The last coating in 14 room took place Wed May 12. There have been a few notes circulating. I thought there might be some general interest in this particular one because of the 14 Room and other coating room histories included here. It is a well written document prepared by Scott Strock in conjunction with a talk he gave at retirement recognition in 2002.

Note: this history was written especially to demonstrate situations and improvements pertinent to 14 Room. It does not do justice to substantial efforts in B38 and the B/W business during the same timeframe. Written by Scott Strock in January 2002 for the retirement of Art Cichowski, Jan Klapetzky, and Russ Dorey. Minor updates at bottom until May 2011. This summary was not intended to minimize the tremendous contribution of many other Kodak people. Each employee has a personal history like those provided for these particular retirees.

I am going to tell you about the history of Film Sensitizing in Kodak Park, mostly during the time that Art, Jan, and Russ, worked there. Film Sensitizing is where plastic film base is coated with light-sensitive emulsions; hence the name of film sensitizing or film coating. It is a story of Building 29, which is the huge windowless building along Ridge Road just west of Lake Avenue, where Art, Jan, and Russ, spent the vast majority of their combined 98 year working careers. It is a story of 14 Machine mostly, which is the particular coating machine which most benefitted from their technical support for a long time right up to their retirement.

But you will also hear about other film coating machines in Kodak Park, as well as coating machines in other countries which were part of their working lives, because all three were experts whose knowledge was used by Kodak internationally. The history includes organization changes representing the swing of the pendulum between the efficiency of consolidation and the product excellence of multiple parallel organizations, each focused on a specific line of products.

The business importance of film sensitizing is unquestionable. Film manufacturing is where Kodak makes most of its earnings, which is exactly why the Wall Street analysts are concerned about Kodak's future in a digital world. One of the primary products made in 14 Room is Kodacolor, which you all know as the film people use by the thousands of millions for snapshots. Kodacolor is Kodak's highest profit generator. The other primary product is Eastman Color Print film (or ECP), the film on which movies are printed in thousands of copies for each major feature film, for showing in theaters all over the world. ECP is the highest volume color film made anywhere, by anyone.

The history of Building 29 in Kodak Park is long and proud because of the technical and operational excellence required to make film, and for Film's financial contributions to Kodak's business. The first coating machine in B29 was built in 1906, and was simply called number 1 machine or 1 "Room" as coating machines came to be known. But relax, I'll start with 1965, just before our honorees arrived at Kodak.

1965: 13 Room is constructed, representing the 13th fully new film coating machine built in B29 since 1906. Output of 13 Room would be increased with a third coating station added in 1967. Each new coating machine is typically bigger and faster than the prior ones. This generation of film coating machine is highly complex, requiring 4 shifts of 40 operators to run it around the

clock, plus 10's of staff for technical support, and a small army of people upstream making processed chemicals for it to use. It covers 6 floors of a building as large as a football field. Future film coating machines in Kodak Park would be even bigger.

June 1966: 22 year old Arthur Edward Cichowski graduates from University of Detroit with a Chemical Engineering degree. Art begins work at Kodak Park Bldg 23, in a central engineering group working on coating machine development. Building 23 is the one with blue panels set slightly back from Ridge Road in eastern Kodak Park. For Art, it is the beginning of a 35 1/2 year career devoted to film coating technology and manufacturing.

Two years later, Art transfers to B29 Film Emulsion Coating Division, proceeding through engineering jobs involving development, maintenance, product control and improvement, and product staff technical supervision. Art's capability and accomplishments would be recognized by promotion to technical middle manager, of which there is only a few in all of Kodak Park.

1969: 14 Room construction is completed, just down the hallway from 13 Room. Eastman Color Print movie film is used to debug the new machine at 300 ft/min, the design maximum speed of 14 Room. Later in 1969, an inefficient 2 pass coating option for Kodacolor X at 300 ft/min is developed in 14 Room to provide scheduling flexibility with the much more efficient, primary option of 1 pass coating in 13 Room. 14 Room would remain limited by only 2 coating stations for another 9 years. However, great things were in store for 14 Room, with which Art, Jan and Russ would later play a major role. Amazingly, still in use in 1969 are 2A and 2B Rooms, 3K, 8 Room, 10 Room, 11 Room, 12 Room, and 13 Room. Those would all be shut down during Art's, Jan's, and Russell's careers, as newer, larger coating machines in Kodak Park absorbed the volume and made them obsolete.

1970: A new coating machine is built at the Kodak deMexico plant in Guadalahara. The Mexican plant would sensitize Kodacolor film for Latin America until the North American Free Trade Agreement in the mid 1990's, when that Latin American volume would be moved to 14 Room, which by then was much more efficient. About the same time, Kodacolor sensitizing would be removed from the Australian plant in Coburg near Melbourne and also coated in 14 Room. In fact, a Kodak plant in Toronto Canada at one time coated both Kodacolor and ECP, but that volume, too, would be moved to 14 Room. Kodacolor was removed from Toronto in the late 1980's, and ECP in 1998.

June 1970: 25 year old Jan Albert Klapetzky hires into Kodak with Chemical Engineering degrees from Notre Dame, a Bachelors, and SUNY at Buffalo, a Masters. His first job is in the Photographic Technology Division, near the corner of Dewey Avenue and Ridge Road. Jan will spend his early career with Instant films, including film finishing and quality assurance. Later, he'll move to Film Sensitizing and become a human institution as the long term Kodacolor and APS product coating engineer. He would be known for quality and waste improvements, and for detailed record keeping showing that tremendous progress over time. He would also be known for effective relationships with film finishing customers in the film supply chain downstream from coating. Jan's Kodak career would span 31 1/2 years.

November 1970: 26 year old Russell J. Dorey begins his 30 year career at Kodak, with a degree in Mechanical Technology from Erie County Technical Institute and night classes at RIT leading

to a degree in Mechanical Engineering. Russell covers his tracks well, because the records are incomplete on his early career. Russ may have worked on the product coating staff in B29, but we know Russ would later be part of the Kodak Park Manufacturing Engineering and Maintenance Organization (or MEMO) serving Film Sensitizing in B29. Russell would serve Kodak for over 31 years.

Russ's expertise involved the equipment and methods needed to transport fragile films over rollers through the many turns of complicated coating machines. That made him a sought after worldwide resource on flexible web conveyance and film drying. He would progress from an individual contributor to supervisor of the process engineers supporting B29 coating machines. Russell would be known for his ingenuity in addition to his engineering capability. Just tell him something related to drying and conveyance could not be done, and watch the twinkle in his eye as he would figure out ways to do it better and cheaper!

1975: Kodak's old sensitizing operations near Paris, France move to a new coating facility in Chalon in the Burgundy region. Later, in the early 1990's, Kodacolor 100/200 sensitizing for Europe would be moved there from the Harrow plant near London, after a short period of supply from 14 Room. Kodacolor 400 followed a few years later. More European Kodacolor 100/200 volume and higher speed Kodacolor Max 800 would move to Chalon in the year 2000 because of huge tax benefits provided by manufacturing in Europe using a Single Trading Company set up by Kodak in Geneva, Switzerland. In 2001, ECP movie film volume for Europe would be taken from there and coated in Kodak Park, to provide capacity for Kodacolor in Chalon.

1978: A 3rd coating station is added to 14 Room, with a very large final drier that would later enable 14 Room to become the highest volume color film coating machine in the world with the help of our three retirement honorees and a few others.

1985: A new type of coating applicator, known as a C-coater, is added to the 1st coating station of 14 Room. That new, promising capability would not be fully used in production until 1991.

1990: For 90 years of Kodak history, there has been a separation of the Film Emulsion Division, located in B30 and the upper floor of B29 where coating materials are made, and the Film Emulsion Coating Division located in the rest of B29 where those same materials are coated on plastic film base. That separation was designed for industrial secrecy by George Eastman himself. It comes to an end with consolidation into a single Film Sensitizing Business. No longer is there an organizational barrier between floors in the middle of the pipelines feeding the coating machines. Four Product Flows, known as Consumer, Professional, Motion Picture, and B/W, plus a Film Components Division, are created. That means that the ownership of different coating machines in B29 is now split up among those different product flow organizations, but each product flow controls most of the processes that make their specific products.

The formation of the Consumer Flow provides a focus on high volume products in 14 Room, primarily Kodacolor and ECP movie film. That focus would enable 14 Room performance to increase to levels that were previously unimaginable. An essential ingredient is the vision, leadership, and execution provided by our three honorees and the likes of Dave Fulton and Tom Braun, plus new and better films brought in from R&D with the work of Reid O'Connell and

Brad Adams. Within 7 years, quality as measured by clean master rolls of film, would increase by 75%. Output from 14 Room as measured in hundreds of millions of square feet of film, would increase by 100%. And improvements in both areas would not stop there. A vision would be outlined in 1995, which would show how to achieve another 50% increase in output by 2002. Parts of that vision are being implemented today, including a new roll unwinder and winder for 14 Room. Today's production rates already represent an increase from the original design speed of 14 Room by more than 3 fold.

Also in 1990, a major drier extension is added to 14 Room for a new Generation III of Kodacolor films. The building for that extension includes the glass enclosed stair tower now seen at the very corner of Ridge Road and Lake Avenue. The extension would never be used for its intended purpose, because a product formulation change using a humectant would provide the needed film hardening, instead of a high temperature drier. 1991

Building 38 is completed on the site where 1 Room through 6 Room coating machines were once located in B29. B38 houses a new, state of the art, coating facility also known as - B38. The break from the historical Room numbering series indicates the intent that both machine design and organizational work systems will be different and better than prior coating machines, to meet the high quality standards for professional films and motion picture camera films. B38 was so different in design, that it would take several years to successfully move the coating of color films there mostly from 13 Room. In later years, much effort will be applied to tearing down the artificial organizational barriers created between the independent and even competing, 14 Room and B38 organizations. B38 would be the last new film coating machine in Kodak Park.

1995: To cut overhead costs, the four product Flows and the Components Division are consolidated into two, named the Commercial Film Flow and the Consumer/Motion Picture Film Flow. This organization sustains the separation of 14 Room from B38 and 13 Room.

December 1997: To cut overhead again, yet another consolidation occurs as the two remaining Flows are consolidated into one, the Rochester Color Film Flow. Because it is adjacent to 14 Room, 13 Room now falls under the responsibility of the staffs groups to which Art, Jan, and Russ belong. Each one now adds substantial 13 Room responsibilities to their plates.

1999: Kodak announces the plan to close 13 Room by moving B/W films to other plants. A year later when that activity was well underway, a change in business conditions would cause a reversal in much of that plan. Instead, many B/W films would be moved to B38, and a few to 14 Room.

2000: Kodak builds and opens a new Kodacolor film and photographic paper plant in Haichang, in the Peoples Republic of China. There are huge tax and tariff savings associated with manufacturing in China where Kodak sells more film than any other country except the US. Of course, there is a common misperception about lower labor rates being the reason. Since Jan is the Kodacolor coating engineer in the Rochester "mother plant", he has helped train his Chinese counterparts, and he continues to provide ongoing product support to China. After some process startup difficulties, Art and Russ will be called upon to help get the Haichang coating machine working properly using numerous trips to China.

March 2001: Color Film Sensitizing is again split up, this time into a Film Components Division and a Melt/Coat Division, as it remains today. Soon thereafter, Color Film Sensitizing would change its name to Rochester Film Sensitizing, to recognize the long term manufacturing of B/W films as well as color films.

December 2001: With B/W films now all moved to other coating machines, 13 Room is reluctantly retired. Art, Jan, and Russ, however, retire quite voluntarily. 14 Room continues to run flat out for the foreseeable future still focused on Kodacolor and ECP movie film. The volume of film made by 14 Room in one year, when slit into 35 mm finished film format, would reach around the world 150 times! Presidential candidate Ross Perot once envisioned a "giant sucking sound" of jobs fleeing to low labor rates in Mexico after NAFTA. In contrast, the incredible productivity developed in 14 Room "sucked" color film products from not only Mexico, but also from Kodak plants in Canada, Australia, and France. Tax laws are the only reason that Kodak must continue to coat color films internationally. Of course, our primary goal is to "suck" film sales from our competitors, and the productivity of 14 Room provides the ability to do that, because fast coating speed and high quality translates to low cost. So, Art, Jan, and Russ can retire knowing they preserved a proud legacy.

We should all recognize that the products they helped make available to the whole world are tremendously honorable ones. Film enables people to preserve memories and film provides the medium for entertainment. Kodacolor film preserves memories of people, as we can no longer see them: Children long since grown. Loved ones no longer with us... Movie print film brings to life the creativity of Hollywood, provoking every thought and emotion possible, including humorous distractions when they are needed.

The final thing I'd like to say to Art, Jan and Russ, is that I will miss each of you, for what you brought to Kodak, for how you have helped my career, and me and for your friendship. I envy you. Enjoy your fishing, winemaking, more time for family, another career, or whatever you decide to do. Most importantly, use your time to shoot lots of film and to see a lot of movies! Many of us still need our jobs!

Update: May 2011

Even with the expected transition to digital technology, it is amazing how rapidly film volumes declined since the above history was provided in early 2002. Kodacolor production ceased in 14 Room about 2008, with the declining volume moving to B38. 14 Room remained as a dedicated Color Print machine, until its last coating on May 12, 2011, at which time that production also moved to B38, Kodak's last film sensitizing facility.

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