DISTANT TRANSMISSIONS

By

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Shortwave radio and the Space Race technology of the 1950's and 1960's cultivated intensely individual and collective cultural experiences that encouraged us to explore the unknown. My research on shortwave radio and space travel as landmarks of exploration includes photographs, shortwave spy codes, a spacesuit, and a collection of the QSL cards that shortwave operators mail to one another. The process of constructing my own spacesuit is a manifestation of my experiences and a collaborative effort to examine the power of technology with those I've met while traveling. Photography encourages us to dream of exploring unknown lands through its subjective nature. This research is comprised of photography, audio, and sculpture and is presented under the guise of the "American Interterrestrial Society". This fictitious organization archives my research and illustrates the tension between truth and the fabrication of the photograph.

DISTANT TRANSMISSIONS

A Thesis

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Master of Fine Arts in Art

By

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DEDICATION

This research is dedicated to my father

for providing me with support and an extraordinary example of

tenacity, strength, and humor

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I would like to thank Angela Franks Wells and Lisa Beth Robinson

for being incredible role models and mentors.

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I photograph and create a part of our history that is being forgotten.

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Shortwave radio and the Space Race of the 1950's and 1960's bridged the gap of distance through technology and encouraged us to explore the vast unknown. Radio broadcasting began in the garage of a Westinghouse employee named Frank Conrad. Flight began with Eilmer of Malmesbury who attempted to fly off of a monastery tower with a pair of makeshift wings. Two unrecognized brothers from Dayton, Ohio built a flying machine and traveled to the uninhabited east coast of North Carolina to fly it. They watched birds to study their movements, were mocked and dismissed, built, rebuilt, failed, and crashed into the sand dunes countless times until their machine flew. Sixty years later, the Gemini Space Capsule traversed outer space carrying two humans at a time. Technology greatly influences our role as archetypal explorers in history. This evolving relationship with technology facilitates our constant need to journey to remote and unknown places. Our history with technology has driven my research on cultural perceptions of distance. The distance I refer to is our psychological desire to explore the unknown, a desire deeply rooted in the human experience. I am examining our relationship with distance, transmission technology, and photography through the guise of The American Interterrestrial Society, a fictitious organization I have created that archives my adventures into the vast unknown. These archives include photographs, a spacesuit on display for the public, a cabinet of found objects provided by the American Interterrestrial Society, audio samples of spy codes and broadcasts, and a collection of the QSL cards that shortwave operators mail to one another.

Technology extends and amplifies the human voice. My research on this amplification asks: how do radio and transmission technologies allow for us to be alone together? How do these technologies cultivate individual and collective cultural memory? How do photographs create tactile experiences in spite of literal distance with the subject? How can I use the art making process to create a tactile conversation examining the influence of technology on our individual and collective histories?

The process of constructing my own spacesuit is a manifestation of my experiences and a collaborative effort to examine the power of technology with those I've met while traveling. Photography encourages us to dream of exploring unknown lands through its subjective nature. The blending of truth and fiction produces a visual dialogue that asks: How quiet would things be if all other technology failed and we only heard the humming of radios? How would we communicate differently if we only had shortwave radio? Would we be able to hear the humming of radios from other planets? What does static sound like in space? When you come back from space, do you miss it? Do you hear the stars pounding in your ears? Can historical technology remind us of a history that is no longer ours? Can we reclaim history and make it our own? Do we find history or create it?

> I speak transatlantic moon languages and dream of a ruler of the sea who didn't have a voice, who whispered to invisible orchestras while I played piano gingerly. Now I build machines that capture old sound like a child holding onto fireflies with fingers glowing. I hear my grandfather's voice, the voice of absent gods traversing planets, all of the

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heartbeats that ever laid down in overgrown gardens, the static from old radio broadcasts, pauses on telephone wires, proclamations of lost languages, someone telling me "this isn't it, this isn't the last time". Sound and image are wound with arms pressed tightly into my back while sound waves continue eternally in space. Do astronauts see, feel, hear things that most people don't? Do sound waves come back from space changed? What are we listening for? What are we hoping for? A relationship is a way of moving between two people, a catalytic broadcast, a sound waltz made of darkness, air, and sand.

Photographs speak for the individual, the intimate, the personal experience of the object one can hold in their hands. The power of the photograph is rooted in its proliferation, the photographer's need to share a part of their experience. It is rumored that the first question the Wright Brothers asked after flying was, "Did you get the picture?" My fascination with flight began with home. I share the birthplace of the Wright Brothers: Dayton, Ohio, a city that speaks of history, a place that symbolizes a past we've forgotten. Dayton, Ohio is a region that challenges what we remember of aviation's beginnings. It is a place constantly in competition for the ownership of truth that shares its history with Kitty Hawk, North Carolina as it seeks its own rebirth as a city. Many of my photographs were taken on the sand dunes of Jockey's Ridge, adjacent to the spot in Kitty Hawk where the Wright Brothers flew in 1903. This geographical relationship is the retelling of a story, the documentation of the spectrum of history and change through time. The reexamination of where I come from and how I

define that place challenges how we translate history through photographs.

The medium in which stories are told has shaped us immensely. Marshall McLuhan said the technology we use to communicate with is an extension of ourselves (Understanding Media 7). The evolution of the camera in the 19th century facilitated the mass distribution of photographs and changed our relationship with the unexplored world. In the book *Photography and Exploration* written by James R. Ryan, Ryan asserts that at the end of the 19th century the change in photographic technology was matched by developments in print media and reproduction methods, making photographs available to a wider audience. The Challenger Expedition of 1872 was the first global scientific expedition to embrace photography as a way to share their journey with those back home. The Challenger Expedition was a four-year scientific journey that made discoveries which contributed to current day oceanography. Many photographs from early expeditions were stereographic images observed in 3D with a stereoscopic viewer. The experience of viewing through the stereoscope allowed individuals to be immersed in the photograph as if they were experiencing the journey themselves. Ryan affirms that as maps helped people visualize western expansion, photography gave viewers a glimpse of worlds waiting to be explored and remembered. Early photographs were tangible objects, memory in the palm of one's hands, something never before held in the individual's grasp. This burgeoning need to preserve our history was advocated further by individuals such as Sir Benjamin Stone who established the National Photographic Record in 1897 to promote recording ancient architecture, landscape, and preserve national visual memory.

The early 20th century ushered in the proliferation of the *vox humana*, the human voice, transcending the bounds of average human limits, just as the train had conquered speed decades earlier. Radio waves crossed the diameters of the earth with historical precedence. Decades later, we traveled beyond our planet and the earth was photographed for the first time by the NASA Voyager Probes, altering our perception of the immensity of the universe and the smallness of our world. Our understanding of reality continues to be shaped by technology. The light installations of contemporary artist James Turrell similarly challenge our perceptions [Figure 1, Appendix B]. Turrell's work forces the viewer to acknowledge that what we perceive extends beyond what we believe we see, real and imaginary blending together. He states,

The interesting thing in terms of perception is that seeing is beyond the eye; it's not too much different from looking at what happens with dreams. Your eyes are closed, and you see quite well in a dream. In fact, in a lucid dream the color has an intensity that you see better than what you would see with your eyes open. I am interested in the superimposition of the imaginative space on the conscious awake space. (Igliori 63-64)

The intent of the artist and explorer are similar: both dream of the impossible and strive to make their dreams a tangible reality.

My research encompasses different roles including inventor, explorer, maker of art and amateur shortwave radio operator. Greenville, North Carolina is home to the last government owned shortwave radio station where my discovery of Voice of America and shortwave radio began. The process of finding the Voice of America sites sparked my interest in the otherworldly qualities of these locations hidden in the fields of North

Carolina [Figure 1, Appendix A]. Shortwave radio static from thousands of miles away and the silent VOA sites communicate the beauty of the unknown and the discovery of our forgotten past. A thrill of the intangible is present when I listen to my small shortwave radio and the crackles and pops of frequencies, spy codes, and stories from foreign countries halfway across the world. A similar thrill pervades the Voice of America Sites. We are unable to hear the frequencies, dots, dashes, and sounds as they are transmitted but these vast, empty antenna fields are not silent. Rebecca Solnit writes,

To hear is to let the sound wander all the way through the labyrinth of your ear; to listen is to travel the other way to meet it. It's not passive but active, this listening. It's as though you retell each story, translate it into the language particular to you, fit it into your cosmology so you can understand and respond, and thereby it becomes part of you. To empathize is to reach out to meet the data that comes through the labyrinths of the senses, to embrace it and incorporate it. To enter into, we say, as though another person's life was also a place you could travel to. (*The Faraway Nearby* 193)

A substantial part of my research includes finding physical objects that reference the experience of listening to the radio. James Ryan in *Photography and Exploration* discusses the influence of photographic postcards on our cultural connection to objects. Postcards were circulated and exchanged on a mass scale in the 19th and 20th centuries. Postcards were not just visual artifacts but also tactile objects that were saved and treasured as placeholders for memory. After searching for artifacts of shortwave radio transmissions, I discovered QSL cards, the postcards shortwave

operators send to one another. QSL means, "Do you confirm receipt of my transmission?" DX, a common abbreviation for shortwave radio means "distance". To broadcast means to scatter seeds or, in the case of radio, to disseminate information. This and other language used in shortwave technology is rooted in the idea of distance. After collecting hundreds of shortwave QSL cards, I began layering my own images of shortwave stations with the collected QSL cards using a transfer process called SuperSauce. My photographs are printed on a positive transparency; the transparency is coated with a liquid medium and placed on top of the QSL card. The image transfers onto the QSL card almost instantly [Figure 2-4, Appendix A]. I select images to transfer that will integrate onto the card cohesively and create a new image. I also experiment with the 19th century photographic process, Cyanotype. This layering of imagery references both my experiences and the experiences of the original QSL cards owners. In a way each card is a map or the pointing to an unknown place or conversation from the past that would disappear without the card, similar to the vanishing of shortwave spy codes and transmissions. These cards are artifacts and records of my experiences. Each card also references the influence of technology on individual and collective histories. The work of Doug and Mike Starn [Figure 2, Appendix B] depicts macrocosmic and microcosmic history in their fragmented, tied, and taped photographs. Jan Aman writes of their work,

Here the viewer is reminded of his relative smallness in relation to the colossal photographs, some measuring twenty-two feet in height. Through juxtaposition, the relationship between the microcosm of humanity and the cosmos were also principal features of the Renaissance- era cabinet of curiosity, whose

function it was to reveal the veiled networks between naturalia (nature or that created by God) and artificialia (the man-made). (Aman 10)

I wish for my viewer to experience the mystery and unseen power of technologies that have altered our perception of distance and the unknown places we dream about. This investigation documented through installation, sound, photographs, and objects is an archive of my experiences in North Carolina, Maine, Louisiana, Ohio, the Middle East, New York, Pennsylvania, and California. I hope for the viewer to encounter some of the magic I've experienced while experimenting with these technologies. The viewer is invited to engage with the installation sponsored by a seemingly real organization. The American Interterrestrial Society elaborates on the tension between the truth and fabrication of my interplanetary travels and the power of the photograph to influence memory and our understanding of place. These archives are to be uncovered in an intimate environment. The exhibit entitled, *Distant Transmissions* includes photographs printed in gum bichromate, an installation with a table and chairs located directly beneath a subdued light source where viewers are invited to examine my collection of altered QSL cards with shortwave sounds playing above [Figure 5, Appendix A], radio and space travel diagrams from the American Interterrestrial Society Archives, my spacesuit, and a collaborative cabinet containing found interplanetary objects. The installation will examine how photographs, light, and sound alter our perceptions of technology and distance.

The Do It Yourself Spacesuit Movement inspired me to make my own spacesuit out of found materials [Figure 6, Appendix A]. I am photographed wearing the spacesuit in locations that reference shortwave, outer space, and otherworldly places [Figure 7-9,

Appendix A]. My photographs are grainy, out of focus, abstract landscapes that create a loose implied narrative. I play a performative part in the work as the figure in the spacesuit. The photographs are often distorted through light leaks, double or triple exposures, and obscured layers of visual information. My process explores the tension between the innate ability of the photograph to record and our desire to re-experience memories. What we remember is a copy of an experience at best. Our memories begin to change and break down from the moment an experience happens. The aesthetics of my work, the in-between nature of my photographs, demonstrate a lack of literal representation-- the layering, covering up, and altering of memories through process. One of the methods I use to mimic the break down of memory is gum bichromate, a photographic process that has a grainy, soft focused quality. Gum bichromate emulsion is made with pigment, gum arabic, and potassium dichromate and hand coated on a piece of rag paper. Once exposed with a digital negative the photograph is developed in water. I use this method to create an obscured, otherworldly aesthetic.

Collaboration has become a fundamental part of my work and process. The people I've met while traveling have all played a role in the creation of my photographs. Rebecca Solnit writes of a planetary collaboration,

You are not yourself, you are crowds of others, you are as leaky a vessel as was ever made, you have spent vast amounts of your life as someone else, as people who died long ago, as people who never lived, as strangers you never met. The usual I we are given has all the tidy containment of the kind of character the realist novel specializes in and none of the porousness of our every waking moment, the loose threads, the strange dreams, the forgettings and

misrememberings, the portions of a life lived through others' stories, the incoherence and inconsistency, the pantheon of *dei ex machina* and the companionability of ghosts. (*The Faraway Nearby* 248)

The documentation of myself in the spacesuit was created with the help of my kindred spirits, an integral part of the experiences we accrued together. Collaboration connects us through distance, it is the playful tension between fiction and non-fiction, an invitation for others to join in, the intertwining of our stories. Collaboration is the sharing of information and knowledge, the construction of memory from many sources.

. . .

I enter into the realms of others' stories through the making of photographs, radios, static sounds, a handmade spacesuit, blueberry jam, black acorns, cups & cups of tea, illusion, books on sound, moon milk, old letters, spy codes, forests and sea water, light bulbs and glass jars, rooms full of lace, ghosts, radio antennas, cemeteries for captains lost at sea, torsos stretched out on shore, Pad Kee Mao, canoes, when Etienne said, "I am not the star, the screen is the star". Fireworks through fences and bells tolling at Notre Dame, ugly postcards, ferry rides and conspiracy theories on the way to Vinalhaven, sound postcards and sea choirs singing prayers, the afternoon spent with P.C, hummingbirds, wind chimes, Chopin, weeping joy, reincarnation, purple gladiolus, and voices emanating from radios: Viking Wind, Easterly veering southwesterly, 5 to 7. Sea State Slight or moderate, occasionally rough later. Weather Rain then mainly fair. Visibility Moderate becoming good, occasionally poor. North Utsire Wind Southeasterly 4, increasing 5 or 6, then veering southwesterly 4 or 5. Sea State Slight becoming

moderate. Cromarty Wind Southwesterly 5 or 6, veering westerly 4 or 5 Sea State Slight or moderate Weather Showers. Visibility Good. Forth.

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My research on memory and history is illuminated in a collaborative piece with the artist Harrison Walker [Figure 10, Appendix A]. The experiences we shared in Maine, New York City, Philadelphia, and North Carolina have sparked our collaborative investigation of individual and cultural memory. Our collaboration formed in Maine the summer of 2015 through a love of process, working on Sunday mornings in the darkroom, traveling to the Canadian Border to meet radio operators preparing for the apocalypse, Owl's Head Beach, exploring every floor of Elmer's Barn Antiques, the exchange of mail art from a distance, 8mm movie film, investigating the loss of a cabinet that had history scratched into its doors, and the process of looking for a second cabinet. The cabinet we are collaborating on was found with dates and mundane details of everyday domestic life scratched into its doors. We combine our discovery of this cabinet and the history engraved in it with our shared experiences. Our images are physically layered in the cabinet to reference the process of memory. The contents we place inside the cabinet also change every time it is reassembled mimicking ways in which we remember over time. Our treatment of materials discusses the evolution of layered and altered memories that photographs and objects provoke. This cabinet contains photographs taken together while traveling, altered with photographic processes such as cyanotype, gum bichromate, salt prints, and silver nitrate. These images became postcards sent back and forth between us. The cabinet also contains shortwave audio, references to space travel, objects collected on our adventures, QSL cards, and 8mm

film reels. This collaboration is a tactile portal to our experiences and the experiences of those whose histories we wish to highlight and engage with through found objects.

There was a time before the airplane, before my mouth filled with sand, before radio signals, gestures, and empty palms, before we tried collecting seaweed and failed, and you cried at the harbor. Before that, there was one lemon, a loon, a cabinet we weren't afraid to leave in the rain, trips to Montreal, then Philly, coffee breaks, blue mountains and bright green sea shores, "snow storm 1952", driving to get cake and nachos. That one fucking moment when I called out your name and we made a big commitment. There was a time not too long ago when we didn't understand how birds flew and voices were recorded on wire. There was a time before Pokey Notch, the house with the gate, Carl Sagan and the magnitude of history, when we found the secret hidden in the work.

History is translated through photographs, maps, notes on scraps of paper, shards, nails in tin jars. Photography began on metal plates, glass, paper, tin, objects that retained grooves, scratches, and fingerprints of memory. William Henry Fox Talbot, the inventor of the Calotype [Figure 3, Appendix B], said, "The most transitory of things, a shadow, the emblem of all that is fleeting and momentary, may be fettered by the spells of our magic" (Draaisma 119). The alchemy of Talbot, Louis Daguerre and John Herschel created objects that served as both objective witnesses and magical talisman. Photographs serve as portals between our subjective and objective nature, the tension between the real and unreal, what we see and what we seek in dreams. My photographs

. . .

are a documentation of the experiences I have collected and the otherworldly nature of our memories when they no longer belong to us but to our past. I am seeking to readdress the past and comment on our future through the power of the photograph. The author EM Cioran writes, "I am lured by far away distances" (105). The ancient Greek philosopher Meno repeatedly asked, "How will you go about finding that thing of which is totally unknown to you?" (Field Guide to Getting Lost 4). In the 1962 Sci Fi featurette La *Jetee*, still photographs form an apocalyptic future in which the narrator can return home only through his memories. In one scene, the narrator whispers, "As in a dream, he points beyond the tree trunk and hears himself say, 'That's where I come from'" (Marker, La Jetee) [Figure 4, Appendix B]. My desire to explore has been influenced by my experiences with travel, the unknown, humanism, failure, stubbornness, what my father would call kismet, kindred spirits, what the photographers Mike and Doug Starn call "the enormity of all of our past experiences, combining with all that is our present and our future, 'the consciousness and unconsciousness, external and internal factors that drive our lives'" (Aman 9).

> I've hunted for snails in the bayous of Louisiana, climbed through the mountains of Asheville, got an orange cat and a radio that plays strange sounds, I've eaten filet mignon in a crowded restaurant alone, got confused for someone famous, sunk my feet into a sound full of sand, painted my nails and hair red like a planet, learned letterpress, photographed five shortwave stations and stared upward at the tall antenna fields, went home, forgave my brother, forgave myself, got drunk and sang karaoke in Gatlinburg, drank tea with strangers in the Middle East, stood in the

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Indian Ocean, prepared for a hurricane and watched the water rise, took banjo lessons, knitted with a group of old women who hugged me and told me they'd pray for my father and I found comfort, saw two bald eagles and an owl, stood outside at night and watched bats hover above my car, told the truth even though it was hard, bought a black chicken foot, stayed up late with no lights on curled up in a chair speaking in hushed voices, laid in bed with my best friend and cried, got a tiny "Gemini twin" niece with dark hair and big eyes, bought a space helmet and telegrams, swam in a creek, ate oysters as big as my fist (well, only one), saw Edgar Allen Poe's grave, been in fourteen exhibitions, lost two keys, painted my toe nails black, and listened to Paul say, "Visiting entities, intelligence from another realm can be a presence that can influence you. I don't want that taken away from me. Take in all of this stuff and try not to get caught in any of it. Each person is inhabited by an entity from another level of existence. You simply have to refuse to die, to let the light go out. The long storm's out there. What's the core of this experience?"

Film is one of the vehicles we use to understand our past. It is a physical document proving that we exist, it is proof of our past outside of the realm of alteration. We can physically hold film; it is an intimate document that transcends distance and time. Film has played a pivotal role in helping us understanding our past and is often disregarded due to a cultural bias toward newer technology. All memory and past evidence, the proof of our existence, can be captured on a small strip of plastic. In an interview with the film director Errol Morris, a cinematic pursuer

of truth, Morris states,

It's almost as if you've walked through a pinhole camera into the past, that world in which the photograph, that strange temporal evanescent world in which we live is gone. But if you can step between these photographs, you are permitted a brief trespass into something that you thought was lost. ("In the Valley of the Shadow of Doubt")

Digital technology discourages tactile engagement with memory. The process of digital photography creates no physical remnant of an image. Our digitally recorded history exists as numbers and codes. Many individuals are reverting back to tangible experiences, alternatives to the temporality of digital memory. My research investigates the history of the human experience through photographs, objects, and sound. I invite my viewers to join in. I am asking my viewers to evaluate their relationships with photography and memory. My research investigates what has been lost with digital processes, the photograph's tactile power as an object embedded with history.

If it's alive, good will take care of itself. We spent the weekend catching blueberries in our mouths and I slept on rocks and dreamed about space. We picked fruit until our hands turned purple and I kept picking, wondering if it struck you: when I cried for the cabinet in the back of the truck with your initials carved in the door, and you remembered that trees are what make mountains taller. We waded through cemetery branches and Gordon said, "I don't know why I collect these things". David is more interested in the appearance. I'm left with two cabinets, one

of which is only a memory, photographs of young men going swimming, dried flowers and seaweed on the dashboard of my car, a radio with a brown leather case, handfuls of rocks, one failed cyanotype, piles of QSL cards, a dress without pockets, one picture of Paul Newman, a spool of thread, a hug after Keith said hummingbirds die of cold hearts, and Madhura spoke quietly down a dark road of the openness of love and how the light and air we surround ourselves by is 13 billion years old. Buckminster Fuller came to me in a dream and said "Which do you prefer?" I prefer humming in cars to singing in front of strangers, rivers to mountains, soft small palms and honest topics, round ambiguity, pure joy to sadness, quiet foghorns, hugs in bars, the reminder that we have to cross a strange patch of country to begin to listen.

The designers Charles and Ray Eames call communication a basic function, the transmission of a message ("A Communications Primer"). The work of the photographer Cig Harvey [Figure 5, Appendix B] speaks of a similar transmission, the telling of stories, a narrative exploration of raw, tactile experiences. Harvey's photographs depict what Charles and Ray Eames call the complexity of the web of communication that holds organisms together and keeps them apart ("A Communications Primer"). Her use of fragile subject matter, light and shadow, and personal writing depicts the micro and macrocosmic universe we exist in, a very small thing that is part of a larger whole. Technology and storytelling are a bridge between these two forms of history. In the interstitial spaces between the real and unreal of our photographic history lies discovery.

History is translated through the camera, the capturing of light in a box, sound captured on a wire or on a wax cylinder, notes carved into the doors of an old kitchen cabinet, maps of places we've been and the spaces we've yet to explore, tangible fragments of our temporary existence. Radio, space exploration, and photography generate both individual and large cultural shifts that have changed our perception of the human experience. I am creating visual relationships and connections that investigate this shift in how we understand the past, participate in the now, and consider the unknown of the future. My research gives tangibility to that which is distant: the radio waves we cannot see, the photographs we can experience only as the past, the planets we can only dream of. These technologies bridge the gaps of distance and time, and we are driven to uncover the histories of our past and rediscover something lost.

I photograph and create a part of our history that is being forgotten

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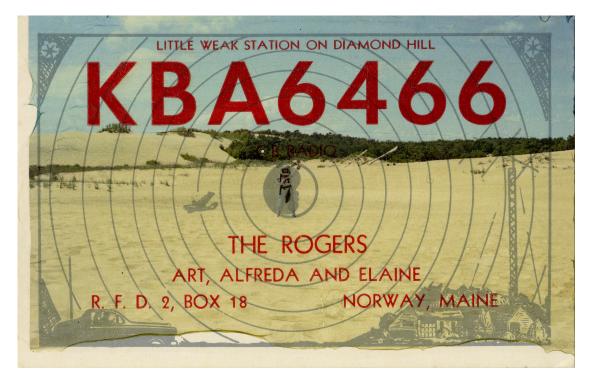
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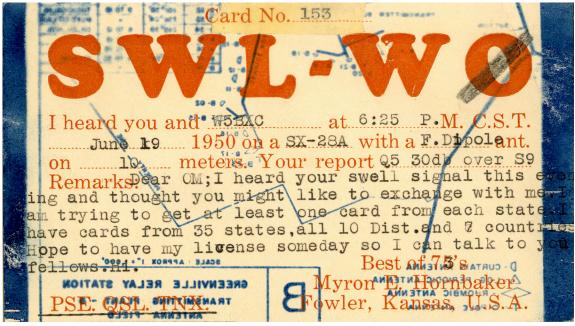
APPENDIX A



[Figure 1], "Voice of America Site B (Greenville, NC), Archival Inkjet Photograph, 2013



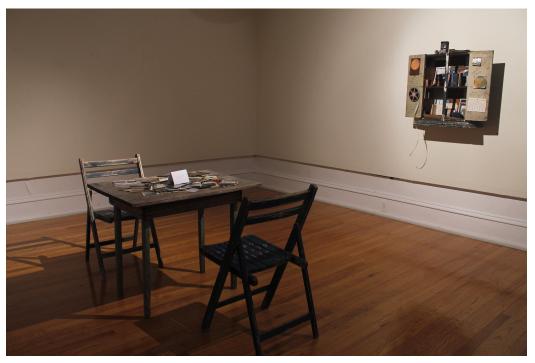
[Figure 2] "QSL Card Collection", Found Object, Mixed Media, 2016



[Figure 3] "QSL Card Collection", Found Object, Mixed Media, 2016



[Figure 4] "QSL Card Collection", Found Object, Mixed Media, 2016



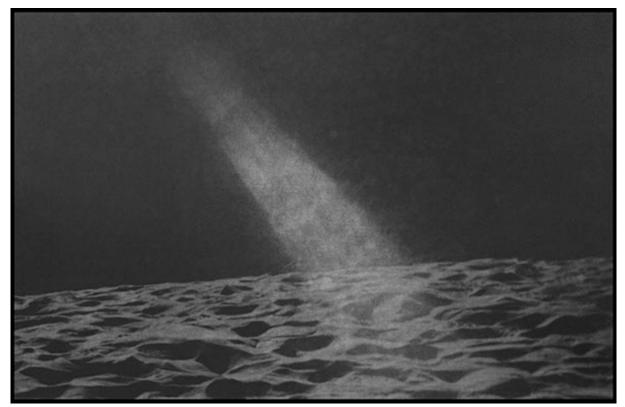
[Figure 5] "QSL Card Collection", Audio, Found Objects, QSL Cards, Images Transferred with SuperSauce, Cyanotype, Gum Bichromate, 2016



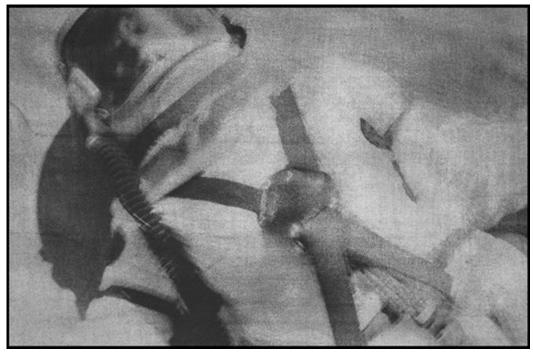
[Figure 6] "Interterrestrial Spacesuit", Mixed Media, Found Objects, 2016



[Figure 7] "Distant Transmissions 3", Gum Bichromate, 2016



[Figure 8] "Distant Transmissions 5", Gum Bichromate, 2016]

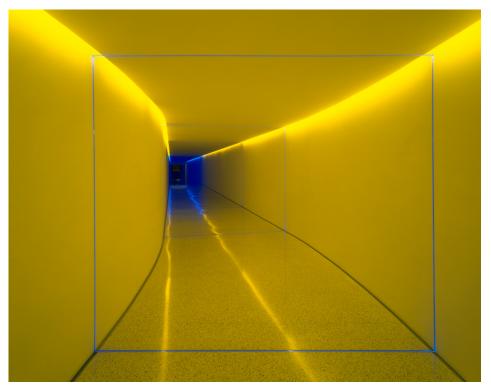


[Figure 9] "Distant Transmissions 6", Gum Bichromate, 2016]



[Figure 10] "Distant Communications" (Collaboration with Harrison Walker) Gum Bichromate, Cyanotype, Van Dyke Brown, Objects and Images

APPENDIX B



[Figure 1] James Turrell, "The Inner Way" from the *Tunnel Pieces* series, 1999. http://jamesturrell.com/work/the-inner-way/



[Figure 2] Doug and Mike Starn, "Attracted to Light 1" from the *Attracted to Light* series, 1996-2004. http://www.dmstarn.com/attracted_to_light.html



[Figure 3] William Henry Fox Talbot, "An Oak in Winter, Laycock", Calotype Negative and Salted Paper Print, 1842-1843, The British Library. http://www.bl.uk/collection-items/invention-of-photography



[Figure 4] Film still from *La Jetee*, dir. Chris Marker, France 1963.

http://www.cine-city.co.uk/festival-event/sci-fi-shorts/



[Figure 5] Cig Harvey, "White Witch Moth, Devin, Rockport, Maine, 2011" from the You Look at Me Like An Emergency series. http://www.cigharvey.com/youlook-at-me-like-an-emergency/