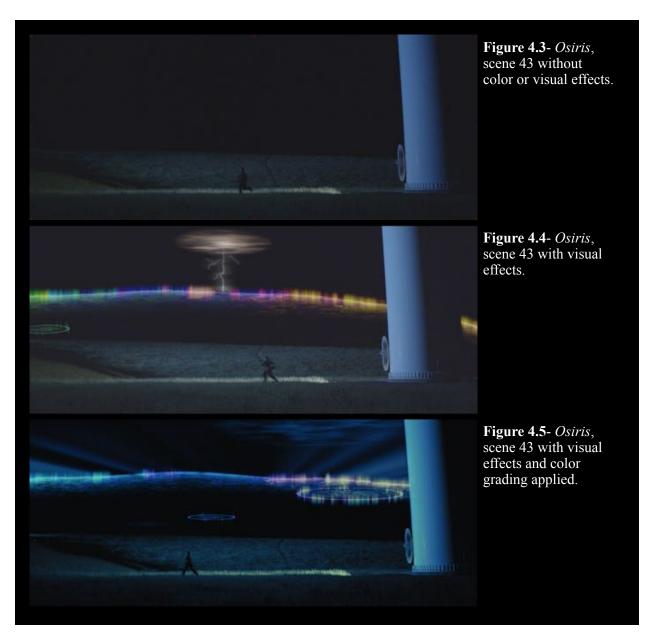


⁷ Clipping occurs when the whites/highlights are blown out.

⁸ Crunching occurs when the blacks/shadows are crushed, that is no detail can be made out.

⁹ Color balance is about making white white. Color temperature is measured on a scale of Kelvins (nothing to do with temperature, the designation is based on the color lead turns when heated). Cameras are sensitive to how Daylight differs from Tungsten light sources and need to be adjusted to offset these changes.

¹⁰ In commercial work, i.e. when making a film for corporate advertising, the rule of thumb is *never show the client the RAW footage*. Frankly, the finished product will never look RAW, so why scare them?



Color grading is to color correction what a freshly caught lobster at a 5-star restaurant is to microwaving a TV dinner. Color grading gives *style*. Color grading creates a *mood*. Jeff Wilson, another Colorado local, is the mastermind behind *Osiris'* color grade. Jeff was a late addition to the team after a cease and desist was issued against our original colorist. He has brought a subtle texture to the film and found more latitude than I had ever imagined. Good color has also helped integrate the visual effects and make the film much more cohesive.

CHAPTER 5: DISTRIBUTION

"Filmmaking is a business and at the bottom line people who don't make fiscally responsible decisions end up going into another line of work" (Gale Anne Hurd).

So you have made a movie! Now what? Remember all the way back to Chapter 1 when we discussed attaching distribution in development? The number of filmmakers who make it through the first four stages but neglect to plan for stage five is mind-numbing. In 2016, there were approximately 1600 feature films produced in the US. Of those, 200 received meaningful distribution. Distribution is an essential part of any business plan. To proceed in making a movie with no distributor attached is a very big gamble. The only way to make money on a film, e.g. return profit to your investors, is to distribute it. There are, reassuringly, numerous and varied means of distributing a picture and they all contribute to The Waterfall.

The Waterfall

The waterfall describes where the profits are funneled from a film. We call it "the waterfall" because "the money-pipeline" simply does not have the same ring. At the top of any chart describing the revenue flow of a major motion picture is the theatrical release, domestic and international. The success of a theatrical release will effect every subsequent slice of the pie. If you have a real "blockbuster" then there will be a heightened awareness of the movie, which should be reflected in the DVD/video sales, the streaming deals, the pay TV, etc. This is important because it is *very hard* to make money off a theatrical deal alone. There are four types of entities that will make money off your movie: the Exhibitors, the Distributors, the Financiers and *finally* the Production Company.

There is, or at least was, only one profession guaranteed to make money in the film industry—the exhibitor. Theatre chains take home roughly 50% of all movie ticket sales. In reality most take home slightly more due to an agreement negotiated between the theater chains and the film distribution companies called the Virtual Print Fee. This means a movie theatre chain gets *over half* the box office profit just for showing the movie. Of course, as theater attendance continues to drop in this era of at-home streaming, even an exhibitor's money is not so safe anymore.

The next big slice of the pie goes to your distributor. If a production company can bring P&A funds (print and advertising) to the table, then the distributor will get a smaller piece of said pie, having invested less. As the exhibition will in all likelihood have been arranged by the distributor, they get the percentage of box office returns left over by the theaters. This then has their P&A expenses deducted as well as the Distributor's fee (typically 20-35% of the box office). The difference then goes to the Production Company. Seldom is the box office return enough to *cover the original cost of production*, which is why ancillary profits are so crucial. Different or overall distribution deals can be arranged to hit these other markets.

Finally, once all income has been accounted for, minus the sometimes exorbitant distributor fees for second screen media, the remaining money trickles down to the Production Company. The production expenses are then fully paid off and, at last, the Net Profit can be split

¹ The Virtual Print Fee (VPF) was introduced when it became evident digital cinema would soon take over the market (largely driven by 3D movies). The transition to digital would be a huge money saver for distribution companies who traditionally footed the cost for prints (copies of the 35mm film) which cost roughly \$2000 or more per print. (For a wide release, say a 2000 screen run, that's \$4,000,000 before shipping.) But the transition to digital, while saving Distributors from overhead costs, was to be a burden on the theaters themselves who had to invest in expensive new projectors. Digital projectors can cost three to four times that of a 35mm projector and typically have a third the lifespan. As a compromise, the Distributor pays a certain amount to the exhibitor off their 50/50 profit split to cover those costs. Nonetheless it is still a money-saver all round.

between the investors' pool and the producers' pool. The producers' pool will include anyone who worked on deferred payment or for "points." A lucky lead-producer may walk away with a mere million dollars for two or more years of work.

See "Understanding the Waterfall," a helpful chart developed by Daniel Lawrence

Abrams and Stephen Marinaccio for their "Bounds of Reason: Dealmaking Best Practices for

Producers," located in the Appendices for further information.

Festivals

There is a misconception in the independent film industry that sending a film to film festivals is enough to guarantee distribution. This could not be farther from the truth. While movies are sometimes picked up at the big film festivals—Sundance, South by Southwest, Cannes, Toronto, Venice, etc.—that is hardly the norm. Often, the movies that are picked up at a big festival were shopped beforehand. The work, alas, does not speak for itself—you usually need a sales agent.

Where does a short film fit in? There are few profitable ways to distribute a short film. A short will almost certainly never see a theatrical release, but video and online can offer a "past-festival" life. There are companies that specialize in picking up short films for distribution. In the last few weeks, I have been approached by the boutique production/distribution company North of Two regarding potential distribution for *Osiris*. I will, on preparing my teaser/trailer and formal one-sheet, open a conversation regarding what they could offer *Osiris*. In all likelihood, North was throwing a blanket net out to short films in post-production, on the off-chance of finding a gem. I would not object to being that gem.

The Calling Card

I never set out to make a student film. Yet, at the end of the day, that is the first formal function of *Osiris*. I will submit this film and graduate, with Honors, from Syracuse University. Then *Osiris* can take on its ultimate form—a calling card. The next few months will consist of hitting the festival rackets hard. Festivals are expensive and I expect to pay between \$1000 and \$2000 dollars on the entry fees alone. The exposure is important and thus worth the price tag. In order to make each dollar count, I am intensely researching where *Osiris* would be a good fit.

Epilogue

Osiris is an impressive film in and of itself, but becomes much more so in light of the how and why behind its production. Spearheaded by a twenty-one year-old, a student, a young woman, this is the very first step on my career. Self-funded, a mentoring project, Osiris represents the best of the Colorado Film Industry. It is a coming together of not only the young and naively ambitious but the veterans with their healthy sense of reality and extensive experience. Film has and always will be a mentoring trade. You cannot learn in school what you will learn in production.

For me, this is my "calling card:" I have vision; I can tell a story cinematically; I can work with professionals; I can *lead* professionals; I am ambitious. Everyone wants to get to the top, but most people waste their time waiting for the elevator, not realizing its already full. They do not understand you can make your own grappling hooks. I am twenty-two. Don't you want to see what comes next?

WORKS CITED

- Alexander, Helen, and Rhys Blakely. "The Triumph of Digital Will Be the Death of Many Movies." *New Republic*. New Republic, 12 Sept. 2014. Web. 17 Apr. 2017.
- American Wind Energy Association. "State Fact Sheets." *AWEA*. American Wind Energy Association, 2013. Web. 6 Apr. 2017.
- "Black Start | National Grid." *NationalGrid.com*. Ed. The National Grid. National Grid, 2017. Web. 24 Mar. 2017.
- "Bryan Boatright." Personal interview. 2016.
- Conca, James. "The Beguiling Promise Of John Goodenough's New Battery Technology." *Forbes*. Forbes Magazine, 17 Mar. 2017. Web. 7 Apr. 2017.
- Energy Information Administration. "Renewable Energy." *IER*. Institute for Energy Research, 2017. Web. 24 Apr. 2017.
- ESA. "Satellite Power Systems: Solar Energy Used in Space." Ed. Niels E. Jensen and Bruce Battrick. *European Space Agency* BR-202 (2003): n. pag. Print.
- Gillespie, Bonnie. "What Does SAG-Eligible Mean?" *BonnieGillespie.com*. The Actor's Voice, 7 June 2004. Web. 14 Apr. 2017.
- Gray, Richard. "Dawn of the SUPER-BATTERY?" *Daily Mail Online*. Associated Newspapers, 13 Feb. 2015. Web. 15 Jan. 2016.
- Hart, David. "Satellite Communications." *Washington University in St. Louis*. Raj Jain, 14 Aug. 1997. Web. 6 Oct. 2015.
- "John Valerius," Personal Interview. Jan. 2016.
- LeVine, Steve. "Not Enough for Goodenough." *Quartz*. Quartz Media LLC, 05 Feb. 2015. Web. 15 Jan. 2015.
- MKPE Consulting LLC. "Digital Cinema Business Frequently Asked Questions (FAQs)." *Digital Cinema Business FAQs*. MKPE Consulting LLC, Oct. 2012. Web. 17 Apr. 2017.
- Office of Energy Efficiency & Renewable Energy. "The Inside of a Wind Turbine." *EERE*. US Department of Energy, 2017. Web. 24 Apr. 2017.

- Petreikis, John. "Research It's a Man's (Celluloid) World." Center for the Study of Women in Television and Film. Dr. Martha Lauzen, 16 June 2016. Web. 10 Apr. 2017.
- Puig, Claudia. "Crew Rallies for Shorter Days Following Colleague's Death." *Los Angeles Times*. Los Angeles Times, 22 Mar. 1997. Web. 14 Apr. 2017.
- "Randy Bachmeier." Personal Interview. Dec. 2015.
- Rosenbloom, Eric. "Consumption of Electricity by Wind Turbines [AWEO.org]." *Industrial Wind Energy Opposition*. AWEO.org, 2012. Web. 13 Jan. 2016.
- Screenplay Systems Incorporated. "MenuDramatica®The Next Chapter in Story Development." *Theory Dramatica*. Write Brothers, Inc., 2017. Web. 2 Apr. 2017.
- Writers Guild of America. "Writers Guild America West." *Writers Guild of America, West.*Writers Guild of America, West, 2017. Web. 2 Apr. 2017.

Black Start, LLC Project: Osiris Budget Dated: January 31, 2016 Morrison, CO 80 **Shooting Schedule: 6 Days** Producers: **Eric Wood** Prep Days: 1 Week: Director: Shoot Days: 6 Kathryn Ferentchak Wrap: 1 Day Writer: Kathryn Ferentchak **Executive Producers:** Post: ? to ? weeks SAG Y - Student Film Prepared By: ECW Account # **Category Description** Page Total STORY & SCREENPLAY \$0.00 1100 PRODUCER \$0.00 1200 1300 DIRECTION \$0.00 \$3,283.00 TALENT 1400 \$1,600.00 TRAVEL & LIVING 1500 A-T-L FRINGES \$637.00 1600 TOTAL ABOVE THE LINE \$5,520.00 2100 PRODUCTION STAFF \$0.00 PRODUCTION OFFICE \$300.00 2200 PRODUCTION DESIGN \$0.00 2300 \$500.00 SET DECORATION 2400 \$500.00 PROPERTY 2500 SET CONSTRUCTION \$1,000.00 2600 WARDROBE \$500.00 2700 MAKEUP & HAIRDRESSING \$100.00 2800 2900 CAMERA \$1,000.00 PRODUCTION SOUND \$600.00 3000 \$600.00 3100 **ELECTRICAL** \$600.00 GRIP 3200 SPECIAL EFFECTS \$1,000.00 3300 SET OPERATIONS 3400 \$3,600.00 3500 LOCATIONS \$0.00 3600 TRANSPORTATION \$0.00 3700 EXTRAS/ATMOSPHERE \$0.00 3800 TRAVEL & LIVING \$1,500.00 \$0.00 3900 MISCELLANEOUS **TOTAL PRODUCTION** \$11,800.00 \$0.00 5000 **EDITING** Post Production at Syracuse University Facilities \$0.00 5100 POST PRODUCTION SOUND \$0.00 5200 MUSIC TITLES/OPTICALS \$0.00 5300 5400 **FACILITIES** \$0.00 \$0.00 5500 DELIVERABLES \$0.00 5600 MISCELLANEOUS TOTAL POST PRODUCTION \$0.00 \$1,500.00 INSURANCE 6100 \$0.00 6200 LEGAL FEES 6300 **PUBLICITY** \$0.00 6400 MISCELLANEOUS \$0.00 **TOTAL OTHER** \$1,500.00

TOTAL ABOVE THE LINE	\$5,520.00
TOTAL BELOW THE LINE	\$13,300.00
TOTAL ABOVE AND BELOW THE LINE	\$18,820.00
CONTINGENCY 10%	\$1,882.00
COMPLETION BOND 0%	\$0.00
GRAND TOTAL	\$20,702.00

Director: Kathryn Ferentchak Production Manager: Eric Wood

Asst. Director: Eric Wood

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응용 응용 기미RBINE TOWER - N CLIMBING DOWN LADDER	응물 TURBINE TOWER - N CLIMBING UP LADDER	응응 WIND PARK - CABLE LINE - N "IT'S CONNECTED! OVER."	ල් ස් Turbine Tower - VICTORY! THE TURBINE COMES TO LIFE	음을 지기 기가	응는 HILLTOP - FLAMELIGHT REFLECTS OFF N'S FACE	음을 나 ILLTOP - N GETS MESSAGES - MARTIANS ARE ON THE WAY!		OF DAY 5 - PAGES = 3 2/8 - Saturday, July 9th, 2016	ලු pacelle, TRAP DOOR - T "WHAT ARE WE GONNA DO?"	$\begin{array}{c c} \circ & \vdash \\ \vdots & \circ \\ \circ & \otimes \end{array}$ NACELLE, CONTROL PANEL - INFRARED IMAGING	응합 응응 응응		2nd UNIT	음을 때 WIND PARK - LANDSCAPE - OMINOUS CLOUDS IN DISTANCE	응을 때 WIND PARK - LANDSCAPE - OMINOUS CLOUDS ARE CLOSER	F DAY 6 - PAGES = 3 7/8 - Sunday, July 10th, 2016	මූ මූ මූ ක් House, Basement - L "You'Ve GOT TO SEE THIS!"	응합 응항 응응	을 응 HOUSE, BASEMENT - L & N SQUABBLE
1	1	1	1	1	1	1	1	P	1	1	1					9F	1	1	1
								END				2				END	2	2	2
								ш	3	3	3					Ш			

Director:Kathryn Ferentchak Production Manager:Eric Wood Asst. Director:Eric Wood

4					
D	N	N INT L 32	N INT L 39	N INT L 42	
D INT L 12	N INT L 34	INT	INT	INT	
L	L	L	L	L	
12	34	32	39	42	
אסן אפן אפן אפר אפאפארד. אפר אפר פער ארט אפר פער ארט אפר פער אפר פער ארט אפר אפר פער ארן א	교 교 대 응합니어USE, BASEMENT - L "THERE'S A PROBLEM"	니 이 음을 HOUSE, BASEMENT - "PRESS THE BUTTON, MONKEY BOY."	응는 HOUSE, BASEMENT - T PUSHES THE BUTTON - "UPLINK"	씨 N 등 없는 HOUSE, BASEMENT - L & T GO "BOOM"	END OF DAY 7 - PAGES = 6 - TBD
3	3	3	3	3	

HYPOTHETICAL REVENUE WATERFALL FOR A MODERATE BLOCKBUSTER

(\$30 million film hydget that earns \$150 million in Worldwide Theatrical Box Office)

GROSS U.S. THEATRICAL BOX OFFICE AMOUNT		\$80 MILLION
APPROX 50% FOR EXHIBITOR (Theaters)	- 4	\$40 MILLION
U.S. THEATRICAL AMOUNT TO DISTRIBUTOR		\$40 MILLION

	U.S. THEATRICAL AMOUNT TO DISTRIBUTOR	100	\$40 MILLION
-	P&A COSTS ETC. (~ \$3k to \$20k per screen)		\$21 MILLION (\$7K * 3000 screens)
	20% TO 35% FOR DISTRIBUTOR FEES		\$12 MILLION (30% of \$40mil)
	U.S. THEATRICAL AMOUNT TO PRODCO	-	\$7 MILLION

	GROSS INTERNATIONAL THEATRICAL BOX OFFICE AMOUNT	\$70 MOLLION
-	APPROX 50% FOR EXHIBITOR (Theaters)	535 MILLION
	INTL. THEATRICAL AMOUNT TO INTL. DISTRIBUTOR & SALES AGENT	\$35 MILLION

	INTL THEATRICAL AMOUNT TO INTL DISTRIBUTOR/ISA		\$35 MILLION
	PBA CDSTS ETC. (~ \$2k to \$10k per screen)	+	\$12 MILLION (\$3K * 4000 screens)
	20% TO 40% FOR INTL, DISTRIBUTOR & ISA FEES		\$14 MILLION (40% of \$35mil)
-	INTL. THEATRICAL AMOUNT TO PRODCO		\$9 MILLION

	WORLDWIDE GROSS TVDD AMOUNT	\$40 MILLION
-	APPROX 30% TO 50% FOR TVOD COMPANIES	\$16 MILLION (40% of \$40ml)
	W.W. TVOD AMOUNT TO DISTRIBUTOR & ISA	

	W.W. TVOD AMOUNT TO DISTRIBUTOR & ISA		\$24 MILLION
+.	20% TO 40% FOR DISTRIBUTOR & ISA FEES	-	\$6 MILLION (25% of \$24mil)
	W.W. TVOD AMOUNT TO PRODCO	-	\$18 MILLION

	W.W. GROSS SVDD, AVOD, & PAY TV AMOUNT (~10% to 20% of WW90)		\$20 MILLION
	20% TO 40% FOR DISTRIBUTOR FEES		\$8 MILLION (40% of \$20mll)
-	W.W. SVOD & PAY TV AMOUNT TO PRODCO	=	\$12 MILLION

	W.W. GROSS PACKAGED MEDIA & ELECTRONIC SELL THRU (~15% to 30%+ of WWBO)		\$30 MOLLION
-	70% TO 80% FOR ALL DISTRIBUTION FEES (INCLUDING ALL MEDIA COSTS)	+	\$24 MILLION (80% of \$30mil)
	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND		\$6 MILLION

	ALL REVENUE TO PRODCO		
	U.S. THEATRICAL AMOUNT TO PRODCO		\$7 MILLION
+	INTL. THEATRICAL AMOUNT TO PRODCO	+	\$9 MILLION
	W.W. TVOD AMOUNT TO PRODCO		\$18 MILLION
+	W.W. SVOD, AVOD, & PAY TV AMOUNT TO PRODCO	+	\$12 MILLION
+	W.W. PACKAGED MEDIA & EST AMOUNT TO PRODCO	+	\$6 MILLION
	GRAND TOTAL AMOUNT TO PRODCO		\$52 MILLION
	NEGATIVE COSTS (i.e. FILM BUDGET)		\$30 MILLION
-	10% "HURDLE RATE" (AKA PREFERRED RETURN)	-	\$3 MILLION
*	NET TO BE SPLIT FOR PROFIT PARTICIPANTS	- 1	\$19 HILLION

NET TO BE SPLIT FOR PROFIT PARTICIPANTS

50% to the "Investors' Pool" (consequently Profit is \$12.5 Million over \$30 Million principal = 41.6% RO() 50% left in the "Producers' Pool"

2076 less in the Troubles Floor

\$19 MILLION

+ \$9.5 Million

\$9.5 Million

Lead Producer: 20% of "Producers' Pool" \$1.9 Million

BOTTOM LINE RECAP: >>> All Media World-Wide Gross Revenue = \$240 Million Work 2 to 5+ years for... >>> Lead Producer's Profit Participation Share = \$1.9 million