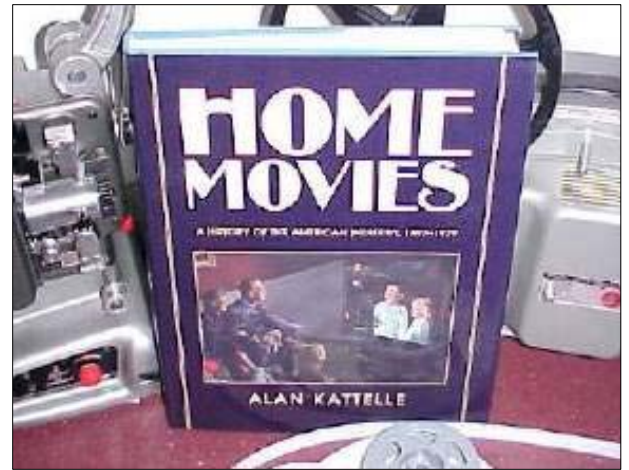




Alan Kattelle Oral History Project

The Alan Kattelle Oral History Project was born of a unique opportunity afforded to attendees of the 2002 AMIA Conference to visit Alan Kattelle's home in Hudson, MA., where the noted amateur film historian and author of *Home Movies: A History of the Amateur Home Movie Industry in the United States* (2000) housed his extensive collection of historic small-gauge equipment. (Alan is pictured here with archivist Liz Coffey in his display room in Hudson.) The proposal to undertake and record an extensive interview with Alan emerged naturally from the wealth of knowledge this elder member of our community shared spontaneously with his guests during that open-house event.



Members of the Small Gauge / Amateur Film Interest Group submitted a proposal to AMIA, which generously funded the project in 2003. Chad Hunter acted as Project Coordinator, and Andrea McCarty conducted the actual interviews, which were recorded onto standard audiocassette as well as onto miniDV cassettes. Copies of the audio and video recordings reside at Northeast Historic Film in Bucksport, Maine (now also the home of the Alan and Natalie Kattelle Collection of small gauge materials), at the George Eastman House in Rochester, NY and at the offices of AMIA in Los Angeles, California. The project was completed in 2005, in which year Alan was honored with the Silver Light Award at the AMIA Conference in Austin Texas.



Alan Kattelle and Liz Coffey

The Small Gauge and Amateur Film Interest Group as well as the wider audience of film historians are grateful to AMIA for funding this project, to Chad Hunter and Andrea McCarty for devoting their considerable efforts to carry out the project, to Northeast Historic Film and George Eastman House for archiving the recordings, and of course to Alan Kattelle himself for his generosity in sharing his remarkable store of knowledge with us all.

Transcriptions of the interviews follow

Alan Kattelle Oral History Project

August 2003

Funded by a grant from the Association of Moving Image Archivists (AMIA).

Project Overview:

During the AMIA conference in November 2002, a number of attendees and members of the AMIA Small Gauge / Amateur Film Interest Group attended an open house at Alan Kattelle's home in Hudson, a small town near Boston, MA. Alan showed guests his extensive collection of amateur cameras, and entertained them with his vast knowledge of home movie history and technology. Many guests noted later that the Kattelle Open House was a highlight of the 2002 AMIA conference.

Following the gathering at the Kattelle home in 2002, members of the AMIA Small Gauge / Amateur Film Interest Group decided that an oral history should be conducted with Alan. The group submitted an official proposal to the Association of Moving Image Archivists (AMIA), which funded the project in 2003. The goal of the oral history project was to record Alan as he spoke about his collection of equipment, his knowledge of amateur film, and his experience with small gauge formats.

The Small Gauge / Amateur Film Interest Group is committed to making the information in this oral history accessible to a wider audience, especially to those who haven't had the opportunity to visit with Alan in person. As an elder in our community, Alan's

experiences are invaluable to those who are committed to the study and preservation of small-gauge film. The oral history project will allow some of Alan's knowledge to be passed on to future generations of scholars and archivists.

Biographical Information:

Alan Kattelle is a retired engineer and business executive who has been collecting, writing and lecturing about amateur motion picture equipment for twenty-five years. Surely the most active octogenarian AMIA member (if not the only one), he is a respected member of the Small Gauge / Amateur Film Interest Group, and has served as an advisor and mentor to a number of archivists and AMIA members. His articles have appeared in numerous collectors' society journals, as well as the *Journal of Film and Video*, *Film History*, and the *AMIA Newsletter*. He is a charter member and past president of the Photographic Historical Society of New England (PHSNE), co-founder and past president of the Movie Machine Society, and is on the advisory board of Northeast Historic Film. His expertise in amateur film and equipment is unparalleled.

Alan collects rare and obsolete equipment of all amateur film gauges, from 8mm to 28mm. A number of the objects in his collection are quite rare; the collection includes one-of-a-kind prototypes as well as once-popular camera and projector models. Alan's knowledge of the collection ranges from the mechanical to the anecdotal, encompassing the technical and cultural significance of amateur filmmaking in the twentieth century. The oral history project is meant to accompany and enhance the information and documentation in Alan's book, *Home Movies: A History of the American Industry, 1897 – 1979*. Published in 2000, the book is an excellent resource for archivists and researchers involved with small-gauge and amateur film. In a 2001 review of the book in *The Moving Image*, Jan Christopher Horak wrote: "I know of no other publication that brings together so much easily accessible and understandable technical information on small gauge issues."

Project Guidelines:

This oral history project was conducted according to guidelines set by the Center for Oral History at the University of Connecticut.

Established in 1968, the Center is a respected leader in the oral history field. Transcription services were provided by the Center's TAPESCRIBE service.

This oral history was conducted by Andrea McCarty and facilitated by Chad Hunter. Both Andrea and Chad are members of the Small Gauge / Amateur Film Interest Group. The interviews were recorded onto standard audiocassette and onto miniDV cassettes. Copies of the audio- and videorecordings reside at Northeast Historic Film in Bucksport, Maine, at the George Eastman House in Rochester, NY and at the offices of AMIA in Los Angeles, California.

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Kattelle Oral History, Tape 1

August 18, 2003

ANDREA McCARTY: Alan, can you tell me where and when you were born?

ALAN KATTELLE: Yes Andrea. I was born in Boston, Massachusetts in what was then called the Lying In Hospital, on March 23rd, 1919.

AM: Did you grow up in Boston?

AK: No. My parents did have a home in Boston briefly, only for three or four years I believe. Then we moved to Newton, Massachusetts where I went to grade school.

AM: I'm going to ask you a little about your first experience with home movies. Can you tell me the first time you saw a home movie?

AK: Absolutely. It was here at the lake, Lake Boone. I don't know the year, but I would guess that it might have been 1927 or '28, somewhere in there. We had a friend and neighbor, had his neighboring cottage here on the lake. His name was Ned Goodnow. And of course a lot of this was recounted to me later, but it seems that one weekend some friends of Ned's wanted to

give their pet goldfish their freedom in the waters of Lake Boone. And, Ned was agreeable and said, “As a matter of fact I have a new movie camera and I’ll take pictures of it.” So the friends came to the lake with the goldfish, and they all went down to the wharf and they carefully lowered the goldfish bowl over into the water so that the goldfish could swim out into their freedom. Alas, their freedom didn’t last very long because out from under the dock came a bass and swallowed both goldfish. And Ned caught it all on film. I wasn’t present at the filming, but I do remember the projection when we were invited to that later. The memory is vivid even today: the darkened room, the mysterious machine in the background whirring away, the beam of brilliant light, and this image on the screen or wall, whatever it was, and there these alive fish—I don’t know. I’ve just never forgotten that experience.

And I think that since then I’ve been enamored of the projected image, if you will. Because another incident from my childhood, somewhere when I was ten or eleven years old, I was given a little microscope. And somehow I discovered that instead of looking down through the lens at the slide on the stand, that if there was a strong enough light coming through the mirror onto the platform, the stage, and up through the lens tube, there would be an image on the ceiling. So, I made some of my own slides by drawing little stick figures on the left side. That was my first magic lantern.

AM: Do you know what kind of camera your neighbor Ned was using?

AK: No. I can only assume it was a Kodak, a 16mm Kodak, but that's not necessarily true. I just don't know.

AM: When you were younger, did you like to go to the movie theater?

AK: Not until I was in high school, although I just met someone at the Home Movie Day, and we both had a—we're about the same age, and the first movie that each of us remember was Douglas Fairbanks in *The Black Pirate*, which I think was 1928 or so.

AM: Did that make an impression on you?

AK: It certainly did. I can visualize him now in that scene where he's up near the top of the mast and he takes this dagger and plunges it into the sail and slides down.

AM: Later on in life, did you keep going to the theater to go see movies?

AK: I didn't go to a lot of movies. I don't know why, but I didn't.

AM: Before we get into talking about your camera collection, I was wondering if you could just tell me a little bit about what you did between being a child and starting a family. Can you tell me about your career or your life as a young man?

AK: Are you talking high school?

AM: Yes. You said you went to grade school in Newton, and then where did you go and where did you end up?

AK: Due to a transfer, my dad's, we were sent to Pennsylvania where I started high school, in Greensburg, Pennsylvania. Two years there and dad was promoted to the New York office, so we moved back to New York. Actually, we lived in Scarsdale. I finished high school at Scarsdale--graduated from Scarsdale High School in 1936. In the fall of that year I entered Columbia College, which I commuted to from a little town called Heathcote. And that was an interesting commute. If this boring, I--?

AM: No, it's not boring at all.

AK: Dad and I both took the same train into Manhattan, or part way in. It was on the Boston and Westchester railroad. The closest that railroad that ever got to Boston was White Plains.

[Chuckles] It was one of those railroads that was incorporated as a financial gimmick I think. Anyway, we road the train into somewhere in the Bronx, and then walked over to Manhattan, where my dad picked up the Third Avenue El going downtown to his office, and I took the 125th Street cross-town trolley.

AM: And that went where?

AK: Through Harlem to Broadway, transferred to the Broadway line, and down a couple of stops to Columbia at 116th Street. My first attempt at Columbia did not turn out well.

AM: Was this Columbia University?

AK: Yes. I was in Columbia College, which is part of Columbia University.

AM: And one question before you continue: What did your dad do that he was transferred from Boston to Pennsylvania to New York?

AK: My father was an engineer with a company called Walworth Company. Their headquarters—they originated in Boston, and that's how Dad came to work for them there. But they had other plants, one of which was in Greensburg, Pennsylvania, and his services were required there. I don't know exactly why. But it was a promotion and he evidently did it well, because after two years in Greensburg he was brought back to the New York office and named Chief Engineer of the Company.

AM: Okay. So tell me more about your first try at Columbia.

AK: It's embarrassing, but what the heck. Manhattan was just too much of an attraction. I was moving for the first time in my life. I was all by myself, on my own.

AM: You were living in the small town where you commuted, or--?

AK: No. I was—Yes, I did commute the first year, and then the second year the folks decided that I should have a dorm—live in a dorm on campus. And that's where I got in trouble, because I just found the attraction to Broadway and Manhattan too much and I didn't concentrate on my studies, with a result that I was told I could not continue.

AM: Do you remember what you were doing instead of studying? Do you remember anything that you were doing at the time that piqued your fancy?

AK: I went to museums. I went to some movies. I frequented a bar. [Laughs] I mean, just an awful lot of things to do. I can't recall all of them, but--

AM: Just the New York stuff?

AK: Yes, exactly. So that would have been 1938. Of course my father--both parents, were terribly disappointed that I had flunked out. Dad said, "What are you going to do now without a degree? The war is coming, and—" So I said, "Well I'll get a job."

So I got a job out in Long Island City in, of all places, a copper refinery. And I say that that way because of my subsequent connection with the copper industry. The job turned out to be pretty horrendous. My job was down in a—working in a lead-lined pit shoveling crystals of copper sulfate out into a bucket under the watchful eyes of a big foreman. And one day I was so bored with what I was doing, I wondered how many bucket loads it takes to empty this thing. So I started making scratches on the lead-lining to tell me how many buckets. And after that, several marks, and I looked and they were gone. I looked up and the foreman was looking over, glaring at me. And he said, "What are you? Some front office spy?" [Chuckles] I was like, "No. Alec," I remember his name. "I was just trying to keep--." "Well I don't want none of them records." That did it for me. I quit the next day. [Laughs] Then what did I do? I went to Monhegan.

AM: Monhegan Island?

AK: Monhegan Island. Now why I went to Monhegan? We'll have to back up chronologically, if you want me to.

AM: That's okay. Tell me, why did you go to Monhegan?

AK: Because I had been introduced to that beautiful place some four years before. How that happened was, when we first moved from Pennsylvania back east, in the course of unpacking our goods, my mother suffered a grievous accident; something exploded in the fireplace and a fragment of metal went into her eye, so she had to be hospitalized and she needed nursing care. My dad was working of course, so I would have been home alone. My mother's sister was a registered nurse and she volunteered to take over nursing mother, but that left her two boys without a mother at home. At that point, a family friend stepped in and said, "I can take care of these boys for the summer at my home on Monhegan Island. I'll take them there for the summer." That was 1934. And my cousin Wentworth and I went out to Monhegan, and my first reaction when we got off the steamer onto this rock, and we were shown to our room in Molly's cottage, we looked at each other and said, "What are we going to do in this place? All summer?" No movie theaters. No cars even. But you know, within twenty-four hours you couldn't drag us away, because we met other kids, and the island kids took us in. I think we went on a picnic on the rocks the second night we were there. So, that was my introduction to Monhegan.

AM: So, you had been on Monhegan as a child, and when you are kind of at a crossroads as a young adult, you decided to go back?

AK: Exactly. And I decided I'm going to be a writer. I'll go to Monhegan and I'll write. I know I can get odd jobs to keep me alive, and I'll start writing. Well, [Chuckles] I got the odd jobs. I didn't do much writing except home for "I needed this. I needed that." [Laughs] The post-mistress on Monhegan Island was very kind. She let me put a little box outside the post office with a sign, "Will Do Odd Jobs – Contact Alan Kattelle." Well, there were a lot of kids on the island who thought that box was the perfect invitation for a lot of peculiar jobs I got in life. [Chuckles]

AM: [Laughing] Like what?

AK: I can't remember. But you know, all ridiculous things. But Molly-this cottage that this family friend owned, was next door to a family of redheads, Mother, father, four brothers and a daughter, all redheads, believe it or not. I didn't get to know them too well that first summer, but I went back in subsequent summers and eventually the redheaded girl and I got to know each other a bit. And in particular, when I decided to spend the winter on the Island, and I got a job in one of the big hotels washing dishes. Natalie, the girl next door, was a waitress in the same hotel. So, we spent that winter getting acquainted. And come spring, we had both come to realize that we were never going to get anywhere on Monhegan. We hadn't at that

time decided we were going to get married. I don't think we just—why we didn't—In fact, we even had a bet who would get married first.

AM: And not to the other.

AK: Not to the other, yeah. But Natalie was offered a job in Boston, taking care of a young woman's three-year old son. I found a job in Hudson because my folks lived there in the summertime, and I spent a lot of my take-home pay going into Boston to visit Natalie. And after a few months of that, we decided that we knew we were in love, and we got married February 8, 1941, in a little church up in Wood Square in Hudson.

AM: So, what did you do for a job when you were working in Boston after you met Natalie and you had married her?

AK: After we were married, through a young couple that we met, I got a job in the machine tool plant here in Hudson called The LaPointe Machine Tool Company. I started out in a low-pay job in the cleaning room, it was called And after a while, I was able to land a job learning how to operate one of the big machines. And after about a year, I could call myself a machinist. I knew how to set up this big boring mill, and set up the work [unclear], and I enjoyed that job very much. But, eventually my number came up. I had a deferment as a defense worker, but after the second time I felt guilty about that and I turned down the deferment, and I was drafted in the Army.

AM: And where did that bring you? What happened when you were drafted? Where did you go and what happened?

AK: I went to Fort Devons, which was a big recruitment center in this part of Massachusetts and, by this time, our first child had been born so it was kind of tough leaving home, but what the heck. All of Natalie's brothers were in the service by that time. I think I was only in Fort Devons a couple of weeks when orders came through. We boarded a train and the rumor had it we were going to Mississippi. And we thought, "Wow, this is great. We're going south. No more New England winter." Well, Camp Flora Mississippi turned out to be not your magnolia blossoms. [Chuckles] Turned out to be mostly mud and rain, cold barracks. But after getting assigned to an ordinance outfit—our group was required to take what was called infantry basic, meaning you had to learn how to carry and use a rifle, how to go on a field march, field pack, and set up a tent.

After a few months of that, we were organized into a battalion and we were shipped to New York. I can't remember the name of the camp right now. We were waiting to get shore leave while we waited to be shipped overseas. And by that time I could tell Natalie more or less where I was, and she came down to visit my folks, who were living in Larchmont at that time, and I could go in and see her occasionally. Then shortly thereafter, we [unclear] shipped to Europe.

AM: What were your duties? Were you a Private in Europe?

AK: I was a Private. My outfit was called Ordinance Maintenance Battalion. And somehow I got a job—well—I'm sorry. After our outfit landed in Belgium, after we—we landed in England first,

then next we crossed the channel and then we were stationed in Belgium. My outfit was strictly a rear echelon outfit, if you know what that means. It means we weren't anywhere near the combat zone at that time. I wound up as a small arms specialist because I'd had a hobby of collecting firearms before I went in the service, and the CO [Commanding Officer] decided that would be a good specialty for me.

AM: So, you had mentioned at one point that you were also a translator while you were a Private in the Army? How did that come to be?

AK: Well that goes back to 1926 when mother and dad and I went to Europe. Mother to study art, and I'm not sure—I've never known exactly what my dad—it must have been business, but I can only guess. We stayed in Paris. We landed in Europe by ship, and we flew from London to Le Bourget in 1926. That was kind of something.

AM: Yeah. That was very early.

AK: Yes, it was. And fortunately I have a photograph of the plane that we took. I was able—through the Aeronautical Historical Association, I was able to identify it. But anyway, Mother told me afterwards, "You know we had kind of a rough crossing on the liner, and you were a great sailor, but that half-hour flight to France you got sick." [Laughs] I don't remember being sick, but anyway, to get back to your question, we lived in Paris for six months or more. And Mother and Dad took [French] lessons. I was sent to school, a French school. And children at that age

pick up a language very quickly. Mother said I became fluent, you know, reasonably fluent, in no time. But afterwards back in the states, she said, "I'd asked you to speak French for somebody, and you refused." [Chuckles] Typical kid.

But, when I was in Belgium, when I was stationed in Belgium many years later [during the war], I met a professor of languages and he thought that I had French ancestry and I related this to him, and he said, "No. I understand. When you learn a language at that age, you don't forget it really." So that's how I became to act as translator formally for my company commander.

AM: When did you leave the Army? When did you return to the United States?

AK: After we were over there through VJ Day—I'm not sure. I'm sorry, I don't know. But it was after about three years overseas.

AM: So near the end of the war then?

AK: Yeah. Right.

AM: During this whole time when you were at college, and then when you were on Monhegan and met Natalie, and then when you went to Europe in the Army, did you have a home movie camera?

AK: No. [Laughter] Unfortunately not.

AM: Okay. So, my next question is, after you got home from your stint in the Army, what did you do then?

AK: Good question. [Pause] Oh. Being that I was entitled, under the GI Bill, with college expenses, and I resolved to go back to college if they would take me. So I applied, and I had the good fortune to get assigned to a very kindly professor in Engineering School, and he looked at my record and he said, "It looks like you could stand a little strengthening in math," and he gave me—I think it might have been a trigonometry textbook. And he said, "Take this,"--this was in the spring I believe—and, "I want you to do every exercise in this book, and keep a record of them, and come and see me when you're finished." And I did, and it evidently satisfied him and the authorities, and they let me re-enroll at Columbia Engineering School.

And we also got veteran's housing at a place called Shanks Village, which is over on the west side of the Hudson near Nyack, New York. So I really—Of course by this time we had a nice, dear little girl and another one on the way. I really applied myself. Well, I just got all I could out of the college experience. I contributed to the college engineering handbook-- I mean yearbook, and all these activities. And finally in the spring of 1950, with my wife and two daughters looking on, I got my Bachelor of Science in Engineering.

AM: Did you find work easily after you had gotten your Bachelors?

AK: Yes, because one of the requirements of the course that I was taking in Industrial Engineering, was that one summer between our junior and senior years, that summer we were required to

get a job, some kind of a job, it really didn't matter, then work at it and submit a report at the end of the summer. And another chap and I, we had become good friends at this veteran's housing place, our families. We both wound up at a company called American Brake Shoe and Foundry Company in Mahwah New Jersey, Mahwah being known as the home of the man who wrote the poem *Trees*. I can't think of his name off-hand [Joyce Kilmer]. So, we were interviewed by a superintendent. Nice gentleman. He says, "Well, I think you boys would find a summer job here useful. Let me introduce you to the man who's going to be your boss, the foundry foreman. And Mr. Tony—I can't think of his last name—came into the office, and he smiled and shook our hands. And we're sitting there in our good clothes. And he says, "Oh, you're gonna go to work for me, are ya? Well you're not gonna look like that by the end of the day." [Laughter] And he [words unclear]. He was sure right. Our first job was scraping and painting ventilators on the top of the Foundry. This was June and it was pretty damn hot. But before long we got promoted, if you will, down to the foundry floor. Is this what you want to hear?

AM: Yes, it is what I want to hear.

AK: My pal was assigned to a miserable, hot, dirty job of changing weights on molds. And I don't want to try and get too deep into the foundry technology, but that's what he had to do. He had to pick up these weights manually and transfer them to another place, for hours at a time. I, for some reason, was assigned to

the maintenance department. That's where I learned how to weld. I also learned that the arc welding torch gives out strong rays, and I wound up the first night with, not a sunburn, but a ray burn on my forearm, not knowing enough to cover up.

But I guess at night we commiserated on our jobs, and we both said, there's got to be a better way to do that job and change the weights the way you're doing. And together we came up with a design, and we showed it to the foundry foreman and he says, "Well it looks promising. Go ahead. I'll give you the shop orders to make up a sample." Well, we made up a sample and it worked so well, we adopted for that whole floor in the foundry, and then they wrote it up in the company magazine. So, understandably, we were both offered jobs when we graduated, with that company. My friend happened to be married to a girl whose father owned a nice, clean company, and he took a job with his in-laws. I went to work for American Brake Shoe and Foundry Company, and it turned out to be a wonderful experience, almost thirteen years.

AM: Wow. So, you learned how to weld there. Is that how your hobby as a sculptor began?

AK: It probably contributed to it, learning how really simple it was to connect two pieces of metal, with the right equipment. I suppose in the back of my mind I said, "Well here's two pieces that look interesting, and now I know how they could be joined." So, I'm sure it contributed.

AM: So, you had a family, and you were living and working the New Jersey-New York area. Can you tell me how you started to collect cameras and projectors?

AK: Yes. At some point, my dad showed me this big folding Kodak. He said, "This is the camera we took to Europe in 1926." He says, "I know you can't get film for it anymore. I was going to throw it away. Would you like it?" I said, "Absolutely I'd like it. It's a great souvenir." By this time I was working in New York, and I discovered that there were things called thrift shops along Second Avenue, and they frequently had cameras, used cameras. And I started to—well, I decided to collect them. [Chuckles] What helped that along was the fact that Eastman Kodak had an information booth in the mezzanine of Grand Central Terminal, right behind the Colorama.

AM: What was the Colorama?

AK: The Colorama was advertised as the largest transparency in the world. It was a transparency about twenty feet tall and sixty feet wide and, of course, it was made by Eastman Kodak. It was obviously made in small sections and then pasted together, and it was hoisted up in Grand Central. I can show you pictures of it. But the point of this yarn was, as I say, they had an information booth up there on the mezzanine, and I began going to them with these cameras that I collected from thrift shops, asking them, "Can you tell me more about them?" And they were very kind. They'd look it up and tell me what year it was made and so forth. I did that quite often so they eventually—people would come into them, you know saying,

“I’ve got this old camera. Would you people like it for your museum?” Well they didn’t really need any, but they’d send him over to see Kattelle in the Chrysler Annex.

[Tape turned off]

AM: So Alan, you were telling me how you would frequently visit the Eastman Kodak booth in Grand Central Station.

AK: Yes. And the manager turned out to be an awfully nice fellow. As I say, they’d always give whatever data they could on the cameras I brought into them. Then one day a man showed up in my office carrying this die-cast aluminum box about so big, and it said Eastman Kodak on it. I didn’t really know what it was, but he said, “Well the people over at Kodak sent me to see you.” So I said, “Oh, it’s for sale?” And he said yes. I don’t remember, unfortunately, I don’t remember what I paid for it, but it wasn’t outrageous certainly. But I couldn’t wait for lunchtime to go over and find out what I had. As soon as they saw me coming over at the information booth, the boss had a big grin on his face, and he said, “Oh, you got it.” [Laughs] I said, “Yes, but what is it?” And he said, “Well, that’s the first 16mm camera that Eastman Kodak made in 1923.” And I was just thrilled. I, in an instant, decided no more folding Kodaks; it’s movie cameras from now on. Very shortly thereafter, I found a [regular] 8mm outfit in a local antique store in my town. A little 8mm camera and projector, and that was the same Kodak

Model 20. And I took many a movie of the children with that Model 20.

AM: Is that the only home movie camera you ever used with your family, or did you move on to Super 8, or did you--?

AK: I moved on eventually to Super 8, yes. I couldn't tell you now without figuring which one it was, but I did move to Super 8.

AM: Did you think Super 8 was an improvement personally, or did you like the 8mm?

AK: No. I felt it was an improvement. For one thing, I had a much better Super 8 projector than the regular 8mm. Made a difference.

AM: Did you ever shoot on 16mm?

AK: No. No, I never graduated to 16mm.

AM: So, you started collecting cameras. Do you still have the first folding Kodak, and do you still have the first [movie camera]?

AK: I think I saved my dad's camera, but I sold a good many of the folding Kodaks.

AM: What about the first [movie camera] that you acquired?

AK: The first [movie camera]?

AM: Yes, the Model A. The first Kodak.

AK: The first 8mm camera?

AM: No, the first 16mm.

AK: Well, the first 16mm was the big Ciné-Kodak. That I have.

AM: Right. The big Ciné-Kodak. You still have that. So you started to collect cameras. When did you start to collect projectors?

AK: That's a good question. I can't put a date on it. Probably since my exhibit space was rather limited when we lived in Connecticut, I think I probably began taking a more serious look after we moved up here and I had this nice big room, [Chuckles] and other places to store them.

AM: Did you ever collect anything else besides cameras, and projectors, and still cameras?

AK: I'm not sure how to answer that, but, yes. Natalie and I collected rocks. I'm not sure when it began, but I have a feeling that our interest in mineralogy came about one day when a lady friend of the family gave me a piece of stone with a peculiar color and explained what it was, that it was—I can't remember the name now. We were living in Chicago at the time, and we looked for interesting places to visit, so we drove out to the Mississippi River, way out to the south—to the northwestern corner of Illinois. To Galena. A town called Galena, Illinois. Named after a mineral. About that time we both got seriously interested in collecting mineral specimens. And eventually I found that there were other people in my neighborhood, and together we founded the Stamford Geological Mineral Society [Stamford Mineralogical Society]. And I was the first president, and Natalie was the first treasurer. And, that society is still going today.

AM: This is in Stamford, Connecticut?

AK: Stamford, Connecticut. And down in the hallway is a plaque where they made Natalie and myself honorary members of the Stamford Mineralogical Society.

[End of Tape 1, Side 1]

[AM: Are you still collecting minerals?]

AK: I wouldn't pass up an interesting one, but as you well know, I've got too many other irons in the fire. But the mineral collection was a problem when it came time to move from Connecticut to Hudson, Massachusetts, and we sold a lot of the collection but I kept some of the more interesting pieces. They're not on display, but at least I know where they are.

AM: Are rocks the only other collection that you've amassed?

AK: [Laughs] I think so. [Note: Alan also has a collection of firearms.]

AM: Well, what I'm getting at is have you ever given a thought to the personality of a collector, or the characteristics that make up a collector? Have you ever thought about that? There are some people who collect things, and there are some people who don't.

AK: I try not to think too much about it because I think that in many people's eyes a collector is sort of a nut. [Laughs] No. The mineral collection, I think was a wonderful experience for the family, because that's something we all participated in. And I used to tell people our children knew how to say "muscovite" before they knew "mama." [Laughs] And we took them with us

to all these quarries and by and large, they had a great time. They've all outgrown it, but all in all, it was educational and it was outdoors and it was fun.

AM: Well that's interesting. So, the rock collecting was a family activity. Has your family become involved with the camera and projector collection?

AK: Not at all. Not in the least.

AM: Except for maybe your grandson.

AK: Except very much for my grandson, yes. [Pause] Dead air here. I'm trying to think. [Pause] I'm sorry, I can't pin it down just when John became interested in the—can you pick another topic?

AM: But John has always been interested in photography, so it wasn't a great leap from photographs to—

AK: That's right. But he and a man in Portland by the name [Earle] Shuttleworth, who was director of the Portland Historical—no, I'm not getting the title right, but he and John organized a marvelous exhibit of early Maine photographs. Including a lot of daguerreotypes. John got so fascinated with the daguerreotypes that he made his own, somewhat to the alarm of his parents because you know the ingredients of a daguerreotype, [words unclear]. But in that little explanatory plaque in the exhibit, explaining what it was all about, John, bless his heart, gave credit to his grandfather for his interest in photography. Very sweet.

AM: That is sweet. So, returning to the collection behind you, if you think back for the—how long have you been collecting now?

AK: Thirty years? From '73, whatever that would be.

AM: So thirty years.

AK: About thirty years.

AM: Thirty years this year. Did you go through phases? How did it start? Did you start with 16mm and move to 8mm, or--?

AK: No. I started while we were living in New York. I almost bought anything in the thrift shop, any movie camera. It didn't matter whether it was 8mm or 16mm. But one of my real prizes I value very highly, one of the dealers got to know me. I went in there so often. And I stepped in one day and he said, "Hey, come on in the back room. Something to show you." And there on the floor was a stack that high of 16mm film cans, and he said, "I don't know anything about them, but do you want them?" And he named some price which was agreeable. And they turned out to be the family movies of a fourth generation New York banker, and they had been carefully shot. They had been titled by Kodak. You know, at one time you could send your films and write out a title and they'd make a title for you. And I was able to go to the biographical section of the New York Public Library and find out about this man, and it was a fascinating story. Northeast Historic Film I believe has the bulk of them. I loaned them to them, and I think they [have] them all.

AM: Wow. Was it interesting to find out the family history of this man?

AK: Very much so.

AM: So, you were telling me about this film collection you found at an antique dealer's shop. What did you do when you got the film? Did you take them home and look at them?

AK: I surely did. And they were fascinating because it was—they were a bit ostentatious if you know what I mean. They filmed Mrs. Clark getting in and out of her limousine, and throwing her furs over her shoulder, and obviously showing off her long pearl necklace. Then there was a film of a party they had, and one of the events was shooting off a rocket, and did Mr. Clark shoot off the rocket? No, the butler came out and shot it off. [Chuckles]

AM: So it really was a glimpse of another lifestyle.

AK: Absolutely. And also, it turned out the more I investigated, the more it seemed that his life was in a way rather tragic. As I recall, they had four children and three of them married, and all three marriages ended in divorce. It was so sad in a way. But it was a great glimpse of how the other half lived.

AM: So when you found those films, did you consider becoming a film collector? Or was your heart still in the cameras and projectors?

AK: I don't think I—No, I didn't seek out films, but I didn't turn them down either when they came along. I accepted them. I was more interested in the hardware.

AK: I get the sense from your book, and the story you told me about researching Mr. Clark, that you kind of like doing the research.

AK: I love doing the research, yeah.

AM: What's your favorite kind of research to do, or what's your take on doing the background work?

AK: Well, as you know, I have a fairly substantial collection of *Popular Photography* [magazine], and I'm thrilled [with] going through these magazines if I find that the editors have written up a specific camera. That always fascinates me. I also got a great deal of pleasure out of being able to interview many of the men who had a great deal to do with the development of amateur films.

For instance, there was a Kodak employee named Harris Tuttle, and Harris was a wonderful promoter of 16mm. He was one of the persons who assigned the first—one of the first persons assigned to use the camera and see what could be done with it. And he subsequently wrote many articles for *Popular* and other magazines on how to use the camera. And I was fortunate enough to have correspondence with him. I found out that he didn't own a Number One Ciné-Kodak, because at one time the company had asked their employees to turn them in. They needed them for some purpose [unclear], and he never got one back. And I offered him one of mine, which he was very pleased, but he said, "No. I'm too old to bother with it now." He was a wonderful man.

AM: Who were some of the other people you remember interviewing who were notable in the history of amateur technology, amateur film technology?

AK: Well, that could be awkward. I interviewed a sales manager, who shall perhaps be nameless, and when I told him that a certain camera had sold for such and such a figure, he said, "Oh no. You must be mistaken. It never sold for that." [Words unclear]. [Laughs] He was mistaken. But by and large, the engineers and executives that I talked to at Kodak were very, very helpful. I had no problems with them.

AM: Were they [easy to find]? How did you know to contact many of these people?

AK: Well, you understand we're going back almost thirty years now, and they were still just on the point of retiring, about like that. And I knew who they were because—for instance when Super 8 was introduced, there was an interview of the Kodak people by the editors of *Popular Photography*, and there I had the names. It was easy from there to go to call them or write them, and without exception they all cooperated.

AM: So I see that *Popular Photography* has been a valuable research tool.

AK: It was extremely—I couldn't have written the book without it. I also was fortunate enough to get my intro or Foreword written by Charles Percy, who was the CEO of Eastman Kodak for many years. And I thought that was very nice of him to agree to do that.

AM: Do you have a full run of *Popular Photography*? Have you always had a subscription, or are there issues that you're still looking for?

AK: I have, but I—there are a couple issues that I'm short, but I couldn't tell you off-hand which ones they are.

[End of Tape 1, Side 2]

Kattelle Oral History, Tape 2

August 18, 2003

ANDREA McCARTY: What I wanted to ask you next was more about how your collection evolved into what it has become. How did you find most of this stuff?

ALAN KATTELLE: I have to say that probably our Photographic Historical Society trade fairs might be the largest source, but I also--Natalie and I were both avid tag sale goers, yard sale goers, flea markets. So, it's hard to say, but between yard sales and trade shows, those were the principal sources.

AM: I'm going to ask you about PHSNE [Photographical Historical Society of New England] in more detail in a minute, but first I want to ask you, when it comes to yard sales, tag sales and flea markets, did you have a strategy? Did you ever just get a feeling [that you might find something], or are there certain places where you had a lot of luck?

AK: I don't recall. First of all, I didn't have any strategy, because usually the items were priced very reasonably. There were some high points. I saw a sale being advertised in the next town on movie cameras, and I hot-footed it over there Saturday

morning, hoping to be first in line, and WOW. It was a professional cinematographer getting rid of what was, to him, obsolete equipment. That was one of my main finds where I—probably acquired that camera.

AM: Which one is that? I'll get it for you.

AK: Oh, that's too heavy.

AM: Oh, no. [Pause, getting camera] Can you tell me about this camera and when you got it?

AK: This was a relatively recent acquisition. Of course I'd known about this camera from ads for years, but I couldn't believe it when this was—it came with a complete outfit, the power pack and everything that went with it. And it came, as I say, from a professional cinematographer. [The camera is an Auricon Ciné-Voice.]

AM: And this was at a tag sale in Stowe or Marlboro?

AK: Maynard, I believe it was.

AM: Wow.

AK: Does the camera have levels on it that you can tell, or you just go by the image? [Alan is referring to the camera Andrea is using to photograph him.]

AM: Right now the camera is on auto-focus. When we start to do the cameras more in depth, I may try to get a better system down, but for right now I think that this is okay.

So, you hit the tag sales, and one of your strategies was probably to get there first. And, did you ever have people at the

local flea markets who had put things aside for you? Did you have people who were looking out for stuff for you?

AK: Yes. I have friends in this association, PHSNE, and quite often when I set up my table at the show, Joe or Bill would say, "Hey Alan, before you leave come over to my table. I got something for you." That was very nice, because I found some really interesting things I possible never would have found if they hadn't been on the lookout for them.

AM: So can you tell me more about PHSNE? What does PHSNE stand for?

AK: PHSNE stands for the Photographical Historical Society of New England. And, we are about to celebrate our fiftieth anniversary, which would be—'53. It was organized, and the first meetings were held in the Edgell Memorial Library in Framingham. Edgell happens to be a family name. [Chuckles] That makes it interesting. I think there was, perhaps not more than twenty people in the original founding group. I did not attend the first meeting, but I was certainly in the second. And I have served as president and as treasurer at various times of the society. It is now one of the largest and wealthiest societies in the country. Primarily because we have several well-to-do members, who I should not name. It's been a great source of interest. My wife and I attended meetings regularly, even when we had to come up from Connecticut to Massachusetts. And it's—what else can I say? Oh, I've given numerous presentations as you can see

by those plaques on the wall. [Chuckles]

AM: I'll photograph those later on. So, you're a long standing member of PHSNE. What are some of the activities PHSNE does every year, or sponsors every year?

AK: Well, this past summer they sponsored a trip to the Air Museum at Bradley Field. Is that correct? That was combined with a visit to Mark Twain's home in Hartford. And there have been visits to one of our prominent collector's home. He's a very gracious host. His name is Jack Naylor, and he has [an] absolutely outstanding, unbelievable collection of cameras. Not particularly motion picture cameras. In fact, that's a relatively small part of it. But he has a copy of the original *Pencil of Nature* which you may have heard of, and things like that. He lives in Wellesley. He's very generous with his time, and our fiftieth anniversary meeting will be at his home.

Another prominent collector is Matt Eisenberg in Hadlyme, Connecticut, who opens his home to visitors. So, we get field trips to various places of photographic interest and other members' collections.

AM: And so then there are the trade shows and auctions as well?

AK: Every spring and fall, twice a year. In recent years they've held them at the Watertown [Ma.] High School. They have over two hundred tables, dealers tables. So, I go. I hardly ever sell anything, [Chuckles] but I go for more to see old friends and chat, that sort of thing. Once in a while I sell something.

AM: You're a long-standing member. Are there many other members who collect moving image equipment?

AK: I think you could count them on the fingers of one thumb, [Laughs] which is nice for me.

AM: Why do you think that is? They like the cameras, and--

AK: Andrea, I have never understood—there are other—obviously there are other movie collectors out there, but very few of them in PHSNE for some reason. In fact, you may want to take this as a separate subject sometime, but there's another very active and long-standing society, and that's The Photographical and Historical Society in Rochester, New York, and they put on a symposium every three years I think. I've been a presenter at several of those. And, why did I bring that up?

AM: You were saying how few people in PHSNE collect moving image equipment.

AK: Yeah. But some twenty years ago now, I began to wonder if there wasn't a need for an organization for people who collected movie cameras. So, on one of my trips west to visit my daughter in Los Angeles, I made a point of looking up a collector that I'd heard about named Wes Lambert, who had a collection of motion picture cameras. He and I put our heads together and decided that there should be a society for us. And we met in Rochester at one of those symposiums, and—
There's a photograph up on the wall showing the founding

members of the Movie Machine Society. That was a great outfit while it lasted.

AM: Can you tell me a little bit more about the Movie Machine Society? Can you give me the story of—since it's kind of dormant right now. [Chuckles]

AK: [Chuckles] It's non-existent, to be honest.

[Tape turned off]

AM: Okay, so can you tell me about the rise and subsequent fall [Chuckles] of the Movie Machine Society.

AK: Very well. As I say, we had our first organizational meeting in Rochester. I think there were eight or ten of us around the table. The first newsletter was done by Wes Lambert, and the title of the newsletter was *16 Frames*. We gradually gathered more members as they heard about us. Eventually we grew to having a membership list of close to two hundred and fifty names. We had some marvelous meetings. We had some meetings in Hollywood and we had a meeting in San Antonio, Texas at the home of the ultimate collector of magic lanterns. We graduated from a little mimeographed, four- or five-typed pages of *16 Frames* to an actual slick-covered journal, and I think we filled a real need. We also met at the Hollywood Museum sometime before it was demolished and destroyed somehow.

This went on for perhaps [seven] years in succession of officers. I was president for a while, quite a while. Finally the editor of the newsletter found it was too much for him and he

was also trying to be treasurer, and he finally had to drop both jobs at the same time when the president of the Society was undergoing an unhappy divorce, so the Society just folded and closed its tent. I hope to resurrect it sometime. I couldn't step into the breach as much as I wanted to because I was in the throes of trying to complete my book. So that's what happened.

AM: What was it about the Movie Machine Society that you liked, or that really drew you in? Was it like-minded people?

AK: Absolutely, like-minded people. And somehow you find that you--right away you like somebody that likes the same thing you do, you know. And it was a good excuse to go to Hollywood or San Antonio. Plus, it was a learning experience for a lot of people, including myself. People would show up with cameras that I'd never heard of.

AM: So, was it helpful as you were assembling your book? Were the members in the Movie Machine Society helpful to you in that guise?

AK: To some degree. I would have to say I can't [remember].

AM: Back to the collection, back to your camera collection. You said you never sell anything. Is it recently that you don't sell anything or have you always been—?

AK: No. I simply mean I'm perfectly willing to sell. I take dozens of cameras to a show, but they very seldom sell. I'm almost coming to the conclusion that I'm not merchandising it properly. Instead of a table just with all these movie cameras, maybe

they should be on nice shelves to make it look like they were worth something.

AM: So you think maybe you can get some converts if you make it look stylish enough? [Laughs]

AK: Yes, exactly. [Laughs]

AM: Are there things--do you have a network of collectors when you want to sell or trade? How does that work for you?

AK: There are a few of us that still correspond, but very few.

AM: What about the things that you're looking for? What are the holes and how do you fill them?

AK: That's a good question. One that immediately comes to mind, and it's not technically important at all, is the Wedding Brownie. That was introduced in the '50s I believe, and it was in gold and white, the camera itself, and it came in a nice gold and white package. And the theory was that it would appeal to a bride much more so than this black or blue or brown camera. [Chuckles] I've actually never seen one but I know there was one.

AM: How do you know?

AK: From company literature.

AM: Are there other things that you're looking for?

AK: To be honest with you, I haven't analyzed my collection to that extent. I might add that I have been fortunate to acquire, through a gift from a friend in the Kodak Patent Department Museum, who is now retired, he sent me a huge carton of surplus instruction books. Of course he didn't tell me that at

least one-third of them are in Spanish, [Laughter] but still interesting. I just came across them as I was clearing out the cellar. No, I'm not aware of anything. I don't think there's anything crucial, you know any real landmark in technology or history that I don't have. There may be a few gaps in the sequence, but—does that answer your question?

AM: It certainly does. Have you found anything on eBay? Has the Internet, or eBay, made collecting easier or more competitive?

AK: Andrea, I confess that eBay baffles me, so when I was looking for the Bell & Howell camera, the camera that Abraham Zapruder [used to] film the Kennedy assassination, I was told by a friend, a former Movie Machine Society member, that there was one offered on eBay. Or he saw it and wondered if it was the right one. So I went and looked at the picture and it was the right one. I said, "Gerard would you buy it for me?" Bid on it for me, because he's used to it. And he did and I eventually got it. So, that's the only thing I've bought from eBay. I haven't tried selling anything yet, but I may be reduced to that.

AM: Why? Because the people at PHSNE aren't buying, or because you would like to get rid of some of the dead weight?

AK: I'd like to get rid of some of the dead weight. Of course I don't relish the idea of having to pack and ship, so I may donate. PHSNE has a nice practice; at the end of a trade show you can leave whatever you want on the table, and they will collect that

and put it in the next auction. This is another activity that the society sponsors, yearly auctions. Not every year possibly.

There have been some really remarkable auctions when collectors have donated a lifetime collection to the Society, and the auction proceeds have been a great financial move for PHSNE. That's why it's one of the most well-to-do societies.

AM: Speaking of the dead weight per se, what are the most common things you find, or what do you have many models of? Or what just keeps turning up? There must be a few things that you just keep coming across.

AK: Yes. The Model B, 16mm Model B, those seem to be turning up. And it's so uninteresting. Lots of Super 8 cameras are very common. So are those small regular 8 cameras, as far as that goes. There are cameras that I have been lucky enough to have that I've only ever seen the one, the one that I have. [Sentence unclear].

AM: What are some of those? Or, do you have any interesting stories about a one-of-a-kind acquisition that seemed to fall into your hands through a stroke of luck? Do you have any interesting stories like that?

AK: Well, I think one acquisition comes to mind where I'm not sure how we saw the advertisement, but somebody in Cambridge [Ma.], I believe it was, advertised that an Edison Home Kinetoscope was for sale. And at the time I had only one, and it was in poor condition. And Natalie and I drove into Cambridge,

looked at it, and it was an adventure in itself because it was in a back alley and up on the third floor. But there was an Edison Home Kinetoscope in the original box, and at least a dozen films. And those were the first films, the Edison Home Kinetoscope films, that I had ever owned. A very remarkable find.

A good friend in Chicago called to tell me that a dealer he knew was offering a hand-cranked movie camera. And this friend said, "I don't know anymore about it than that, but would you like to talk to him?" And I said I certainly would. I mean it's hand-cranked. I called the dealer and he says, "Yep. I got a Bell & Howell camera." And I said, "Can you describe it at all?" and he started giving me the dimensions. And my heart started to pound because it was getting bigger and bigger, and finally he says, "Are you interested?" And I said, "Well if it's what I think it is, I am, yes." I said, "Aren't there any markings on it?" He says, "Oh yeah. It says Bell & Howell." And I about leaped in my throat because a Bell & Howell that size could only be one thing: The original 2709. So I sent him a photograph, and he said, "Yep. That's it." Should I say how much I paid? I can't tell you exactly.

AM: That's okay. What is the significance of the original 2709?

AK: Okay. The 2709 was the first 35mm motion picture camera that Bell & Howell built. The first model, the frame was in wood, and one of the [first] customers were the two African explorers—

AM: Martin and—

AK: Martin and Osa Johnson, yes. And Martin and Osa took one of these wooden Bell & Howells to Africa, and they came back six months later to tell the company that the tropical weather and insects had practically destroyed the camera and they'd better make one with a metal frame. So they did. And there's one, used to be in the—used to be in the Bell & Howell archives. Eastman House has one. And now, it's downstairs, but I have one. And it's a prototype because it doesn't even have a serial number on it. It's pretty rare.

AM: We might talk about that later when we bring the camera downstairs. Alan, I remember you telling me a funny story-- somebody called you about something and you decided to buy it on the spot, and a competing collector called you minutes later, and had listed—

AK: Yes. That was the adventure with the Moy & Bastie. Again a wooden-bodied, hand-cranked camera. I bought my first Moy from a dealer, a PHSNE member. I was delighted to have it even though the lens board and lens--the lens board was awfully chewed up and it didn't look like the right lens. But anyway I was happy to have it. I'd had it several months, I think, when I got a notice from a dealer that he had a lens for it. This is a letter that the dealer sends out to all his customers, that he had a lens for it, for a Moy & Bastie. I called him right away. "Oh," he said, "it looks like new." And I said, "Well, what do you want for it?" He told me and I said, "You sold it. I get it okay?" He said, "Alright." And it was not an hour later that the phone

rang and I picked it up and this voice said, "I hate you. I hate you!" [Chuckles] Somehow I knew who it was. It was my good friend, Sam Dodge, out in California. He had gotten the same notice and he needed one, and I beat him to it. But we're still good friends.

AM: That's funny. Do you find with a lot of your pieces that you have had to reconstruct the cameras from different parts, or is that just one case?

AK: That's the only case that I can think of offhand. Nothing major.

AM: So the stuff usually comes to you in pretty good shape?

AK: It does. There's an old story around the Kodak sales department that [with] most movie cameras, the user took one roll of film, put the camera up on the shelf, and never looked at it again. Now that's an exaggeration of course, but on the other hand, you've seen in my collection how many cameras are in mint condition. How did they get that way?

AM: Have you found very often in your collecting that people don't know what they have?

AK: That's assuming that they have something really valuable?

AM: Yeah. I was thinking about, you just told me about going to Cambridge and finding the Edison Home Kinetoscope. Did those people know that that was a significant piece of equipment? And I'm not saying that— did they know that you were really excited about it and had been looking for that? Did they have any idea?

AK: I don't think so. They must have known that it was unusual, but I doubt very much if they had any idea where it stood in the development of home movies. On the other hand— see, that was not a dealer, that was private individual. Dealers by and large know what they've got.

AM: And then conversely, do you find that some people think that their camera must be worth something and it's really not?

AK: Absolutely. Particularly a Model B [Laughs], and I say it's a wonderful doorstop.

AM: So do you still collect still cameras? You said you started out with folding Kodaks.

AK: No, I don't collect, still--Oh I shouldn't say that. I went to an auction this spring, and there was an Expo Watch Camera. And I've always wanted one of those and I was the successful bidder on it. We can look at it sometime. You might be interested if you're familiar with an Expo Watch Camera.

AM: Okay. I'd like to see that.

AK: There's another still camera that people, friends say, "Come on Alan, what are you doing with that? That's not a movie camera." They want it, that's why they say that. But, Natalie and I had been doing a round of Saturday yard sales, and I guess it was getting on to the end of the day. And we passed one more sign, "Yard Sale", and I said, "Oh, we might as well try it." And I think Natalie said, "It looks like they're closing up," and I said, "Yeah, well lets go in anyway." We went and I asked the lady if she had any cameras. This is the honest truth. She turned to her

husband and said “Harry, you got that old camera that’s upstairs in the attic?” or some words to that effect. She said, “This gentleman would like to see it.” He came down with what is known as a Stirn Detective Camera, and it’s an extremely rare camera, still camera, that was designed to fit under a gentleman’s vest with the lens poking out through the button hole and you advance the film by pulling on a little string. And it took eight negatives--eight prints on a circular negative. And I just knew enough about it to know that it was very rare, and I said, “Well, what do you want for that?” And she said, “Well, we had thirty-five dollars on it once and it didn’t sell, so how about twenty-five?” I said okay. [Laughter]

AM: I bet you couldn’t wait to get it home.

AK: This dealer friend when he saw me with it, he’s the one who said, “What are you doing with that? That’s not a movie camera.” That was a beauty.

AM: What I wanted to get to when I was asking you if you still collect still cameras was this- I know that you have a significant collection of pre-cinema and early cinema stuff in your cabinet and we may not get to that, things like flipbooks and--can you talk a little bit about--

AK: Well, of course, I like to collect anything that treats with the history of motion pictures and that included magic lanterns, so I felt that I should have at least a couple magic lanterns in the collection. And as I have told you, I love projection anyway, so when I see a bunch of lantern slides I generally buy those too.

[Laughs] So I have hundreds of lantern slides, but I'll never get to see them all. Perhaps John will.

AM: I'm going to get ready to wrap this up, but this is a really general question. What is it about amateur film technology that you like? Why are you drawn to it? Why do you collect these cameras, and why do you collect the projectors? Why did you go through the trouble to write a book? What do you think it is?

AK: Well, I suppose being an engineer, I'm captivated by the different mechanisms that have been utilized in making a camera work. The more you collect the more you learn, so when I finally--I'd read about for instance, the Kemco HoMovie system where the inventor wanted to save the amateur money by putting four pictures in the single 16mm frame. The mechanical aspect of that fascinated me, and I went to considerable trouble to bid on this machine, which was for sale in Australia, and won.

AM: How did you bid on an auction in Australia?

AK: Mail bids, as I recall. And when it came in the box, it was covered with stamps. [Laughs] I wish I'd saved it, but anyway. I don't know if I answered your question. Why do they appeal? It's hard to answer except, as I say, two things: I like the idea of the projected image, and I like different mechanisms. Beyond that I--it's some kink in my brain and others who collect.

AM: Well, I was struck by something when you talked about how you're missing the Wedding Brownie. Would you agree that amateur film technology mirrors certain developments in culture in the twentieth century? There was a certain period of time when I can picture a bride in the 1950s having this white and gold Kodak. What do you think the cultural significance of these cameras are? Do you think there is any? Do you have any--?

AK: I don't. I just know that when George Eastman finally let a designer turn up something other than a black camera [words unclear], I'm sure that brought in a whole new group of customers. And of course, color still cameras, Kodak particularly, are very much in demand, very collectible. And that carried over to movie cameras too. As you can see, they came out in different colors. But I'm not a sociologist, and I don't pretend to be. That's why I kind of laugh that I've had criticisms, or critiques, of my book which, in so many words they said, "Okay, Alan's book is fine as far as the mechanics and the history of the mechanical, but he doesn't touch on the sociological importance as Patricia Zimmerman has, for example." That's not my field.

AM: And that's fine. [Chuckles] But I am curious about this. It's funny when you think about some of these cameras and that they are so of their time. I think that that's--

AK: Yeah. Frankly Andrea, I've never--that's a whole new aspect I'd have to look at to see if I could get a correlation between--But I

agree with you. I can see where the colored, or the Wedding Brownie, would fit in a certain area of history.

AM: Well actually, I'm thinking of a page in my mother's wedding album. She got married in the 1950s, and there's this picture of her in her bridal gown with tables and tables of gifts, and she has a camera. I think she has a still camera, but I was just thinking about the wedding iconography of the 1950s and I can see that Wedding Brownie. [Pause.]

How do you feel about video technology?

AK: Well, the book has been criticized for giving short shrift to video, and I'll agree. I just felt that that was--I have no animosity against video cameras, but I just felt that that was another subject and deserves a book by itself. My book was about film.

AM: Did you realize when you started collecting that amateur film was slowly on the decline?

AK: Yes, I began to see that fairly soon. And that does remind me; there is another camera I'm missing. And that was Kodak's first video camera. I missed that. There was one at the local Salvation Army, and I passed it up.

AM: You wish you had it.

AK: Oh do I ever, yes.

AM: Do you collect other video cameras?

AK: Not intentionally. Well, you see that I have several video cameras. I'd like to actually shoot some with that last one.

AM: Do you wish you had Kodak's first video camera because it is significant?

AK: It's significant. Exactly. The first of any product line...

AM: Do you still shoot with super eight film?

AK: I haven't, no. I switched to a video camera, and haven't shot movie film since. I haven't shot video either for a long time. After the children grew up and moved away there wasn't the incentive.

AM: But you enjoy your digital still camera now, right?

AK: Yes, very much so. And I've just discovered in looking for a film to take to Home Movie Day, I discovered--and that's the one I told you to pull out, I didn't want to show it after all--it starts out just family films, and then it goes to one of the really early PHSNE shows, trade shows, and there are at least three prominent figures in the collecting field. I mentioned Herb Gross. He was mentioned in the book. He wrote the first book on collecting cameras, and he is in the film. And Michel Auer, who wrote a book on the history of movie cameras [*Histoire de la Camera Ciné Amateur*] was also at that show, and Paul Wing, who wrote the definitive book on stereoscopes [*Stereoscopes: The First 100 Years*]. I'm hoping to show that at PHSNE's fiftieth anniversary.

AM: Wow. They have quite an illustrious membership.

AK: Yes, they had a very--You know what I need? I wonder if there's a Super 8 projector that has a still mode on it.

AM: I'm not sure, but I think I may have one.

AK: Do you really?

AM: I have a kind of a still button on mine, where the lamp dims, and your not supposed to use it for more than, I think--I've never even tried it--but the directions say that you're not supposed to use it for more than a few seconds at a time. And it dims significantly. I can bring it over sometime.

AK: Gee, that would be great if you could. I have just the ones that--like the ones that Liz [Coffey]—yeah, she was using a Movie Deck.

AM: Mine is a Bell & Howell. I have trouble sometimes loading the film, but once it's in there it seems to behave itself pretty well.

AK: Well listen, I've got to look at my own Auto-Load.

AM: We'll look and we'll see, because I think mine does have a still button, but I'm not certain. Okay, back to another nostalgic question, I have one more. Were you sad when Kodak made its last super eight camera?

AK: No. The only thing that I felt sad about was that they didn't--I have a camera that the Patent Department Museum didn't have, and the director of the Patent Museum was very unhappy. Not with me, but he just pointed out that--he said, "Good for you." They didn't think to take one off the line and put it in the museum.

[End of Tape 2, Side 1]

AM: Are you going to get out the last one? Because we can actually talk about that later if you'd rather.

- AK: Okay. It was the last--The reason I'm so pleased to have it, it was the last 8mm that Kodak made.
- AM: Okay, let's talk about that later on. Is there anybody in PHSNE right now who is collecting video cameras? Do you know of anybody who is collecting the history of video technology?
- AK: I don't, and that's interesting. There are dealers who bring video equipment, but if there is [a collector], I don't know.
- AM: You know, it's funny because it seems like there's something about video [technology] that people don't want to deal with.
- AK: Really. Yeah. I don't know why it is, but the only other person I know of is my good friend Lew Halprin, who said he would like to have a video camera show. He's having a lot of trouble getting the Stowe Selectmen to agree to have their meetings videotaped. They don't like the idea. And yet it's an open meeting. There's no reason it shouldn't be videoed.
- AM: Yeah, a lot of people have them televised. I guess I was thinking about how archives and archivists haven't necessarily come to terms with home movies on video. There's a lot of it out there, and it's so hard, when you think about the sheer volume, to devise a collection strategy. It's a lot more difficult than collecting home movies on film. And you know it seems like there's a parallel there, in collecting the technology as well.
- AK: Right. There is an outfit on the west coast that started out as amateur filmmakers, and they have now almost all gone over to video. But they're still active. And they have a festival, you

know where they—Oh, we transferred my database to a CD, did we not?

AM: We did. Well, we have a backup on CD.

AK: I'm sorry, this is not germane.

AM: What I wanted to ask you, Alan, was when did you realize that you needed a system to keep track of all of the cameras you've collected? And how did you keep track of them from the beginning?

AK: Well as you know, I started a 3 x 5 card file. I started that actually when I was collecting still cameras. I still have that. So it was perfectly natural to continue putting movie camera acquisitions on a 3 x 5 card.

AM: And what was the kind of information that you would record about each camera?

AK: On the movies or the--

AM: On the cards. What was the information that you thought was relevant to record about each camera?

AK: The manufacturer, model number, year, if I could determine it, [and] any special, interesting features. And, I felt, what I paid for it and when I bought it was important. And as I may have told you, my friend Lew said "I don't think you should put down what you paid for it. You should put down what it's worth." And I said, "Well Lew, I can't tell what it's worth. How can I put that down?" Then I turned to his wife and said, "Judy, is he teasing me, or does he really mean that?" And she said, "Oh, Lew gets some funny ideas." [Chuckles]

AM: Well that brings up an interesting question, Alan. How do you appraise the value of a camera? How do you know what something's worth? Let's say you were going to sell something.

AK: That's a very tough question. I really don't know. I suppose-- well in the first place, as I've already told you, I've sold very little, and I sell them for what I think will move [them] off the table. I don't intentionally sell them at a loss, not substantially anyway. But if it's an interesting camera, I try to put what I think is a reasonable value on it. That's all I can say. Oh, there is a book now, which you may or may not have heard of--I can't think of the guys name at all. Oh, *McKeown's Guide to Camera Prices* [*McKeown's Price Guide to Antique and Classic Cameras*]. His guide has been published for maybe fifteen years, and it used to be just still cameras. And I'm not sure if I--I wasn't the first, but I gave him a lot of data which he was very grateful for, and [he] credited me in the book. When he added, he expanded the movie department quite a bit. So, there is that authority, if you will, [that] has some values in it. And more recently there's that big German book. It has values, which I don't have a great deal of faith in. [Chuckles]

AM: This is a personal question that you can choose not to answer. Have you been able to convince, for instance, your insurance company that you have a collection of great worth in this house?

AK: Andrea, I am ashamed to say that I haven't got a [rider] yet, but I've got to do that now that I have it in some sort of manageable form. And that was one of the things that stimulated me to get you to help me, was that I needed to--because the insurance company says they can't do anything unless I give them a rider describing every single piece of equipment. I'll have to pursue that. I may have to give them a value too. I suppose I will.

AM: Well that will be interesting, because I think that the value is perhaps more than what the marketplace will bear.

AK: You think it's--I'm sorry?

AM: I think the value of these cameras might be more than what the marketplace will bear. You know somebody [the insurance company] will say that this camera is worth twenty-five dollars, but it may be worth [a lot] more than that, depending on the rarity.

AK: It's an awfully difficult thing. I don't know what to tell my friend who has the Pathé Frères camera. He's got a range of prices, and I don't want to get in the middle of that. I told Karan [Sheldon] and David [Weiss] and Bill O'Farrell, I said, "My interest is simply to get the buyer and the seller [together]."

AM: Right, you're trying to find somebody who's interested in buying this camera. Alan, is there anything you would like to add about anything that we've talked about today? About your personal history, or your interest in amateur film technology, or how your collection evolved or--

AK: Well, I would just add this, that first of all, I am so delighted that my grandson has agreed to be curator of the collection. And I felt I owed it to him to at least bring as much order as I could to getting it inventoried properly. It's been a delight to me to collect them and enjoy them, and it still is. So, that's about it.

AM: Okay, this is the end of tape two. We'll start another session some other day, and we'll talk about the cameras individually.

[End of Tape 2, Side 2]

Kattelle Oral History, Tape 3

August 19, 2003

Andrea McCARTY: Alan, I wanted to talk to you a little bit more about why you started collecting. We had been talking about this earlier [off-camera], and I was wondering if you can repeat what you said to me.

ALAN KATTELLE: Yes. I believe that I really began collecting seriously when I became interested in the development of the technology. I was determined to acquire as much, as far as possible, every camera that represented a forward step in the technology. Of course I couldn't immediately tell whether a particular camera was an important one or not, so my rule of thumb was, if it's a movie camera, and I can afford it, I'll take it and wait until I get home and research it to see whether it was important or not. That might be why I wound up with so many Model Bs. [Chuckles] But they make excellent doorstops. Not technically particularly attractive.

AM: So then, this brings me back to another question I asked you yesterday about what you do with all the excess, with all of the duplicates, with all of the cameras that, you know, are similar to

something that you already have? In your early years, did you do a lot of selling and trading?

AK: I tried to do selling and found that they did not market very well, as I may have mentioned. At a typical trade show, I might be the only table that had nothing but movies. Other tables, other dealers, might have a few movie cameras, but I was pretty much the one oddball. Out of two hundred dealer tables, you know, it was kind of funny to have just one that was movie [cameras]. But as I say, once I began to see the general outline of the technological history, that sharpened my focus somewhat, so that I got to know what I was really looking for. By that time I had accumulated numerous duplicates, but I tried to sell those. In some instances, I gave them away.

AM: I noticed with some cameras in the collection [that] you've collected different colors of the same model. Did you often collect them to details like that?

AK: Absolutely. I thought it was interesting that, you know, George Eastman was sort of like Henry Ford-- in the early cameras you could have any color you wanted, as long as it was black. But then he hired a world famous designer, Walter Dorwin Teague, who introduced colored still cameras, which became very popular with collectors. And I was fascinated to find that there was also some color variations in movie cameras.

AM: Clearly Kodak had a very good design team. When I look at some of these cameras, they're beautiful, especially some the ones from the thirties that are very art deco. Why do you think

that was? Was [design] a priority of Eastman, George Eastman, or--? Who led the commitment to design at Kodak do you think?

AK: I think probably the sales staff must have had influence on Mr. Eastman, persuading him to take this perhaps radical step, as far as he was concerned, and design for mass appeal and try to make the cameras aesthetically pleasing as well as functional.

AM: So you think it was market driven, rather than the sheer pleasure of creating a beautiful piece of equipment?

AK: Absolutely market driven I would think, yes.

AM: Because some of the designs are just beautiful. Okay, so Alan, we're going to start to talk about some of the equipment in your collection, and we thought we'd try to go somewhat chronologically and hit some of the most important pieces. You wanted to start with some of the pre-cinema— early, early, early cinema stuff. So, do you want to talk about the beginning of amateur film and film technology?

AK: This happens to be one of my favorite pieces. It also, as I look at it, it's probably the oldest piece in the collection, dating from 1878. But it's also very appealing because it was such an important step in the whole history of motion pictures, not just amateur, but motion pictures themselves. It was invented by a Frenchman, Emile Reynaud, and this is a toy version of the Praxinoscope, as he called it. But it was a toy that showed animation, and thus is an important step in the history of the motion picture. Doubly so, because Reynaud went on to modify

this principle and enlarge it to theater size. And for several years he exhibited, in Paris, his theater projection mechanism with the long continuous bands of images which he hand-colored and hand-printed. The show was seen by hundreds of Parisians, thousands of Parisians.

AM: When was this? This would have been the early 1890s, late 1880s?

AK: 1878 about. The tragic thing was [that] Reynaud discovered that he had a competitor, and the competitor was actual movies. Reynaud was so discouraged when the attendance of his theater dropped off, he threw most of his priceless bands into the Seine, and he died a broken man, almost in poverty. And it's so tragic because he was such an important person in the development of technology, and yet he was, in a sense, killed by the advancing technology.

AM: So he didn't move along with the technology.

AK: No. Of course he had so much time invested in this mechanism, that it would have been too much for him to start over again.

AM: About the toy Praxinoscope-- if he was touring Paris in the late 1870s having shows, when did he start to market it for the home? Would that have been later?

AK: No, the home came first. And that led him--when he saw how popular and how this worked, to show animation, he realized that it would be possible to enlarge it so that not just one person could view it, but a whole theater audience could view it.

AM: And where would the consumer buy the bands?

AK: No, the consumer didn't--for this toy?

AM: Yeah. Did the toy come with bands, or were there bands that you could--if you got bored with the bands you had, could you have bought more?

AK: I can only assume that you bought the machine with bands, and as you say, you could buy more if you needed to. I might mention that when I bought this it was like that [removing the candle from the machine], and I had to find a candle holder, and then wonder of wonders, I learned that there was a gentleman making photographic reproductions of this original lamp shade, and that's what this is.

AM: How did you figure that out? How did you learn about [the shade]?

AK: How did the man--? I have no idea.

AM: No, but how did you find him?

AK: I suppose on the Internet. [Chuckles]

AM: That's funny. Did Reynaud ever incorporate photographs into the band, or were they always kind of hand-painted figures?

AK: They were always hand-painted.

AM: So that was it. He never moved onto capturing--

AK: No, he did not. That's right.

AM: You have something in front of you. Did you want to talk a little bit more about early amateur film?

AK: This is a reproduction of another interesting, and essential artifact in the history of motion pictures. It's Plateau's [Joseph

Antoine Plateau] device that demonstrates persistence of vision. It requires holding a mirror and viewing it through these slots. Plateau was a fascinating man. He was very much interested in the eye and the physics of the eye. And in fact, in one of his experiments, he looked at the full sun through a lens, and subsequently went blind because he ruined his retina. But he didn't quit. He continued his work with his wife helping him and taking notes for him and that sort of thing. So he was a real pioneer in the science of persistence of vision. This is a reproduction of one of his toys that I made.

AM: You were telling me earlier that you use a metaphor to explain the evolution of projection and movies. Do you want to talk to me about that?

AK: I tell, chiefly for people who have very little knowledge of the movies, I tell them the motion picture as we know it today depends on three legs. And those legs are: number one, the art of projection, which is the oldest art and goes back to the seventeenth century as typified by a magic lantern. The second leg is the invention of film, which occurred in 1890 or so. And lastly, the third leg is that peculiar eye, brain phenomenon which we erroneously call persistence of vision. Physiologists tell us that that's misnomer, that there isn't any such thing; that the retina doesn't retain the image but your brain does. So those are the three legs that support the motion picture as we know it today.

[Tape paused]

AM: So we have the next piece of equipment, and I asked you to put it up against a white background for a minute so people might be able to see it a little bit better. I know that the light in here is not ideal. Let me see if the camera will adjust. No, still not better.

AK: What's happening that you don't like?

AM: You can't see the detail very well, and I think that's just because it's black and we would need to light it.

AK: You know, do you think that we may run into that again? Because what I'm thinking is [that] I could clip a light here that would show on this.

AM: Let's pause for a minute and talk about that.

[Tape paused]

AM: Okay, can you talk about the Ernemann projector?

AK: Yes. Almost as soon as motion pictures became commercially successful in theaters, various entrepreneurs looked for ways to bring this new amusement into the home. This projector, I believe it dates from 1898 or so, made by Ernemann, a well-known German concern, is very typical because it is a projector designed for the home, but it uses commercial 35mm film.

AM: Is that nitrate film?

AK: Nitrate film. I am particularly fond of this example because, from a technical standpoint, its film advance is by the so-called beater movement, which you probably can't see. An actual

beater comes down and pulls the film down frame by frame.
That was an early method of film advance.

AM: Let's see if I can demonstrate its full effect. I don't know if it will show up, but-- so the beater comes down and catches the sprockets on each side?

AK: No, it doesn't even do that. It just holds by the geometry of it. [Chuckles] There are no teeth on the beater; it just pulls on it. Another interesting thing about this projector, and it's typical of the day— you'll notice how the lamp house slides over. And that is to provide for the projection of lantern slides. Here is where a small magic lantern slide could be put in this slot and projected on a screen. That was very common on early home movie machines, because up until the time of motion pictures, the magic lantern was the one projection machine that was common in the homes. The Edison Home Kinetoscope had the same thing. It was a movie projector but it could also project slides and those slides for the Edison Home Kinetoscope are among the rarest artifacts going.

AM: Do you think this projector was a success? Was it most common in Germany? Do you know anything about what happened to Ernemann and how the projector fared?

AK: Well they were very successful in other photographic fields, in cameras and projectors. This is the only one I've ever seen, for what that's worth. I'd say that it probably didn't have a big

market. But there were similar American-made machines in this country. Keystone made an early one like this too.

AM: Okay. What do we have now?

AK: Well, we were just talking about the earliest appearance of movies in the home and they were by that Ernemann projector. Of course, eventually, entrepreneurs sought to introduce a camera for the amateur. This is perhaps a typical example of one of the earliest home movie cameras. According to the label, this was made by Barker Brothers Inc. in Los Angeles, and it is labeled as a combined motion picture camera and projector, and patent supplied form. And that is so typical in so many ways. Also the fact that it's made in Los Angeles is interesting. The birth place, so to speak, of home movies, of movies in general. I looked up Barker Brothers and discovered their main business was furniture making.

AM: Well that's a really nice cabinet. Look at the wood. It's really beautiful.

AK: Yes it is. The fact that it could be used as a projector as well as a camera was also very typical. The British Birtac [camera], for example, made by Birt Acres, was similar. And again it used commercial 35mm film, nitrate.

AM: How did the projection work? Are there batteries in there? Is there a cord, or--?

AK: Nope. What there was, in the rear of the camera-- I haven't had it off for so long, but you'll notice this circular disc that unscrews

and the space is the place for inserting a light, the projection lamp.

AM: Is there a shutter in there as well?

AK: Yes, I don't have a crank in there but—

AM: Okay. So in effect, it was portable, provided you had a lamp to bring with you?

AK: I'm sorry. I gave you the wrong scoop on that. This is where you put the lamp. As you can see, it gave access to this forty-five degree mirror, so the light beam would—here's the film coming down here, and the light beam would go through the film and out the front lens to serve as a projector.

AM: Oh okay. That's pretty cool.

AK: Yeah. And here are the film magazines. Oh, there's film in there. Almost guaranteed to be nitrate. I'm looking for edge printing and it says-- oh, this says, "Property of Pathé Exchange. Not to be sold".

AM: So that was film for projection then? It looks like there's a title there.

AK: If I had a magnifying glass-

AM: Now I'm interested. Hold on; let's pause for a second here.

[Tape paused]

AM: Okay, Alan and I just discovered-- we read the title on the film that was in the camera. It's a Pathé newsreel, and the title that we saw said *Glimpsing Chicago at the Field Museum*. So that was evidently in there for projection. Alan, what year was that camera again? Around 1908 did you say?

AK: I believe it was 1913.

AM: You had mentioned the home projectors, like the Kinetoscope. Was the Kinetoscope the first one?

AK: Oh no. That was 1912 and there were home projectors in the 1800s—for instance, the Ernemann was pre 1900s anyway.

AM: Was Ernemann the first?

AK: I can't tell you the very first. I doubt if anybody could really.

AM: Okay, what do we have now?

AK: We have another typical, early, amateur motion picture camera. This one was made by the A. S. Campbell Company in Boston, Massachusetts. And this was a camera only, not convertible to a projector. The company made a Cello projector, a huge machine which I own, but it's too big to have in this room.

AM: Did people often have such a large projector in their home?

AK: I don't know how good a market there was for this. Let me say that this is the only one I've ever seen, so I doubt that there were very many sold.

AM: How big, just out of curiosity, is the projector?

AK: Oh, it takes a case about like so [gesturing].

AM: Okay. So that was a camera designed for amateurs.

AK: For amateurs, right. And it's 35mm.

AM: It looks heavy.

AK: Well, it's all wood, so it's not as heavy as you might expect. Or it's almost all wood.

A. S. Campbell also made— Can we cut a moment?

[Tape turned off]

AM: We're going to continue talking about the Cello camera. Do you know the date of that camera, Alan?

AK: No, I don't. Since it appears to be quite similar to the Pathé Kok and that was 1912--

AM: The Pathé Kok was a 28mm?

AK: Yeah. I would guess that [the Cello] is probably about the same era. Also, it's interesting that it's a Boston company. The only other Boston manufacturer of cameras and projectors that I know of was Keystone.

They also began about 1917. So, so much for that.

AM: Did Campbell do very well? How long did they—do you know anything about [them]?

AK: I have no idea. Again, all I can say is this is the only Campbell camera/projector I've ever seen.

AM: Can I ask you to talk a little bit about the market for 35mm cameras and projectors for the home? I would imagine there wasn't a very big market for it, but maybe there was. Do you have any idea about who was buying them, how they were marketed?

AK: I can't answer that because I wouldn't have-- the statistics are long since gone. Campbell, I have no idea how many they made. The only thing I can go by is how often they show up, and the fact that this is the only camera of this make that I've seen, and similarly the Pathé 28mm is a very rare camera; I've never seen another one of those. So I don't think they had a big

market, and they were fairly expensive, relative to the small toy projectors, which were cheap. Ten dollars or so. The cameras were not cheap and I don't think they sold very well. And of course people were aware of the hazards of nitrate film. There was a particularly disastrous fire in Paris. I've forgotten the date now, but you may have read of that. Dozens of highly placed Parisians were killed.

AM: And I would say that most of the film that we find-- the home movies that we find on 35mm, are usually of wealthy families.

AK: Yes.

AM: Okay let's move on. What do we have now?

AK: We have an amateur motion picture camera, dating from 1926.

AM: What's the name of this camera Alan?

AK: It is a DeVry and manufactured by Herman A. DeVry, a German immigrant who came to this country in the very early twenties and became an innovator for many things, one of which was a portable projector with which he perhaps showed the first in-flight movies.

AM: Do you know what the first movie he showed was? Was it a newsreel or—?

AK: It was a newsreel as I recall, and he flew over Chicago. There's a picture of him in the plane with his projector set up in the aisle.

AM: So this is just a projector, not a camera?

AK: I'm sorry; this is a 35mm camera/projector.

AM: [What can you tell me about it?]

AK: Here again, it is convertible. That is a giveaway on this aperture, which again leads to a forty-five degree mirror, to allow the light beam to pass through the film.

AM: Okay, so this was the DeVry Standard Automatic 35mm Camera/Projector. So it's both. Okay.

AK: And it dates from 1926, I believe.

AM: Still nitrate film. But this was 1926, after 16mm had already come on the market, after 28mm was on the decline. Who was still shooting on 35mm then? For the home?

AK: I'm sorry. I don't follow your question.

AM: That's a 35mm camera/projector that was marketed in 1926, and that was after 16mm film had already come on the market. I'm wondering who would have still been shooting—

AK: What was the market for this camera, in other words? That's a good question. 28mm had not been successful. That's the whole trouble. Probably there's more to that in the book, but I just don't...

AM: That's okay, Alan. I was just commenting that this machine probably wasn't long for the market. Because if you could shoot on 16mm film you probably would have.

AK: Exactly. Exactly. And I was trying in my mind to justify that. You see DeVry went on to found a school of visual education.

AM: Where was that, in Chicago, or--?

AK: Yes. DeVry Institute existed for quite a while, and it was bought out eventually by Bell & Howell, I believe.

AM: Okay. And it was an institute for students of photography? Or?

AK: Yes. And I think it was promoting the use of films in education.

AM: Was the whole DeVry concern bought out by Bell & Howell at some point, or just the Institute?

AK: Just the Institute.

AM: Did they start to make 16mm and smaller gauges as the market progressed?

AK: I'm almost certain that there's a-- I think so, yes.

AM: And we'll probably come across one of those cameras as we progress down the line.

AK: I hope so.

AM: So that was—they never made a 16mm projector/camera [combination] did they?

AK: Not that I can recall, no.

AM: So that was more something with the larger gauges.

AK: And again, these are—I hate to keep saying it, but I've never seen another one. So you have to assume it wasn't a big seller.

[Tape paused]

AM: Okay, we're back to the DeVry camera again. Alan, you were pointing something out about it.

AK: Well, this is the means to convert it to a projector. This is the opening to where the light source would be put, but it seems like such a small aperture. And just to show that I do know what I'm talking about, there is the forty-five degree mirror, enabling the light beam to go through the film. Incidentally, the airborne projector that I mentioned was not this. It was more like a standard-sized machine.

[Tape turned off]

AM: Okay Alan, what do we have next?

AK: We have here the Edison Home Kinetoscope. It was actually an invention of one of Edison's engineers. It was introduced in 1912, and Edison, having contributed a great deal to professional motion pictures, decided that he would try to do something for films in the home. When he discussed the subject with George Eastman, Edison asked Eastman if he could supply film for the projector he envisioned, Eastman said, "I will supply you safety film. I wouldn't dream of giving you anything other than safety film for home use."

AM: I have a question. The people who were making 35mm cameras and projectors with nitrate film, were they getting their film from Eastman Kodak?

AK: Between Eastman and Pathé, those were the two major suppliers of film, yes.

AM: So why did George Eastman take this stand with Edison and not necessarily--?

AK: He felt that the professional projectionist, the theater operator, knew the hazards of nitrate film, and besides, there were laws written. The underwriters required certain enclosed booths and other safety precautions.

AM: Okay. But what about the people who were taking home movies on 35mm nitrate and showing them in their homes? Like the people using the [DeVry] camera/projector?

AK: Eastman couldn't control—he would sell 35mm nitrate to a professional—

AM: Whoever wanted to buy it.

AK: Whoever wanted it. He had no control over it— but knowing that Edison wanted it for use in the home, he insisted that it be safety film So, Edison devised a very curious format. The film was 22mm wide, and it had three rows of images. I don't know how we're going to be able to see this. Oh, look at that. Did that show up?

AM: Yep, that shows up. Actually, if you can unroll it a little bit more and give me a little more of the black. Yeah, there we go. Yes, that's clear.

AK: Okay, the camera shows that there are three rows of images, and there are two rows of perforations on either side of the central row. The purpose of that was, of course, to get as many projectable feet as possible on to a reel of film. The way that was accomplished was— this is the film transport mechanism.

This is to feed the spool. The film goes down through the film gate, out, and is collected in the lower sprocket.

AM: Can you show that one more time? I'm going to do a close-up on the...

AK: Surely.

AM: You were talking about [the path] through the gate, and I didn't get the bottom part of it. No, leave it just like that.

AK: Can you see alright?

AM: Yes, it's perfect. I just wanted you to show that one more time for the camera.

AK: The film comes off the feed spool up here, down through this channel which is the film gate, and out the bottom, and is caught by the take-up reel down here. Now, there are three rows of images. So how does one go from one row to the other? This wheel moves the whole film transport.

AM: So then the middle row, you go from take-up reel to— you go backwards. You go back up.

AK: Exactly. Let's say you start on the outside of the roll of film. You crank up through— then when you reach the end, you switch the film to the center roll and crank in the reverse direction. And then finally, you shift over to the last row and go back again in the forward direction. So that on fifty feet of film, you've got one hundred fifty images. [Note: On fifty feet of film you have the equivalent of one hundred and fifty feet of images.]

AM: That's pretty smart.

AK: Yeah. The light source was a miniature arc lamp. Edison also offered the projector with two other forms of illumination. One

was acetylene, you know, an acetylene torch, and the third was something called a Nernst lamp.

AM: What was a Nernst lamp?

AK: Good question. I didn't know until I was visiting the Eastman House archives one time and met this gentleman who— I mentioned what I was searching for, and he said, "Oh, we have one. I'll show it to you." I discovered shortly thereafter that my kind guide was the famous Dr. Rudolph Kingslake, the dean of lens design. And he was just the kindest, nicest man I've ever met.

AM: And you met him on a tour of the Eastman house? Or where exactly did you meet him?

AK: I had received permission to look in the archives, and Dr. Kingslake volunteered in the archives as a sort of free-lance curator. He would look through the archives for errors in the notation, or that sort of thing. He was giving his own time to do that. And I discovered that a Nernst lamp was a device that used a rare earth oxide, maybe cesium or something like that, and under applied voltage it glowed like a filament.

AM: Were they common?

AK: No. Very unusual. I've never heard of one since.

AM: Could each projector be outfitted with all three sources of illumination?

AK: No, you had to specify what you wanted. The machine got mixed results from the critics. I read that one critic said that the

[miniature] arc was a joke. However I've run this projector with an arc and found that I got very good results. Good enough so that we copied one of Edison's films onto Betamax. A Channel 4 camera man came up here and put his Betacam over his shoulder, and I set up the screen, and he filmed it.

AM: It wasn't the guy from *Chronicle* was it? [Note: *Chronicle* was an evening news show run on the ABC affiliate in the Boston area.]

AK: It was Art Donahue.

AM: He seems to be really interested in movie technology. He's an interesting guy.

AK: Yeah. Nice guy. I think his picture is up there [gesturing to a wall of photographs].

AM: Alan, do you want to demonstrate how the magic lantern part of this [projector] works?

AK: Yes, of course. This lamp house, in this case, you see is swinging. Let's hope we can get it all the way out.

AM: If you can't, that's okay.

AK: You'll notice up here that there are two lenses. One is for movie projection and one is for lantern slide projection. So, it's now in position for the lantern slides. The film path is out of the way. And, here is an Edison slide which is—can you see at all?

AM: Hold it out a little bit farther and I'm going to zoom in on it. Bring it out, and I will zoom in. Can you hold it at an angle? That's good. So it has ten images on each slide.

AK: Yes. And, they are designed to show in sequence. You put it in one way, and it's showing the top row, then after you've shown that—

[End of Tape 3, Side 1]

AM: And the bottom becomes the top row, and that's how you show the bottom row of the lantern slide.

AK: And Edison provided lecture notes to accompany the lantern slides.

AM: This is going to be tough to see. I'm getting a reflection off of the window. Let me turn off the light and see if I can see it better.

AK: Are we getting the outside window?

AM: The outside window.

AK: That's too bad because it's a...

AM: Well, let me read the top. It says, "Lecture on Edison Lantern Slide No. 57." It goes through each view and gives you a paragraph to read so that your audience can find out what the image is, and gives them some fun facts about it. See, you've got view number two, view number one. Can you lift it up a little bit Alan? There's view number three. That's good.

AK: Yes. You're through with that?

AM: Yes. So you've showed us how it works, but do you know anything about how it was received, besides the one critic who didn't think that the carbon arc worked very well? These machines are pretty rare, aren't they?

AK: Yes, but the archivists are finding them very interesting and worthwhile searching for. There is now a pretty good list of Edison Home Kinetoscope films.

AM: Right, there's a Union Catalog.

AK: Right. You see, the films that Edison provided were almost all reduction prints of films that he made in the Black Maria, and he had done several films on the early days of this country. The people who were running events during the Bicentennial year [1976] thought it would be wonderful if they could make 16mm prints of those films and distribute them to high schools throughout the country. And the only source for those films that they wanted, like *Washington Crossing the Delaware* and so forth, were the Edison 22mm films.

AM: Where did they find them?

AK: Well, that's a good question. But once they found them, the next problem was how to transfer them from 22mm to 16mm.

AM: So how did they do it?

AK: They enlisted the help of one Karl Malkames, the son of Don Malkames the well-known Hollywood cinematographer. And

Karl built a special printer to take the Edison films and print them onto 16mm stock.

AM: And those were distributed across the country?

AK: Right, to high schools across the country.

AM: I have a question about Edison. He seems to me to be a very controlling sort of inventor. He did not want the audience to have any freedom with the technology he gave them. That's my impression of him.

AK: I'm not sure. How do you square with that with the fact that he offered three different lamp arrangements?

AM: That's true.

AK: The film, you could buy in short lengths or fairly long lengths, but--

AM: But, with his technology, he was the only person who made these 22mm films, and the audience was going to get the films that he made for them. He wasn't— didn't seem all that interested in making a camera/projector so that the audience could make their own 22mm films to show.

AK: That's true. I would say again, that's self-interest. It was an additional market for his films.

AM: It just reminds me of the old story about how he completely missed the boat on projecting film for an audience because he wanted everybody to look at his films one by one [in the Parlor Kinetoscopes]. I don't know. If you're going to sit here and analyze Edison, which I have really have no right to do, he just seems to be [so protective of his business model that he misses out on larger opportunities].

AK: I think he felt that once he made a machine that could show pictures to dozens of people, you wouldn't sell many machines. [Chuckles] That was his thought. At least this way, it was that every family should have one.

AM: Right. In their home, and they could show the films that he makes.

AK: Yeah. Right.

AM: Was he interested in having other people adopt the 22mm technology so that it would become a standard? Or did he want to corner the market, so to speak? It doesn't seem like he wanted anyone else to be doing 22mm.

AK: Actually, I think you have to face up to the fact that the Home Kinetoscope was not a commercial success. The figures that I found somewhere, show that less than half of those produced were ever shipped. They're still in the factory, and whatever happened to them, I don't know. It was not a commercial success.

AM: Why do you think it wasn't [a success]?

AK: Well, I would imagine that the arc lamp was a bit daunting to most people. Also, the technique of cranking one way and then cranking the other way, those were things that perhaps didn't come easily to the general public.

AM: Right. You really had to have an understanding of the technology.

AK: Exactly. I hope I'm being fair to him.

AM: Well, he's covered admirably [in other publications], so I'm sure it will be okay.

AK: [Laughs] I can look up those figures, but an awful lot of those projectors were never sold.

AM: We're almost at the end of Tape 3, so I'm going to end Tape 3 here and put in a fresh tape for 4.

AK: Okay. So we can put this away?

[End of Tape 3]

Kattelle Oral History, Tape 4

August 19, 2003

Andrea McCarty: So Alan, you were saying?

Alan Kattelle: I think perhaps some of the reason for the lack of commercial success for the Edison Home Kinetoscope may have been the fact that there were quite a few adjustments that had to be made, and all in the proper sequence. The lamp house had to be set correctly for either film or lantern slides. The film transport mechanism had to be shifted in the proper sequence. There were two lenses: one for film and one for slides, and you had to get the correct one. Also, you had to put in the correct lens for the distance you expected—the size of the room you were in.

AM: All of which probably came naturally for Edison but not necessarily to somebody unfamiliar with the technology.

AK: Exactly.

AM: Okay Alan, what do we have now?

AK: We have here the 1902 Vitak, and this machine was designed by Enoch J. Rector, a very accomplished camera designer. He

designed the Veriscope camera and projector system for professional films, and in 1902 he introduced this for amateur use, taking 11mm film with a center perforation.

AM: Do we have any examples of the film here?

AK: Unfortunately I do not. I was sent a short sample from the [George] Eastman House and it got lost somehow.

AM: Tell me, with the center perforation, did it resemble 9.5mm, only it was a little bit bigger?

AK: It was oblong. Rectangular oblong. 9.5mm is that also—I've forgotten now. It did resemble it very much. In fact, for a long time I thought the machine was for 9.5mm.

AM: So probably the image was a little bit more rectangular, and the sprocket I wonder—do you know how big it was? I'm just wondering if you remember the film as having a large space between each frame with a fairly straight sprocket, or was it just...

AK: Well you can get an idea from the pull-down mechanism. The tongue is quite narrow. There's no sprocket.

AM: Oh, I see it. It's just a really little pin.

AK: A little tongue that goes into the—that's right.

AM: Yeah, I see. So, we see how it worked. Now, who was producing the film for this projector?

AK: Rector. He was making reduction prints from his commercial movies. The illumination was a carbide lamp, somewhat similar to this. This is the original. This is a metal tube. But this snout,

as they call it, and it occurs in many projectors— the snout is cardboard, so it's miraculous that it has survived.

AM: Oh wow. Can you tap the tube and then tap the cardboard. Okay. That gives people who can't touch it a better sense.

AK: Yeah. May I tell how I acquired this?

AM: One thing first-- I saw you loading some film onto it. Tell me where...

AK: Unfortunately, all I was doing was loading the empty reel.

AM: Right. But we can see where the film was loaded.

AK: And it probably collected in a bag at the end of the table. That was a common—

AM: Or a basket?

AK: A basket, yes. Put the projector over the edge of the table, and then the film went into a basket.

AM: Yes, do tell me how you acquired it. I'm curious.

AK: Alright. On a visit to Northeast Historic Film, after we had chatted with Karan Sheldon for a while she said, "Alan, I had a call the other day from a lady who offered me a Vitak projector. Does that mean anything to you? I told her we weren't interested." And I said, "Well, I'm interested. The 1902 Vitak was one of the first home movie machines. 1902 is quite early. So I'd like to know more about it." She said, "Well, I'll give you the lady's phone number." So, I called her and she said yes, she had it, and it was for sale. And she directed me. And it was not too far from Bucksport, but it was— I was led off Route 1 onto a side road, then I was to take the next left which was no

longer a paved road, but a dirt road through the forest. And at the end of that road I came to this obvious farm; there were sheep, cattle, hens and chickens. And the man of the house was building a garage. So I inquired about the Vitak and they dug it out. And I was just so thrilled because I had read of it many times and had never seen one. They unfortunately couldn't tell me—it had belonged to a relative, a deceased relative, and that's all they knew about it. But, since then—

AM: Were there any films with the projector?

AK: No. There were no films. There was no lamp either, and there was no stand. Interestingly enough, there's an antique store in Maynard that specializes in lamps, so I was able to find a similar one. As I told Karan, when she offered me the Vitak, I said, "I've never seen one, but it's like you said "pterodactyl." Right away you know what a pterodactyl looks like. You never saw one." [Chuckles] That's the way I thought about the Vitak.

AM: Well it's a pretty unique looking piece.

AK: Yes it is. And 11mm is an unusual gauge too.

AM: Can you tell me a little bit more off the top of your head about Rector?

AK: About Enoch Rector?

AM: Yes. That's a name that I recognize.

AK: Yes. I think he was a producer as well as a filmmaker, it seems to me. The name has a famous ring. That's all I can tell you at the moment.

AM: Do you know anything about how he became interested in making a projector for the amateur film market? Or why he chose 11mm? Do you know anything about that?

AK: No, I'm sorry I don't. That's a good question why he wouldn't have taken—well of course there wasn't any 9.5mm in 1902, so I just...

AM: So why not 11mm?

AK: Why not 11mm, yeah.

AM: And a center perf makes sense, so why not?

AK: Also, if you think about it, he could get three strips of film out of his 35mm stock, so that might have entered into the equation too.

AM: Do you think that he met with any success?

AK: I can only say that it probably did not provide a very bright image. I doubt if very many were made, and generally the snout is missing or torn, being cardboard. I doubt if there was commercial success.

AM: Okay. Here we go. What do we have there, Alan?

AK: Well, somewhere around 1920, a German immigrant named Herman Schlicker devised a new revolutionary film projector and camera system, and got patents on it. And somehow, the patent came to the attention of Mr. Freuler, who was a movie executive at that time. Perhaps best known as he was the one who gave Charlie Chaplin his first million dollar contract. Anyway, Mr. Freuler—

AM: The Mutual Film Company.

AK: Yes. He was president of the Mutual Film Company. And he caused a sensation when he gave Chaplin that then fabulous contract. Mr. Freuler found out about Schlicker's invention and thought it had possibilities, and bought the rights, and employed Schlicker to help him build the necessary equipment.

AM: Okay, more about Schlicker. What exactly did he invent? What is this machine?

AK: This machine is a device—we have to start with the film I would say. It's a device for taking pictures. No, this is the device for showing them. Now mind you, this is 1920. 16mm hasn't appeared as yet. So, Schlicker and Freuler were looking for economies for the amateurs, and they devised this system built around this endless belt of film that carried 1,660 images in a slow spiral around this loop of film. [Note: This is the Vitalux system].

AM: Alan, for 1,660 frames, how long would that run for? And could you run it all at once?

AK: If it was projected at sixteen frames a second, it would be convenient to say about a hundred seconds. Is that right? [Chuckles] I think it was more like about three minutes.

AM: Three minutes for that roll? [Laughs] Wow, that's not a whole lot.

AK: Not a whole lot. Shall we go to the camera?

AM: Let's talk a little bit more about the projector.

AK: Alright. It's a marvelous piece of engineering. May I open it up? As you can see, from the way the images are arranged on this film, the camera shutter and lens would have to move down as the machine was cranked.

AM: Why don't we turn it around so the people can see that mechanism.

AK: [Repositioning the projector] Here's the mechanism in operation. Now you see the shutter is working, and there is also a gear that is moving this shutter assembly down to the bottom. See this shaft moving here?

AM: Where is—I don't see anything moving down to the bottom. Is it just moving very slowly?

AK: It's moving very slowly. [Chuckles] [Cranking projector]

AM: And this being what's moving. No, what's moving? I'm looking at the wrong thing.

[Tape paused]

AM: So Alan, you were saying that the whole shutter mechanism is moving up the projector very slowly. Let me see you wind it one more time.

AK: [Cranking projector] And a nice touch that the engineers put in was when you reach the top--you had to go back down— but it automatically, when you reached the top, it went into a high-speed mode and went down faster than it came up, just to save you the cranking. [Cranking projector] I'm not sure that I can get the speed there.

AM: So the film was going through the projector in a very slow spiral. Was it going down or up? Did it start at the top or the bottom?

AK: Well, I would say that it looks like it starts at the bottom. There's some evidence that the operator, when he was showing this film, stopped cranking from time to time and that's what these blisters are. [Chuckles]

AM: And it looks like often in the same place.

AK: Yeah. That's curious. Are we ready for the camera, or--?

AM: So you're going around in a spiral, bottom to top. How did you get the film off when you got to the end? Was it easy to release?

AK: Yeah. It comes off very easily. I also forgot to mention that the lamp, which goes inside here, also had to be moving up to follow the lens.

AM: And that's when you said that you would take the film off and then you would need to crank it down again to start another reel. Yeah, let's look at the camera. [Retrieving camera] Okay, this is the Vitalux camera.

AK: Right. And it was loaded with film magazines. Here is the film magazine. There we see the film.

AM: Can you also hold the box out so I can take a look at it? Let's move the box now so we can get a better look at the camera.

AK: [Setting up camera]

[Tape turned off]

AK: Here we have the Vitalux camera, which took a magazine holding this film.

AM: Hold the film up so that people can see that it's the same film from before. And let's see the magazine.

AK: Here's the magazine and you can see the end of the film. And now, when the magazine is inserted in the camera, a tongue or arm pressed into this slot and exposed the film.

AM: And then the sprockets engaged.

AK: And then the sprockets took over and advanced it.

AM: Why don't you show us the camera, so people can see where the lens is and where the crank is.

AK: This is the crank back here, and—

AM: That's where the magazine is inserted, right there?

AK: Yeah. It would be nice if I could find the lens opening. Oh, here we are. I guarantee that you did not hand-hold this camera.

AM: How heavy is it? An estimate. It's not light.

AK: Ten pounds? And actually, there's a wonderful picture which Mr. Freuler's granddaughter kindly sent me. It's Mr. Freuler filming his granddaughter in a baby carriage, and he's turning the crank on the camera.

AM: Oh, that's excellent. So, let's hear some more about the history of the Vitalux. You had Schlicker and Freuler—

AK: Schlicker had the patents, Freuler had the money, And they combined to produce the Vitalux Company. They came on the market in late 1922 and, of course, a few months later, George

Eastman introduced 16mm film. Vastly simpler to use, inexpensive and lightweight, and in no time at all Vitalux closed out of business.

AM: Did either Freuler or Schlicker ever go on to develop anything else?

AK: Not that I have heard of. I don't know whatever happened to poor Schlicker. Freuler, of course, went on to successes in commercial film.

AM: Tell me about— you mentioned Freuler's granddaughter. How did you meet her?

AK: That's a good question. Lost in the mists of time, I'm afraid. How I ever managed to locate her, I don't know.

AM: But you did, and see—

AK: I did, and I told her I was writing a book and was going to write the story of the Vitalux. And she was interested in that and kindly sent me that lovely photograph that you can see in the book.

AM: So she knew about the Vitalux. Did she have any information that helped you?

AK: Not a bit. She doesn't have a camera or a projector.

AM: No idea as to how Schlicker came up with this? It's really complicated.

AK: I told you all I know about Schlicker.

AM: Okay. Where did you get it? How did you come across this camera?

AK: I got it through a peculiar set of circumstances. There was a well-known dealer in Chicago named Barney Copeland. Everybody in the camera trade knew Barney Copeland. He and his wife were good people, and they were successful dealers. And Barney had offered the camera and projector to Jack Naylor whom, as we may have mentioned, is this very well-to-do camera collector, who for some reason, refused to pay Barney his asking price for the Vitalux. And I decided that it was rare enough that I had to have it, so I bought it from Barney Copeland. That's how I got it.

AM: Have you ever seen another?

AK: No. I have a good friend in Europe who has one. Unfortunately, we're missing the lens I believe.

AM: So Schlicker came over here from Europe.

AK: From Germany.

AM: From Germany. So was this a camera that was mostly marketed in the United States?

AK: I have to say it—there's one in Europe, so how it got to Europe is hard to say.

AM: But it was probably primarily on the market here?

AK: In the United States, yes.

AM: And are there ads for it in some of the early trade magazines?

AK: I don't believe that I've ever seen—no, I should take that back Andrea.

AM: It would be interesting. Clearly they only had a short time to market the camera before it became clear that 16mm was going

to be the next thing. And I'd be curious to see how, you know, how they decided to do it.

AK: Well let's just hold on a second.

[Tape turned off]

AM: Okay Alan, you were showing me a picture of Vitalux literature.

AK: Yes. This is a Vitalux promotional—

AM: Can you hold it up just a little bit more? This is from the Vitalux literature?

AK: Yes. Actually it's a copy of their instruction book.

AM: Okay. I see. Can I see the front picture again? Alan, I'm noticing that the images behind the camera in the picture don't look very home-movie like. They look like Hollywood films.

AK: Well, I would suppose that Freuler being, you know, a Hollywood man, even though his company was located in Milwaukee I think, he was very much a professional producer of professional films. And I think he wanted to give the Vitalux the aura of being practically of professional grade.

AM: Right. So were there any films available, production films available?

AK: Absolutely. Here we have a Vitalux package, which one could presumably purchase. And if you can read the titles—

AM: Okay, we have the *U. S. Naval Academy*, *Boy Scouts of America*, *All Aboard* Parts I, II and III, Douglas Fairbanks in *Hawaiian Blues*, I'm assuming. And we also have *The Hickhunter* and *Sweet Revenge* Parts I and II.

AK: And on this side it says, "Vitalux are perforated and inspected by experts. But in supplying them to the trade, we assume no responsibility for perforations."

AM: So they're saying once you put that film through the projector, they're not responsible for how it responds, or--?

AK: [Chuckles] "Film productions will not be sent out on approval or exchange."

AM: Sent out on approval or exchange? That means they're not going to loan them out to you.

AK: That's right. You can't borrow them and send them back, and you can't exchange one for another.

AM: Do you think that they ever got around to producing equipment to repair them? You know, splices, or how to repair the perfs, or--?

AK: I've never seen any if they did.

AM: Clearly, the splice would be very big in that film, but mostly the perfs [would need repair] because it looks like the roll that you have has damaged perfs.

AK: Right. And it's quite obvious that none of these are amateur. These are all commercially shot films right?

AM: Yeah. So they had commercial films available, and you could shoot your own. Do you know who did the processing of the amateur films shot on Vitalux?

AK: I wonder if this would tell us. Oh, the customer apparently was expected to develop his own film because this instruction book says, "In case you do not care to develop and print your films,

bring them to your photograph dealer. If he is not equipped to do this work, send films to the Vitalux Laboratories by parcel post. All orders will receive immediate attention and will return in a minimum number of days.

They pointed out that the Vitalux projector uses only safety standard special tubular film approved by the Underwriter's Laboratory. Also, by State and Municipal for use anywhere without restrictions.

AM: Anything else interesting about the Vitalux, or should we move on?

AK: I think we probably said all we can about the Vitalux, except, of course, that the timing was terrible. 16mm came along and just knocked this out of the market.

[Tape turned off]

AM: Alright Alan, what do we have now?

AK: Well, in 1931, an inventor named Clarence Ogden introduced a revolutionary new system of camera and projector. It was called the Kemco HoMovie System. Ogden's objective with his new system was to save the amateur money by putting four images in each 16mm frame.

AM: And how would he do that? Can you demonstrate with your hands how?

AK: Yes. He would—if you visualize the 16mm frame, he arranged the camera so that it took picture number one here, moved over—each image being a quarter of the 16mm frame. Number one, number two, number three, number four and so on, like that.

[The mechanism moves from left to right, down, and then from right to left.] If you can visualize the pattern of-- a Kodak engineer gave me a beautiful name for that pattern; It's called boustrophedonic. The Greek word for how the ox plows. That's the way it would plow a field. And, here's the camera which we shall open. [Opening camera] It's in Bakelite, which is always nice.

[Preparing camera for operation] [Camera running] I hope you can see that the shutter is going back and forth and advancing at the same time.

AM: Can we do that one more time, and maybe—I don't know if we'll be able to catch the motion on the back and forth clicking.

[Adjusting camera] Okay, if you put it on an angle maybe we can do it. Let's try it one more time. And let's go. Oh yeah, you can see now. Good.

AK: So, here we have the camera. It's not too bad, weight-wise. Three or four pounds perhaps. Ogden, being an engineer and an inventor, he did a good job. He gave instructions for operating the camera and the projector.

AM: So what we have right there is the camera. Do you have the projector?

AK: Yes we do. I was afraid of that. [Laughter]

AM: Here we have the Kemco HoMovie projector.

AK: And of course, it should be realized that the projector mechanism had to do exactly the same boustrophedonic pattern that the camera did. In other words, it had to shift sideways then down, then sideways back again. So it was quite

a complicated mechanism, but well-designed. I have a Kemco film. I've never quite had the nerve to try and project it. I didn't want to destroy it.

AM: That's understandable. Do you have it here?

AK: I can't put my hands on it, but I would point out that Ogden made a maintenance kit.

AM: Oh, excellent. So he had accessories. Contents: projection lens, reel, lens cleaning kit, a bottle of lubricating oil, wire oil dropper, oil can, cleaning brush, screwdriver. That's excellent. I'd like to talk to you a little bit more about the Kemco.

AK: Yes. It was another case—I'm sorry, I should let you ask the question.

AM: You know what I'm going to ask.

AK: It's another case of a brilliant idea and terrible timing. Because the Kemco came out in 1931 or late, even early 1932, and you know what else came out in 1932 was 8mm, which accomplished the same result at half the cost.

AM: Did Ogden have the support, or did he need support from George Eastman and Kodak?

AK: I'm sure that Kodak— Eastman would have been glad to help him, because all along, Eastman Kodak realized that their bread and butter was film. So the more cameras out using film the better, as far as they were concerned. They didn't really

worry about competition camera-wise, because that wasn't really their bread and butter, particularly in that era.

AM: So, the Kemco HoMovie camera used the exact same film, was using the same frame line—

AK: Exactly. They didn't have to have special film. It was just straight 16mm film.

AM: Where was Ogden based out of?

AK: Cincinnati. His company's name was Kodak. I think you picked that up—

AM: [Reading] Yes. Kodak Electric and Manufacturing Company.

AK: Yeah. They manufactured electrical gear, including rectifiers, which were well thought of. Where did I get this? I believe this is the one from Australia, but I'm not quite sure.

AM: Oh, the one where you did a mail bid?

AK: Yes.

AM: Another question: Who processed this film? Would Kodak do it? Did you just process the--?

AK: You could send it to any Kodak processing station, yeah.

AM: So it would just show the four separate images. Do you think it met with any success before it was drummed out of the market by 8mm?

AK: Again, I have to say that these are very, very rare. I've only heard of one other outfit, camera and projector.

AM: Do you know whatever happened to Ogden?

AK: It says in the book. [Chuckles]

AM: Okay. We'll go to the book to find out. Maybe you could tell me in a nutshell, do you remember? Did he go on to do anything notable? Or was this the end of it? If you can't remember, that's alright.

AK: I'd like to look and see what it—may I?

AM: Okay. We'll pause and then we'll come back.

[Tape paused]

AM: Okay. So Ogden, he was a pretty active man?

AK: Clarence Ogden received many electrical patents between 1929 and 1932, one of which was for the Kuprox Rectifier, which was widely used as a DC source for radios in those days. The radios of those days took a large number of batteries for DC. The alternate for batteries was to have a rectifier.

AM: And for more information about Ogden, people should see your book.

AK: We're done.

[End of Tape 4, Side 1]

AM: Okay Alan, what do you have?

AK: I have here a very unusual amateur camera called the Movette, introduced in 1917 by a Rochester company. Unusual for several reasons. First of all was the peculiar film path.

AM: What's peculiar about the film path?

AK: Well you notice the camera is a conventional shape, but instead of being like so, it's like so. [The film path is at a right angle to the long side of the camera.]

AM: Which means that the film has to have a twist in it.

AK: Exactly. I'm sorry I didn't have a piece of film in there.

AM: That's okay. Why don't you hold it up so I can look at the film path reel? Can you straighten it out a little bit towards the camera? Actually there is a piece of film in there.

AK: And you see where the sight is. That was one unusual thing. The gauge of the film was also unusual; it was 17.5mm. And the film was supplied to the Movette Company by Eastman Kodak.

AM: Could you show me the film?

AK: I can't take it out. It's in the magazine.

AM: Oh no, I just want to see the box. And it's a magazine.

AK: Exactly. I don't like to unseal it.

AM: That's okay; you don't need to do that.

AK: You can see there's a metal magazine showing through. And that magazine dropped into place here. You pull the loop of film out to put into the film path.

AM: And the magazine sat where?

AK: The magazine sat right in here, like so. And the camera was hand cranked. So again, it would be very difficult to hand-hold. And you have on the bottom a tripod socket.

AM: Can you show me the crank?

AK: Yes. There's a crank in the back.

AM: So it would sit on the tripod.

AK: So it would be sitting on the tripod like so and you'd be cranking the film. As I say, the film was supplied by Eastman Kodak, and curiously enough, it was nitrate. It was 17.5mm nitrate film.

AM: Okay, here's a question. You were talking about the Edison Home Kinetoscope, where George Eastman said that he would only supply safety film for this 22mm format that was marketed for the home. Why was George Eastman inclined to provide nitrate for the [Movette] 17.5mm, which was clearly destined for the amateur movie market?

AK: Very nice leading question. The answer is that the flammable nitrate film was only going to be used in the camera where there was no danger of ignition. Because once the customer had exposed the magazine full of negative film—

AM: And did Eastman Kodak do this processing?

AK: Eastman processed it and printed it on safety film, which was then used in the projector. Besides that, the film was returned to the customer in this magazine. And this is a projector magazine. So you could shoot a roll of film, take it to the dealer, get it [processed] and printed, and you took in your magazine and he added that to whatever film you had in there already, until you'd filled it up. And then you had to buy another. But you've got a nice film load for your projector instead of just a short length.

AM: Can you open the magazine again so we can get a better look at what the film looks like? The sprockets look round. Are they?

AK: They are indeed. That's right. In fact, that's one of the things I mentioned in my lecture, that the round sprocket holes were a giveaway.

AM: Okay, so 17.5mm had round sprocket holes. You said that Movette was based in Rochester. And they had a collaborative relationship with Eastman Kodak.

AK: Obviously, they must have ironed this out with Kodak before they ever started manufacturing: "Will you be able to supply us with nitrate, and...?"

AM: Do you know anything more about the nature of the relationship? Was Movette eventually swallowed up by Kodak? Do you know anything about the history of the two companies?

AK: No. Of course, again, this system would be out-moded once 16mm came in, because you wouldn't have to go through the two sets of film. And the projector was curious. Shall I bring it?

AM: Okay. We have the Movette projector there?

AK: Yes, and this is incomplete. I've never seen a complete one. But this is the projector magazine that I showed you before, and it slips on to these. And obviously, it was a motor drive, and some sort of illumination source. Well no, I shouldn't say it was a motor drive. It was hand-cranked. Again, I believe a very limited market. These again are extremely rare, and of course with the advent of 16mm direct reversal, there wasn't any need for that double system.

AM: Do you want to turn it around so I can see inside the projector?

AK: This must have been kind of a nuisance. You had to pull a loop of film out of the magazine and spread it over those two sockets. That looks to me like a pretty awkward procedure.

AM: So what year did *Movette* come out with 17.5mm amateur film?

AK: It came out in 1917.

AM: So it had a good six years?

AK: It had six years to live, that's true. It has a well-done instruction book. It shows the procedure I mentioned of pulling the film out of the magazine, how to load it in the camera, how to put it on the tripod.

AM: Oh, is that the picture from the cover of your book? No it's not. Okay, I'm going to pause for a minute.

[Tape paused]

AK: I'd like to comment on the back of the [*Movette*] instruction book. This is the rear of the instruction book, urging you not to waste film. What's interesting about this to me, is that it almost says that people bought this camera and projector to make their own dramas, not [to film] Mary's tenth birthday party or the bar mitzvah, but to make dramas. Because here, they're pushing a hundred scenarios [for the amateur]. And that's not the first time I've seen that. In fact, in one of the earliest issues of *Movie Makers*, which was a journal of the [Amateur Cinema League], the movie society, they discussed at some length a play that a group of amateurs were making.

AM: Are you referring at all to the woman, and I think Dwight [Swanson] wrote an article about her, who had a connection to Eastman Kodak through one of the Rochester theatrical societies?

AK: Are you talking about--?

AM: I may have the name wrong.

AK: I think I know who you mean. She filmed a famous early 16mm movie called *A Birthday Party*. Is that the one you're thinking of?

AM: Right. Is that not the same woman?

AK: It's not Mildred Dawson, no.

AM: Okay, because I know that the woman that Dwight wrote the article about, and her name escapes me, also was writing scenarios for other amateur filmmakers to play around with—

AK: Exactly. I'll think of it, and her name is in the book. I think what we're seeing here is that today, when you say home movies, everybody thinks of family movies. And yet in the early days, I think the emphasis was on people doing dramas in the home. [Note: Alan and Andrea are trying to recall the name of Marion Norris Gleason. See Kattelle's *Home Movies*, p. 82.]

AM: And the emphasis was through Kodak, because I think Kodak is clearly pushing this, supporting local amateurs—

AK: Movie clubs. Right. And I think that they probably felt that people would get tired more quickly of the kids' birthdays than they would of these dramas, but that didn't turn to be. Long range, it wasn't true.

AM: I have a question. Kodak got together with Movette to make the 17.5mm format, or at least cooperated with Movette. What were their own engineers and designers doing at this time, running up to [the release of] 16mm in 1923?

AK: Well, the work on 16mm had actually started prior to World War I, and then was suspended because of the war time efforts. And it wasn't until after the armistice was signed that the design engineers went back on the 16mm project and brought that to completion in 1923.

AM: And so all this time they were thinking about amateur formats and were also thinking about amateur theatricals and movie clubs. Is there anything else you can think of about Movette? Was Movette around after the advent of 16mm?

AK: No. The Patent Department, Kodak's Patent Department, used to obtain every new competitor's movie cameras and projectors. They always took one in and ran it through the basics and wrote a report on it. I remember that it was a very poor report on the Movette projector.

AM: On the Movette 17.5mm? What were the [problems]?

AK: Just erratic performance and poor illumination.

AM: Do you think it did well in the market place?

AK: No, I don't.

AM: How do you know that?

AK: Again, I sound like a broken record, but you just don't see them. So what else could it say but that they didn't make many. That's all I can say.

AM: That makes sense to me.

AK: Although I happen to have three Movette cameras, I'm surprised. But I only have that one poor wreck of a projector.

AM: Where did you find the Movette cameras? Are they around?

AK: Yeah, they show up. They did. Not anymore, but they did show up at trade shows.

AM: Do you have anything else to add about Movette, or what Kodak was doing during the [war]?

AK: Were you recording what I said about the patent department? About them taking new cameras as they came in on the market and testing them?

AM: Right, and that they wrote a report. And Kodak was doing that for everybody, not just people they were in direct competition with.

AK: No, everybody.

AM: So they were doing that with 28mm and—?

AK: Yeah. Whether those records still exist or not, I don't know.

AM: How did you hear about the report on the Movette?

AK: I see papers about Kodak from the man who was in charge of the Patent Department, David Gibson.

AM: I'm out of tape. Hold on just one minute.

[End of Tape 4]

Kattelle Oral History, Tape 5

August 19, 2003

Andrea McCarty: Alan, I was asking you how you knew about Kodak's report on the Movette projector.

Alan Kattelle: I suspect that it was one of many, many pieces of information that was given to me by a wonderful chap named David Gibson, who was the director of the Kodak Patent Department Museum. And I wrote to him, pestered the poor man many times with, "What about this Movette? Or, what about this camera or that camera?" And if he had any information on it, he'd send it to me. I have a pretty good idea that that's where that report came from.

AM: Do you think that there were other reports on 28mm or—?

AK: Oh, I'm sure there were. Whether they can be accessed anymore, I don't know. I haven't tried.

AM: Do you think Kodak had any sort of interest in seeing Movette succeed with the 17.5mm format?

AK: I doubt it. I would think that their sales people looked at that and said, "that's such a niche market. Why do we want to be

bothered providing a specialty film like that?” It wouldn’t be enough to justify keeping it in production.

AM: It was a niche market. Was it a niche market before the advent of 16mm?

AK: I shouldn’t say this. I don’t suppose that Kodak wanted to refuse anybody to supply them with film, but I think if you were asking me if they would encourage the continuation of that particular system, I would say they wouldn’t.

AM: So they were happy to supply the film because it was easy for them to make, they could split the 35mm film right down the middle, and they charged for the processing, so they make money that way. It was probably no big expense to them, and a little bit of profit from processing and providing the film.

AK: They must have known that their system was going to eclipse almost any other system, in fact did eclipse them, with one exception. You know what that exception is? 9.5mm.

AM: Were they that sure about reversal film because people would only need to process one [element]?

AK: I’m sure they may have recognized what a boon that would be and how popular. I would think they did, don’t you?

AM: Yeah, I do. I do. Back to Marion Norris Gleason. Have you ever come across a copy of these scenarios [that she wrote], or any other kind?

AK: Not these particular ones. I think I might have another book of scenarios. But to tell you the truth, I haven’t looked for it.

AM: I would think that they may have printed off scenarios in the amateur film magazines for people to use. Don't you think?

AK: Oh, that's possible. That's possible, yeah.

AM: Anything else you can think of about 17.5mm, or 11mm, or the Edison Home Kinetoscope or anything else we've talked about today?

AK: Andrea, no, I'm talked out.

[Tape turned off]

AK: But, the more I think about it, the more I think that the emphasis was on encouraging amateurs to do plays. Of course Hiram Percy Maxim, who was the founder of the Amateur Cinema League, he made plenty of family movies as you know.

AM: Yeah he certainly did. It seems like recording your family is a given. I wonder if they were promoting the scenarios as an alternative, or something else, so that it would be an even richer hobby.

AK: Right. Yeah I think that, again, it would be sales driven. I'm sure the sales manager would say let's give them the tools to make their own *Gone With the Wind* and use a lot more film.

AM: That's true. And I think that people were watching Hollywood movies, and they were able to rent or buy them for their at-home projectors, so I'm sure there was certainly an interest. Alright, you want to call it a day?

AK: Yes, let's.

[Tape turned off.]

- AM: Okay Alan, I had one more question about 17.5mm film. We discussed how the camera used 17.5mm nitrate film, and that Kodak would send back a positive [safety] print to the consumer. Is that true?
- AK: That's true as far as I know only of the Movette. I don't know of any other manufacturer that used the same system.
- AM: Okay, then my question is, could we assume that Kodak was splitting 35mm diacetate to make this 17.5mm print for the Movette?
- AK: I think that's a good assumption.
- AM: So were they making 35mm diacetate for any other purposes at that point?
- AK: Let's see what's the date on the film—1917. I'd have to look back and see when they abandoned diacetate for professional use. I don't recall a date off-hand, but 17.5mm was popular for home use. And another example of another machine that used it was the Ikonograph. And the one film I have for that particular projector is very curious; inside the can of film it says "Caution. The first six feet is nitrate," making it clear that the rest is diacetate.
- AM: What's the Ikonograph?
- AK: The Ikonograph is a 17.5mm home projector by—I think it was by E. J. Rector, and there's an example over there on the shelf.
- AM: So, what can you tell me about the Ikonograph?

AK: I would say that it is one of the best, most well-made 17.5mm projectors made for home use. Most of them were much less sophisticated in the way that they were built.

AM: What makes this one special then? What is so sophisticated about this one?

AK: It has a nice solid lamp house, and a good, workable, wooden base. They were obviously intending to do good business, and they made their own film cans. And, as I was saying, this legend is inside.

AM: Interesting. And that's not your writing. That was there.

AK: Yes, that was there.

AM: I wonder who wrote that? It seems that if the company issued that, they would have typed it, would they have not?

AK: I think the owner did this. He made a leader in other words. However there's certainly an image.

AM: Can you hold that still for a minute?

AK: What do you want to see? The film?

AM: Yeah, I do. Okay hold it still for a second. I'm going to ask you to hold it up away from the machine.

AK: Yes. The first six feet is from some other film, because after six feet it starts with titles, *The Tramp's Revenge*, which is the title of the film as shown on the can.

AM: I noticed that the film for the Ikonograph has different sprockets than the film for the Movette.

AK: The Movette had side perforations. This one is center perforations on the frame line, yes.

AM: So was Kodak also producing the film used for the Ikonograph?
You said that Kodak was collaborating with Movette in their
17.5mm venture.

AK: Right. I don't know if there's any identification on this. We can
certainly look. There's no edge printing.

AM: So it could have been anybody.

AK: Yes, exactly. But the fact that it's safety, I would tend to think
that it's Kodak film.

AM: Was there an Ikonograph camera as well?

AK: No, there was not. There were different models of the projector.

AM: So this projector was solely to project reduction prints put out
by the Ikonograph company?

AK: I don't know who made [the prints] for them.

AM: Who was the person behind the Ikonograph?

AK: Yes, I'm saying it was E. J. Rector, and we've already talked
about him in connection—

AM: Was it the Vitak that we talked about him in connection with?

AK: Yes, it was. Wasn't it?

AM: I think so.

[Tape turned off]

AK: I would call [the Ikonograph] one of the better amateur motion
picture projectors for that era. For one thing, it has a nicely built
lamp house with a chimney, and they also provided a good-size
lamp, so the illumination should have been pretty good. The

film transport mechanism appears to be well built. We have discovered a mystery in that there is no shutter, and apparently no provision for one. There was a fire shutter however. I don't know if I can show that to you, but a fire shutter is a device that blocks the light from the film if the cranking speed isn't fast enough. That's to prevent the film from burning. [Cranking projector]

AM: Could that have served the purpose of the other kind of shutter?

AK: No, because when the camera is cranked at the right speed, the fire shutter is supposed to go out and stay out. As to why a camera was not produced, I can only assume that Rector saw the handwriting on the wall. In fact Kodak— Eastman may have even told him that they were working on a direct reversal film.

AM: In your book, it says that Rector approached George Eastman with the idea for the Ikonograph fairly early on. Was it 1904? [Note: Rector is said to have demonstrated the Ikonograph system to Eastman in 1902. See Kattelle's *Home Movies*, p. 55.]

AK: That early? I don't know.

AM: Do you think that it just took Rector a long time to get his idea off the ground because he just didn't have enough financing or something?

AK: Well, no. He must have had a fairly good organization because he produced the commercial Veriscope camera, and perhaps he was concentrating on his professional work. I can't tell you.

AM: Was it through his professional connections that he was able to get the films to be reduction printed, do you assume?

AK: I don't think that's the problem. I think there were so many amateur projectors that were advertised with film, that I think there were more places than Eastman Kodak to get that work done. I think there must have been independent labs.

AM: Was the Ikonograph more successful than the Mockette?

AK: Again, this would be just a pure guess on my part, but it was certainly a less complicated mechanism, and there were fewer steps for the user to go through. That's all I can say about that.

AM: Your book notes that there was a camera listed in the Ikonograph catalog, but it looks like there was never one produced.

AK: Correct. Again, as I say, he may have decided that the coming thing was going to be the safety film. I can't be sure.

AM: Although the 17.5mm prints were printed on diacetate safety, right?

AK: They appear to be, yes.

AM: Were there any other 17.5mm formats besides the Mockette and the Ikonograph?

AK: Yes. I'd have to look, but I'm thinking in particular of an ad in a Sears catalog for 1905 that advertised a projector and a whole list of films by a company that has never been heard from since, so there must have been a ready source for 17.5mm reduction prints from commercial films.

AM: And this was a separate projector that would project these prints, or were they made for the Ikonograph?

AK: No, this was a separate projector. However it's difficult to tell in just looking at the Sears ad exactly who made the projector.

AM: Or where the sprockets were?

AK: Exactly.

AM: I have one more related question about the 17.5mm diacetate prints. I was wondering whether, because there were 35mm diacetate prints floating around at this point, whether 17.5mm diacetate was an expedient format because you could just split the 35mm down the middle?

AK: Yes, that's correct. But then it had to be perforated, which is no big problem. It's easy to build a perforating machine.

AM: Can you tell me more about the 35mm diacetate? Who was producing it? Who was showing it? Do you know anything about that?

AK: As I said in the book, Eastman, as early as 1908 I believe, was experimenting and did make some [diacetate] for professional use. But diacetate has much less tear resistance than nitrate, and both the distributors and exhibitors were very unhappy with it, so they abandoned it very quickly. And Pathé was also working on diacetate but he, as we know, made it for the amateur market.

AM: And that was 28mm?

AK: 28mm, right.

AM: I remember when I was working at Northeast Historic Film, there was a film called *The Fall of Jerusalem* that came from

your collection? And that was a 35mm diacetate print that was released by what looked to be the Wholesome Film Company. It looks like it was a religious film that perhaps was shown for church groups, outside of traditional movie theaters. Do you think that was a common occurrence?

AK: I'm sorry, that they were made for churches or--?

AM: Well, I was thinking about that film, and I was thinking that before 16mm, church groups and amateurs who could afford 35mm projectors would probably be seeking diacetate prints.

AK: Absolutely, yes.

AM: And I was wondering if you knew anything about who was releasing those prints and what the market was, or... Do you have anything?

AK: There was a periodical, a magazine, that was published primarily for the educational, religious and fraternal organizations. They made quite a thing of it, that you could buy safety prints. I'm not sure if that answers your question. [Note: Alan is referring to a journal called *Moving Picture Age*.]

AM: Yes, it does. Have you ever come across one of these periodicals?

AK: I have several of those issues.

AM: Could I look at them later?

AK: Absolutely.

AM: I'm curious. It seems interesting to me because the 16mm format became so entrenched with the church groups and the

schools, but these 35mm diacetate prints keep turning up. The first time I saw one, I assumed it was nitrate. Then on closer inspection, I realized that it wasn't. And that leads me to think that there are probably a fair few of these floating around.

AK: I have a question for you. Is there a good way to distinguish between diacetate and nitrate other than setting fire to it?

[Chuckles]

AM: There are hash marks. Often, there are hash marks in between the sprockets. And, nitrate hash marks are [perpendicular to the edge] of the film. I can draw them for you later. There are these hash marks when you're inspecting the film and looking closer near the sprockets. They're not always there, but they often are.

AK: Okay. Well, the reason I ask is that the dealer who told me about the Pathé Frères camera for sale, he claims that the film is nitrate and I said, "Why?" And he said, "Well, it burns just like it." Well I tried it, and I tried a piece of what I know is [diacetate], and it does burn. It doesn't flash, but it burns and it leaves a residue.

AM: Do you mean the diacetate or the nitrate?

AK: The diacetate.

AM: It's true, because I burned a frame of the leader from *The Fall of Jerusalem*, and it did catch on fire, but not as quickly as nitrate does.

AK: But I burnt a piece of known nitrate and known diacetate, and the big difference that I discovered was that the nitrate tends to burn much faster, but also it leaves hardly any residue where as the diacetate leaves a black ash.

AM: Now, he was looking at 28mm, your dealer friend was?

AK: Yes.

AM: I don't think the hash marks would appear on 28mm.

AK: Also this is unexposed, so you would—

AM: So the hash marks may not work there. I'm not even sure if they appear on non-Kodak nitrate.

Okay, we're going to pause.

[Tape paused]

AM: Okay, Alan do you want to talk about 9.5mm?

AK: Of course. 9.5mm was the one amateur gauge that survived the introduction of 16mm direct reversal.

AM: Why?

AK: Every other peculiar gauge that came along succumbed when Kodak came out. except for Pathé's 9.5mm.

AM: Why was that?

AK: Well, I think, of course it started in Europe, and then the image size is not that much smaller than 16mm. It had a wonderful organization in back of it, Pathé Frères, and they made a good

product. The film design was such that they could make very small camera, exemplified by this little baby. The film was provided in handy cassettes, once you got the camera open. [Laughs] [Note: the camera that Alan is referring to is the Pathé Baby.]

AM: So is that a cartridge-loading camera?

AK: Yes, absolutely. There is the 9.5mm cartridge.

AM: You can see the center perforation. Can you show me the imprints of the Pathé [logo] again? There we go. Can you tell me the answers to some basic questions, like when was 9.5mm introduced?

AK: 1922, I believe. Of course, they introduced a camera and a projector. The projector was simple to use. The film came in little canisters which I probably won't be able to get out.

AM: That's okay; you don't need to take it out. We can see that the film came in little canisters. I have many questions about this. I guess I wanted to ask you what was so exceptional about the Pathé Frères organization?

AK: What was exceptional about them? Well, they'd been in business, in the film business, as long as Eastman Kodak. They were quite parallel organizations, and they were pioneers in many things. They were pioneers in coloring film. Of course they did it the hard way, stenciling each frame, but still. And they made a good product.

AM: Would you say that Pathé Frères was as established in France and Europe as [Eastman] Kodak was established in the U.S.?

AK: Very definitely so. I remember one famous remark when somebody told George Eastman how much film Pathé was running, he said, "Well he didn't buy it all from me," meaning that they had produced a lot of their own. They did buy some film from him, but...

AM: Did 9.5mm ever really make it to the U.S. before 16mm took hold?

AK: I don't believe so. Again by the relative infrequency of 9.5 gauge cameras and projectors in this country. However, it was actively marketed in this country.

AM: Was it? Even after the introduction of 16mm?

AK: Yes, I believe so. They came out with a motor driven camera, again quite compact and well-made. Here's the motor attachment.

AM: I have a couple more questions. Was Pathé's business in Europe hurt by the introduction of 16mm?

AK: Apparently not, because as you know there are 9.5mm clubs in Europe still in existence today.

AM: And one small 9.5mm club here in [the U.S.]. Then my next question is— 9.5mm, was it ever a reversal stock? Or did you always need to have a positive printed from the negative?

AK: That is a good question. I'm sorry, I don't know. I'd have to look that up.

AM: Okay. We can look that up. That's not a problem. What about the 9.5mm projector? Can we look a little bit at the projector you have out?

AK: The full-size projector was approximately twice the height of this. It had several unusual characteristics, some good and some bad. The film was fed from this metal spool, and the receiving chamber had a glass front on it. In theory, at least, you didn't have to fool with it down there, you just reversed and it pulled it. When you finished [projecting], you reversed, cranked and cranked it back up into this metal spool up on top. One of the unfortunate features of the—oh, it had another positive feature I forgot about. You know, to show a title in a film, you have to print a title in several frames depending on how many words there are. That's ten or twelve frames just for two lines of title. Pathé had a clever device to get around that. You may have heard of it. He notched it. He made a notch in the film, and the projector mechanism stopped on that frame. Not long enough to burn, but long enough to give you the chance to read it and then it [moved on]. That was an interesting thing.

The poor feature of the design was the combined flywheel shutter which, unfortunately, they made out of die-cast metal which, over the years, tends to warp and swell and makes the projector totally inoperative until you pull that flywheel out and have it machined down or replaced. [Note: Alan is referring to the Pathé Baby projector.]

AM: Do you think that there are still 9.5mm cameras and projectors being produced?

AK: I don't know.

AM: I'm curious about projectors that were made more recently. Because it's been a viable format and still is to some extent.

AK: They must make modern cameras for it too.

AM: They must make motor drives. Were the 9.5mm cameras variable speed?

AK: Again, I'd have to look at a particular one. Of course the hand-cranked one was certainly variable speed.

AM: Do you have anything else to add about 9.5mm? We probably should have done 28mm first because it came first, but we'll move on to that now.

[Tape turned off.]

AM: So Alan, what do you have there?

AK: This is a marvelous import from France. It's the 28mm Pathé Frères camera which utilized 28mm safety film. The film itself was unusual in that it had three perforations per frame on one side, and one perforation per frame on the other side. Nobody is exactly sure why Pathé did that. Somebody said, "Well that's just so you couldn't mistakenly put 35mm negative." Well you couldn't do that anyway. It would be too wide for the sprocket. It would certainly mean that the camera user couldn't use anybody film but Pathé film, because most people put the same

number of perforations on each side. I mean, at least that was the standard for 35mm film.

AM: Do you know where Pathé was getting their 28mm film? Were they producing it themselves, or--?

AK: I would assume they were. But, they also were very good customers of Eastman Kodak. However, I somehow don't feel that Kodak would have set up special machinery for 28mm film. I suspect it was all domestic and French manufacturing.

AM: When did the 28mm format emerge? Roughly, you don't have to know the exact date.

AK: 1912.

AM: 1912. And you said that at that point, Kodak had already begun work on 16mm.

AK: Yes, they had.

AM: So chances are that if Kodak had already started to work on the 16mm process, then they definitely would not have produced the 28mm for Pathé.

AK: I'm absolutely sure of it. Almost absolutely sure. Yes, Eastman Kodak paused work on 16mm when the war came along and didn't resume until after the armistice in 1918 or 1919. Again, Pathé have a market in the United States. If so, it was limited. However, an American entrepreneur, Willard Cook, saw the virtue of the 28mm and he formed Pathéscope of America Limited. And he imported both the camera and the projector.

AM: Which was called the Pathéscope?

AK: Pathéscope, right.

AM: Was the camera also called the Pathéscope or only the projector was called the Pathéscope?

AK: The scope meant to project.

AM: So the camera was called just the Pathé or the Pathé [Frères]?

AK: Yes. Well, Cook very soon embarked on improving the Pathé projector, and he marketed that, of which we have an example.

AM: He marketed the Pathé projector?

AK: Yes.

[Tape paused]

AM: But Cook did in fact make a camera.

AK: Yes, after he began importing the projector. As I say, he wasn't entirely happy with the design, so he improved it, the design of the projector.

AM: How did he improve it?

AK: For one thing, there was no need of the generator on the projector. Pathé Frères had a generator because in France, there wasn't a wide distribution of electric power, so that was eliminated.

AM: Okay, you said that Willard did in fact make a camera. And was that also marketed as a Pathé camera, or was that called something else?

AK: I think it was called a New Premier Camera. But it must have had a very limited run. I've never seen one.

AM: Do you have an example of the Premier Pathéscope, or not?

AK: Yes. On the projector, yes I have.

AM: That's not this one, is it? That's the Keystone.

AK: That's the Keystone.

AM: Where is the New Premier Pathéscope?

AK: May I look?

AM: Okay, what do we have here?

AK: This is the New Premier—I'm sorry, there's no "New", it's just a Premier Pathéscope.

AM: Okay. So this is the projector that Willard Cook came out with.

AK: That's correct.

AM: And that "W" down here, is that for him?

AK: No, that's a Westinghouse [logo]. There is an interesting feature with this projector. That shaft you see out there is where the shutter goes, and as you can see it's turning. One of the unusual features of this [projector] was that it had an external shutter, and this is the shutter shaft out here. The shutter looked—it was a three-bladed affair like so, and it was mounted on the shaft. And as the projector turned, it did the necessary interruption of the projection.

AM: So, Cook came out with this improved projector. Was this only in the U. S. that the the Premier Pathéscope was marketed?

AK: Yes, because for one thing, he changed the perforations. No, I'm sorry. This is still three and two. Three and one, I should say. But, you see he—Pathé's projector required a generator for the light, whereas Cook's projector used domestic electricity.

So there was no need for that. He wouldn't have—what I'm saying is, there wouldn't have been a market in France or Europe for this projector.

AM: Because there was no electricity.

AK: Electric distribution was not as common as it was in the United States.

AM: So let's talk a minute about what was shown on the 28mm projectors. As far as I know, there were many production prints in 28mm. Is that correct?

AK: Yes.

AM: And some home movies.

AK: Yes, since there was a camera they must exist, but again, for what it's worth, I've never seen an example of the camera, the domestic camera.

AM: The domestic camera. Interesting. So all you have here is the original Pathé Frères camera. You don't have an example of Cook's camera.

AK: That's right.

AM: And you wouldn't be able to necessarily tell though, whether a film was shot with the new camera or the old camera.

AK: That's true.

AM: Because we saw examples of 28mm home movies a couple of weeks ago at Northeast Historic Film, and in other places.

AK: I'm sorry. What did it show? Was it a typical home movie?

AM: Do you remember Dwight Swanson's presentation at the beginning about the home movies from the family? Let me get their names. It was the Forbes' 28mm home movies. Do you remember that?

AK: Yeah, I'm trying to think now. Forbes, did you say?

AM: Yes. And we've also seen an example of a 28mm amateur theatrical called *Snow White*, which was shot in Blue Hill, Maine. That was a home movie as well. And we have found other examples.

AK: So now, do we know what camera that was? It's impossible to tell whether it was made on a Pathé Frères or on a Cook's camera, right?

AM: I think it is, because the three-and-one perforations would have been the same. With the 28mm, how did it do in Europe, do you know? Was it popular in Europe, the 28mm?

AK: I would assume so. Again dear, I have no knowledge of that. But as you see from those ads in the magazine we were looking at, there was a definite market for educational films in 28mm in this country.

AM: And newsreels as well, right?

AK: Right.

[End of Tape 5, Side 1]

AK: Keystone Manufacturing Company projector for 28mm.

AM: Do you want to face the camera a little bit with that? Okay, the first thing that I notice is that the perforations are different on the film.

AK: I have put a piece of what I would say must be Willard Cook's 28mm, or safety—is that safety standard?

AM: What's in there right now is definitely 28mm. And 28mm was always safety. But that does not have the three-and-one perms.

AK: Right. But Keystone designed this before the safety standard was adapted.

AM: Before which safety standard was adapted?

AK: With the same number of perforations on each side.

AM: So Keystone designed this projector--?

AK: Prior to 1918, which was—1917 or 1918, which was when this was adapted as safety standard.

AM: So in 1917, 28mm with the same number of perms on each side was adapted as the safety standard?

AK: Right.

AM: Who adopted that? Because with the Premier Pathéscope we just looked at, they still had the three-and-one perms on that one.

AK: Right. Well, Alexander Victor was very concerned with getting safety film more available to the amateur, to fraternal organizations, and so on. And in 1917 or 1918 he persuaded SMPE, the Society of Motion Picture Engineers to adopt this as so-called safety standard.

AM: 28mm?

AK: 28mm with the same number of perforations on each side.

AM: What did Willard Cook think about that? [Chuckles] Do you think he was put out because he was still doing the three-and-one on his Pathéscope?

AK: I'd have to think about that, how that would have affected him. I can't answer that off the top of my head.

AM: That's okay. So Victor was making a 28mm machine at that point?

AK: Yes.

AM: So was the Keystone projector a good projector, and were they long in the 28mm market?

AK: Keystone was—they started out as a toy manufacturer. They, at least in this period in their history, they were aiming at the low end of the market. This is basically a very inexpensively made projector. And it's amusing to me that they made this projector for this odd gauge, which was 28mm, three and one.

AM: Okay, so even though we have the standard 28mm film in there, this projector is actually a three-and-one projector.

AK: That's right.

AM: Can you move the film up a little bit and I'm going to focus in on the projector so everybody can see it is actually three and one. Good. Okay. Would you have thought that they would have waited until a standard was adopted and then made the 28mm projector for that?

AK: [Chuckles] Yeah.

[End of Tape 5]

Kattelle Oral History, Tape 6

August 25, 2003

Andrea McCarty: Today is Monday, August 25th and this is tape six of an oral history with Alan Kattelle at his home. We were going to talk a little bit today about 16mm film and cameras. You were going to tell me how or why 16mm is your favorite format.

Alan Kattelle: Right. Well, I've already recounted how I came to have the first Model A 16mm camera, and that of course stimulated me to research the subject. And I was tremendously lucky that I got started on research when I did, because so many of the people that were involved, the engineers, were still around and some of them [were] still working for Kodak. First among them was a man named Harris Tuttle. There's an amusing incident about Mr. Tuttle's name. He was a Kodak technician, but he was given the responsibility of doing a lot of the testing on the 16mm system when it came out. He made the first actual films with it. He filmed a cement plant in Rochester. So his name became known, and he said that the switchboards would get calls asking for Mr. Aristotle. [Laughter] Harris Tuttle. [Laughs]

Harris and I had quite a bit of correspondence, and we talked on the phone, and he was just a peach of a gentleman. And he provided me with a lot of information that I never would have acquired otherwise. One of the interesting, if somewhat gruesome, incidents about early 16mm film that he sent me a story on, involved the use—this was shortly after Kodachrome had been announced—

AM: This would have been 1937, 1936--?

AK: 1935. The University of Rochester Medical School was quite interested in this, and they described a very unusual procedure. One of their patients was an unfortunate victim of cancer, which had essentially removed his right eye and part of his nose so that there was a three inch hole in his face. He willingly offered to be examined. And the upshot was that they, using a just-introduced RCA Victor 16mm sound on film camera, Harris aimed this camera down the gentleman's throat so that the doctors could see the work of his vocal chords. And they had him pronounce different words and recite the letters of the alphabet, and they learned a tremendous amount about the function of the vocal chords in forming letters with 16mm film.

AM: That's very interesting to think about, because they may not have been able to use a monitor to know what they were seeing, so to get the exposure right, it was a challenge back then I think, to do that.

AK: It was. And Harris was a great man to do it because he was so familiar with the camera and the film. Another thing that I came across is the fact that the first 16mm camera--well, it was not 16mm at that time, but a man named Barnes had been assigned by Mr. Eastman to look into the development of an amateur camera. Of course one of the main requirements was economy. So the Barnes camera, interestingly enough, took 35mm film but exposed just half the width, and after half was exposed, the film was turned over.

AM: So would it have functioned the way Dual 8 functioned?

AK: Exactly. It was a predecessor of Dual 8.

AM: So what happened with that camera?

AK: The Barnes camera used 35mm, and Mr. Eastman was dead set against any amateur camera using 35mm because it was too easy for them to get nitrate.

AM: Right. I wonder too if it was very heavy? Every 35mm camera I've ever seen—

AK: Yes. I've seen the camera in the Kodak museum and it's pretty bulky.

AM: Because if you think about 28mm, 28mm cameras were very—not like this one.

AK: Light, exactly. Incidentally, we were speaking about 9.5mm and you asked me whether it was reversal, and at first it wasn't, but I've since learned that Pathé did come out with a reversal film for 9.5mm also.

AM: That makes sense. It would seem like they would need to in order to stay competitive, in order to keep the costs down.

AK: Right. Absolutely. I believe they used a slightly different process, but the end result was the same, one piece of film.

AM: Did Pathé make the 9.5mm film? Did they have to [manufacture] it?

AK: Pathé was a big manufacturer of film, but they were also one of Kodak's best customers for film.

AM: But it's unlikely that Kodak would have ever made 9.5mm?

AK: I don't believe they ever did, no. Another thing that attracts me about 16mm, possibly because I'm an engineer, I was fascinated by the mechanism. It was so thrilling to acquire—well of course, first came the camera. Then I had a call from a friend telling me that he had just learned of a gentleman who had a very early Kodak projector that I might be interested in. I went out and met the man and it turned out to be an early one. It was—at that time, the Underwriter's Lab had not accepted the fact that 16mm was non-flammable, and they insisted that the film supply reels be enclosed, which you can see in that projector.

AM: Who were the Underwriter's Labs, and who were they connected to?

AK: That's—I can't give you just a—It was a government organization? It's a public service organization charged with licensing certain equipment.

AM: Okay.

AK: They were insurance related.

AM: So they made sure that both the [film] and the—

AK: Yes. As you can see-- it's that camera. That one, yeah.

AM: Okay. Why don't we show that in a little while.

AK: Sure. But the other 16mm equipment, I didn't get the whole package all in one fell swoop. I got the camera, and then subsequently that projector, and then one of the screens which you've seen, which I think was neat. And one of my all-time 16mm projectors is the—I think it's called the Kodascope 1620, and it comes in a substantially big case. You find out why when you open it up, because the case converts to a stand with folding legs inside. So you have not only a projector, but a stand for it, all in one package.

AM: Oh, wow. So you do not need a table then?

AK: No, you didn't need a table. Yeah, nice.

AM: Wow. So the legs must be pretty tall?

AK: Yeah. They bring it up to that height.

AM: That is pretty neat.

AK: We can take a look at it later.

AM: Okay. That sounds good.

AK: And the Library Kodascope. I'm not sure if we've talked about that.

AM: We haven't, and I'd love to bring the camera down and show it. But why don't we talk a little bit about it to begin with.

AK: You want to talk now about it? Sure. Ever since I first saw the brochures and illustrations of the Library Kodascope--which was early on, twenty years ago at least—I just lusted after one of those. [Chuckles]

AM: Where did you finally find one?

AK: One dealer had a half a dozen. I don't know where he ever accumulated them. But he wanted a lot of money, and at the time I just didn't feel like spending it. And it was just a few years ago, a couple of years ago, a dear friend in Canada called me to say he was kind of breaking up his collection and he wondered if I might be interested in his Library Kodascope.

AM: What did you say?

AK: "Let's go." I wish you'd been here when the case arrived. He did a marvelous job of crating it on a skid, and the whole package was about so big. It took three of us to get it into the house. But, it's a beautiful piece of equipment.

AM: Do you want to talk a little bit more about—I was thinking about the whole Kodascope package; it was so well thought out. You had the camera. You had the projector. You had the screen. You had the film so that you could take the pictures to get developed. You had the Kodascope library so you could, if you

weren't shooting film, you could watch the films borrowed from Kodak. It really was a good idea.

AK: I think I've got something to say on that. Thanks to Harris Tuttle I learned that—I learned quite a bit of the background on the development of the 16mm, the whole 16mm project. For one thing, the initial camera was designed by a French man that Eastman had hired. Eastman learned that this man had, I think, designed the Pathé camera. I'm not sure which one. But anyway—

AM: Possibly the 28mm? Or the 9.5mm?

AK: No. I don't think it was the 28mm. But anyway, his name was Tessier, and he came over and designed a camera. And Harris Tuttle, I think, took an instant dislike to Mr. Tessier. [Laughs]

AM: Because of competition, or--?

AK: Maybe competition. But anyway, they didn't like his design even though he got a patent on it.

AM: And it was for 16mm?

AK: It was for 16mm. And it looked much like the present Model A, except all of the controls were on the aperture and the footage counter was on the front of the camera, curiously enough. The other thing I learned from Harris was that many people were involved in the design. Mr. Eastman himself was very much interested and watched every step. And also the managers of other departments: the manager of sales, film sales. So I think that may account for what a wonderful end product it was, because so many people had input into it. You know, the

marketing people would see something the engineering people would not see.

AM: So in that respect it really could be the complete package. Because you had the technology behind it, but you also had the designers on the team and the marketing people telling you what they thought would work.

AK: Exactly. Yeah. It was not an overnight thing. The Barnes camera was first made in 1917.

AM: Have you ever seen an example of the Barnes camera? Was there just one prototype, or were there several?

AK: I think there was just one Barnes camera, and it's the one in the Eastman house. Then I met other people. For instance, Pete Chiesa, who had so much to do with available light in film. There was a fiftieth anniversary celebration of the Amateur Cinema League in Hartford. I can't off the top of my head give you the date.

AM: Would it have been in the 1970s, or--?

AK: Yeah. 1978 maybe. I was invited to, I guess--I set up an exhibit on the history of amateur motion pictures, with the first camera and so forth down the line. And I was away from the table for half an hour or so, and when I came back there was a note saying a gentleman from Eastman Kodak would like very much to see [me]. And I don't know how I managed to meet up with him, but anyway, I met this gentleman. He introduced himself as Pete Chiesa. And he told me that he was an engineer with Kodak and he was very much impressed with my display. And I

think he said, “I have some other information if you’d be interested,” which was the beginning of another good friendship. We subsequently met in Rochester and we had lunch together. He was a wonderful source of information.

And many of the Kodak people, which I wrote about in the introduction of my book, were very generous with their time. One anecdote that I particularly liked was when Kodachrome was first introduced, they gave a sales manager from one department a camera to use and they told him be sure and crank it two revolutions per second. So he took it home for the weekend as they had asked him to, came back Monday morning, his film was developed, and it was all totally over-exposed. “What did you do? Did you crank it the way we told you?” He says, “No. I just thought you guys were trying to impress me with how much film we were going to use. So I cranked like one turn every second.” [Chuckles] So of course everything was over-exposed.

AM: So it sounds like the whole process was tested by Kodak employees.

AK: Yes. They characteristically gave employees an allotment of film by the way, that you could use up on your vacation or wherever. Another thing that I just came across, we were talking about the Ikonograph—this is out of place, but I—

AM: That’s okay.

AK: I just came across the fact that—you know it was designed by E. J. Rector, and it was to use 17.5mm film. And Rector got an

appointment with Mr. Eastman to show him his projector. It was in the winter time apparently. Eastman was quite impressed, and he wanted to have some movies made of his mother but he told Rector, "Come back in the summertime when we can go out in the rose garden. I'd like to see your film then." There's no record if he ever came back or not, but it is interesting that he showed it to Eastman.

AM: Well that makes me think about some film I saw at the Eastman house when they were testing the Kodacolor lenticular process. It seems to me that the gardens played a huge role in the testing of all of these film processes.

AK: Yes it did.

AM: It seems like they always went out to the garden.

AK: Exactly. I was promised a program of that, but I haven't gotten it yet. They just had the fiftieth anniversary not long ago.

AM: I'm sure that we can arrange for you to get that. [Laughter] Can I ask you a question? It goes back to what you were telling me about Tessier, the French engineer. Now, did he come up with the idea for the actual gauge, or was 16mm in the air somehow? Were there two people with the same idea? I mean, of all the gauges he could come up with, he had designed a camera for 16mm film. Why 16mm? Why not--?

AK: I think that Tessier was given that gauge. In other words, he was told, "Design a camera for this size film." They had done extensive testing on different gauges. They didn't want a

convenient multiple of 35. So they found out that 16mm gave just—it was big enough to have a good image. So that's what Tessier was told to do, use that as a [gauge].

AM: Okay. So it's not like he was sitting there himself and saying, "Oh 16mm sounds good. I'll try that."

AK: No. No.

AM: Okay. So already Eastman had settled on 16mm, and then recruited Tessier to go to work on it?

AK: Right. Yeah. They had briefly flirted with 17.5mm, but since that could be done with 35mm, they didn't want to use it.

AM: Since we're talking about 16mm in general, what about sound on 16mm? Do you have any anecdotes about that development, or--? If you don't, that's okay.

AK: No, I can't say that I do. Not off the top—I resolved that if you ask me something I don't know, I'm going to say I don't know. [Chuckles]

AM: Good. I'd rather you did. And you know a lot of this is in your book, so we can go look there. And just because I ask something doesn't mean you have to know it. Before we move on to talk about specific cameras, is there anything you'd like to add about 16mm?

AK: No. I think we'll get—16mm you know, almost evolved into professional gauge, but I guess we can get to that later this afternoon.

[Tape paused]

AM: Okay, we're going to talk about some specific 16mm cameras now, starting with—

AK: Well if I could only keep one camera, I'd probably keep this one.

AM: Which one is that one?

AK: This is the Ciné-Kodak Model A, 1923, the first amateur camera to use that wonderful film called direct reversal 16mm film. And I often say that it's the most important development in amateur film there was. It did two things—three things; it eliminated the danger of nitrate film. It cut the cost of film in half just by its width, then it cut it again by being the one piece of film that you could process into a [print]. The first Model A was designed by a Frenchman named Tessier whom Mr. Eastman had hired. His patent drawing shows that he put the focus and these other controls on the front of the camera for some reason.

AM: Can you turn the front towards me and I'll do a close-up on the front? So originally he had the controls on the front. And then, why don't we see the back of the camera. How did he change the design from his original?

AK: Kodak's own designers turned it around and put all the controls on the back where they belong.

AM: And it was a pretty simple camera to operate, wasn't it?

AK: Very. By the way, it was designed for use on a tripod only. There's the tripod hole on the bottom. It was hand-cranked, and

the instructions were very clear. You turned the crank at two revolutions per second. It was quite simple to load.

AM: And this was cartridge loading, or did you load the actual film?

AK: I'm sorry. I didn't hear that.

AM: For the first 16mm, how was the film provided?

AK: In spools.

AM: In spools, okay. It was probably easier to develop. Most people sent the film back to Kodak to get it developed, right?

AK: Right. But they put processing stations—it was extremely important that the processing be done properly. There was one part of the procedure that was called the second exposure I believe, and that had to be done just right. So these labs that they established had to be carefully instructed in how to process it. But they managed to do it. They had, as I said in the book, within a few months of its introduction, they had processing labs all over the country and at least one station on one of the luxury liners that went to Europe. They had processing on the ship.

AM: So you could take your film and then watch it during your journey.

AK: During the voyage, yeah.

AM: I wonder if they ever had a [group] screening on those ships.

AK: They did. Mr. Eastman, I think it was Eastman himself on one of his trips, filmed some of the notables that were traveling with him and then invited them that evening to a showing on board ship. It was quite impressive.

AM: Can I ask you, these processing stations that they set up, were they the same local offices where people could rent their Kodascope films to project on their 16mm projectors, or--? Those were also available through local camera shops, were they not?

AK: Yeah. I don't think the processing stations were allied to the camera stores. I think they were two separate operations, if that was what you meant.

AM: Yes. Because I can remember looking in Kodascope books, where they would have the list of films that were available to you as a consumer, and it seemed like there was an office or a dealer in every city where you could go and get your Kodascope films.

AK: Yeah. The customer got the film from the dealer, and took it back to the dealer, who in turn sent it out for processing. So one processing station in Cleveland could be serving a dozen retailers.

AM: Oh I understand. So the processing center didn't necessarily deal with the consumer. The consumer dealt with their dealer who then dealt with the processing. Because they needed to be able to turn the film around quickly, so they needed regional labs to turn the film around quickly. They would use the regional [center].

AK: Exactly. Yeah. Okay?

AM: Okay. What do we have here?

AK: This is the [Ciné-Kodak] Model B. You see, the Model A was hand-cranked. The Model B was Kodak's answer to Bell & Howell, who had a clever kind of one-upmanship with Kodak. When Kodak—of course Kodak told everybody, every camera manufacturer, that they were working on the 16mm film. Because his main interest is selling film, Eastman was perfectly happy to have competitors who would have to buy their film from him. As I say, Bell & Howell kind of got the jump on Eastman with their first camera that had a spring motor.

AM: Like this one?

AK: Yes. And that obviated the need for using the tripod, which was kind of a nuisance.

AM: So you don't have to crank anymore?

AK: Right. It was so much nicer to be able to hold it up.

AM: Let me get a close-up of the Bell & Howell. What was that model called? Does it have any name? Is it just--?

AK: It was just called the Filmo. And then all Bell & Howell cameras for years were called Filmo this or Filmo that. We'll get to—

AM: You want to talk about the other Filmo we have?

AK: Yeah, that's—I'm sorry I don't remember off-hand what the number on that one was.

AM: That's fine. I was interested more in the whole Filmo name.

AK: Yeah, okay. This is the Filmo 75.

AM: Which is gorgeous. [Chuckles]

AK: Which is absolutely gorgeous.

AM: I'm going to do a close-up on the detail there.

AK: This particular one we're looking at, it came in three colors. This is the silver model.

AM: And it also came in a brown?

AK: Brown, and—

AM: Black?

AK: Black or blue. [Laughs] Black I guess. Oh, and the advertising for this camera described it as "watch thin." It's not a watch.

[Laughs]

AM: Yes, but it is very thin compared to the others.

AK: Yeah, and the ad shows a man, I think it shows—one of their ads shows him putting it in his overcoat pocket, which you certainly couldn't do with a Kodak Model B.

AM: Right. So let's a minute about—Bell & Howell had been—Was the 16mm their first entry into the camera business?

AK: No. For one thing, Bell & Howell—their first entry was 35mm. But they too saw the handwriting on the wall, the need for an amateur camera system. And they were independently working on a 17.5mm. I was fortunate enough to see this model when I visited the Bell & Howell headquarters in Chicago. A very nice person there managed to dig out an illustration of the—what do you call it? Anyway, the first model. They actually constructed a 17.5mm.

AM: A prototype?

AK: A prototype.

[Tape turned off.]

AM: So Alan, you were talking about how you saw the prototype for Bell & Howell's 17.5mm.

AK: Right. As soon as they learned about Kodak's development, they dropped the 17.5mm.

AM: Were they going to make it compatible with any of the other 17.5mm cameras on the market?

AK: I imagine they were, yes.

AM: Because I noticed that the two 17.5mm formats we talked about had different sprockets.

AK: Yes. That's all I know about their prototype, is that they made it.

AM: So tell me about the advance represented by the spring motor drive. Was Kodak surprised or threatened by that?

AK: They had developed a peculiar alternative to the tripod. They made, essentially it was a cane which would double as a support. There's a photograph I wish I could lay my hands on right now of one of Kodak's engineers with the Kodak on a cane.

AM: How did it stand up? Did it have little legs at the bottom, or--?

AK: No, you just had to—

AM: Oh, you just held the cane. I think Bell & Howell's works better.
[Laughs]

AK: Yeah. By the way, this is a great resource for people that have a Bell & Howell—I say, "Give me the design number." I have a catalog of Bell & Howell design numbers that's about two inches thick. So if you give me the design number, I can tell you

about when it was made. And if you give the serial number, I can sometimes tell you when it was made.

AM: So can I ask about the relationship between Kodak and Bell & Howell? Was there a spirit of competitiveness? Was there any cooperation? Were they each pretending the other didn't exist, or--?

AK: Well there was a great deal of competition. I don't think there was any particular ill-feeling. As I say, Kodak, their money-making was in film, and they were delighted when there were more cameras out there using more Kodak film. Bell & Howell, they didn't make film so—

AM: So kind of a friendly competition?

AK: Yeah, exactly.

AM: What about the camera code on the side of the film? I've never thought about this, but is there a symbol that represents Bell & Howell cameras?

AK: Absolutely. And I just came across a mention of that code. The headline on the article is something to the effect of *Finding Stolen Cameras*. I had never thought about that, but if somebody lost or had a camera stolen, I suppose they could show the police—well the only way you could track the camera was to go to the man who processed the film at the processing plant. I didn't read the article, but—

AM: That's okay. What was the gist of it?

AK: The gist of it was that, by those edge codes, you could look at a piece of film and know what camera took the film. Kodak, Bell & Howell—

AM: You would know what kind of camera, but you wouldn't know the specific camera.

AK: Yeah, you'd know the model.

AM: But you wouldn't know the serial number. Because the thief could say, "Oh this is my camera. I've had it my whole life."

AK: Exactly. Yeah. As I say, I didn't finish the article, but that doesn't seem like it would be a great help. [Chuckles]

AM: What was the logic behind thinking about doing that? Adding the camera code to the edge of the film?

AK: Well, I can think of one reason. A customer complains to Kodak, "Here, I bought your film and I ran it through my camera. And look at these lousy results." And the Kodak people look at it and say, "Well look friend, you weren't using a Kodak camera. You were using a Bell & Howell." [Laughs] Right?

AM: Okay. I guess that's true. So did they come up with a symbol for just the major cameras on the market? It's not like they could have a symbol for every 16mm camera out there.

AK: That's right. I've got the table in the book. I can't—well, let's see how many were covered. [Looking through book.]

AM: There was an impressive list you say.

AK: Yeah. There were at least thirty Kodak identified, and perhaps fifteen competitor's 8mm cameras, and another thirty or so competitor's 16mm cameras.

AM: That is impressive. Do they still do it today? Do you know?

AK: Well, I don't think they do it on Super 8. I think they gave it up at that point.

AM: But I wonder, if you put some Kodak stock into a Model A camera now, you'd probably still get it.

AK: Oh that's right. It doesn't depend on the film. It depends on the camera.

AM: So Bell & Howell came up with the spring motor drive in their Filmo, so then Kodak answered that with the Model B.

AK: Right.

AM: Is there anything else about the Model B?

AK: Yes. They also introduced readily exchangeable lenses, such as this one. [Removing lens.] [Chuckles] I say "readily," and now I won't be able to get it off. As an alternative to a tripod, Kodak used this system. The latch came up, and the lens came off. You could substitute different lenses.

AM: So they produced lenses for the consumer to use?

AK: Absolutely. I believe that Kodak also bought from Bausch & Lomb. I believe you will find Kodak cameras with non-Kodak lenses.

AM: But you would have to buy your collection of lenses separately, right? Did the Model B come with a few lenses, or did you have to buy those as accessories?

AK: No. You specified to the dealer what you wanted.

AM: So things were quickly becoming more sophisticated.

AK: Absolutely. I might add that this Bell & Howell design—

AM: This is the Filmo.

AK: The Filmo design was one of the longest running designs. From 1923 up until they went out of business, they were still making cameras with this design. And also, the 16mm Filmo camera was the father so to speak of the famous—[Long pause] This is the 35mm version of the same design, and this is called the Eyemo. This happens to be a military model.

AM: This is the Bell & Howell Eyemo. Was this a 35mm camera for the consumer market? Or, what was the primary--?

AK: No, it was for the professional market. As bulky as it looks, as you can well see, it is a lot smaller than most professional cameras.

AM: That's what I was wondering. It's smaller than a lot of them that you have here.

AK: I was just reading about the filming of *D-Day* and *Saving Private Ryan*, what's-his-name, the director tried to—

AM: Spielberg?

AK: Spielberg, yeah. He tried to duplicate, as much as possible, the actual cameras that were used. I was surprised to learn that the American cameramen almost all had Eyemos. The British had [chuckles] another camera. You want to show it now?

AM: Yeah, sure. Can I put the Eyemo back, just to get it out of the way? [Changing cameras]

AK: Did I tell you that the Eyemo was a favorite with Hollywood cameramen for certain types of location shots? The film *Wings* was made with many Eyemo cameras.

[End of Tape Six, Side 1]

AM: So Bell & Howell kept developing 35mm alongside their 16mm production?

AK: Right. I'm not sure there was a great deal of change in the design.

AM: And so this camera, you said that this was the camera that the British cameramen were using? [Andrea is gesturing to a DeVry camera.]

AK: In the story, there's a new book out apparently on D-Day and it shows the British cameramen loading their DeVry and it's very easy to see the DeVry logo.

AM: And so DeVry was another American out of Chicago as well?

AK: Yep.

AM: At least from the logo. So Bell & Howell was out of Chicago too. So DeVry and Bell & Howell were from Chicago. What was DeVry's position in the camera market in relation to Eastman Kodak and—

AK: A very distant third, if even third. [Laughs]

AM: Okay. Because you have some DeVry 16mm cameras [here]?

AK: Yes—

AM: Why do you think it was that the British cameramen took [up] with DeVry? Was it just that DeVry—?

AK: I'm not sure that they preferred it or whether it was availability.

AM: Could it be something as simple as DeVry had the good luck to contact the British Army?

AK: Right.

AM: Okay. There was another Kodak camera we wanted to talk about, and since we're on the topic of the military—[Retrieving another camera.] What do we have here Alan?

AK: We have here a camera, motion picture, strike-recording, 16mm, Type KD9A, contract with Eastman Kodak Company. This camera is the property of the U. S. Government. It's a little electric-driven 16mm camera.

AM: So tell me how this camera was used. I see some film in this.
[Chuckles]

AK: [Chuckles] Well my understanding, and given the name on the nameplate: strike recording, it enabled the fighter pilot to turn on the camera at the time he was firing the machine-gun at the enemy planes. Thereby if he got a strike, he could have a record of it. There would be a record of it on this film.

AM: I see. Compared to the other designs, this one is fairly utilitarian.

AK: Exactly. No frills. But interestingly enough it had a fairly sophisticated set-up. In fact there were two electric heaters. You can imagine at fifteen thousand feet, or wherever the plane was, it was pretty cool outdoors so they had to have heaters to keep the motor-wind and the film pliable enough to go through the camera.

AM: Were the same heaters used for explorers who were using cameras to record their expeditions to the Arctic?

AK: Here's where I say I don't know. [Chuckles.]

AM: Okay.

AK: I wouldn't have know this, except that somewhere there was a wire diagram and it showed heaters.

AM: Another Kodak camera that we wanted to talk about was this next one, just from a design perspective.

AK: Oh yes. This is the [Ciné-]Kodak Model E. You notice it has the conventional two film spools, which in most cameras were one on top of another. But whenever this came out--I don't remember when it was exactly, whether it was the late '30s or early '40s--most men wore a fedora. You know what a fedora is. It's a hat with a brim. And Kodak's advertising for this camera showed the hat-wearing cameraman like so. You see you're just getting in the view with the brim of his hat.

AM: Got it. See, I love that design. Somebody was really good to think of that. It's actually a nice-looking camera.

AK: I think it is too.

AM: Let's do the last Kodak that we have down there.

AK: Okay. [Getting camera.]

AM: Oh, that one looks heavy. [Loud sound as camera is placed on table.] What is so great about this camera? Because it's good-looking?

AK: Well, it's the absolute top of the 16mm line for Eastman Kodak. It's the Ciné-Kodak Special. This particular one is special in

more ways than one, in that it has a very special turret. This is a four-lens turret, quite unusual. The turret was made on order for this camera by a firm in Los Angeles called Par Products. It has all kinds of nice telescopic finders, three or four lenses. One thing about the Ciné-Kodak Special—it was quite expensive. I don't recall the price off-hand, but if you wish, Kodak would have your name engraved on a little plate and put on the camera.

AM: Wow. Focusing in on this, I see it says "Louis K. Eastman". Any relation?

AK: Not that I know of.

AM: Interesting. So that was the top of the line. Around when was that produced, and when did it cease production?

[Tape turned off]

AM: Okay, we're back. Still talking about the Ciné-Kodak Special.

AK: The first Ciné-Special came out in 1933. It was maintained in production until 1948. There were a number of design changes over that period, but the latter ones were called the Ciné-Special 2. I would suspect—in fact this one was probably used in the medical field, being that it was owned by a doctor. My other Ciné-Special with a multiple lens came from a professional photographer in the next town, who was upgrading all his equipment and he let me buy it.

AM: So I have a question: Did they bother to market these as much as they did the cheaper models? I mean, clearly, the kind of

consumer who bought this wasn't the same consumer who, you know, trotted out the Model B once a year.

AK: Right. But they had ads in *Popular Photography* for the Ciné-Special. I think they tried to cover all bases. I think you can find in the *Popular Photography* magazine, you can find an ad for a Brownie movie camera on one page, and later on in the magazine for the Ciné-Special.

AM: That would make sense that they would advertise the Ciné-Special in *Popular Photography*.

[End of Tape 6]

Kattelle Oral History, Tape 7

August 25, 2003

Andrea McCarty: Okay Alan, we were talking about 16mm. Why don't we continue?

Alan Kattelle: All right. Kodak's introduction of 16mm, as we've just seen, produced some terrific cameras. But it also [chuckles] gave birth to probably dozens of small manufactures who rushed into the market with some of the most primitive cameras. I've chosen this one as an example. This is called the —this was made by The Filmograph Corporation. [Opening camera]

AM: Oh, now I can see it. South Easton Massachusetts, which is a really small town.

AK: I would believe it. [Chuckles]

AM: Because Easton is a small town, and I've never heard of South Easton.

AK: It is absolutely bare-bones.

AM: [Looking at camera.] I see. Show the front so we can see how small the lens is. Wow. What is there to say about that camera? It just looks like a tin box.

AK: Exactly. It was designed apparently for waist-level. I don't know if you can get that. Here's the finder down here, so the operator is looking down into the camera.

AM: Okay. I didn't know that. Wow, so you would—

AK: And that's the lens down [there]. And it's hand-cranked. And that's it. There's nothing sophisticated about it at all.

AM: Nothing much else to it?

AK: It does tell you where to put the film reel.

AM: Well that's nice of them. [Chuckles]

AK: Yeah. [Chuckles] That's perhaps typical. Of course there were other manufacturers who joined the 16mm parade. One of them was Keystone. Keystone was a Boston manufacturer of metal toys, including a metal toy I owned as a child. It was a mechanical digger. But about 1919, Keystone came out—their first product was a very inexpensive projector. Then they went on to make 16mm [equipment]—quite a variety, and some of them were quite sophisticated cameras.

AM: So they were maybe a middle of the line manufacturer?

AK: Middle of the road, exactly.

AM: Were there any other manufacturers that were notable?

AK: Yes. There are companies like Stewart-Warner.

[Tape turned off.]

AM: Okay Alan, what do we have there?

AK: We have here one of the first sound on film cameras for the amateur. This is called the Auricon Ciné-Voice. It's for 16mm film. I believe that it's magnetic, but I wouldn't swear to it. It came out in 1938, I believe. And it required some auxiliary equipment, such as an amplifier, a battery pack, table microphone, and cords. Inside of the cover it has a sound absorbing lining. It would cut down the camera noise. [Opening camera] Here's the interior of the camera itself.

AM: So you said you believe that this is magnetic and that it was produced around 1938?

AK: That's what my recollection is, yes.

AM: Was this one of the first systems available to the amateur?

AK: Certainly. I can't think of—I'm sure there was an earlier one...

AM: But it's one of the first.

AK: One of the first.

AM: And it was developed by a Dr. Firth?

AK: Yes. Along with somebody else, they formed the Berndt-Bach Corporation, in Hollywood, by the way.

AM: So the first sound system available to the amateur was magnetic. Was there also an optical?

AK: Yes. That's what we'll see next.

AM: Okay. I want to note that I didn't have the tape recorder turned on the first time Alan talked about the Bach Auricon Ciné-Voice,

so if you see this on the mini DV [videotape] you'll see it twice. On the tape recording, we get to hear about it just once.

Here's a note for the listeners of the tape recording: Alan also mentioned that the Bach Auricon Ciné-Voice was one of first sound systems available to the amateur.

Okay Alan, what do you have there?

AK: This is the RCA sound camera, which I believe was announced in 1935, but didn't actually reach the market until 1938. It was spring motor driven. 16mm. The recording was on an optical track, and as I understand it, the cameraman was also the man producing the sound. His voice would be picked up by a microphone, and it would modulate a light beam that focused on the edge of the film, thus producing the optical sound track. [Note: Alan is referring to the RCA-Victor 16mm sound-on-film camera. See Kattelle, 231-32]

AM: Okay. So that was fairly sophisticated, and clearly very expensive no doubt.

AK: Probably. I can't tell you the—it had two speeds: 16 and 24 [frames per second]. I believe the 24 [fps] was preferred for sound recording. [Maneuvering camera]

AM: But you could you have recorded at 16 [fps] if you wanted to?

AK: Yes, but I think the quality improves the faster you [record] on the film.

AM: So RCA was a company that was fairly well-known for its sound technology, and so then they decided to get into the camera market.

AK: Right. The amateur camera market.

AM: Did they continue very long in the camera market?

AK: I don't believe so, because this camera very rarely shows up, so I don't believe it reached a very wide market.

[Tape turned off.]

AM: I have a couple of questions about sound on film for the amateur. Was it very expensive for the amateur to do sound on film?

AK: Well yes, because the sound camera was much more expensive than the silent camera. I don't believe the film was any more expensive, but his initial investment was. And then again, he had to have a sound projector, adding to the expense.

AM: And do you think—Were the sound cameras and the sound projectors popular?

AK: I don't believe so. Again, for the simple reason that you don't see a lot of them. And one film critic I remember, or film columnist, had this rather cynical comment to make about sound for the amateur. He said, "Good heavens. Ninety percent

of the amateurs don't know how to take a silent picture. What are they going to do with sound?" [Laughter] Which I thought was kind of cynical, but probably pretty much the truth.

AM: Right. That's a good point. I had another question about 16mm. A lot of the early cameras were spool-loading. When was 16mm offered in cartridge form?

AK: Oh yeah. From the earliest days almost, different manufacturers came out with 16mm in cartridges.

AM: What was the advantage of one over the other?

AK: Simplicity of loading. People seemed to have a lot of trouble making sure that the film was threaded through the aperture and into the take-up spool. It was so much nicer to just be able to drop a cartridge in.

AM: Okay. So there was the spool-loading. There was the cartridge-loading. Is a magazine-loading camera different?

AK: No. That term is—I'm not sure which is correct, magazine or cartridge. There probably is a distinction. I don't know off-hand what it is.

AM: There was one more 16mm manufacturer that we wanted to touch on, and that was Victor.

AK: Yes. Well Alexander Victor, sometimes called the Swedish Magician, born in Sweden, came to this country as a young man, and hooked up with a magician, and for a while was a traveling magician. So, a couple of things happened. In one place, one theater, he was all set to give his act and the theater

manager would not let him cut a hole in the stage, which he needed for one of his tricks. [Chuckles] And subsequent to that, I believe the barn where he was storing his magic equipment burned, and that was the end of his career as a magician.

He started out, I believe, making slide projectors. But he sure caught on to the idea of the coming importance of making home movies, and made a couple of interesting cameras.

Would you get that out? This is Victor's first 16mm camera.

AM: [Looking at the camera] Victor [Animatograph] Corporation.

AK: This camera has an interesting film path. I don't know whether I should say it's a copy, but it's similar to a number of Kodak 16mms, where they had the spools in parallel arrangement.

AM: Did Victor make any other gauge equipment besides 16mm? Was he in on any of the early rush to find a format?

AK: I don't believe that he—He came out with this just as Kodak announced the 16mm system.

AM: This camera has great instructions. Wow, that's great.

AK: And the story goes that one of Victor's first customers was Mr. Willard of the Willard Storage Battery Company, and Mr. Willard says, "Why don't you make an electrically driven camera?" So Victor says, "Okay, I will."

This is his masterpiece. [Retrieving another camera.] The Victor Ultra.

AM: Oh, the Victor Ultra Ciné camera. Now what's the advantage of having the electric motor, or the electric drive?

AK: Well, because you didn't have to stand there and turn the crank.

AM: But with the spring motor drive, you didn't have to turn the crank. Did you?

AK: True, but you had to remember to wind the motor. This is an electrically driven camera. You'll notice that it's longer by two inches than the other camera, and that's the battery compartment back here. [Working with camera.] The film path is the same as in the other one. This camera I was able to purchase from a gentleman whose name escapes me right now, but he was a very important man in lens design. It was very kind of him to let me buy one of his. There are only, I think, three or four of these known to exist. [Note: Alan bought the camera from Edward Kaprelian.]

AM: Well, why are they so rare? Was it not very popular?

AK: It wasn't very successful. The batteries lost power very quickly, they were a nuisance to keep charged, and it just wasn't very successful.

AM: Okay, but clearly that caught on later, the whole idea of having batteries. Did Kodak perfect that? Was that another--?

AK: I think between Kodak and Bell & Howell—

AM: Anything else to say about Victor?

AK: Yes. He went on to have quite a career. He made a slide projector and he made the Victor Animatograph projector.

AM: What's the Victor Animatograph projector? You don't need to show it. Do you just want to talk about it?

AK: Oh dear. I think that's the one that—Or was that a DeVry? No. I'm sorry. I can't—

AM: That's okay.

AK: You can read about Victor in my book. He was an interesting character. He lived to be quite well along, always inventing all the time. That's all I can say about him.

AM: Okay. Let's talk a little bit about one of your projectors.

[Tape turned off]

AM: Alan, we were just talking about Victor, and you were saying something about the Victor Animatograph?

AK: Yes. Victor made an interesting 35mm projector which was designed for portability. Because in that day, the late 1920s, early 1930s, there were traveling motion picture entrepreneurs. That's the 35mm portable projector.

AM: I'll show that when I pan the room.

AK: Okay. He made another interesting projector, and that's the Victor Animatophone, which is just to your left down there. It's a 16mm projector combined with a record player.

AM: I'll get a close up of that one in a little bit. That's very interesting. What year was the Animatophone? Around when would that have come out?

AK: In the late 1920s, early 1930s.

AM: So that was around when the sound on film craze hit the theaters. The amateur could play music along with—

AK: Yeah. But that Animat—Oh, you're talking about which one?

AM: I was talking about the Animatophone.

AK: This was designed for home use. Yeah.

AM: Okay. But it was designed to play music alongside the film, right?

AK: Or maybe there was a film of boxing. I think one of them is championship boxing. So it was a film with the announcer, you know, commenting.

AM: So did Victor release film along with record albums to be played?

AK: Yeah. You got them together.

AM: That's really great.

AK: Rudy Vallee was one of the—You ever hear of Rudy Vallee, the singer? He owned a Victor Animatophone. His picture is in the book.

AM: Selling one? Hawking an Animatophone?

AK: Oh, I don't know what he was playing. Maybe his own records.

AM: Was he used in an advertisement, or do you have just a picture of him with the Animatophone?

AK: I think it was a Victor ad.

AM: And was the Animatophone very popular for home use?

AK: I doubt it. Again, so very few of them show up.

AM: And the Animatograph was marketed to professional exhibitors?

AK: Yeah. And that, again, must have had a fairly limited market.

AM: But that's interesting for a traveling magician to invent that for

the professional exhibitor.

AK: Right. I think there's a picture back there of—

[Tape paused]

AM: Okay, we didn't have any luck finding the picture but we did find a projector.

AK: This is a 16mm Kodascope projector. I was very pleased to acquire it because it's one of the first that Kodak made. The Underwriter's Laboratories—that's the organization that had to give their approval to motion picture machinery in general. Since this was designed for home use, despite the fact that Eastman assured them that it used non-flammable film, they still required that the feed and take-up spools be closed.

[Working with projector.]

AM: When did they stop requiring 16mm projectors to have the enclosed--?

AK: Oh within months, or less.

AM: So that was really one of the very earliest Kodascope projectors?

AK: That's right. Yes.

AM: I noticed that on one of your 16mm projectors has a seal. Or one of your projectors does-- it may not be 16mm. The Underwriter's Laboratories gives every projector a seal?

AK: Right. If it was to be used in a public place, it required acceptance by the Underwriter's Laboratories.

AM: And I also noticed a machine over there where the motor says that it was the same motor used to operate a sewing machine.

[Chuckles] I'll read it to you. It says, "Westinghouse Sewing Machine Motor". I just thought that was interesting.

AK: I think it is too. I'm surprised that Kodak would let them—

AM: It was actually the Pathéscope.

AK: The Pathéscope?

AM: Yes. So they were using sewing machine motors on 16mm projectors.

AK: [Chuckles] Well I suppose the prospective customer might say, "Well if the motor runs out I can always go down and swipe my wife's sewing machine motor." [Chuckles]

AM: I'll show it to you when we're done. It's pretty interesting. Is there anything else you can think of to add about 16mm? That was a brief discussion, but—

AK: No. Except that 16mm hasn't died out yet. It's still used as far as I know.

AM: It seems to be. I think it's dying out a little bit faster now that churches and schools don't use it anymore, with the advent of video.

AK: Right. Yeah. They were big customers for a lot of years.

AM: Because we had spoken already about the brief life of 35mm safety film in the late teens, before 16mm came out. And then the churches and schools started to adopt 16mm. How did 16mm fare after the introduction of 8mm and Super 8?

AK: I think it probably lost a segment of the market. I don't think Super 8 immediately interested the scientist or the medical photographer. They probably liked the bigger image and stayed

with 16mm, but I think the average amateur, of course, was delighted with how much less expensive it was.

AM: And with color it didn't matter because you could have either one in color.

[Tape turned off.]

AM: At this point, on the mini DV [videotape], I'm going to photograph the Victor Animatograph and the Victor Animatophone so that we can see what they look like.

[Tape turned off.]

AM: On the mini DV [video]tape, you just heard Alan give a brief description of the Victor Animatophone. He talked a little bit about how the record and projector were driven by the same drive shaft so they were able to sync up correctly.

[Tape turned off]

AM: Okay, what is that?

AK: This is one of the records that went with the Animatophone. The producer was Gillette—or the sponsor, I think you would call it. *Cavalcade of Sports*. I sort of remember that. This particular record is a fight of Joe Lewis versus Tammy Mauriello. Whoever heard of Tammy Mauriello? [Chuckles]

AM: Well he lives on in infamy now, [Laughter] thanks to the *Cavalcade of Sports*.

AK: And it's dated September 18, 1946. Alright?

AM: Okay. Great. Wait a minute. September 18, 1946? That seems a little late, doesn't it? I would have thought the Animatophone would have been used much earlier than 1946.

AK: I don't know. I'm wondering if this record could have been marketed to other people who didn't own an Animatophone. They were played on any—I can't answer that.

AM: Okay. Alright.

[Tape turned off.]

AM: Okay Alan, I wanted to make a note just to clarify our earlier conversation. The Victor Animatophone was produced between 1930 and 1932. People can make of that what they will.

[Chuckles] Let's talk about—This is my favorite. What is this?

AK: This is the Sound Kodoscope Special.

AM: You want to tell me a little bit of the background behind this?

AK: As much as I know of it. The story goes that the workload at the Hawkeye Factory in Rochester—that's Kodak's Hawkeye plant, where they built the projectors—the workload had slacked off in 1937, and George Eastman was very good about his workforce. He always did the right thing, and he didn't want to lay off people if he could help it. So the story goes, anyway, that he told the manager, "Put your people to work on the best 16mm sound projector that you can possibly make. I don't care what it costs, but make it." And this is the result. And it is a classic, not only in appearance, but in its mechanical sophistication. Want me to try to open it?

AM: Sure. This is the one that's tricky to open, right?

AK: [Opening projector.]

AM: It's very elegant. It's just so elegant.

AK: [Chuckles] Yeah. Now the beauty of this projector was its very unusual film path. Conventionally, a projector that was going to show a thousand foot reel, the reel being that big—

AM: Being how big Alan? About? Can you motion how big? You can just show with your hands if you want.

AK: Shall I get one with the film on it?

AM: No. No, don't bother. This is fine.

AK: Okay. In the conventional projector, with the bottom take-up reel, the projector had to be placed at the edge of the table because the reel would be out here. But Kodak's engineers overcame that requirement by this interesting arrangement for the take-up reel. [Positioning projector] Here it is. You see it can be right on the same table.

AM: And it doesn't interfere with the lamp, with the path of the light.

AK: No. Of course the film path was very interesting. It went down through here--

AM: Do we want to show this to the side so you can see?

AK: And through there, and then onto the spool.

AM: So it made a little curve. Okay.

AK: Yeah. That's one interesting part of the design. The other part is that the gears are all running through oil.

AM: What do you mean by that?

AK: Well, instead of having oil bearings where you drop a little oil, the gears were in a little vat down here. It's got oil in it. It's like the crankcase of a car. This projector was not cheap. The list price in 1937 was 800 dollars, which in 1937 was a lot of money. I have no idea how many of them sold, but they're very, very rare.

AM: The design is gorgeous. It's very art deco.

AK: Yes. Art deco design.

[Tape turned off]

AM: Okay Alan, you had something to add about the Sound Kodascope Special.

AK: Well of course all we saw was the projector itself. Naturally the sound output had to go through an amplifier and a speaker, and that was a package as big as the projector.

AM: Do you have that?

AK: Yes.

AM: Okay. We don't need to show it. [Chuckles]

AK: Good. It's over in the garage. [Chuckles]

AM: Another thing I was going to ask you, we were talking at lunch about why, on a personal level, 16mm is your favorite film gauge.

AK: Oh yes. And I said that I thought perhaps it intrigued me because the 16mm system and I are about the same age. Actually 16mm was more or less introduced in 1918. I was born in 1919. But as I also told you, I missed out—by not being born in 1918, I missed out on getting the Kodak Anniversary

Camera. In 1938, on the fiftieth anniversary of—

AM: Or was it 1918? Was it 1918, not 1938?

AK: No. That was the birth year. And in 1938, on the fiftieth anniversary of *the* Kodak camera, the first Kodak camera, Eastman Kodak gave away five hundred thousand Brownie cameras with a little gold seal on them to any child who was born in 1918. I missed that.

AM: By one year. When you say that more or less 16mm was introduced in 1918, what do you mean?

AK: No. I shouldn't have said introduced. It was almost ready for introduction in 1918.

AM: Right. And what happened in the ensuing five years, do you think?

AK: Between 1918 and 1923? That's a good question. 1918 was when Barnes, as I might have mentioned-- an engineer with Kodak offered an amateur camera which took 35mm but, as in dual 8, it was filmed on one half of the 35mm film then turned over on the other half. But of course that was on nitrate film and so Eastman said no, we won't use that. So Barnes and other engineers continued and, as I say they—We recorded this didn't we, about Tessier?

AM: Yes. Alan, what I was wondering is that you had said how Eastman began work on the 16mm format before World War I. Was it after World War I that they, say about in 1918, that they went back to it seriously and geared up for the production and then [brought it out in] 1923?

AK: Yeah. It was pretty well nailed down by 1918, I suppose. And they—Let's see, the war wasn't over until 1919—I can't tell you anymore absolutely, or why there was that gap of four years. Or five years.

AM: Okay. That's fine.

[Tape turned off.]

AM: Alan, can you tell me about the introduction of 8mm for the amateur market?

AK: Well the thing that sticks in my mind about the introduction of 8mm, which was 1932, was the fact that it came out when there had been—within a few years prior to that, there had been several attempts to save the consumer money, such as the Movette that we talked about, and the Kemco HoMovie system. And there were other amateur gauges, or attempts at amateur gauges, and when 8mm came out, it knocked all those other gauges out of the field totally, except for one. And that was the 9.5mm, which continued to be produced.

AM: Was the attempt to save the consumer money, was this also an attempt to penetrate the market even further and to make amateur moviemaking available and affordable for people without as much income? Was it the depression?

AK: No. I'd say it was absolutely, judging from their ads—from Kodak's ads, they had this invention. It cut the cost of film, and correspondingly it cut the cost of the camera in half, or even more than that. An 8mm camera was so much simpler and smaller to build. I think that the motivating thing was that if we

can sell a camera for five dollars instead of twenty-five dollars, there are going to be ten times as many people buying it. And that's what motivated...

AM: Especially in the 1930s when people did not have as much money, even the more well-to-do people.

AK: Right. And the Kodak ads just played that up. They said, we cut the cost of film so much and cut the cameras so much. And, "Makes movies no more expensive than snapshots," was one of their phrases. They weren't worried about the other competitors at all, I don't think.

AM: Okay. Well let's get out some 8mm cameras and talk about them.

[Tape turned off.]

AM: Okay Alan, we thought of one more thing to add about 16mm.

AK: I have in my hand a Bell & Howell 16mm magazine camera, Model 200. A very handsome looking camera that took a 16mm cartridge, or magazine, whichever you prefer. It had an interesting method of changing lenses. [Working with a B&H Model 200 Auto Load camera.]

AM: Oh wow. That's pretty neat.

AK: Yeah, isn't it? [Words unclear]

AM: Why don't you hold up the side of it so I can zoom in on the logo. Okay I see that. So then what else do you have?

AK: Well, you know, they say imitation is the sincerest form of flattery. Did you ever hear that expression? So let's look at this camera. [Retrieving camera] It bears a striking resemblance to

the one in my right hand. From front to back, [exactly the same]. Now let's look at the label.

AM: Wow. It's Russian isn't it?

AK: In Russian, yes.

AM: Can you tilt that up a little bit? And you can see the Cyrillic writing on it. Okay.

AK: As far as I can see, every last screw, everything is identical.

AM: That's funny.

[Tape paused.]

AM: We're going to go back and talk about 8mm again, which is where we were before we took the detour with the Russian camera. So what do you have there?

AK: I have Eastman Kodak's first 8mm camera. It's called a Ciné-Kodak 8 Model 20. And it was introduced in 1932. I wish I could tell you the price off-hand, but believe me, it was less than half the cost of a 16mm camera. It's a very slim, easy to handle design. The finder is through the handle, and of course it's spring-motor driven. [Note: The list price was \$29.50. See Kattelle, 350.]

AM: So you didn't have to crank. There was only one speed on that, right?

AK: That's correct. There was an adjustment on the aperture from F35 to F16.

AM: When did they start offering two speeds?

AK: I can't tell you off-hand.

AM: Okay. Were 8mm cameras ever offered with interchangeable lenses the way the 16mm were?

AK: Oh yeah. Eventually they were.

AM: Do you want to pick up the next Kodak [camera]?

AK: Sure. I might mention that this was my own first movie camera that I found in a thrift shop, with a projector. I still have some of the early films I shot of our children.

AM: Did you switch to Super 8 later on?

AK: I sure did, yeah. This next one is an 8mm camera that Bell & Howell made, called a Filmo 141A. I like it for its art deco design.

AM: Yeah, that's a nice one.

AK: Isn't that pretty. Carried over the design onto the handle. It took a magazine.

AM: Most 8mm film that I've seen was magazine-loaded. Was it ever spool-loaded, the 8mm film? Did you ever have spool-loading with 8mm?

AK: Oh yeah. They had spool-loading.

[End of Tape 7, Side 1]

AM: Okay Alan, what do you have there?

AK: I have a Bell & Howell Filmo 121 8mm camera. You'll notice that it has a nice, slim design. And part of that design, enabling it to be slim like that, is the kind of shutter that it has.

Frequently, the shutter in a small camera is a circular device.

This particular camera has what is called a “barn door shutter.” It’s these two blades here, and watch when I turn the camera on. [Camera turned on.]

AM: They’re going back and forth, aren’t they? Do that one more time.

AK: Yeah. Or single frame—

AM: Right. That gives a better sense of the motion. Can you turn the camera around so that I can see the label? Okay. Great. So why was that an important advance?

AK: Well, because it took up less space in the camera body. It enabled them to have this narrow design.

[Tape turned off.]

AM: What do we have there, Alan?

AK: Kodak’s Electric 8 Automatic Camera, they called it.

AM: And why was that a significant camera?

AK: Well, it was Kodak’s first battery-operated camera. Not only battery-operated, but it’s operated with a battery pack rather than four individual batteries.

AM: So was there any advantage to having a battery pack?

AK: Yeah. There was, to the extent that it was quicker to load a battery pack than to load—you know when you load four batteries, you have to make sure you get the polarity correct, and that they don’t pop out.

AM: Could you buy the battery packs from Kodak?

AK: I would guess so. I can’t say for sure.

[End of Tape 7]

Kattelle Oral History, Tape 8

August 26, 2003

Andrea McCarty: This is Tape 8 of an oral history with Alan Kattelle in his home. Today is Tuesday, August 26, 2003 and we're talking about regular 8mm film. Alan, I wanted you to talk about the mechanics of 8mm film. How it was delivered to the consumer, and how it was returned to the consumer after processing.

Alan Kattelle: 8mm was introduced in 1932, and it was furnished to the customer as double. In other words, the film was actually 16mm wide. That meant that you filmed half of the film, and when it was all wound down on one spool, then you had to open the camera, put that spool up on top again, rethread it, and shoot the other half.

AM: Did you have to do that in the dark?

AK: No. I don't recall them telling you to do that in the dark. If you had carefully made sure that it was all wound on to one spool-- You know, I could see now that you could expose a few frames certainly. That's an interesting question, because I

don't recall seeing instructions on how to do it. But there were various themes devised to avoid that and one of the most interesting ones is the [Sekonic Dualmatic-50]. It was a Japanese manufacturer, and they called this camera the Dualmatic. It still took the film in the 25 foot spool, but when you finished with this camera, when you finished the first run through, you could just flip the whole body over, and you were all ready to run the second half.

AM: That's pretty interesting. Was it sold in the United States?

AK: Oh, yes.

AM: And do you think it caught on? Is it a rare item, or—?

AK: Again, it's fairly rare. Apparently it didn't—I don't recall a date...

AM: That's fine. It's probably in your book, so that's okay.

AK: Yeah, it probably is. Of course the other way to avoid the rethreading and so forth, was to furnish the customer with pre-split film. To the best of my recollection, it was the Universal Camera Corporation from Chicago who did that in 1936, I believe.

AM: Don't be too concerned about dates.

AK: Okay. I'm sorry. It wasn't Chicago. Universal was in New York. This is their first camera and it was revolutionary, not only for using the pre-split 8mm, but also the for the price. They were determined to make a camera that was affordable to almost everybody and, believe it or not, this one sold for \$9.95, which

was really remarkable. Most cameras of that day were \$25 or \$30, except this camera. This is the Univex 8mm. Well-made.

AM: Did Kodak furnish the film for the Univex camera? Did they split it for them or—?

AK: Good question, and I'm sorry I don't know. [Chuckles]

AM: That's fine.

AK: I'm sure they didn't make it. Let's put it that way.

AM: Right. They have somebody splitting it for them, whether or not it was Kodak.

AK: Right. I couldn't tell you that.

AM: The pre-split 8mm seems very elegant to me. That camera is a little bit smaller than some of the other ones we've seen. Did it catch on?

AK: I think it did. I think it must have, because they went on to make a number of different models for several years, so I think it was quite popular. And of course the shining example of the single 8mm camera was—

AM: I'll get it for you. And what camera is this?

AK: This is the Bolsey 8mm. A product of that brilliant designer, Jacques Bolsey.

AM: Can you turn it down a little bit? That's perfect. Who was Jacques Bolsey?

AK: Well, he was born Yakob Bogopolsky, from a central European country. Came to this country as a young man, and went on to design the famous Bolex cameras.

AM: Which are very nice.

AK: Which are all high-grade, exactly. This little Bolsey 8mm took a single 8mm magazine, which was loaded by Bolsey.

AM: So Bolsey provided the magazine to the consumer?

AK: Yes.

AM: So, do we know who provided the magazine to Bolsey, or who provided the film?

AK: We may if we look--

AM: Oh, Kodachrome indoor. Okay. So it's Kodak film.

AK: Right. This is a perfect example of how much it is simplified. Think back when you had this double spool to put in and then thread, and here you just had this neat little magazine. Just slip it in there and you're ready to go.

AM: You said that there's—you have a little anecdote about this camera don't you?

AK: Well, coming in this case as it did, and with this elegant brushed chrome finish, it was a very handsome camera. And supposedly Jacqueline Kennedy owned one. It certainly would sort of, match her elegant aura.

AM: It would. It definitely has that look to it.

AK: Right. Now it's interesting; this shows that, evidently, Bolsey had film laboratories.

AM: Hmm. In Cambridge [Ma.] even? Interesting. So they were doing some of the processing themselves? Where was Bolsey based out of?

AK: Where was the home base? New York wasn't it?

AM: It's funny. Not knowing anything about Bolsey, but having seen the design of their cameras, before I knew anything, I immediately assumed they were European.

AK: Well, I've got quite a bit more in the book about Bolsey and what he did.

AM: Let me ask you another question about the pre-split 8mm. After Universal, or Univex, came out with the first pre-split 8mm, and clearly Bolsey adopted it, were there other companies that adopted the pre-split 8mm?

AK: Yes. One that I can think of right off-hand is Agfa. I believe that's the only other example that I have in my collection.

AM: Did Kodak ever make a pre-split 8mm camera, or did they always stick with the dual 8mm?

AK: I don't recall if they made a single 8mm.

AM: I think Bell & Howell did though.

AK: Yes. I believe they did also.

AM: The [Model]127, maybe. I'm not sure. The camera [model] 127. Let's talk about—we have an 8mm to talk about, so let's grab that.

[Tape paused]

AM: So Alan, we've been talking a lot about pre-split 8mm versus dual 8mm, and some of the cameras that you—

AK: This is the Universal.

AM: The Univex.

AK: The Univex, yes. And one interesting point about this is if you hope to show the movies taken with this camera, you had to have a Universal projector.

AM: Why was that?

AK: Because, notice the size of the spindle hole.

AM: It's very tiny.

AK: Very small, exactly. So you absolutely had to have the right projector.

AM: Could you not wind it onto another spindle though?

AK: Sure. That's true, you could. This is an example of how you got the film processed from Universal. They provided these little envelopes and boxes, and you mailed it back to them.

AM: Can I see the front of that?

AK: Yeah. You were looking at the front. [Chuckles]

AM: Oh. Then the back, sorry. Okay. So the back doesn't really—they don't seem to have a good logo anywhere. I was hoping to find one. They were pretty plain.

AK: There's the Univex word on the edge. This is the camera, remember, that sold for \$9.95. Which was revolutionary in its day.

AM: And the first one to use pre-split 8mm?

AK: Yes. 1939. They also made a still camera that sold for thirty-five cents.

AM: Wow. That's [amazing]. I want to take it back to my office. So what else do you have on the table there?

AK: We have the Moviematic, which was advertised as being three-in-one, with which you could make still pictures or movies or what they call flip books.

AM: What did they mean by flip books?

AK: Well, you simply printed each frame of the exposed film onto a single piece of paper, and then pasted them together at the ends--

AM: Oh, right. So the traditional kind of flip book.

AK: Yeah, like a miniature...

AM: I was just thinking that it's not like—you still have to do the work to make the flip book. It's a little bit of a stretch. [Laughs]

AK: Yes. [Laughs] It is, definitely.

AM: And you have a cartridge there that fits the Moviematic, don't you? So the Moviematic was also using the pre-split 8mm?

AK: Yes, that's pre-split 8mm.

AM: Can I see the cartridge?

AK: Yes. This cartridge, you notice has a—you don't have to pull a loop of film out. There's a slot where the pull-down lever in the camera would work into the perforations in the film, and then would be exposed right there.

AM: Okay. I see. Do you know what I think would be useful if we're showing the Moviematic? I think they have a great box. So I'm going to hand it to you, and we're just going to film for a minute. And that kind of demonstrates the whole flip-book

thing better, I think. But the back—

AK: Here's the cover of the box. And on the back it shows the three—

AM: The three-in-one. We've got movies, movie books and [stills], on one film. Okay, great. And you've got three Moviematics in different colors, don't you?

AK: Yes, that was the interesting thing about it. They made it very colorful. This one is all silver, and one of my favorites is the one that's copper colored. [Putting camera away. Retrieving another camera.]

AM: Okay. So, you've got another camera on the table.

AK: We've done that one.

AM: We haven't done the [Agfa] yet.

AK: Okay. Introduced in 1957 by a well-known German film firm, Agfa. That's their logo on the front there.

AM: Agfa. Was this their first 8mm?

AK: Yes. [Opening camera.] It has a very slim magazine, but in this case, you had to pull a loop out of the magazine to thread it.

AM: Right, because it had to go around that little piece in front and then into the gate. Can you hold this sideways, and maybe I can get the arrows a little bit better. If you hold it this way. Now we can focus on the arrows that show you where you need to guide the film. You pull out the loop and guide the film into the gate.

AK: Yes. That's interesting because that harks back to the 1917 Movette, where you had to do the same thing. Kodak provided the cartridge, but you had to pull a loop out and thread it in.

AM: So this was Agfa's first regular 8mm camera? And they were late getting into it, most likely because of the war.

AK: Yes, they were late. Almost twenty years after the first single 8mm.

AM: Because at this point, Kodak had almost already moved on completely, had they not? To Super 8?

AK: No. Super 8 in 1965.

AM: Okay. But they were probably working on it?

AK: I imagine, yeah.

AM: Did 8mm ever really catch on in Europe?

AK: I can't answer that. As opposed to 9.5mm, I don't think so.

AM: Because I was just thinking, if 9.5mm already had a large group of users and Agfa didn't come out with a regular 8mm until the 50's, then that really gave 9.5mm a good long time to...

AK: Get established, yeah. And the 9.5mm image size was bigger than regular 8mm, substantially.

AM: Were there any other European companies making regular 8mm at this point, that you can think of off the top of your head?

AK: Not that I can think of, no. And incidentally, not that you asked, but George Eastman and the company were very, very—they

played their cards very close to the vest. They almost never released sales figures. They were very particular about that. It was difficult to tell. Overall sales, yes. But on the particular products, they never gave that away.

AM: Or a particular region? It's not like you could go to Eastman and say, "So, how are you doing in Europe?"

AK: Absolutely not. That's correct.

[Tape paused]

AM: Okay Alan, what do we have now?

AK: We have a Keystone, the Model K8. I believe that this was their first 8mm. I find these cameras difficult, extremely difficult to open. [Trying to open camera].

AM: That's okay. Why don't I get a shot of the outside?

AK: It looks like a quite well-designed camera.

AM: Oh, and that's that famous sports finder, that red thing on the side. What exactly was that viewer for? That little red viewer? Did they call that a sports finder?

AK: [Chuckles] That's possible. It was obviously designed if you wanted a wider view of whatever you were taking. I mean, for distant shots.

AM: It looks a little bit like the Bell & Howell Filmo. That really nice "watch thin" one with the oval shape. And I see that it's clearly [marked] top and bottom. Can you show me the writing on the top of the camera where it says top? And it says the same thing on the bottom, right?

AK: The curious thing about that Keystone is that—

AM: I'm so close to getting this open. But I'm not there.

AK: [Chuckles] We want to show both of these side-by-side, right?

AM: Right. So what's the other camera that you have?

AK: This is the Stewart-Warner.

AM: Which looks exactly the same.

AK: Yes. I'll put them side by side.

AM: And I'd like to get the front. That way I can get the front panels of both cameras. They do look exactly the same.

AK: And I would suspect that Keystone may have made the camera for Stewart-Warner. Stewart-Warner was their primary business [client] for automobile accessories. I happen to know because I had a Stewart-Warner car heater installed in my car after we moved to Chicago.

AM: The Stewart-Warner one also says top on top as well. They're really the exact same, the exact same thing. They're strikingly similar.

AK: Here's the back.

AM: Yes. So did you remember that you had one of their radiators, or at the time, did you know they were making cameras?

AK: See, we moved to Chicago in 1950, and not all cars came with a heater. And you know what Chicago winters are like. I think I might have gone through one Chicago winter and decided I

had to have a heater. And Stewart-Warner made one—it burned gasoline right out of your tank. You had to run a fuel line. But boy that would sure heat the car up. It was beautiful.

AM: I bet. And the cameras, were they good cameras?

AK: There's nothing wrong with the camera. I never saw another camera by Stewart-Warner except this one. This is not uncommon. I think you'll find other examples up there of two different makes of a camera that are identical. And you know that one of them must have been—they were both probably made in the same factory, they just put a different nameplate on it.

AM: So it wasn't then a case of one company ripping off the other. It was usually a case of somebody making it for somebody else. Keystone was out of Boston? And where was Stewart-Warner out of?

AK: Right. Chicago.

AM: Okay. I was just thinking about 8mm film, and a lot of the 8mm that I've seen. What is the cause of the light leaks that you see? Is it just a matter—could that be happening when the person was changing the spool? You know sometimes you see the light that leaks in on the side. Each side of the frame is overexposed, and then you have a perfectly good image in the middle?

AK: See, you've probably examined more films than I have. I can't honestly say that I have noticed that.

AM: And I'm trying to think out loud, and I can't remember, but I don't know if I've see it as often on Super 8 film.

AK: Well let me ask you this, noting the difficulty that we both have of getting the back off, it may have been also that they didn't get the back on all the way. Is that possible?

AM: I think that's totally possible. Because it would be one side of the film that just has this slight, very slight overexposure around the edge. Okay. We have more cameras [down there]. [Retrieving camera.] Okay, we are talking some more about cameras that look alike.

AK: Right. There is an interesting example of the Paragon [Model 33 16mm] and the Cinklox [Model 3-S 16mm]. There's the front.

AM: Okay. I'm going to zoom in a little bit more. Up at the top, the two charts look very similar.

AK: Okay. Want to see the other side?

AM: Yes. Oh wow, that's almost exactly—just a different color. Same shape of the lens mount.

AK: Right. And here is the—[adjusting camera]

AM: Oh, there's the back. Very similar again.

AK: Now my guess is that Cincinnati Clock and Instrument Company—

AM: Cinklox.

AK: Cinklox—that they probably manufactured the Paragon. And the reason I say that is that Cinklox lists their patent numbers. But there are no patent numbers listed on the Paragon.

AM: And where is Paragon based out of? Wisconsin?

AK: Fond Du Lac, Wisconsin, and Cinklox was Cincinnati. And of course, my hope is that patent numbers will become available on the Internet. They may be now for all I know. I have, as you know, a file of maybe three or four hundred patent numbers. And if I can go on the Internet and check these patent numbers, I can pretty much tell, is this the company, or is that the company?

AM: That's interesting. I'm going to take those two, and if you want to reach down next to you and get the green camera, we can keep going. Tell me about this camera.

AK: Well, this is called the Dralowid Reporter.

AM: That's a pretty one. Now I'm going to zoom in on that. I'm going to zoom in a little bit here so that people can see the exposure chart.

AK: Now, zoom in on this.

AM: Right. I see it. And what significance does that have?

AK: That loop is attached to a piece of tough fiber that if you pull, and I'm not going to do it, but that is how you wound up this

camera. The only one in the world I've ever seen that had that mechanism.

AM: And as the film advances it draws the loop back inside.

AK: You just wound it up and it would spring back.

AM: Wow, that's interesting. Do you know who made the Dralowid Reporter?

AK: I believe that was Austrian. They have—did you get the exposure guide? It's quite a nice one.

AM: I did.

AK: It gives you time of day.

AM: With months even. That's great.

AK: I don't pull on the tape because other collectors have told me that this is the first thing that breaks on the camera, this little tape, so—

AM: I wouldn't ask you to. Okay, what do you got there?

AK: I have the Briskin 8mm.

AM: It's a nice looking camera.

AK: It's lovely looking. Fake alligator skin. Nice design.

AM: Can I see the front one more time?

AK: Do you want to take that tag off, or no?

AM: No. It's okay. I really like their logo. Very nice. So tell me a little about this camera. Besides being nice-looking, is there anything--?

AK: Interesting story, I think, behind it.

AM: Oh, what was that on the bottom? Can I take a look at that?

AK: I don't know if you can—in very quite small print at the bottom, it tells where they're located.

AM: Santa Minay something—

AK: Santa Monica!

AM: Santa Monica, California. Okay, so what's the story?

AK: Okay. The story is that Briskin is the family name. The patriarch was Sam Briskin who founded the Revere Camera Company. Sam was a great individual. He came to this country as a poor Russian-Jewish immigrant. I think he was only twelve years old. He got various jobs. He got a job in a scrap metal yard, and from that—oh, this is in the book.

AM: Well still tell me.

AK: From the scrap metal yard he went into the business of repairing radiators. And the story goes that he needed copper, and copper was tough to get at that time. You had to be on a regular list of the copper producers. But the Revere Copper Company provided him with what he needed, and in gratitude, [chuckles] he named this camera, and called his camera company, The Revere Camera Company.

AM: After the Revere Copper Company?

AK: After the Revere Copper Company. Now, he was based in Chicago—

AM: And you have quite a few Revere cameras in your collection.

AK: Quite a few, yes.

AM: I know that you have a lot of Revere 8mms. Did they make 16mm as well?

AK: Yes they did.

AM: And how did their cameras fall? Top of the line? Middle of the line? Well-made? Not so good?

AK: Well, there's a little story, again it's in the book— but there was an article I believe in *Fortune Magazine* talking about amateur camera sales, and it said “dignified patrician Bell & Howell may have to look to its laurels because this upstart Revere Camera Company may be eating its lunch.” *Fortune* didn't use that terminology, but—

AM: But they were a threat?

AK: They were a threat. Sam Briskin supposedly went to a friend's wedding, and there was somebody taking movies of the wedding. And he asked about it and how much the camera cost, and when he was told, he was stunned at the price that the camera cost. And he thought, “I could build a camera for a lot less than that,” and he promptly did so. But, that's not the story of this camera. Sam had three sons. I can't, unfortunately, remember the first name of this particular son, Briskin, but his dad gave him a part interest in the Revere Camera—gave all the boys a part interest in the Revere Camera Company. And this Briskin took his money, moved to Santa Monica, married a movie star and started up the Briskin Camera Company.

AM: In Santa Monica.

AK: In Santa Monica. And, sad to relate, within a few years both the marriage and the camera company were defunct.

[Chuckles]

AM: So he was, in effect—was he competing with his father's company?

AK: Not really.

AM: Was this because the company never really established itself?

AK: That's right. This Briskin, he didn't have the business smarts that his dad did.

AM: Well he made a nice-looking camera.

AK: But a handsome little camera anyway. And they made it in a couple of different colors. That's about all I can tell you on this one.

AM: Alright. So you want to reach down for—oh, well there's another Revere.

AK: This one doesn't have any technological significance, but it has a peculiar—[adjusting camera]

AM: Model 55. It's nicely presented.

AK: [Stands up. Demonstrating camera.] This is obviously designed to go around your neck, and you kept the camera in its case while you filmed. It's a nice Bakelite case. Quite an unusual idea, and the only one I've ever seen.

AM: Good. Let me get a shot of the Revere on the front. Alan, that reminds me of a camera you showed me once, that is disguised as a purse. When you open up the purse, it unsnaps and there's the camera.

AK: [Chuckles] You sure it wasn't that one?

AM: No, the one I'm thinking of is a ladies purse. Very cute. Just a little clutch purse. I'm wondering when we turn the camera off

if we can take a look for it. I have a feeling it might be a Super 8, but I can't remember. We'll take a look in the database. It's very cute. [Chuckles]

AK: Was it a leather case, did you say?

AM: No. I think it might have been a plastic, patent—maybe a patent leather purse.

AK: Oh boy, Andrea, I wonder if that's buried somewhere.

AM: That's okay. Why don't we talk about what you've got in front of you, which is a nice regular 8mm camera, isn't it?

[Tape turned off]

AM: Okay, what do we have?

AK: We have a German 8mm Nizo.

AM: Let me zoom in on the side of it. The Nizo Heliomatic. It's got some impressive lenses.

AK: Right. That was introduced in 1951. I think you can see that it's really a quality camera. It has a choice of exchangeable lenses and nice operating controls.

AM: It is a nice-looking camera.

AK: It certainly is.

AM: I have a question. That's a German camera from 1951, and it is a regular 8mm. So was Nizo was making regular 8mm cameras before [Agfa]?

AK: Before [Agfa], probably. Yes.

AM: Because we were just talking about an [Agfa] camera that we thought was their first regular 8mm from 1956 or 7 or so.

AK: Yeah. My records show that Nizo's first 8mm film camera was in 1933.

AM: Nizo's first. Wow. So there were regular 8mm cameras introduced in Europe from the '30s on. It's just that [Agfa] didn't get into the game until later.

AK: Exactly.

AM: Can I take a look at the inside of the camera? What were you going to tell me about the Nizo?

AK: I think the fact that it's a quality product is evident. This is somewhat reinforced by the records. These are pages from that priceless *Ariel Register*. A man named Pete Ariel embarked on the project of cataloging every movie camera in the world, and here are his pages on the Nizo.

AM: So the real name was Nizo and Kramer GmbH. And I'm going to go down the list. [Agfa], Nizo—I see a lot of cameras here.

AK: Yeah. And it tells the gauge. Where you see a figure eight, that's all 8mm.

AM: Right. So, they made a lot of cameras?

AK: Yes. And they were in business from—actually, their first amateur camera was a 16mm in 1925, which makes sense. And the next cameras were 9.5mm.

AM: I'm going to zoom in on that.

AK: I can't tell whether I'm holding it right.

AM: You are. I can see it. So they made 16mm and 9.5mm.

[End of Tape 8, Side 1]

AM: So they made 16mm, and they made 9.5mm.

AK: Yes. And they evidently concentrated on 8mm, as you can see from this list. That was their strong—apparently their strong suit.

AM: I see. It doesn't really look like ever made a Super 8. So how often do you come across Nizo cameras?

AK: Very rarely.

AM: Do you think it's because they're a higher end product?

AK: Yes. I do. I don't think they could compete really, with the American manufacturers. They were high quality and obviously, that was what they stuck with.

AM: When I look at the Nizo, I see that as regular 8mm evolved, it could do a lot of the things that you probably could do with the 16mm. You had interchangeable lenses. You had zoom. You had the electric eye. Were the serious amateur photographers adopting 8mm?

AK: The best way to answer that question, and I would hesitate to do it off the top of my head, but what I would suggest as an interesting study, and I might have started it—would be to take a look at the ten best each year of the Amateur Cinema League and see just what the distribution was. How many of the prize-winning films were regular 8mm, Super 8, 16mm, and when did they change, you know? I have those numbers somewhere but not in my head.

AM: I think I read in your book that in 1940 a significant number, almost half, were regular 8mms. I'm not entirely sure about that figure though. We'll have to check. I see there's a cute little camera beside you that I wanted you to talk about.

AK: Oh yeah. Alright. What have we here? My lady's purse perhaps.

AM: [Chuckles] Nice little clutch purse. And inside is the camera. It's a DeJur Electra.

AK: Should I take it out? [Removes camera] Oh, there's the DeJur logo.

AM: So it's just a basic 8mm, right? And that's a conventional dual 8mm. I just like that one.

[Tape turned off]

AM: Don't feel like you need to hold that up, because it's very heavy.

AK: In 1957, a very unusual camera appeared on the market.

AM: The Wittnauer Ciné-Twin.

AK: Wittnauer was part of the name of the Longines-Wittnauer Company. And something just broke off. Oh, that's one of the feet. I'll have to glue it back on.

AM: They made watches didn't they?

AK: Yes they did. And apparently one of their executives thought that they should get into the amateur camera business. They hired a very well-known, respected designer, John Oxberry of... Oxberry of—I'd have to check my literature. Anyway, what they came up with was a combined camera/projector. [Adjusting camera.] I'll get the camera off if I can remember

how to do it. There's the camera. Looks fairly conventional. It was battery-operated. Here's the battery compartment. Nice four-lens turret, with a very sophisticated telescopic sight, which you could set for the particular lens you were using. But, open the camera and you were in for a surprise.

AM: Why is that?

AK: Because there's a lot of stuff in there that you don't usually find on a camera. Well, not to kid around any longer. What happened was, they made a combined camera/projector. Here we have a camera, right? I took the handle off as the first step, and [clicking noise] hey! Lo and behold. Here are arms for film. And what you can't see, but what happens when I raised this arm, was that it opened a passage between a lamp and the film gate.

AM: Where's the lamp?

AK: The lamp is inside this—

AM: Inside that grate. I'm going to zoom in on that. Oh, and there we have a demonstration, or instructions on how to operate the projector. Does it matter which lens you project it with?

AK: Yeah. I think there was one lens that was just for projection. But you're going to say how do you drive the projector, and that's where this heavy base came in. [Adjusting projector.] You set it on there. I must not be doing something right. There we go. And lock it, put the film in, and turn it on to project, and there you have a projector.

AM: It seems nice, but seems very complicated. How did it do?

AK: It didn't do well at all. They must have sunk many, many dollars into this. But it was heavy, and I can't tell you why really, but it faded from view very quickly. When I went back to Longines-Wittnauer and asked them about how it—tried to find out how it sold and so forth, they totally stonewalled me and said that all the records had been destroyed. [Chuckles] Isn't that disgusting?

AM: It was so long ago, you'd think that they'd be over it by now. They're still making watches, right?

AK: I believe they are, yeah.

AM: Is Longines-Wittnauer an American company?

AK: I thought their origin was Swiss.

AM: Okay. I had no idea. You have another part of the Ciné-Twin that you wanted to talk about. It was right next to you.

AK: Yes. When Don Gorman, a Kodak engineer, was working with Pete Chiesa on existing light photography, he made the discovery that he needed a shutter that would expose the film longer than a conventional camera shutter.

AM: Because more light need to—

AK: Right. More light was needed on the film. But, if you think about shutter design, a shutter is designed to do two things. It's designed to shut off the film when it's advancing, and open when it's holding still in the aperture, of course. And it stands to reason that if you take the open sector and make that

larger, you're going to have to make the closed section shorter. And that indicated to Don that he needed a shutter, a camera mechanism with an extremely fast pull-down. Somehow he realized that kind of shutter was used in the Longines-Wittnauer camera. So he scoured the thrift shops in Rochester and found one, and this is one of the cameras that he used to design the existing light cameras for Kodak. And he very kindly gave me this camera.

AM: When did the existing light cameras come out? In the 1960s? If you don't know the date, that's totally fine.

AK: I don't recall it.

AM: That's okay. That's all in the book, right?

AK: Yes it is.

AM: Why do you think the Wittnauer camera had that shutter? Is it something [that was needed as] part of the projector?

AK: Yes. See, what they needed was a shutter that would work for both filming and projection. So that's why this—I don't know if I can demonstrate. It's in the book, but in one position of the shutter it's working up in here, and when you move it into the projection mode it's working on the inner portion.

AM: Okay. So the shutter actually moves and does different things.

AK: Yes. The axis of the shutter moves.

AM: Why was the existing light camera an advance? What was so great about it?

AK: What was so great about it was that you almost didn't need those horrible lights you used to have to use. And I have pictures of my own daughter coming into the room and going, "ayyyyyyyy." [Chuckles]

AM: So when you were shooting inside, you had to use those little movie gun lights. And the existing light cameras really allowed you to shoot indoors. Great.

AK: Yes. It was a great advance.

AM: Well, we're almost at the end of the tape, and we're almost at the end of our discussion of 8mm, or regular 8mm. Can you think of anything else to add about regular 8mm?

AK: No. It sure produced a lot of interesting cameras.

AM: Alright. Let's talk about Super 8.

[End of Tape 8, Side 2]

Kattelle Oral History, Tape 9

August 26, 2003

Andrea McCarty: We're going to continue the discussion of regular 8mm for a few minutes, because we thought of a few additions. So Alan, what do you have there?

Alan Kattelle: I have here, if I could mask off the front, I have a little Bolex regular 8mm camera, as you can see from the inside.

AM: It looks like a very nice camera with quite a lens.

AK: Well, that's the thing. Attached to this simple regular 8mm camera is this humongous and extensive Berthiot telephoto lens. I'm sure the lens cost twice as much as the camera. I mean, to me it's like attaching a five hundred horsepower engine onto a six-foot rowboat. [Chuckles]

AM: What's the story behind that?

AK: I guess some customer wanted to be able to zoom and do all kinds of interesting things with a simple camera, and that was his option. Buy the lens separately. It wasn't bought from Bolex.

AM: Bolex makes fairly nice cameras though, don't they?

AK: Oh yeah. Good cameras.

AM: Okay. They made 16mm, and I know they made regular 8mm. Did they move on to make Super 8, do you know?

AK: Yeah. I think we have a Bolex Super 8 sound camera over there somewhere on a tripod.

AM: Okay. The other thing that we forgot to talk about, and I don't think any discussion of regular 8mm would be complete without it, is the Kodak Brownie. The first one and the last one are right down by your feet.

AK: Okay. This is the [first] of the Brownies. The first of the Brownie line.

AM: Can you tell me anything about the Brownie line? About the name, or about the marketing behind it?

AK: Well, one anecdote that comes to mind right away—I was fortunate enough to gain an interview with [the sales manager of Kodak's amateur camera line]. I won't say his name right now, but he was very kind to grant me an interview. I went to his summer home on the coast. We were talking about Brownies, and I said that I was surprised at the price of the first Brownie, which was \$47.50. You know, it was quite a lot of money. He said, "Oh no. That's wrong. We never charged that much. That can't be right." So, am I going to argue with this vice-president? [Chuckles] But he was wrong. [Laughs] Interesting. In his mind they were marketed at a lower level than they actually were. I thought it was curious.

AM: Because they weren't the higher end cameras, right?

AK: No. They weren't at all.

AM: And with a name like Brownie, were they marketed to [families], right?

AK: Exactly. That was the whole idea of calling it a Brownie. The Brownie name is associated with an inexpensive-style [still] camera, and that's what they designed these cameras for. It was very simple. Spring-wound. You don't have to worry about batteries. Threading was simple.

AM: Can I take a look at that? There were quite a few Brownies made, weren't there?

AK: Yes, there were. They got more complicated as they went along. They added features like exposure control and so forth. But curiously, the last Brownie was also very simple design.

AM: This is called the Fun Saver?

AK: Yes.

AM: This was being produced even while Super 8 was coming out, wasn't it?

AK: Yes, because Super 8 came out in 1965 and the last Brownie was 1968.

AM: That looks very simple. It actually looks even—I hate to use the word cheap, but it looks cheaper than the first one. You know, the first one has some metal body on the body—

AK: Exactly. And this one is all molded plastic.

[Tape turned off]

AM: Okay, so what do we have there?

AK: This is the Brownie [Turret] Movie Camera Exposure Meter Model. So you see, they've added all these things to that simple Brownie, giving you a choice of lenses and an exposure meter.

AM: How much did that one sell for?

AK: That one sold for \$99.50.

AM: Which just seems like a huge amount of money, but—

AK: That's correct. In fact, they made one which was even more expensive. I forget what the added feature was, but they very quickly decided that it shouldn't be called a Brownie. [Chuckles] They dropped the name Brownie off of the name of the camera.

AM: Because they knew that they needed to drop that name in order for it to appeal to the more sophisticated consumers?

AK: Exactly. Yeah. It's like—well I can't think of a good analogy, but the name Brownie to the sophisticated consumer meant, "No, I don't want a Brownie."

AM: So if Hostess was going to come out with a snack cake for yuppies, they wouldn't call it a Devil Dog. Is that kind of what you mean?

AK: [Laugh] Right. Okay.

AM: Why don't we talk a little bit about the inception of Super 8?

AK: Alright. One of the interesting things is that I was fortunate enough to get to talk to many of the engineers that worked on the introduction of Super 8. Perhaps this anecdote is not out of place. One of the prime features of Super 8 was the fact that

the user didn't have to worry about setting his camera for the kind of film that he had, because the film cartridge had notches on it that told the camera essentially, that this is type A film, ASA 100. So the user didn't have to set anything. The camera did it for him, which made it very surprising and amusing when I received an email from a lady who signed herself as Product Manager for Eastman Kodak Film. She told me that Kodak was contemplating—or was going to introduce two new emulsions, and wondered how an older camera would react to this new cartridge. And I had to tell her that she'd have to talk to the cartridge designers. But—

AM: Because the new cartridges would have to be designed with the old cameras in mind as far as the notches, and—

AK: Well that's what we—I couldn't answer that though. I thought it was curious that she'd come to me.

AM: Well, it's a credit to you and all of the work you've done.

AK: She'd also got to Toni Treadway, [chuckles] who was also surprised.

AM: Alan, let's talk a little bit more about Super 8. Why? Wasn't regular 8mm doing well enough?

AK: Well, Super 8 had been in the planning stage for probably five years or more before it came out. One of the things that was badly needed was a soundtrack, room for soundtrack. They also wanted to increase the image size. The first big thing they did was to decrease the size of the sprocket. And then they also narrowed the frame separation [frame line]. All in all, they

added almost fifty percent to the image size over single 8mm, regular 8mm. But more important than anything else was that there was room for a sound stripe, and a balance stripe.

AM: Did the Super 8 sound film come out at the very beginning, or was it a few years after the introduction of silent Super 8?

AK: That's a good question. I think the first Super 8 introductions were both silent. [Note: Kodak did not release Super 8 sound cameras until 1973.]

AM: So they waited a few years to work out the glitches [in the new format].

AK: Possibly. A lot of purists objected to the cartridge load, saying that it was not as accurate in positioning the film. However that was sort of an old wives tale, because tests showed that the cartridge placed it very accurately.

AM: And the consumer no longer had to open the camera and rethread the film. You were talking to me once about an anecdote, you told me an anecdote about the inception of Super 8 involving *Popular Photography Magazine*.

AK: Oh yes. Kodak, as usual, had told its competitors that it was working on Super 8, a new gauge. There were meetings with Bell & Howell, and I suppose with other competitors. But Bell & Howell was their major competitor at that time. The general manager at that time made it very plain to Bell & Howell, and to *Popular Photography*, that there was to be no announcement until the pipelines were full of film. It's a terrible thing to come

out with a new camera and then have the buyer go to the store and find that there wasn't any film yet. So *Popular Photography* sent reporters to Bell & Howell and Kodak, and they interviewed the people in great depth. All of a sudden the June issue of *Popular Photography* came out, and on the cover it announced the new film and the supposed new cameras, and they were all Bell & Howell cameras. So, the sales manager was very upset. [Chuckles] You can imagine. Kodak had this big promotional scheme all planned out and here these guys jumped the gun. I'd like to show you one of the promotional ads.

[Tape turned off]

AM: Okay, so you've got some promotional literature for Super 8.

AK: Yes. Here's the formal side of it. See they were going to have Walt Disney involved, and *Life* magazine—[looking through literature].

AM: Advertising material.

AK: Here's this great little guy.

AM: Ah, so they're really trying to—oh, so this is for the dealers. Let me see the front where you can see that this is Kodak dealer news. Let me see this one. It says Kodak—so this was promotional literature meant for the dealer who would feel like he or she was supported by all of this promotional effort by Kodak.

AK: Exactly. And this little kid is called Speedy Load 'em. [Laughs]
[Note: Speedy Load'em is the child featured on the Kodak promotional materials for Super 8.]

AM: Okay. So it's so easy to load, even a child can do it. And they started with the three cameras I see: M2, M4 and M6.

AK: Yeah. And here are the projectors.

AM: What was the significance of the M? What does the M stand for?

AK: [Chuckles] Model.

AM: Okay. And there you see the difference.

AK: Yeah. That's good. That shows how they enlarged the frame.

AM: Right. And there being room for a sound stripe. While we're talking about the promotional literature, I couldn't help but notice this ad over here that I'd like to show. Just because I think that the Moviedeck is a very interesting projector, why don't we show that piece of literature for just a minute. The Moviedeck projectors and XL movie cameras. Okay. Those are the existing light cameras that you were talking about. Can you talk to me a little about the Moviedeck?

AK: Well, I like it sometimes, and sometimes I don't. [Chuckles] It's very simple—it's quite simple to load. It's compact; it doesn't take up a lot of space. But, you know the way it works, you feed a leader into a slot—of course one thing that's nice, you can show either regular or Super 8 on it. And, you feed the leader into a slot and it picks it up and moves it onto a take-up reel down below. But if you don't have a leader, a trailer on the end—even if you do, you've got the devil's own time trying to retrieve the end of the film And I'm not alone. I asked Liz Coffey about that, and she agrees [chuckles] that it's a nuisance.

AM: Yes, that happened to us. Did you ask her about that at Home Movie Day?

AK: Yes it was at Home Movie Day.

AM: Because that's what happened with her deck on Home Movie Day. And that's probably why you were talking about it.

AK: Yeah. That's right. I asked her if she had an answer to that, and she said she didn't really. I don't think she did.

AM: The whole set-up of the Moviedeck brings me to another thought about [design]. The Moviedeck doesn't look like any other projector that had come before. And it seems like with aesthetics of Super 8, as far as the equipment and design build, there is a break from [regular 8mm].

AK: Yeah. And there's another Super 8 projector that I'd like to get out to show. Okay?

AM: Should we do it now, or should we talk about the cameras first?

AK: Well, alright. We can do the rest of the cameras.

AM: Why don't we start talking about the cameras. Keep in mind the design, because I think the design is different. What do you have there?

AK: This is the bottom of the line of the first three cameras, the M2. This is the simplest of the initial cameras. And the first thing that you notice about it, there are no cranks. It opens very simply. [Opening the M2 camera.]

AM: Do you want to hold up the cartridge? There's the—where do you insert the cartridge? The word Instamatic is interesting. I wasn't around when Super 8 was first introduced, but when I hear the word Instamatic, it makes me think of instant cameras, which makes me think of still photography.

AK: Right. I agree with you.

AM: To me it doesn't seem like a motion picture word.

AK: I know. I don't know why they settled on that.

AM: What do we have next?

AK: This is Kodak's first XL, or existing light camera. Designed by Don Gorman and Pete Chiesa—

AM: And we spoke earlier about them using the Wittnauer camera as a design model.

AK: Right. And the beautiful thing about the existing light camera was, through a combination of fast film and different shutter designs, it enabled the amateur to take pictures under existing light. Just as its name implies. It did away with those terrible flood lights and whatnot that blinded everybody.

AM: Or the really dark shots [indoors].

AK: [Chuckles] The dark shots. Exactly.

AM: Were you excited when the XL came out? Did you buy one? Do you feel like it made a difference for you in your [photography]?

AK: I did. I used to have my camera marked, but it has long since got lost in the collection somewhere.

AM: The design is interesting too. Is that the battery compartment? Can I take a look in there?

AK: You bet. It tells you what batteries to use.

AM: Now do you want to open up the other side and we'll look at the cartridge?

AK: [Chuckles] I don't remember how to do this. Now wait a minute.
[Tape paused]

AM: So what do we have?

AK: We showed the battery compartment. And this is where the cartridge goes in.

AM: Very easy.

AK: Yes. And I guess we've mentioned that the cartridge was notched to tell the camera what film was in the cartridge.

AM: And were there only certain kind of films that you should use with the XL camera because it needed a fast speed?

AK: Well, since all Super 8 film was made by Kodak, and notched accordingly, how could you go wrong? I'm not sure I understand you.

AM: Well, I guess I'm asking if there were several different stocks and emulsions. That maybe there were some stocks that were slower than others that didn't work as well in the XL cameras, which seem to require a stock that had a fast speed, you said,

to take advantage of the existing light. What if you put in a stock that was, you know, film speed 100? Would the pictures you have gotten back be—?

AK: Over-exposed?

AM: No. Just be less optimal than if you had put in a higher speed film in the XL camera.

AK: Well, wait a minute. The notch set the aperture in the camera, so that would take care of it, right?

AM: Right. That's true. So if you had a slower speed, then you would just get more light into the aperture. Okay. That was my question. What else do you have down there? Do you want to talk about the last one? I'm going to do a close up on the box. This is the Our Gang Movie Outfit.

AK: Well this is kind of sad. This is the last movie camera that Eastman Kodak ever made. It came off the line in June of 1981. David Gibson, the curator of the Patent Department Museum, told me that he was disgusted that nobody had thought to grab one for the museum. I don't know whether he ever found an example or not.

AM: Kodak must have known that it was the end, right?

AK: Oh yes.

AM: The Our Gang marketing is funny. It seems very old school. You know, it makes me think of the Our Gang pictures.

AK: That's an old comedy. You know, going back to the '30s almost.

AM: And that's what I was thinking about. If you're going to try to position your Super 8 camera as the next big thing in motion

picture technology, then you may not want to do the Our Gang thing. Although the iconography doesn't have much to do with the original Our Gang.

AK: Well how many people—I'm surprised that you recognized Our Gang.

AM: Well I guess I've seen some of the old ones.

AK: You've seen old movies. You're a different consumer than most people. [Chuckles]

AM: I don't know. I wonder if those comedies aren't hanging around in the backs of people's heads. They see Our Gang, which I think makes it seem more old-fashioned. Instead of positioning it in the 1980s as the new next thing. I guess they're trying to be retro, but I find it kind of ironic.

AK: I guess we'll just have to conclude that nobody's perfect, including the Kodak advertising people. [Laughs]

AM: Do you want to take out the camera and show it?

AK: [Chuckles] Well, they put the Our Gang right out front.

AM: It looks like it's the same shape as the XL camera you just showed us. Let's see it from the side. And so it works the same way. The whole design has completely changed from 8mm to Super 8.

AK: Yes. This hand-grip, of course, is something new in the design.

AM: But there's no more metal. Everything's plastic.

AK: Not quite. This has a metal frame.

AM: But it looks cheaper to me. The design. How did it feel to you as a consumer?

AK: I guess I'd have to agree. It certainly doesn't have the—take this, for example. [Chuckles] It's such a different—just in the weight alone.

AM: Did you ever talk to any of the designers at Kodak about what they were thinking?

[End of Tape 9, Side 1]

AM: I think that there was a break in the way that the cameras were designed.

AK: Well, I have to think that the forces at work—first of all, the economy of manufacture was in force and there's no arguing with molded plastic. It's so much cheaper than stamped steel. And maybe you and I are not the right ones to say, "Oh, this doesn't feel right." The average consumer might say, "Hey this is light. I can handle this nice."

AM: Maybe this felt more modern at the time.

AK: Yeah. Compared to this [metal camera], which in many ways was twice the camera, but it's also four times the weight. [Chuckles] And lugging a camera all over Alaska or Hawaii is no fun if it's really heavy. [Chuckles] I've been through that. I've regretted that my camera was so heavy many times.

AM: That's a very good point. Did many of the Super 8 [cameras] have the interchangeable lenses or zoom lenses?

AK: I think you'd probably have to agree they didn't have quite the versatility that the earlier camera did.

AM: That's funny. One thing that I was thinking about, and the reason why I brought up the Movie Deck—if we have one around it might be interesting to film it—is that the Movie Deck looks different from any film projector I've ever seen. It almost looks more like a videotape player.

AK: Yeah? Well, wait until you see the next one.

AM: Okay. Should we talk about the sound [camera] first? [Adjusting camera.] Where did you get the Our Gang Movie Outfit? Did you know at the time that it was Kodak's last, and did you go out and buy one? What was the story behind it, your acquisition?

AK: Boy, I'm sorry. I don't know. Maybe we can find out on the computer if it tells where I bought it. But I don't remember.

AM: That's not important. I was wondering if it was a significant day.

AK: No. Some of my Kodak friends— that one came from one of the Kodak engineers. They gave me things like that.

AM: Did you like Super 8 better than regular 8mm? How did you feel about Super 8?

AK: Did I? Oh yes, I did. Yeah. In my home movie collection, I have very few reels of regular 8mm.

AM: As an archivist, I find Super 8 a lot easier to handle sometimes. When somebody brings in their home movie collection to me, I hate to say it but I sometimes think, "It's regular 8mm. It's going

to be a little more work.” It can be harder to work with. In the end, I tend to like the regular 8mm more because a lot of the stuff is older. We were going to talk a little bit about Super 8 sound. Do you want to start with Bell & Howell, or with Kodak?

AK: I don’t know what I can tell you about this.

AM: I just thought it looked interesting. Why don’t you tell us the story behind it?

AK: I’m not sure for whose benefit this was [built]. I would imagine that a top-of-the-line dealer might be interested in having this cut-away bottom.

AM: Tell me a little bit about the basics of the camera. What is that camera? Who is it made for?

[Tape turned off]

AK: This is a cut-away model of the very sophisticated Bell & Howell Super 8 Sound Camera. I would guess that this is one of the last [amateur] cameras that Bell & Howell made.

AM: Why do you think they made the cut-away model?

AK: Well, as I was saying, I would think that it might appeal to a sophisticated dealer, to have this model to show his customers the intricate machinery that goes into making a sound camera.

AM: Where did you get it?

AK: At an auction of camera equipment that our society holds. PHSNE—twice a year.

AM: Does the cut-away model work?

AK: I’ve never tried to make it run.

AM: I notice there's also a cut-away cartridge too.

AK: Oh yes. [Laughs] Do we have a sound cartridge handy too?

[Tape paused]

AK: Here's a silent Super 8 cartridge versus a sound cartridge. And the thing you notice right away is that it's bigger in both dimensions.

AM: More of the film is exposed.

AK: The film has to be exposed because it has to be under the sound head in the camera.

AM: Let's talk about the Kodak sound camera now.

AK: Oh wait a minute. You want to know the year of introduction probably.

AM: Was it 1973?

AK: Could be.

AM: They can check your book. Anybody that wants to know, check Alan's book.

AK: [Laughs] Okay. This is the Supermatic 200. The 200 stands for this monstrosity up here. That's a 200-foot cartridge.

AM: So who was this camera marketed to?

AK: Semi-pro, I would say. You know, the really serious Super 8 film makers.

AM: Now, your average consumer with the Kodak Super 8 sound camera, would they have the same camera, only without the 200 foot cartridge?

AK: I'm sorry. I'm not sure I get you. Did they make this camera—?

AM: Well, I'm just thinking that your average consumer with the Kodak Super 8 camera might have the same exact thing, lacking the 200-foot magazine on top.

AK: Yes. Let's see if that's possible or not. I can't answer that.

AM: It's quite a camera though. Did you ever shoot with Super 8 sound?

AK: No. I never did. I was going to show you the cartridge. This is the film box for this.

AM: For that 200-foot magazine? Of course the Super 8 sound was magnetic.

AK: Interesting. The ASA is only 40. That's not very fast is it?

AM: No, that's very slow. But again, you said that the aperture would compensate.

[Tape turned off]

AM: What do we have here, Alan?

AK: We have a curious Super 8 movie projector called the Ektasound 245.

AM: I'm going to pan along the bottom. And I see the lens is out there in front. And it's got speakers and volume. So this really does function a lot like a video tape player, doesn't it?

AK: Yeah. You can use a 200-foot reel. And I think they designed it, obviously, to sit on a shelf, like they say.

AM: Right. Your description on the computer says, "tape-deck styling, book-shelf compatible."

AK: Right. Obviously, there's a 45-degree mirror in there, so while the light beam is going this way, it actually shoots out in the audience.

AM: Was it a good projector?

AK: I have conflicting reports. One user told me that it was a lemon. Another person said that as far as he knew, it functioned very well. So, it's hard to say. I think it was probably the last Super 8 projector that Kodak made.

AM: And a radical departure from projectors in the past.

[Tape turned off]

AK: This is one of several Super 8 projectors, silent projectors that Kodak made. This is the 457K. It was introduced in 1977. It has some very nice features. It has three speeds—two forward and a reverse speed, as well as a still setting. It has automatic rewind. And some people consider it to be one of the safest projectors, that is, easiest on the film. Oh, and it also will show 8mm or Super 8.

AM: Can you show us how the film loads?

[Doorbell rings. Tape turned off.]

AM: Now that's a good view of the top of the Moviedeck. [Alan is now looking at a Moviedeck projector.]

AK: Can you show the arrows? Well, I guess it doesn't highlight them.

AM: I can see the film path.

AK: Now I want to show you where the film goes. Can you see the take-up reel down there?

AM: Yes, I do. Now what I remember about these projectors is that it's really hard to get the film out if it gets stuck.

AK: Exactly. You have to fish around there. There's got to be a better way. Some projectors, I can't think whose make, if you put something on the trailer, when you get to that, it will automatically rewind. I can't remember whose make projector it is. Anyway...

AM: Were there other [companies] making the tape deck style projector in the '70s, besides Kodak?

AK: I haven't seen them, to tell you the truth.

AM: You just mentioned that somebody's make would rewind it automatically. Does that mean a different model of Kodak, or somebody's--?

AK: No. It was a different maker all together.

AM: So there were probably some makers who were making--?

AK: I believe so. Right. I don't think I showed you one feature of this. This has a pop-out screen so you could view the movies in close.

AM: Right. So that's the Moviedeck.

AK: That's the Moviedeck. And it sold for \$254.

AM: That's not cheap.

AK: Not cheap, right.

[Tape turned off.]

AK: Well as most people know, simultaneously with Kodak's announcement of Super 8, Fuji announced single 8mm. The

film actually had the same dimensions as Super 8: The aperture, the sprocket holes--Everything was identical except the film itself.

AM: What was the difference?

AK: Well, Kodak, of course, was on [cellulose] acetate, and Fuji's was on polyester, which is thinner and stronger, which enabled them to make a more compact cartridge—oh, I don't have a cartridge in there. Being thinner and stronger, it permitted rewind, for one thing.

AM: Can I see the interior of the camera? So you could rewind the film within the cartridge?

AK: Right. There's a rewind knob right here.

AM: Why would you want to do that? To shoot something again?

AK: Yes. To double-expose if you wanted to.

AM: And how did Fuji's single 8mm catch on?

AK: Good question. Again, I'm sadly deficient in that area of knowledge about marketing and total sales. I really couldn't tell you.

AM: That's okay. How often do you find the Fuji--?

AK: I'd say that's an indicator that it wasn't a particularly big seller in the States, because you just don't see it that often.

AM: Now, I wonder—this would have been around 1965?

AK: Yeah. That same month I think, or very soon thereafter.

AM: Were they the first people to experiment with polyester?

AK: As far as I know the first and only people.

AM: Because Hollywood uses polyester film now, almost exclusively.

AK: Do they really? I didn't know that.

AM: And nobody really knows much about the [way it ages].

AK: Ah ha. How it ages.

AM: It seems like you don't get the vinegar syndrome in the way that acetate film does, but nobody knows what its problem is going to be. I wonder if [Fuji] was the first. That pretty much covers Super 8, Alan. Is there anything else you can think of to add about Super 8?

AK: No I can't.

[Tape turned off.]

AM: Before we finish talking about Super 8, you have another camera you wanted to show me.

AK: Yes. This is probably the pinnacle of the mountain of Super 8 cameras. This is French-made. It's the Beaulieu 5000AS, and it's just loaded with wonderful features. As you can see, it's got a tremendous lens on it, which is [an Angenieux 6-80mmm PowerZoom]. An Angenieux lens. It's battery-powered. And I won't try to remove the battery compartment. But it was considered by many to be the finest Super 8 camera made.

AM: Can I see the cartridge compartment? Did it take regular Kodak cartridges?

AK: Yeah. Sound cartridges. As you can tell from this little gizmo down here, that's where the sound reader is.

AM: That looks like quite a camera.

AK: It's really considered to be a professional-grade camera.

AM: Would that have been very, very expensive in its day?

AK: It would have been. Even the battery was expensive.

[Chuckles] I'm afraid my battery compartment might be frozen. That's why I am not opening it, and I don't want to—no, wait a minute. I guess I wasn't turning the right thing. But I noticed on the Internet, somebody was trying to get a rebuilt battery compartment for one of these. The trouble is that people would leave batteries in and they go bad and corrode the compartment. Okay, so that's the top of the line of Super 8 sound cameras, as far as I'm concerned.

AM: I know I said I that I would stop asking you dates, but that would have been made some time in the mid to late '70s, right?

AK: I would say so. Exactly.

AM: I have another question before we finish off with Super 8. Were most Super 8 projectors also made to project regular 8mm?

AK: Regular 8mm, yes.

AM: And that was to ease the transition into the new format?

AK: Exactly, yes.

AM: Were any of the cameras dual cameras?

AK: That's a good question. I don't think that—is that possible? Because you would need a whole new film transport. I don't believe there's such a thing as a dual.

AM: That makes perfect sense.

[End of Tape 9]

Kattelle Oral History, Tape 10

August 27, 2003

Andrea MCCARTY: Today is Wednesday August 27th, 2003. This is an oral history with Alan Kattelle in his home, and this is the beginning of Tape 10. We're going to start the day talking about Kodacolor. Will you give me a little background about Kodacolor, Alan?

ALAN KATTELLE: Yes. First of all, it's important when we use the word Kodacolor, to know that there are two processes that were called Kodacolor. This one we're going to talk about now is from 1928, and it was a peculiar system to produce color movies. Many, many years later there was a Kodacolor for print film.

AM: This was a process also known as lenticular color?

AK: Yes. And it gets that name because one of the particular elements of the process was that the film itself had, on the base, a series of cylindrical lenses running the length of the film.

AM: Very tiny [lenses].

AK: Yes. I can't give you the [exact measure]—probably not more than a millimeter in width. That was one essential component. The second component was the tricolor filter that had to be attached or inserted on the taking lens of the camera. I'm afraid you won't be able to see the fact that there are...

AM: This is a pretty good camera. I can get the red and the green. And now, the more I zoom in I can kind of see the blue. So, yes, I can see it.

AK: The last element was the identical geometry of the three colors on the lens to be used in the projection.

AM: Great. And again you have the three colors.

AK: Yes. And you'll notice that it has some pins on it. This is to be sure that the three color lines are perfectly aligned to be in the same orientation as they were on the camera. That's very important.

AM: Right. So that if they're vertical on the camera, they've got to be vertical on the—

AK: In the projector. Exactly. Then one more curious element. Since every batch of film had a slightly different color sensitivity, film that was sold to be used in the Kodacolor process, each package included a special—I can't think of the word for it.

AM: Like a compensating element?

AK: Element. That would modify the amount of light that would go through each of these strips according to the color sensitivity of that particular batch or roll of film.

AM: So the little element that you got with the film would be different every time?

AK: Yes. And when you used it for that roll of film, then you would discard it, because the next roll would have a slightly different geometry.

AM: So there was a lot of testing at Eastman Kodak when they produced a batch of film?

AK: It certainly meant that each batch of film had to be tested for color sensitivity. Which they may have done as a matter of quality control anyway. Normally, they would just make sure the response fell within a certain limit, but in this case, they had to tell the camera what the limits were. Do you follow me?

AM: Yes I do. So, pretty complicated all around.

AK: Yes. And the last curious thing about the system was that the striated side of the film, which is the base side, contrary to ordinary practice, the base was put it in the camera facing the lens instead of being at the back as usual.

AM: Why is that?

AK: Those striations acted as lenses and they exposed the emulsion with an image of this three, tricolor filter actually. If that makes sense.

AM: Yes, it does. How was the processed received?

AK: Well, George Eastman was delighted. He held a party to celebrate this achievement. Naturally, he had it in the summertime when the rose garden on the side of the Eastman

house was in full bloom, and he invited all the famous people he could think of, including Thomas Edison and General Pershing of World War I fame. The story is that he gave several of his guests a camera to try shooting roses and other flowers in his garden. Then they all went in to lunch while the technicians hurriedly developed the film, and everybody was really delighted, including Eastman, at the results.

AM: They were treated to a screening after lunch?

AK: Yes. They screened it after lunch, exactly. I have screened [my own] Kodacolor film and I have to say it's not bad. It's really quite surprising. It's very tricky. The photos have to be lined up exactly right. And as you can imagine, this filter consumed a lot of light, so it had to be exposed in bright sunlight.

AM: Did it go over well with the general public?

AK: I can't tell you how well it was received.

AM: It was no longer in production when Kodachrome came out, right? They had stopped it.

AK: Right. I think that the general public wasn't as careful about lining up the [lenses], or using the compensating filter that came [with the film]. They may have tried to film in insufficient light. I don't believe that it lasted very long.

AM: Do you have any remarks to make about the Kodachrome process? I don't need you to tell me the facts about the development that are in your book, but what are your thoughts about Kodachrome?

AK: Well of course, I can't divorce my thoughts about Kodachrome from the two men that were the primary developers of it, [Leopold Mannes and Leopold Godowsky, Jr.]. Also that it was one very successful product. The results were beautiful color. And the Kodachrome process, I know it from own experience. I have a transparency of my daughter, of my oldest daughter, taken when she was about three or four years old in front of the fireplace, in Kodachrome transparency, and those colors today are just as marvelous and bright as they were. That was fifty years ago. So, that's my reaction. [Chuckles]

AM: Right. So it really was the leap forward that Eastman had been looking for in terms of color technology.

AK: Absolutely. And Ektachrome was a disappointment, at least in my experience. I find that my Ektachrome transparencies have changed color. They've turned orange. [Chuckles]

AM: Any other comments to make about color technology?

AK: I don't believe so.

[Tape paused]

AM: I'm going to do a pan of Alan's camera room now, and then we're going to move downstairs to talk about some of his other equipment.

[Tape turned off]

AM: We're outside now [on the porch], and Alan's going to talk to us a little bit about Polavision. Alan?

AK: Well, the Polavision system appeared before the world in April 1977, when Dr. Edwin Land convened a large group of the press and other interested visitors to a big hall in New Jersey, where he had set up a number of brightly colored mini-stages. There was a dancer in each stage, well-lit. Dr. Land appeared and said, “I’m about to introduce to you the latest product of the Polaroid Corporation.”

AM: Alan, can I ask you one question? Polaroid is based in Boston, right?

AK: In Cambridge, [Ma].

AM: In Cambridge. Why New Jersey, do you think?

AK: I don’t know. I may be inaccurate on that.

AM: I’m sure you’re correct. It was just something that popped to mind, so I thought I’d ask.

AK: I can tell you in a minute if you want me to check where it was. The date I’m sure of.

AM: No. I’m sorry. So [Land] was introducing the latest—

AK: Product of the Polaroid Corporation. And of course, Polaroid at that time, had a marvelous reputation. The instant cameras had been so successful, and his other products were really amazing. So Dr. Land took to the podium and said, “I’d like to show you the next product of the Polaroid Corporation.” And he took this camera and in his hand, and appeared to be filming one of the dancers. It looked like it could be a movie camera.

After a few minutes, he opened the camera, took out a cartridge, and dropped it into the top of a mysterious box.

AM: Which we can look at in a minute.

AK: Which we will look at in a minute. And lo and behold, within seconds, the image of the dancer appeared moving in full, beautiful color. And a great murmuring went up in the crowd, they were in amazement. The techies in the audience immediately recognized what a marvelous technical achievement it was. The fact that you could make instantaneous color reversal in that short space of a time and with such simple equipment. Not everyone in the audience was technologically-minded however, and some of the more financially-minded reporters were curious what impact this might have on Polaroid's future. Well that's another story which will come later. But the product was Polavision. The heart of the product perhaps, was this little cassette or cartridge that contained, within its miniature limits, what amounted to a film processing laboratory. When it was inserted in the player, it initiated a sequence of events which drew the exposed film through a squeegee and released the proper chemicals to develop the image. The next roller dried it, then the film passed before a mirror, a forty-five degree mirror.

AM: Where's the mirror?

AK: This is the mirror and lens, which caught a light beam from inside the projector, and threw the image on the screen.

AM: I have that cartridge in a very tight close-up. Can you maybe show me what you were saying? Where the squeegees are? Where the [chemicals were released]?

AK: Okay. It's rather difficult, but this would be the take-up spool over here. This is the film that's been exposed. It now passes around this pulley, over here, and this is the squeeze-processing mechanism right here. This is the lens and mirror, which projects the image onto the screen. Then it passes and is wound up on this spool.

AM: Can you turn the cartridge around so I can get a better idea of what the film looks like? It looks a lot like Super 8. Is it the same gauge?

AK: It is almost identical to Super 8. It is however, a very dense image, which is one of its problems.

AM: What do you mean by dense?

AK: It's like a dark negative. A dense negative.

AM: So it doesn't capture the grays very well?

AK: Right. And it takes a lot of light to bring up a good image. So some skeptics in the audience said, "We've been shown a dog walking on its hind legs, but we're not sure why." [Chuckles.] And they began to quiz Dr. Land rather sharply about how much did this cost the company and what its impact would be. And I don't know exactly what Dr. Land said in reply, but apparently he said—he just stood up and said, "Don't ask such questions. You know Polaroid is a vital company." And with that

the rest of the audience stood up and applauded him. [Laughs]
The process, the procedure, the product, unfortunately had a very short and tragic life. Number one, it's so peculiar that Dr. Land somehow didn't recognize its shortcomings. For one thing, it was impossible to edit the film. And second was the very dense image. It required a lot of light for the exposures.

AM: So there was absolutely no way to shoot indoors?

AK: You had to have plenty of those big lights on. The other thing was that the projected image on the player was very directional. If you weren't looking at it exactly head-on, it fell off as soon as you moved to the side or anything.

AM: So screening the movies for a big crowd is almost impossible.

AK: Exactly. But he didn't intend it for that. He said that the idea was that mom could pick up the camera when she saw her little two-year-old doing something cute, and catch it. Which she could. But you couldn't splice that into a longer film. It wouldn't work in the projector. So it had its limitations. And ultimately, within a few months of its introduction, dealers were discounting it very heavily. Offering it at half-price.

AM: What was the marketing campaign like when it first came out?

AK: I can't repeat verbatim, but Dr. Land imagined lots of uses for it in medical or scientific research. The fact that you could get the results right away was interesting.

AM: Like a video camera.

AK: Right. But, the video you can edit, and the video you can put into longer segments, and this you could not. And the other

curious thing about this project was that Dr. Land was really the only one in the company who believed in it. His engineers and sales people had tried to tell him that it had some serious drawbacks, but he just wouldn't listen.

AM: Were some of the drawbacks you mentioned the same ones brought up by the engineers?

AK: Exactly. Well, I can only assume so, yes.

AM: Was he that optimistic about instant camera technology?

AK: Well, that's it. Most of his other products had been great successes, financially and technologically. But as it turns out, it was not only a tragedy and a money-loser for Polaroid, but as the equipment was manufactured, the contract had been given to Eumig in Austria. And this little machine says, "Made in Austria," when you turn over the projector. And when the product failed, Eumig went bankrupt.

AM: Wow. So it put Eumig out of business.

AK: It almost killed the company.

AM: Had they invested some money in the—?

AK: Absolutely. You can imagine the tooling they had to invest in to make these products.

AM: Because it's completely different the film technology they had been working with before.

AK: There isn't anything that would be useful. Well, I suppose you might make a camera that looks sort of like this, but—
[chuckles].

AM: Can you hold up the camera so that I can do a close-up of it?
And what about the front? The front of the camera. How did you load the cartridge?

AK: Very simply. Just like this [demonstrating loading the cartridge].

AM: Can you turn the camera around and just show me the inside?

AK: It would help if I'd put it in the right way. [Chuckles] Here we go.
Did you get it?

AM: Actually, if you can turn the camera around.

AK: Okay, I'll do it again. You open the camera. Take the cartridge and make sure that the sprocket holes line up. And there you go.

AM: Oh, very easy to use.

AK: Yes. And you could attach a light, a floodlight. And it had a zoom lens. And perhaps it was good for the one thing that he demonstrated. One of his early ads showed a mother watching her three-year-old. She picks up the camera, and then the baby went over and put it in—supposedly put it in [chuckling]—

AM: Into the player. Tell me more about your fascination with Polavision. I know that you are pretty interested in it.

AK: Well, I first became aware of the company, the Polaroid Company, very shortly after his instant camera line [was introduced]. I was working in a foundry in Chicago at the time, and we had what could have been a very serious accident. A huge blower, which is an essential part of the foundry, had exploded. Fortunately, nobody was hurt. But we had to get approval from the New York office to buy a new blower or we'd

be shut down. And somebody said, “Hey, we’ll get one of those Polaroid cameras. We can take a picture of this blower, and mail it off to the New York office,” rather than waiting for somebody to come out and look at it. Which we did. And I remember how pleased the New York office was that we were able to document the damage with the Polaroid camera. And as I say, I think that stimulated my interest in the company. And then—there’s a wonderful biography of Dr. Land, which I would recommend to anyone. You’ve got to admire the man.

AM: How often do you come across Polavision cameras, or films, in your travels?

AK: I haven’t. I collected these years ago. Somehow you don’t see them or hear of them. I don’t know why.

AM: So Polaroid lost a lot of money with Polavision. Did they recover from it in the 1980s?

AK: Oh yes. They recovered. This was in 1977 that it happened. They still had some good products. I think the SX-70 came after that, and that was a marvelous camera. A still camera.

AM: And did this compromise Dr. Land’s position at the company and his stewardship at all?

AK: No, not at all.

AM: People just recognized his experience, and—?

AK: Exactly.

AM: Do you want to show me the special edition you have there?

[Tape paused]

AM: Okay. What do we have? The [Polavision] Special Edition Camera Outfit.

AK: A three-year camera warranty.

AM: And when did you come across that?

AK: This was given to me about ten years ago. It was just a marvelous gift. They certainly did a nice job of marketing.

AM: Let's see. We've got the camera, the camera case—

AK: Here's the case with the special eye-cup. This is the—

AM: Wrist strap?

AK: Oh yeah. I couldn't read it. This is the remote control to rewind. And this nice wooden box can hold up to ten cartridges.

AM: Okay, I'm going to do a close-up on that. Hold on a minute.

AK: Incidentally, Dr. Land, for some reason, insisted on calling the film tape, not film [Chuckles]. I don't know why, but they'd always refer to it as tape, at least when he was within earshot.

AM: I find it interesting that he insisted on calling it tape. Was he— do you think he was following the development of videotape and foresaw the end of film? Or—?

AK: I can't answer that, Andrea.

AM: I don't know. It's kind of a strange intermediary step [between film and video].

AK: I'd have to ask you, when did video--?

AM: Videotape was being developed early on. I think [research at Ampex] began in the late '50s, early '60s.

AK: Oh, that early.

AM: But the path from two-inch [video] to smaller cassettes that

would be available in the consumer's home, I think that path took a long time. I don't think video even started to penetrate the consumer home until the 1970s. Okay, let's pause and talk about the player.

[End of Tape 10, Side 1]

AM: Now we are talking about the Polavision player. I see that the screen, like you said, isn't all that big. So it would be hard to watch movies with a crowd.

AK: Right. It's a peculiar screen. I can't think of a technical word for it, but the image was, I'm told, satisfactory, as long as you were sitting absolutely at right in front of it, but the image quality dropped off severely when you were off to an angle.

AM: Could you turn it around so we can see the back, Alan?

AK: Surely. [Turning projector.] There aren't any controls except to replace the lamp. Did you see the top, or do you want to see the top?

AM: Yes. You showed me the top when you put the cassette in. It's an interesting idea.

AK: Yes. And as I said, Dr. Land had great hopes for it, because he obviously spent millions of dollars on the development. Did I tell you about Eumig?

AM: Yes, that Eumig went [bankrupt] as a result.

AK: Right. Of course, Polaroid has since all but disappeared. However, in the the past year, [I've discovered] that Polaroid film is still popular with experimental photographic artists, because they can get such unusual and weird effects with it.

AM: Especially the really, really [large-format] ones.

AK: Yes. You can buy great sheets of it apparently.

AM: So it's still hanging on, maybe a little bit.

AK: A little bit.

AM: I think it's interesting that people in the audience at the first introduction could see immediately what Dr. Land didn't.

AK: Isn't that amazing? Yes.

AM: And it's amazing that he couldn't see it. Did he expect people to take the players places with them? Did he think that you would take it with you and watch the movies on the spot? Or do you think—?

AK: No. I think he was clever enough not to show them taking it to the beach. Mostly in the living room, or perhaps the scientist in his laboratory, but nobody taking it to the beach.

AM: Were you able to speak to anybody at Polaroid about the Polavision?

AK: Yes. I've since lost track of them, but they didn't really like to talk about it.

AM: Even later on?

AK: Even later, right.

[Tape turned off]

AM: Alan, I wanted to ask you about a conversation we had a couple of weeks ago where you told me about a theory you had developed while looking through the old trade magazines.

AK: Yes. I started the search actually looking for ads for a specific camera, thinking that I might add an image to our FileMaker Pro Database. I thought it would be nice to have a thumbnail picture. And of course, somebody else suggested, “Why don’t you just take a picture with your digital camera?” [Laughs.] But anyway, in looking through the ads, it struck me that this is would be an interesting vein to explore.

I had several approaches. One that struck me almost instantly was, how did camera advertising vary over the seasons? In other words, I suspected that the Christmas market would get some emphasis, and that the manufacturers would tend to advertise more in the pre-Christmas issues. So I was in the process of making a count of ad pages per manufacturer and per month. A typical page would be, an analysis of *Popular Photography*, January—that’s not before Christmas, but—[chuckles]. Anyway, I would note the page number, the manufacturer—in this case X-acta Camera—and I would note how much page, in other words a quarter-page, half-page, two pages or whatever, and then a single line trying to get the essential point of the ad. For instance the X-acta Camera advertised itself as “The World’s Finest 8mm, fully automatic, electric eye. That sort of thing.

There were other things that came to me later. I wanted to see if I could determine when zoom lenses started to get emphasized as a selling point, and other technological advances. Once one company advertised a zoom lens, I suspect that most of the others tended to follow the leader. But all of that is a work in progress.

AM: But there was one interesting point that you told me about, and it had less to do with seasons than with years. And you were thinking that you saw a decline in the number of ads starting in the late '60s, early '70s.

AK: So, what you're saying is, you mean that we might graph advertising space against year to determine—what?

AM: Just to foreshadow the decline.

AK: Oh. I see what you mean. Yes.

AM: The decline of 8mm and Super 8.

AK: Right. Absolutely. That would be a very interesting thing to do because home movies essentially died in— well, they were starting to die in the 1980s, or before that. But that's a good point.

AM: And I thought that you had said that you were surprised by the fact that there was a decline so early on. I think you said it was in the early '70s, not the late '70s.

AK: I may have. I've forgotten, and unfortunately I've mislaid my papers, so—[chuckles].

AM: That's okay. You'll find it again. But I want to keep up with you on that, because I think it's an interesting theory. We were also going to talk about some of the books that were put out by the

camera manufacturers and others to try to help the consumers with their moviemaking. And I see you have a whole pile there.

AK: Right. I guess we should start the story chronologically. This is an English volume, a handbook of amateur cinematography. There are a couple of things that I find very interesting about this book. It was printed in Great Britain and first published in 1950. It contains a very interesting catalog, so to speak, a table of popular movie cameras and their principle features. [Note: Alan is referring to *The Handbook of Amateur Cinematography*, ed. R.H. Bomback, London: Fountain Press, 1953.]

AM: I'm going to zoom in on that. I see that we have a lot of [references to] Kodak in this [book]. Okay, I see it. And that was 1926 you say?

AK: No. 1950.

AM: Well, that would make sense. I guess there weren't that many cameras around in 1926. [Chuckles.]

AK: This book was certainly directed at the well-heeled amateur, because some of the cameras that they show are really—most people would not consider [them] amateur cameras. Of course, I can't find them right now.

AM: That's okay. Let's just do an overview of the books that you have.

AK: An overview. Okay.

AM: What else do you have?

AK: I've sorted them. I found out that they fall into some categories. This pile almost all have the same title.

AM: Why don't you show me each one and tell me a little bit about it?

AK: Alright. Not the granddaddy, but the most renowned book on how to make movies, aimed at the amateur, was Kodak's classic *How to Make Good Movies*.

AM: Aren't there several editions of that?

AK: Oh, there were many editions. It sold millions of copies. A professional cameraman, William Shannon, came out with this book. [Note: Shannon, William J., *Moviemaking Made Easy*, 1934.]

Here's an interesting variation on the subject.

AM: Earning money. So that gets away from home movies into somewhat more professional stuff. [Note: Barleben, Karl A., *Earning Money with your 8/16mm Movie Camera*, 1960.]

AK: Right. And Kodak's *How to Make Good Movies* went through a number of editions.

AM: This is great. Yes, each one has a different feel, doesn't it? Each cover.

AK: I'm afraid that I was a little bit cynical in the book because I thought some of the writing was so simplistic. They always show the husband. The [couple] will be sitting around, talking about home movies, and he's got a jacket and tie on. Does he go around the house like that all the time? [Chuckles.] And the wife says, "But dear, I thought only an expert could take color movies." That's the type of—

AM: Very scripted. I can kind of imagine it.

[Tape paused]

AM: So you were telling me that some of the [how-to] books were pretty scripted, with the men in suits and jackets, and—

AK: Yeah. These are interesting I think, because they're very early for one thing. This one was published in 1924 by Herbert C. McKay. [Note: McKay, Herbert, *Motion Picture Photography for the Amateur*, 1924.]

AM: And what's that one? Can I do a close-up of the title page?

AK: Yeah. I think the title page is—I'll get it.

AM: Now tell me a bit about that one.

AK: Well, McKay was a very well-known writer on the subject in those days, and he was affiliated with the New York Institute of Photography. I was curious about some of the cameras he displayed, such as this, which is a Bell & Howell 2709—

AM: Which we're going to talk about in a little while, right?

AK: [Chuckles] Right. Hardly what you'd call an amateur camera today.

AM: That looks like 35mm, hand-cranked, for the amateur. Well, I guess technically these cameras were [marketed] for the amateur who had enough money to buy them, and the interest.

AK: Of course, 1924, there was—oh, this is interesting, to me anyway. Recognize that projector? We have a picture of it upstairs. That's the Ernemann.

AM: You have that on the shelf, don't you? I noticed in [one] section [McKay] talks about the Pathé projector. And there's probably a

little section on 28mm. Do you think there is a section devoted to 28mm?

AK: On 28mm? Yes. I also have that projector [referencing the McKay book]. Quite a recent acquisition.

AM: The Optica?

AK: Yes. You'll see it [later on]. And then there were books that were marketed to a specific segment of the amateurs. In other words, this book focused on just Super 8. This one was sound.

AM: That was a Kodak book, actually.

AK: Yes. This goes back to regular 8mm, and then this one is directed at the amateur going into color. So that's what I have to say on books.

AM: Okay. Aside from books, there were a lot of other accessories too. I remember that you have splicing kits upstairs. You have light meters. You have—

AK: Titlers. I don't think we talked about titlers, but most of these books urged the amateurs to make titles for their movies, and they show different ways of building a title, as well as buying them.

AM: Right. What are some of the other recommendations they would make about using the accessories?

AK: Well McKay says that you should pay attention to the makeup. If you have people in your movies, they should probably be

made up, and he suggests a makeup kit. Isn't that interesting?
[Chuckles]

AM: Yes. That seems very advanced. And were a lot of those—we had talked earlier about scenarios, and encouraging the amateur to produce home theatricals. Do some of those books talk about that?

AK: They certainly do. McKay's book has, as the next to the last item, a script.

AM: Wow. There's not much in McKay's book about just taking out the camera and shooting the birthday parties.

AK: That's right.

AM: And did you find that earlier on, [people approached home movies in a more organized fashion]?

AK: I found an interesting thing. I think I mention it in the book. The advice to the amateur, as given in the magazines like *Popular* and *Modern Photography*, year after year, it was the same thing. Don't swish pans. Plan your movie. Have a script. And so on. They seemingly ignored spur of the moment home movies.

AM: How did the spur of the moment home movie—I like that—how did that fit in with the Amateur Cinema League, the ACL? Seems like a lot of the ACL movies that I've seen are wonderful. Great, but also seemingly very professional. I've seen some amateur theatricals, although I have also seen some family movies by ACL members.

AK: Yes. I would have thought that ninety percent of the prize-winning, award-winning ACL movies were carefully scripted. Well, that sort of stands to reason that—

AM: The prize-winners are going to go to the people who made the effort.

AK: Yes. Nobody's going to give a prize to Andrea's fifth birthday party. [Laughter]

AM: That kind of fits in with what I've seen anyway, although I haven't seen a whole lot. And did the ACL push these books? These accessories?

AK: I don't recall *Movie Makers*—I don't know. It doesn't seem to me that *Movie Makers*—they seem to assume a higher level in their membership than the general photography magazine. Do you know what I'm saying?

AM: I do. It seems like there's a certain level of—

AK: Competence.

AM: Yes competence, but also, a lot of the photographers that I know have a lot of gadgets. People like to have them. They like to have all the stuff that helps them to be a better photographer, a better moviemaker. Whether that's the light meter, whether that's the lens, or three lenses, or a zoom lens and all that stuff.

[End of Tape 10]

Kattelle Oral History, Tape 11

August 27, 2003

Andrea McCarty: We had been talking about books related to home moviemaking, and there were a few that we forgot to cover.

Alan Kattelle: This is a category of books that were written about a particular, specific make of camera, of amateur camera. We start with this one. *Motion Pictures with the Baby Ciné*. You may not recognize that immediately until I show you the back cover.

AM: Oh, the Pathéscope. Was that for the 9.5mm camera? That's great. Where was that book printed? I think it's London.

AK: That was printed in England, because the price of the book is two and six.

AM: Yes. And it says London on the back cover. It makes sense that it would be a European book.

AK: This was a book devoted to using the Bolex.

AM: Okay, what else do we have?

AK: Kenneth Tidings, the author, was a frequent contributor to *Popular* and *Modern* magazines. *The Keystone Movie Guide*. Also by Kenneth Tidings. Another one by Tidings—

AM: Wow. He was quite the prolific author. *Movies with the Kodak Brownie*. I like the picture there on the front cover.

AK: And lastly, we have a couple of movie stars on the cover of this one—

AM: That's David Niven on the cover, right? Can we also show that picture of Victor Mature?

AK: Yes. Let's find that picture. Here is John Wayne with his [camera].

AM: That looks like it would be on the set of one of those John Ford pictures. Does it say?

AK: Let me see. Oh, William Holden was the other one. It doesn't say, unfortunately.

AM: I really like that picture of Victor Mature. If you can find it, I think it's a good one.

AK: I like this one of David Niven. Oh, that's the same as on the cover, except you can see the back.

AM: So this [book] has a different feel. It uses movie stars to bring home movies to the [masses].

AK: This is interesting. Here's a chapter on the family reel. [Reading from article:] "This is the commonest type of amateur film. The christening. Bathing babies." You want to see?

AM: [Reading from article:] “You must learn to think and express yourself in terms of pictures and sounds.” Wow, so they really want you to structure your home movies. No wonder why they’re using the Hollywood stars.

AK: Oh, this book is great. [Chuckles.]

AM: Where did you get that book?

[Tape turned off]

AM: Okay, we’re back with my favorite pose from the book. It’s Victor Mature and his Eumig camera. Alan, how was the market penetration for Eumig? Where did they stand in the [market]?

AK: Well, judging by the number that I’ve found, they didn’t have a big presence, at least in this country.

AM: But they managed to get their cameras to Hollywood stars for this book. These books that adhere specifically to a type of camera, do they mostly give the amateur tips on certain features and how to use them? Because it would seem to me that, you know, one kind of 8mm camera [isn't so different from another.]

AK: Yes, exactly. It’s a promotional tool for the manufacturer. And the fact that Kenneth Tidings edited so many of them, I would venture to guess that they all tell the amateur the same thing. [Laughs] Don’t you?

AM: Right. He had a sort of boiler plate, and you could insert different company names and [cameras].

AK: Oh, I neglected to look at the bottom and to mention that they were all a series

AM: Oh, the Modern Camera Series. Okay. Let's stop there and we're going to talk about your Kodascope screen.

[Tape paused]

AM: We're going to talk about Alan's Kodascope screen, which I want to make sure we can see pretty well. I'm going to do a pan of the bottom. This is Kodascope screen number three, is it?

AK: This is number one.

AM: Sorry. Yes, now I see it better.

AK: I'd like to point out that, as has been mentioned before, when the original Ciné Kodak Model A, the first 16mm camera was announced, Eastman insisted on selling it as a package. The camera, the tripod, the screen, and I think, an editor.

AM: And the projector as well?

AK: And the projector, as all one package, to make sure that the customer got good results.

AM: But it must have been expensive.

AK: It was, very.

AM: So is this the screen that came with the Model A?

AK: This would have been one with the Model A, that's right. Shall I open it?

AM: Yes. We're shooting against this background, which isn't very good. Why don't we do it on the floor, actually? I'm going to

pause it so that we can change positions, because I'm shooting it against the light from outside.

[Tape paused]

AM: Alright, now Alan and I are going to try to put the screen together and see how it works. [Putting up screen.] That was easy. And there it is. So Alan, what can you tell me about that screen?

AK: Well, the first thing I have to say is that, considering it hasn't been opened for eighty years, it's not in bad shape.

AM: Yes, it's actually looking pretty good.

AK: I'll admit that I've touched up the paint in a few places.

AM: This is a silver screen.

AK: A silver screen, right. And one that needs cleaning, but all in all, I think it has stood up pretty well. And I might mention that they made a much bigger one. Want me to get it? We won't try to open it.

AM: Okay. I'll put everything on top. [Retrieving screen] So here we've got Kodascope screen number two. Perfect. So, Kodascope screen number two was a little bit bigger.

AK: More than a foot wider I think.

AM: And when did that one come out?

AK: I don't know. I don't have any literature on it at all.

AM: But probably soon after screen number one, yes?

AK: Right.

[Tape paused]

AM: Okay Alan, what have you got?

AK: I have here a Sigmund Lubin projector, a 35mm projector.

Lubin was a pioneer cinematographer for the Thomas Edison / Essanay group, a very early professional motion picture machine manufacturer. To me, the most interesting thing about the projector, aside from the fact that its illumination source is limelight, was the manner in which I received it. I had a letter, or a phone call from a gentleman who heard about my collection, and he said that he had an old projector, and he thought I might be interested. He mentioned that it was a Lubin. I said, "Great, I'd like to see it." He said, "Well, I'm on my way south from New Hampshire, but I see you're in Hudson. Could we meet somewhere off route 495, so I don't have to go looking for you?" I said, "Fine, I'll see you at the exit on 117. I'll meet you there." He not only had this projector but he had a very tattered suitcase, a small suitcase, the contents having to do with the owner, the last owner of this [machine]. Unfortunately, there were no films, but there were a number of lantern slides, and a business card of the owner. It turned out that he was an itinerant black preacher. Some of his lantern slides are fascinating. I'm sure I'll have to give it to the black history [society].

AM: Tell me what you have here. Would that fit inside the wooden box? I'm just trying to understand how it works. You have a metal case and then you have a wooden exterior. Did those two fit together at one point?

AK: No, this is just the lamp source. The light source. See, this is where oxygen and acetylene gases were fed into the burner, and when that flame is played on a piece of lime, it emits a tremendously brilliant white light. That's the light source and this is the [aperture through which] you can see whether the light is on or not.

AM: Okay, and then how does that work?

AK: This is the giveaway to those slides. See, this is a slot where a slide carrier would go in, but of course, it would also show movies. It was hand cranked because it belonged to an itinerant man, [in case] he didn't have a power source. The gases for the light, he could easily carry with him, and he didn't need electricity to move the machine because it was hand-cranked.

AM: Okay, and that was the lens in front.

AK: And this is the auxiliary lantern slide projection lamp that goes over on the far side, because when you're projecting, you slide this mechanism out of the way.

AM: Okay, but for the film, the lens is in front.

AK: Yes. Right now it's set up to show film. What's missing would be the upper reel.

[Tape turned off]

AM: Okay we're in Alan's parlor? Sunroom? What do you call this room?

AK: The sunroom.

AM: You can see the silver screen in the background.

AK: And a couple of his sculptures.

AM: And a couple of sculptures. They are tough to see with the window. I'm going to zoom in on the one over there. I'm zooming in on the one with the blue background on the wall. Can you tell me anything about that sculpture, Alan?

AK: I have trouble naming my pieces, or remembering what I call them. [Chuckles.] Just design number one maybe. It's all composed of scrap metal pieces that I retrieved from a scrap yard near where we lived at the time.

AM: I'm going to see if I can [focus in on another one.] Now I'm showing the one with the red...

[Tape paused]

AM: Alright, what's next?

AK: This is the Library Kodascope. It is basically a [Ciné-Kodak] Model B, 16mm Kodak projector. The Model B was fairly common. It became the library Kodascope when it was offered with this lovely walnut case. It was announced in June 1929. And it had some unusual features that the ordinary Model B did not have, such as this rear projection screen. It had a threading lamp, which was a great advance. And it was also self-threading. In theory at least, you put the fly reel up here, and threaded it through the machine, and it would pick up and be wound up automatically down here. Another nice feature, it

came with short and long focus lenses. I was particularly delighted to find this one. In that little container was a Kodacolor filter. And it happens to be in excellent shape. Most of them show considerable deterioration, but this one is pristine.

AM: That's a beautiful projector. The cabinet is in good shape.

AK: It was introduced, as I say, in June of 1929. It cost 300 dollars. That's from here up.

AM: The projector cost 300 dollars?

AK: In August they came out with this stand. That was another 150 dollars. This is a remarkable piece of equipment. First of all, there was storage space for your reels and any auxiliary equipment you might need. A good place to keep the instruction book.

AM: Can I look at the instructions? I would like to do a closeup on them.

AK: And another accessory... Oh, here's an ad you might want to see.

Now, what have we here? Well, for one thing we have a table. You could put the editor on here, and splice it or whatnot. And still more interesting is the screen. And here is the tripod. And there's the screen.

AM: They were all about giving you the complete package, weren't they? Do you have anything else to add about it?

AK: Well you didn't ask me, "Was it very successful?" [Chuckles.]

AM: I always ask you that and I didn't ask you this time. Alan was it very successful? How was it marketed?

AK: [Chuckles.] I'll tell you. The thing to remember is that this cabinet, the additional cabinet, was announced in August of 1929, and you wouldn't remember what happened in September of 1929, but it was the stock market crash. So I think that explains why not many of these were found. Very rare.

AM: I think you told me a story about your acquisition of that [Library Kodascope]. Hadn't you coveted it for a long time?

AK: Yes I had. When I first read that ad I thought that it was a beautiful piece of machinery. I thought, "Oh, I've got to have a library Kodascope." And several years ago, [a collector] in New Jersey had half a dozen. I don't know how he ever [got them]. He must have bought a warehouse somewhere, but he was asking what I thought was an outrageous price, two or three thousand dollars, so I didn't go for it. Then, just about maybe a year ago, a dear friend who collected in Canada, he called me and said, "I'm going to break up my collection. I know you've been interested in a Library Kodascope, so let's talk." We agreed on a price, and he did a marvelous job of crating it. I guess he had a professional do it. It took two of us to get it in

the house, and it took me about half a day to get it out of the crate. But it came through without much damage.

[End of Tape 11, Side 1]

AM: This is the beginning of side 2 of tape 11 on the audiocassette, and we're going to talk about an early Bell & Howell camera. Tell me about it Alan.

AK: This camera represents, I believe, a very, very early model of the first 35mm professional camera that Bell & Howell made. And my reasons for that assumption are twofold. There are a couple other of these early models. One is at the Eastman house, and one is in the Los Angeles County museum. But this one is different. The lens for it is quite distinctively different from either of those two. Those other two have serial numbers. This one does not. This one says "Patent Applied For", so it makes me think it could even be a prototype. It's the 35mm Studio Camera. It took a thousand-foot magazine. I'll try to get it around where you can see it.

AM: Yes, I can see it.

AK: You can see the magazine doors here. Did I say a thousand-foot magazine? Four hundred or five hundred foot, more likely.

AM: Yeah. It looks about four hundred or five hundred. How did you get this camera, Alan?

AK: Well, a dealer in Chicago called me. I didn't know the man. He said that he got my name from a fellow who thought I might be interested. He said, "I have an old Bell & Howell camera." And I said, "Oh yeah?" You know, I stifled a yawn. And I said, "Tell me about it." He says, "Well, it's about twelve-inches high and twenty inches deep, and it's wood. It seems to be a wood body. Are you interested?" And, trying to keep my heart from racing out of control, I said, "Well, if it's what I think it is, then yes, I am interested. Let me send you a picture of what I'd be interested in. Or you can send me a picture." So I guess I sent him a picture from a magazine or something, and he said, "Yes, that's what it is." So we agreed on a price in due time.

A couple things are really fascinating. One of the film magazines had "Art R." written on it, or painted on it. Another one said Reeves. Through a little research, I found out that Art Reeves was an early cameraman for Essanay in Chicago. So it may well have belonged to him. I have subsequently found a picture of Art Reeves cranking a camera that I'm almost certain is this one. It's unusual in this respect, that the cameraman didn't stand behind the camera, but right where I'm standing now. Because the viewfinder lens reflected through the side. I've got a studio shot where the cameraman is standing right here.

AM: Okay. I'm going to move the camera over and get a shot of the side.

AK: This is the footage meter to tell you how many feet you've shot. These tell you if the film is moving out of the magazine. I believe this is the rewind, but I don't know for sure. This is a contemporary tripod. It shows up in early pictures.

AM: Okay Alan, while I have you standing there—

AK: The one behind me?

AM: Sure. If you want to tell me some more about anything, that'd be great.

AK: This is one of the most beautiful cameras that [I've seen]. This is a French Debie. It's a studio camera. 35mm, hand-cranked. Dates from about 1908, so you've got to admit that this is in pretty nice shape.

AM: It's gorgeous. How did you acquire that camera?

AK: Again, word of mouth. A man called me. He said, "I got your name from somebody. I have an old camera." And that's the way it came to me.

[Tape paused]

AM: Alan, what's the camera behind you?

AK: That's a studio camera made by the Century Camera Company. Not very well-known. I think it takes an 8x10 [glass plate]. Oh, here we go. You'd be looking at the image on this round glass, then when you're ready, you put the negatives in behind this.

AM: Why don't you sit down in the blue chair and we can wrap things up? This has been kind of a long process. How long

have we been doing this for? We've probably done this for five or six days?

AK: I've forgotten when we started. You must have kept track of it.

AM: I think we did it Monday and Tuesday of last week. We had a not-so-good day on Wednesday. We took Thursday and Friday off. I came back here for Monday, Tuesday, Wednesday of this week.

AK: Well that's not bad, is it?

AM: No. It's not too bad at all. How do you feel about what we've done? Do you feel like we've covered your selections?

AK: I'm certainly thrilled and I can't complain about anything. I just hope I don't come across as a shmuck, or I don't know what.
[Laughs]

AM: No. Come on, I think you should be proud of your collection.

AK: Well I'm very grateful to you, Andrea, for putting your effort into this.

AM: When we shut the camera off [a few minutes ago], you were saying something about how it pays to have your interests well-known.

AK: Yes. It sort of strikes me as you ask me these questions, how often it's been through friends who have known of my interest. They tell me [about equipment for sale], or they tell another person [about me].

AM: There are a lot of these things that found their way to you through, through the goodwill [of others]. Do you have anything else you'd like to add, or any last thoughts before we turn the

camera off and call it a day?

AK: No. We've not touched on some of the written records, but that's something that I'm anxious to have survive. There is a fairly substantial collection of paperwork. Not only camera instruction books, but I've faithfully clipped magazine articles whenever there was something that applied to them. So I've got, as I might have mentioned to you, I've got four big three-ring binders full of articles.

AM: I think there was some chatter on the [AMIA listserv] just yesterday, people were talking about the need to access things like instruction manuals.

AK: Oh was there? That makes sense.

AM: Anything else? Any words of wisdom to young collectors?
[Chuckles.]

AK: [Chuckles.] Get going if you're going to try collecting because this stuff is going fast. [Chuckles].

AM: I think that's a good way to end it.

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