ASSIGNMENT 3-D

An Invitation to Share Your Best Stereo Images with the World!

Two B&W “Favorites”

“Noonday Demons” by Robert E. Dias of Broomall, PA, was shot following photography of regular flat publicity stills for a play of the same title at Temple University in Philadelphia. During his time as photographer for the University, Mr. Dias had cast members in several theater productions pose for his stereo camera, in this case William Zielinski and Callum Keith-King. TDC Colorist and Wollensak Stereo cameras, Tri-X, Lowell Hot Lights, 1/50th, f/5.6, Jan., 1995.

“Multnomah Falls Through Fall Foliage” by Q. Brown of Troutdale, OR, was taken in the Columbia River Gorge in 1994 with an Asahi Pentax Spotmatic and 55mm lens on a homemade slide bar using T-Max 100 film.

We often have to consider the matter of how well a particular color print or slide pair will translate into black & white when selecting images for publication in Assignment 3-D. But both of this issue’s selections are original black & white print views which were also done in a format very close to the size used for most Realist format reproductions in Stereo World.

No Deadline

We’re still asking you to send in “One of your favorites” from among all the stereo images you’ve ever photographed, drawn or otherwise generated. That’s the extent of the category. Entries simply need to be images you find special somehow—something you’d like to share with other members even if you can’t easily explain why. If you wish, feel free to send up to six stereos for us to do the selection from a few of your favorites. As yet, no deadline has been set for this very open Assignment in the hope of eventually sharing a wide variety of interesting views from more readers.

The Rules:

As space allows (and depending on the response) judges will select for publication in each issue at least two of the best views submitted by press time. Rather than tag images as first, second or third place winners, the idea will be to present as many good stereographs as possible from among those submitted.

Any image in any print or slide format is eligible. (Keep in mind that images will be reproduced in black and white.) Include all relevant caption material and technical data as well as your name and address. Each entrant may submit up to 6 images per assignment.

Any stereographer, amateur or professional, is eligible. Stereos which have won Stereoscopic Society or PSA competitions are equally eligible, but please try to send views made within the past eight years. All views will be returned within 6 to 14 weeks, but Stereo World and the NSA assume no responsibility for the safety of photographs. Please include return postage with entries. Submission of an image constitutes permission for its one-use reproduction in Stereo World. All other rights are retained by the photographer.

Send all entries directly to: ASSIGNMENT 3-D, 5610 SE 71st, Portland, OR 97206.
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ON THE COVER

The huge IMAX 3-D camera system towers over the
late stereographer and camera operator Noel
Archambault on the vineyard set of Echoes of the
Sun, the first and only film in IMAX SOLIDO.
Archambault, 37, was killed in an ultralight aircraft
crash June 26, 1998, in the Galapagos Islands
while working on the IMAX 3-D film Galapagos: The
Enchanted Voyage. More about the far too short
life and impressive work of this pioneer of large for-
matic stereoscopic cinema is related by friends
and co-workers in an feature "Remembering Noel
Archambault" by Don Marren.

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THE MAGAZINE OF 3-DIMENSIONAL IMAGING, PAST & PRESENT

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Volume 25, Number 5 • November/December 1998
Remembering Noel

I met Noel Archambault only once, unlike most of those quoted in Don Marren's memorial article in this issue. But there are those people whose sheer sanity, enthusiasm, and friendliness make even one encounter memorable and leave you looking forward to your next contact without any lingering feelings of either hesitation or impatience.

The occasion was the 1991 ISU Congress in Paris, at which Noel had presented "Large Format 3-D Film: The Stereographer" as one of the shows in the main auditorium. At that point he had worked on the IMAX 3-D films Transitions, The Last Buffalo, and Echoes of the Sun, gaining a sort of specialized stereographer fame through articles in Stereo World. His illustrated technical descriptions and anecdotes about the production of these spectacular films using the massive IMAX dual-camera rig held most of the audience in envious fascination with both subject and presenter (who actually got paid for getting to work with the biggest 3-D camera in the world).

The Congress organizers, eager to get the Saturday program back on schedule with more traditional 3-D slide shows (Noel's technical diagrams and images were largely flat), tried to cut the presentation short by turning up the house lights when he was about three-quarters of the way through. After howls of complaint from the audience and scattered arguments over the eligibility and merits of the presentation threatened to degenerate into something between a minor riot and international incident (or at least an unpleasant "first" for an ISU Congress), the lights soon went back down and Noel finished his presentation to an enthusiastic ovation.

Surprised, but showing no signs of feeling bitter or insulted, Noel continued a sort of informal "IMAX show & tell" in a mirrored stairway alcove just outside the door to the auditorium for anyone with questions about large format 3-D. His IMAX 3-D frame pairs, openness and genuine interest in all aspects of stereography quickly obliterated most thoughts of the interrupted presentation, although I'm sure he was both flattered and a bit embarrassed by the overwhelming audience support he received.

From his work on Transitions in 1986 to his death last year doing an IMAX 3-D film in the Galapagos Islands, Noel's was a life largely devoted to the effort to produce the best possible stereoscopic films for people all over the world. His skills as a stereographer and his work on every single IMAX 3-D film through 1998 made him, for many, an object of astounded admiration and outright envy. Even the manner of his death could be seen as having something of the dramatic aspect of "dying with your boots on and your stereo camera in hand". (But I'm sure most people making remarks along those lines would prefer that any such end to wait to find them stereographing some exotic location at about age 105.)

As far as I know, Noel was the first participant ever killed during the production of a 3-D film. One soldier/cast member is reported to have died during the filming of 1953's 3-D film Cease Fire, but since that was a "semi docudrama" shot during Korean War battles, the situation was very different. The still growing field of large format 3-D cinema needed Noel's knowledge, talent, dedication and inspiration more than it needed any sort of martyr.

There are now several new IMAX 3-D films coming up that I hope to see, but I'd pass on all of them for another chance to talk with Noel in some stairwell packed with excited stereo enthusiasts.

Green Bay
Where Stereo's Fine in '99!
July 8-12, 1999

All NSA '99 Convention material and forms are available on the new convention web site:
www.dddesign.com/3dbydan/nsa99

Or, contact Convention chairman Harry Richards,
11506 N. Laguna Dr., Mequon, WI 53092,
hjrich@execpc.com
45 Years in Reverse

Recently, I purchased a few 1950s stereo slides, mounted in old slip-in mounts of the same time period. No doubt, the taker of these photographs became discouraged with stereo, because of the finished product.

In the end result, the sprocket holes are visible below the lower edge of the window, indicating the slide should be viewed from the opposite side of the mount. Also, and more importantly, the film chips were mounted in an incorrect order, resulting in a pseudo-stereo effect.

I was amazed when I realized these slides had remained uncharged for over 45 years. My deepest regrets are these photographs became aged with stereo, because of the finished product. Up until just recently, my personal experience concurred completely with this estimate of the time period when Cades was in business. However, recently I purchased ten stereoviews from the 1890s, each with the characteristic CADES blindstamp. One view was by B.W. Kilburn (dated 1893), four views were by J.F. Jarvis (dated between 1892 and 1897), and five views were by Strohmeyer & Wyman (all dated between 1895 and 1897).

This appears to infer that Cades was in operation for almost twenty years longer than any of us had previously thought. Incidentally, these later views have little or none of the informative notes and cross references found on the earlier cards.

I would enjoy hearing from anyone interested in the Cades Lending Library and the views that they circulated.

Tom Rogers
1111 12th St.
Huntsville, TX 77340

3-D VIEWMAX

I appreciate...your glowing review of 3-D VIEWMAX. [SW Vol. 25 No. 4, page 28.] I'm happy to report that in over a year on the internet with my stereographs for sale, I've not had a single complaint or return. Many school teachers are buying my viewers to pass out to their class. I include my own written instructions for the students on how to make stereographs with a single camera.

Your article in Stereo World has sent a lot of business my way. People are ordering all of the sets at once, instead of one or two, as in the past. Your magazine carries a lot of weight. I've scanned the article and published it on my web site, and I've linked to the NSA page...I'm proud to be a part of the printed history of stereo photography via Stereo World.

Ron Keas
Ben Lomond, CA
Noel Archambault, 37, veteran large-format (LF) camera operator, stereographer and cinematographer, was killed in an ultralight aircraft crash along with its pilot, William Raiser, Jr., on the morning of June 26, 1998, in the Galapagos Islands. Raiser, 50, was a retired Air Force pilot from Colorado Springs who had prior experience filming in these islands. He founded Leading Edge Air Foils, a distributor of ultralight aircraft engines and parts. Noel and Raiser were filming Galapagos: The Enchanted Voyage, a new IMAX 3-D film produced by Imax Corporation and Mandalay Media Arts of Los Angeles for the Smithsonian Institution.

When the aircraft failed to return on schedule, a ground and air search was immediately initiated. Late in the afternoon of June 29, three days after the search began, the aircraft was spotted from the air near a crater on Isla Isabella. The search team didn't reach the crash site until July 1. The cause of the crash has yet to be determined. The initial aerial search team reported that it had experienced heavy turbulence which could pose a threat to ultralight planes.

Director Colin Low was so impressed with Noel's amateur 16mm 3-D film that he hired him as first camera assistant for Transitions, the first film in IMAX 3-D, which premiered at Expo 86 in Vancouver (SW Vol. 13, No. 3). Here Noel holds the clapper in front of the dual-camera IMAX 3-D rig, which is suspended from a crane for a Canadian railroad sequence in the film. He would go on to work on every IMAX 3-D film through 1998's T-Rex: Back to the Cretaceous.
Over and over again, the same words are repeated to describe Noel Archambault: “extraordinary,” “remarkable,” “amazing” and “irreplaceable.” The adjectives are not used lightly either. Colleagues, friends and family members support these words with praise for his patience and dedication to detail, his communicative deftness, his humor, his passion for 3-D and his technical and artistic brilliance. Graeme Ferguson, producer and one of the founding fathers of The IMAX Experience, summed up all of the accolades by saying, “Noel made a difference to the world, and we thank him for that.”

Noel was a good friend to Stereo World, and subscribed before and after he became associated with the National Film Board of Canada (NFB) and IMAX Corporation. He was always generous with his time for interviews, and he eagerly offered us stereo pairs he had shot with his Realist and View-Master cameras while on the sets and locations of the films he worked on. He even put us in touch with the right people at IMAX Corporation who would generously give us 70mm film pairs over the years for a more thorough coverage of their films. Thanks to Noel, a higher standard of 3-D film coverage was established.

John Dennis, editor of Stereo World, in an editorial (Vol. 16, No 2), acknowledged Noel’s largesse by writing, “Only rarely have stereo photos been made to record the production process of 3-D films. Most of the examples are publicity shots of movie stars, made by photographers allowed only briefly on the set. It can make a difference when the person with the Realist is an insider—in the case of our coverage of two new IMAX 3-D films (The Last Buffalo and Echoes of the Sun), it was the stereographer behind the IMAX camera himself—Noel Archambault. Imagine the record we would have today if people in his position had been willing and able to roam Hollywood sets in the 3-D years of the 1950s!”

An Unrivaled Stereo Expert

Noel, who was born in Vancouver, B.C., had a passion for film even as a young boy when he and friends borrowed his family’s 8mm camera and shot a three-reel version of Rumpelstiltskin and some other films. Instrumental soundtracks were recorded on a separate tape. While studying for his Bachelor of Arts degree at Simon Fraser University in nearby Burnaby, he enrolled in their film workshop. In 1989, he told Stereo World (Vol. 16, No. 2) that his interest in 3-D led to experimenting with 35mm SLR cameras and making a stereo film as part of his thesis. “I built a crude 3-D rig using two 16mm cameras on a plate with mirrors from an old Xerox machine. The film was a learning experience from beginning to end. By the time the film was completed, I figured out how to shoot it correctly.” That film, George Norris in Depth, about a renowned Canadian sculptor, together with a written study...
when he was contracted to do further 3-D research and help design the new camera mount for the next two IMAX 3-D films, *The Last Buffalo* and *Echoes of the Sun*. He was stereographer on both films.

Amazingly, 1992 saw five films featuring Noel's talents go into release. Besides two films in IMAX, there were three films in 3-D. In addition to being stereographer, he was director of photography (DOP) for *3-D Safari* (full-frame 35mm), which was produced for Le Cinema en Relief at Futuroscope, The European Park of The Image in Poitiers, France. At the time, he told *Stereo World* (Vol. 19, No 3) that the position of DOP gave him personal satisfaction. "In future films, I would like to move away from the technical aspects of filmmaking as a stereographer and concentrate on the aesthetics of filmmaking as a director of photography. Both positions do give you complete control, but it's the use of the medium that's of primary interest to me now."

The two other LF 3-D films released in '92 were ground-breakers. He was stereographer, camera operator and second unit DOP on *Shooting Star*, a 5-perf/70mm film produced for Science North in Sudbury, Ont., where it is still being showcased. The film is a rarity and a must-see stereo experience. It was the first 3-D movie in North America to incorporate free-floating 3-D laser animation with film. His other LF 3-D film was *Concerto for the Earth*, where he was one of three stereographers (he was also 2nd unit DOP) used in the complex film. It was the first film ever created with the Showscan 3-D system utilizing 5 perf/70mm film at 60 frames per second rather than the standard 24 frames per second.

Noel would go on to be DOP for three other projects, *Into the Deep* (1994) in IMAX 3-D, *DANANANANA: Rainbow Butt Monkeys* (1995), a 16mm music video, and *Cosmic Voyage* (1996) in IMAX. The latter film was produced for the Smithsonian National Air and Space Museum. Director Bayley Silleck initially envisioned this film in 3-D, but a soaring budget for special effects and computer animation prevented this reality. One can't be too sure, but I'm very suspicious on stereo, impressed Colin Low who was about to embark as director of the first IMAX 3-D film, *Transitions* (1986). Noel, who had been working at the NFB at the time, was hired as the film's 1st camera assistant. In the following year he had the same position on *Niagara: Miracles, Myths and Magic* in IMAX. His career went into high gear...
that there was a conscientious effort by the film's creators to make 2-D Voyage look like it's a 3-D film, if that's possible. Thanks to Noel's stunning camera work, some extraordinary special effects and Silleck's thoughtful and precise direction, the illusion of depth is forever present on the big IMAX or OMNIMAX screens.

Noel has worked on every IMAX 3-D film ever made since Transitions in 1986, a testament to the demand for his gifted and unique talents. (A complete filmography follows this article.)

Friends Pay Tribute to Noel

A celebration of Noel's life and work was organized by Imax Corporation and held on Sept. 19, 1998, at Toronto's Ontario Place park. The event took place just steps away from the Cinesphere, the world's first permanent IMAX theater which opened in 1971. The company thought of everything. Video monitors showed tributes to Noel that had been taped earlier at the International Space Theater Consortium convention in Sydney, Australia. Other monitors took us behind the scenes of filmmaking allowing guests to take a peek into Noel's private life by way of a few dozen viewers containing his personal Realist slides. The viewers were hung on ribbons and tied to rails where the slides were labeled and identified.

A more formal part of the gathering included tributes to Noel. Sally Dundas, who produced the Academy Award nominated-Fires of Kuwait, and who worked with Noel on several films in IMAX, said, "Noel was a trusted and respected constant in her professional life. He was an extraordinary nice person often in extreme adverse conditions, like when I was being a slave to the two demons of time and money and giving him a hard time. He was an amazing colleague, technically and artistically." Dundas went on to talk about 3-D in general and how the process had to him and make the absolute most of any situation."

Graeme Ferguson, who produced Into the Deep, said, "The first thing that comes to mind when I think of Noel is his smile and his automobile license plate which read 'ILUV3D'. Almost every time we met, it was the same thing, Noel had a new idea. If there had been some problem bothering us, Noel would have a proposed solution. If something hadn't been bugging us, Noel knew it was going to bug us pretty soon. He always wanted to tell us the solution before we ran into the problem." Ferguson then went on to talk about 3-D in general and how the process had become an enormous joke in the film industry, so much so that nobody would take it seriously.

"Establishing IMAX 3-D wasn't easy," he said. "Film stock, projectors and theaters were expensive, but our determination couldn't be dampened." He paid tribute to Colin Low, Noel and the group who charged ahead with Transitions and IMAX 3-D "to show the world that this was the right way. They created a film revolution, not only in IMAX, but also in the cinema."

A tearful Richard Archambault, Noel's father, acknowledged the immediate outpouring of condolences after the accident. "They began with a series of short e-
Noel aims a 65mm camera rig at boiling mud pits in Iceland for the Primordial sequence in Shooting Star (SW Vol. 19 No. 3, page 40). Director David Lickley appreciated Noel's patience and dedication and relates a horrific 30-hour adventure involving countless phone calls to travel agents and equipment suppliers. “To solve a camera flickering problem in Iceland, Noel flew to Canada, got on another plane and flew to Los Angeles, picked up the device to solve the problem, then flew to Sudbury, Ontario, where we were based, then flew back to Iceland. I felt so sorry for the guy because he didn’t get any sleep, but I also knew that it is what he wanted to do—get out there and make sure things were perfect.” (Photo, Walkeye Productions, Inc.)

Noel Archambault Scholarship Fund

A scholarship fund has been set up at Simon Fraser University (Burnaby, Canada), where Noel studied film and created a student stereoscopic-3D film that led to his beginnings in IMAX 3D stereography. In Noel Archambault’s memory, donations can be made to the SFU scholarship fund. Donors receive a tax receipt and Noel’s family is notified of the donation (not the amount) and who made it.

Donations should be sent to the Noel Archambault Scholarship Fund, Simon Fraser University Development Office, 8888 University Drive, Burnaby, B.C., CANADA V5A 1S6.

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basic tenets of the format. The reel, the films and our memories of a passionate, dedicated and loyal colleague are his legacy which will live for years to come. Noel was a cherished member of the Imax community who will miss him both personally and professionally. T-Rex, his last film, will be dedicated to his memory. He is a hard person to replace and an even harder person to forget.

Stereographer Ernest McNabb, who worked with Noel on Transitions, remembered him as being “an energetic, hard-working and enthusiastic person. The next time we worked together (Wings of Courage) his experience was much greater, but his attitude was just the same.”

André Picard, producer of Rolling Stones: AT THE MAX, admired Noel’s intensity. “He was truly focused. He was always asking a series of questions to help you clarify your idea, pose solutions and look at your idea in a different way.”

James Porteous, Post-Production Manager of D.A.V.E. Audio, stated, “There are precious few people in this business that do what they do just for pure love. Noel was one of these people.”

In acknowledging the industry’s loss, producer David Keighley, Senior Vice President of Imax Corporation, hoped that Noel “was using SUPER IMAX 140mm wherever he is.”

It didn’t matter who you talked to at the Toronto gathering, every filmmaker present had nothing but praise for Noel’s work. Walter Woloschuk, director and producer of Endangered Films Inc. and Wall-eye Productions Inc., worked with Noel on three different projects, including Shooting Star which involved almost a three month shoot traveling to Australia, Iceland and Canada. “I must say that I never met a finer friend or working associate, not to say that the rest of the crew wasn’t like this, but there was something special about Noel and his understanding, his temperament and his day-to-day enthusiasm for the project. He would go that extra mile for everything and anything, whether it was moving equipment, setting up shots, or being an ambassador for our production company during this period. On a subsequent project, which was in the early development stages, Noel and I worked together and completed an eight-minute test film which was shot in the Las Vegas area. The film played at many conventions and the reception was excellent. Unfortunately, the film never came to fruition because the finances weren’t there to continue the project. I really admired Noel for the hard work he put into this test film. He never lost his enthusiasm for the project and he constantly worked at promoting the film.”

Director and producer Bayley Sillbeck assesses Noel’s vast experience as being irreplaceable in the short term. “He will have to be replaced by two or three people. He knew and understood the dynamics of 3-D and he understood all the different composition challenges posed by the medium. Noel was a skilled practitioner of 70mm 3-D. He lived and breathed to work in this medium. Because of his work and accomplishments, he is probably the one person who is responsible for the rise in 3-D interest today. He gave 3-D a cinematic expression, and he brought 3-D to a new plateau. His passing is so sad, really, and so unfortunate. Thanks to Noel, 3-D is about to take off to a new plateau.”

(Continued on page 15)

Noel Archambault Filmography

(S)=Stereographer (DOP)=Director of Photography (CO)=Camera Operator (1CA)=1st Camera Assistant

1998
- T-Rex: Back to the Cretaceous (SW Vol. 25, No. 4) IMAX 3-D (5), (CO)
- Mark Twain’s America (SW Vol. 25, No. 2) IMAX 3-D (5), Additional Photography

1997
- The IMAX Nutcracker (SW Vol. 24, No. 3) IMAX 3-D (5), (CO)
- The Hidden Dimension (aka Four Million Houseguests) (SW Vol. 24, No. 1) IMAX 3-D (5), (CO)

1996
- Cosmic Voyage IMAX (DOP)
- LS: First City in Space (SW Vol. 23, No. 5) IMAX 3-D (5), (CO)

1995
- DANANANA: Rainbow Butt Monkeys 16mm Music Video (DOP)
- Across the Sea of Time (SW Vol. 22, No. 4) IMAX 3-D (5), (CO)
- Wings of Courage (SW Vol. 22, No. 3 & Vol. 23, No. 1) IMAX 3-D (5), (1CA)

1994
- Into the Deep (SW Vol. 21, No. 5 & Vol. 23, No. 1) IMAX 3-D (DOP), (5)

1993
- Imagine (aka Breaking Through) (SW Vol. 21, No. 5) IMAX 3-D (DOP), (5)

1992
- 3-D Safari (SW Vol. 19, No. 3) Super 35mm 3-D (DOP), (5)
- Shooting Star (SW Vol. 19, No. 3) S perf/70mm 3-D (5), (CO), (2nd Unit DOP)
- The Secret of Life on Earth IMAX (2nd Unit DOP)
- Concierto para la Tierra (SW Vol. 19, No. 6) SHOW-SCAN 3-D (5 perf/70mm 60 fps) (5), (2nd Unit DOP)
- Flight of the Aquanaut IMAX (1CA)

1991
- Rolling Stones: AT THE MAX IMAX (Co-Director), (DOP)

1990
- Echoes of the Sun (SW Vol. 16, No. 2 & Vol. 17, No. 4) IMAX SOLIDO (5), (CO)
- The Last Buffalo (SW Vol. 16, No. 2 and Vol. 19, No. 3) IMAX 3-D (5), (CO)

1987
- Niagara: Miracles, Myths & Magic IMAX (1CA)
- The Outfitter 16mm Documentary (DOP), (Editor)

1986
- Transitions (SW Vol. 13, No. 3) IMAX 3-D (1CA)

1984
- George Norris in Depth 16mm 3-D (Director), (DOP)
On Monday, May 24, 1880, members of the Santa Cruz County Inquest convened at an isolated stretch of railroad track in the San Lorenzo River Gorge, about five miles north of Santa Cruz, California, for the purpose of gathering evidence.

Recessing from Judge John Dav-enport's courtroom, the nine members of the inquest met to view, first-hand, the location of a railroad accident that had claimed the lives of 17 people the previous day. That afternoon, an unknown photographer captured at least seven images of the visit, producing a set of unnumbered stereographs mounted on orange card stock.

Extant originals, now in the collections of Alan Young and Bill Wulf, bear type-set labels relating the images to the wreck that had occurred the day previous. One reads: "View showing projecting rocks, where many of the unfortunate victims received their first injuries". In spite of the sensational labels and the commercial formatting of the finished stereographs, it is clear that the photographs played a role as evidence in the investigation of the wreck, and in the deliberation of the inquest board that followed.

Nearly 120 years after the wreck occurred, the photographs still establish the credibility of one of California's Narrow Gauge Railroads

This article is adapted from The Birth of California Narrow Gauge, a Regional Study of the Technology of Thomas and Martin Carter, Bruce MacGregor; a book in preparation by Stanford University Press; the author would be grateful for help in identifying and making available for copy any early, unpublished stereo or cabinet images of the six narrow gauge railroads featured in the book:

- South Pacific Coast RR (serving Dumbarton Point, Newark, San Jose, Santa Cruz, all in California), the Santa Cruz & Felton RR (Santa Cruz, Felton), the Santa Cruz RR (Santa Cruz and Watsonville), the Monterey & Salinas Valley RR (Monterey and Salinas), the North Pacific Coast RR (Sausalito, Tomales), and the Santa Clara Valley RR (Dumbarton Point, Newark). The author can be contacted by email at bruce_macgregor@vcd.hp.com or by mail at 2410 Pimlico Dr., West Linn, OR 97068.

Before the Wreck

As the year 1880 approached, the city of Santa Cruz looked forward to new prosperity with the arrival of the narrow gauge South Pacific Coast Railroad. For the first time, the coastal community would be connected with San Francisco by a four and a half hour train trip, short enough to make possible single day business round trips between Santa Cruz and the commercial districts of San Francisco. Compared with previous con-
connections (a full day, one way only, by ocean steamer or two days by stage) the new connection would be made at lightning speed.

That connection, however, proved to be an engineering nightmare. It took four years to complete the 80 mile railroad, most of the time spent drilling eight tunnels through the spine of the Santa Cruz Mountains that effectively walled off the coast from the San Francisco Bay Area. More than two and a half miles of the railroad would be underground when the tunnels were finished. A major petroleum reserve was accidentally discovered in the longest tunnel—the mile and a quarter long bore through the summit of the ridge. Over thirty Chinese laborers died in the tunnel when a gas pocket, uncovered near the center of the tunnel, exploded in November, 1879.

The tunnels, however, were one of the reasons behind the narrow gauge's eventual success. They helped keep its grade to a minimum of 90 feet to the mile (about 1.7%), allowing 20 mile per hour headway over most of the mountain grade. To maintain such speeds, the narrow gauge management prided itself on “industrial strength” engineering standards. Rail, for example, was uniformly 52 pounds per yard—just four pounds lighter than the rail used by its standard gauge rival, the Southern Pacific. Curves were no tighter than 16 degrees, and struct-
tures, like bridges, were extremely well built.

However, rather than build to such standards for the entire 80 route miles to Santa Cruz, the railroad's President, Alfred Edward Davis, opted to purchase control of a short line already in operation between Santa Cruz and the small lumbering community of Felton. This line, called the Santa Cruz & Felton Railroad, spanned the last seven and a half mile link in the South Pacific Coast's route—down the beautiful but rugged San Lorenzo River Gorge. In operation hauling lumber from Felton to coastal ships at Santa Cruz, the SC&F had not been built to the same standards as the South Pacific Coast. Its rail was a light 30 pounds to the yard. Its curves spiraled down to 33 degrees, and to avoid expensive tunneling, a grade of 127 feet to the mile (about 2.4%) had been used to surmount a granite ridge in the canyon called the "Hogback". Ironically, even with a lightly built plant, there had been no major injuries or fatalities in four years of the SC&F's independent operation.

Alfred Davis would take no chances. When he purchased the SC&F in 1879, he ordered his company's engineers to begin re-engineering the seven and a half mile long orphan. Most of the trestles on the SC&F were replaced with earth fills. Deep excavations into canyon walls allowed curves to be reduced. 30 pound rail was replaced with 52 pound rail. Two new tunnels were constructed in the San Lorenzo River Canyon to improve alignment. But there was little the South Pacific Coast engineers could do about the steep grade at the Hogback. It remained, like a land mine, when the narrow gauge officially opened for business on May 15, 1880.

The Runaway

In the mood to celebrate the opening of the South Pacific Coast, residents of Santa Cruz bought tickets on numerous weekend "specials" between Santa Cruz and a station called Big Trees, a picnic ground set in a theater of first growth redwood trees, the site of today's Henry Cowell State Park. Big Trees sat just beyond the upper end of the original Santa Cruz & Felton, about eight miles from Santa Cruz.

At 3 o'clock Sunday afternoon, May 23, 1880, a South Pacific Coast train crew waited at Felton with written orders to return one of the "specials" to Santa Cruz. The conductor on the crew was George Colegrove, and in his diary, Colegrove described what in his estimation were a series of errors in judgment that unfolded as the clear, hot afternoon moved fatefully along.

The first error was the rescinding of his train order by the railroad's dispatcher, A.H. Walker, giving another crew—also waiting on a siding at Felton, permission to return the special to Santa Cruz. Colegrove recalled this decision with chagrin. It was unclear why the order was annulled (Colegrove kept the original train order among his papers, perhaps as evidence that he told the truth), and he openly questioned the dispatcher's judgment. Colegrove was familiar with the Hogback grade...
and had taken trains over it numerous times while the railroad was being built. The substitute crew, assigned an engineer named Bob Elliott, had never been over the original SC&F. Colegrove recalled coaching Elliott about the hazard's of the Hogback grade while waiting on the siding at Felton. Colegrove's brakeman, Howard Anthrum (spelled Antrim in newspaper accounts), offered to go along with Elliott and ride in the cab as a pilot, an offer which Elliott accepted. The railroad president's brother, Sam Davis, also got on Elliott's engine, crowding into the small interior of the narrow gauge cab.

The second error in judgment was made by Elliott's conductor. At Big Trees station, conductor William Bones loaded an estimated 300 celebrants aboard three flatcars, each just 24 feet long. A light wooden railing had been nailed in place around cars normally used to haul lumber, and crude benches were constructed. The cars might have comfortably held half the number that actually boarded, forcing dozens of passengers to crowd together in the narrow aisles.

Elliott whistled off from Big Trees Station at 3:15 pm and took his train into the heart of the San Lorenzo River gorge. A short tunnel at Rincon marked the top of the Hogback. The notorious Hogback grade began just south of the tunnel portal. Emerging from the tunnel into daylight, passengers noticed the train picking up speed, and heard Elliott sound one short blast on the whistle—a call for his brakeman to spring into action.

There were no air brakes on the train. Elliott's brakemen had to respond to the whistle by physically setting hand brakes on each car. But with the cars packed to overflowing, the brakemen had to shoulder their way through the crowds to reach the brake wheels. All Elliott could do was wait for the anticipated tug on his drawbar, adding badly needed braking power. The tug probably never came. In a few critical seconds, the train was out of control. Elliott knew he was in trouble. A quarter mile past the tunnel was a public highway crossing. Just beyond the crossing, a series of tight reverse curves lay in wait for the train. If he somehow avoided those deathtraps, 100 yards beyond the curves, the line crossed a high trestle. Lurching into the first reverse curve, Elliott felt the engine's wheels lift up off the rail. Desperate to slow the train, he "horsed over" the big reverse lever by his seat, forcing the drivers into a reverse spin. But the image of giant wheels spinning furiously against the engine's momentum is misleading. Without adhesion to the rails, the driving wheels would have as little braking power as they would the power to accelerate a train if they spun in the forward direction. Even with the engine going in reverse, it took 300 feet to stop the runaway.

Who Was the Photographer?

The artist responsible for the seven known stereographs taken of the wreck site remains unidentified. R.E. (Romane) Wood, perhaps the best known stereo photographer in the Santa Cruz area during the 1870s, had sold his home and moved out of the county by the time of the wreck.

Two other commercial photographers were listed in the 1878 McKenny's District Directory for Santa Cruz: J.E.D. Baldwin and John Richard Hodson, both operating commercial studios on Pacific Avenue in the late 1870s. C.W.J. Johnson is another possibility, operating a gallery in Monterey in 1880, but the demand to travel nearly 50 miles on short notice seems to make Johnson's presence in Santa Cruz a long shot. In any event, the photographer in question produced some of the most unique stereoviews of his—or her—time.
Miraculously, the engine remained on the rails, but the second flatcar had derailed on the reverse curve, thrown towards the bluff by centrifugal force. One corner of the flatcar impacted a solid rock outcropping, the sudden jar throwing passengers through the shattered wooden railing and onto the rocky ground. An instant later, the third flatcar had run over the prostrate victims, dismembering, maiming and killing in its wake. Fifteen men, women and children died at the scene. Two others died in the next 24 hours, bringing the casualties to 17 dead, and nearly 40 wounded. When Elliott finally got stopped, his fireman raced back to the wreck, and found thick dust, like plaster masks, caked on the faces of the dead and dying.

The Inquest Convenes
Judge John Pope Davenport convened the coroner's inquest board that evening, hastily impaneled to view the bodies brought to a temporary morgue in a Santa Cruz skating rink. The wrenching sight of mutilated bodies quickly established an obvious cause of death in the minds of the jurors. But the root cause of the accident was more difficult to determine. On Monday, the inquest visited the wreck site, bringing along a photographer. His name, if it was a he, remains unknown, but that afternoon at least seven stereo images were made of the wreck site, including one view that included the locomotive involved, positioned approximately where it had come to rest after Bob Elliott's frantic efforts to stop the runaway train.

The next afternoon, Davenport began to call the first of 40 witnesses. Questions were raised about the competence of engineer Robert Elliott. The morning before the wreck, a passenger testified, Elliott had been at the throttle of a south bound passenger train on the run from Alameda to Felton. Twice on that run, Elliott's train had slipped out of its Miller hook-style couplings while in motion on the mountain track, the cars arrested from coming apart by safety chains. The passenger concluded that Elliott had not handled the train well, allowing too much slack action between the cars.

Even Elliott acknowledged that he had never been down the Hogback grade before that day. But attention was quickly refocused on the condition of the track at the site of the derailment—a few yards south of the county road crossing in the San Lorenzo gorge. Witnesses reported observing sharp kinks at joints in the rail at the first reverse curve, suggesting the heat of late afternoon may have expanded the rail, causing a crimp. Other witnesses testified that the track had no ballast at that point, making it easier for heat to distort the track, skewing the joints to the point where a moving train might derail. The weight of the speeding locomotive could easily have pushed the unanchored track even further out of line, setting up the conditions for derailing the flatcars behind. The Coroner's jury wrestled with each of these alternative explanations. Except for time to attend public funerals on Tuesday, May 25, the jury remained at their task for nearly a full week, finally reaching a verdict on Monday, May 31.

The Findings
Ironically, the coroner's board labored under the handicap that the track had been repaired before they could inspect it, and that little or no direct evidence remained of its condition at the time of the wreck. George Colegrove noted in his diary that "the track was cleared" the same night as the wreck, and he himself acted as conductor that night on a train running through the wreck site to Santa Cruz. Articles published in the Santa Cruz Sentinel on May 29 documented that the jury had questioned railroad section men who had repaired the track just a few hours after the wreck occurred.

The stereo views taken on Monday, May 24 bear out this conclusion, showing not only smoothly aligned rail, but ballast filled in
Endangered Critters
Animated in LF 3-D

by Don Marren

Production has started on a new large-format (LF) 3-D film called Endangered! The 40-minute family film is being produced by Endangered Films Inc. in Toronto by a consortium of industry professionals including Walter Woloschuk, Doug McKenzie, Richard Hanet, Glenn Wong, Stephan Fanfarra, Ingrid Weger and Howard Buckman. Woloschuk and his Walleye Productions Inc. produced Shooting Star, the 70mm 3-D film which includes 3-D laser animation. That 1992 film is still running at Science North in Ontario, Canada. (See SW Vol. 19 No. 3.)

Executive Producer Doug McKenzie said, "We choose Endangered! as our first project because it fit our mandate, which is to produce projects that are entertaining and educational, while contributing to the welfare of our environment." Endangered! is described by the producers as a visionary film that will combine state-of-the-art animation technology with live action in a 3-D setting. "Large-format films are visually stunning and the challenge is not to let large-format techniques take priority over creation of a sound project based on a good idea," said Glenn Wong, Vice-President. "Audiences can be wary of films that are special effects driven. They want the technology to enhance the film and its entertainment value and not overwhelm the story."

The film will be released in LF 3-D and 2-D presentations in the spring of 2000.

Noel Archambault

(Continued from page 9)

Everybody who ever worked with Noel—or knew him—agree that he was, as Stephen Low called him, "truly a spectacular human being." At the Toronto celebration of his life, Noel's fiancée Cara Burres reminded us that "his life expressed his philosophy. He lived what he believed, and a key part of that was his willingness to live in empathy towards others. He was always putting himself mentally in your position, and always trying to see things from your point of view. That's an important thing that we sometimes forget. And I think that was one of the keys as to how we all felt so comfortable with Noel, why we were drawn to him and why we certainly loved being in his presence. He was truly the most exquisitely beautiful human being I ever met. There are some people who come into your life and leave footprints all over your heart. Anyone who has shared time with Noel will have known a man whose heart and mind are always open, always honest and always loving."

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It seems that Large Format (LF) 3-D movies are still few and far between. Only two LF (IMAX) 3-D films were released in 1997. In 1998, it looked as though we would be treated to three new films. The first film was MARK TWAIN'S AMERICA IN 3-D (1998) from Sony Pictures Classics, which opened July 4th. The second new 3-D film for 1998 was Imax Corporation's T-REX: BACK TO THE CRETA-CEOUS, which opened October 9th. We were promised a third, ENCOUNTER IN THE THIRD DIMENSION (E3D), an nWave Pictures presentation in association with Iwerks Entertainment, Movida and Luminair, originally scheduled to be released in the fall of 1998.

This film had a sneak preview weekend at the UltraScreen Theatre at the Ontario Mills mall in Southern California but it was not to receive a 1998 release. It is my belief that T-REX and E3D did not want to compete with each other. IMAX had big hopes for T-REX and two films being released at once would not help either one's box office grosses. T-REX had a good opening. It was number 35 on the Top Box Office grosses for its first weekend (playing at only 3 theaters). T-REX still has opening dates planned for the Spring of 1999, but it has a long way to go to become profitable.

Word came that E3D (mimicking the coordinated distribution model of Hollywood) was scheduled for a national May release in Canada. Famous Players IMAX theaters is the first chain of large-format theaters in the world to coordinate a national coast-to-coast marketing and exhibition effort—which seemed to partially explain the delay of the film's release.

Last Fall Director Ben Stassen screened E3D for the people who had worked on it. He could only show the left eye print of the film at the IMAX theater in Brussels, since Belgium doesn't have a 3-D IMAX theater (yet). In January, E3D had a press screening at the Los Angeles, California, Science Center IMAX theater. I was disappointed that no one involved in the film was present to speak or answer questions. Iwerks had its own screening at this location on February 18, 1999, with the film set to open there on February 26th.

The Stereoscopic Displays and Applications Conference was held January 25-27, 1999 at the San Jose Convention Center, San Jose, California, as part of IS&T/SPIE's Electronic Imaging '99. Ben Stassen of nWave Pictures was scheduled as the keynote presenter with his presentation "Encounter in the Third Dimension, A Revolution in 3-D Cinema." Ben Stassen had to cancel, but he was aptly replaced by Sean Phillips. A true 3-D fan, Sean had worked on the LF 3-D films T-REX and E3D, plus he is currently working on future LF 3-D films. Sean's presentation included 2-D slides and 3-D video clips, with examples of all the multiple elements necessary to make one very short effects shot for T-REX.

Sean is truly excited about the developments in digital 3-D large format films. He predicts that things are ready to take off. He prefers digital due to the zero lens distortion that is possible using it, and talked at length about the improvements in computer programs to create 3-D special effects. Phillips mentioned one shot that he made for the upcoming SIEGFRIED & ROY— THE MAGIC BOX 3-D large-format film, that took a very long time to set up and was very difficult due to the 240 pound IMAX camera. He predicts that in the not too distant future, there will be a digital 3-D IMAX hand held camera that will be able to take any shot with very little effort or set up time.

I had a chance following Sean's presentation to ask him some questions. He remembered that he had called me a couple of years ago when E3D was in development. At that time he had been searching for images of famous individuals, such as United States presidents and Mahatma Gandhi.
Max, the Professor's flying robotic assistant in the Institute of 3-D Technology explodes into the audience after he inserts a lit stick of dynamite into his head in a scene from Encounter in the Third Dimension.

Detail from a scene in which the Professor gets zapped when his latest invention, Real-O-Vision, malfunction. One of the film's minor 3-D anomalies can be seen in the circle of light and the shadow that fall below the plane of the laboratory floor.

(An image of Ghandi holding a stereoscope did make the final film). Even though every U.S. president since Lincoln has been documented in stereo, they didn't follow that storyline.

Previously, Sean and I had a couple of pleasant telephone conversations. I did nothing more than suggest they contact UCR/California Museum of Photography and take advantage of the 350,000 image Keystone-Mast collection, just as had been done in 1995's ACROSS THE SEA OF TIME (SW Vol. 22 No. 4) and MARK TWAIN'S AMERICA IN 3-D (1998). Sean discussed his first work in 3-D, the titles for FRIDAY THE 13TH PART III: 3D (1982) and his recent work on AHEAD OF TIME (1995), a special venue film for Sony.

In a later visit to the UCR/CMP, I discovered that they had asked the museum for images of photographers shooting with stereo cameras. Interesting to note that while the previous two LF films had requested large copies (11" by 17", I believe) so the IMAX camera could pan within the image, E3D only wanted 8" by 10" size prints.

I asked Sean about the museum and he stated that he had spent many hours there. I mentioned one print of two scantily clad women looking through a stereoscope and how well the film handled the humor of the shot. Sean said that as soon as he saw that picture, he knew he would use it in the film. Even though the museum didn't have the negative, they did have an excellent print to copy. I asked Sean about the delay in the release of E3D. He was not sure why (since the film was ready in July of 1998) the release had been delayed. He said he believed it had something to do the release cycles of IMAX motion pictures.

Admittedly, When I first saw the film, I was bothered by the extensive use of computer generated imagery (CGI). But, E3D does use CGI to its maximum potential. The film integrates CGI and live action to explore the history of 3-D photography and motion pictures. Included are clips from several 3-D ride films. It is interesting to note that the film made use of the new BiClops® 870/1570 3-D camera rig which Stephen Hines built for HinesLab, Inc. But, in order to be the first 3-D LF film to have sync-sound, they used 35mm (as well as Sper/mm and 8per/mm) cameras. The footage was then integrated into 1Sper/mm digital format on a computer.

In forty minutes, E3D can only explore a limited amount of 3-D history, but the film is well constructed. It begins in the digitally created "Institute of 3-D Technology". The Professor's laboratory was created entirely on a desktop computer graphics workstation at a digital studio. Initially, animators designed a wireframe outline of the laboratory, then applied various textures to the drawings to
The Professor (Stuart Pankin) and his flying assistant Max in the final composited image of the laboratory, from which they take viewers on a historical tour of 3-D cinematography. © 1998 nWave Pictures

Wireframe outline of the Professor's "Institute of 3-D Technology" to which animators applied texture, lighting, colors and atmospheric effects. © 1998 nWave Pictures

give the set its shape and initial appearance. High resolution colors were added along with lighting and atmospheric effects to complete the environment. I enjoyed the opening with a CGI curtain and titles that utilize "spelling check". Again, this and several other points in E3D are very reminiscent of THRILL RIDE: THE SCI-ENCE OF FUN, but this time they are in 3-D.

We meet the Institute's bright (and slightly disorganized) professor, played by Stuart Pankin. Stuart is recognizable from his many TV and film credits. He was in HONEY, WE SHRUNK OURSELVES (1997) the video sequel to HONEY, I SHRUNK THE KIDS (1989). In addition to portraying "The Professor," Stuart provides the voice for his wisecracking assistant M.A.X. (a flying robot). The Professor, not content with dry scientific explanations, presents (or attempts to present) Elvira, to show off his new process called "Real-O-Vision." Cassandra Peterson also portrayed Elvira in THRILL RIDE, plus Elvira has presented 3-D films on television and did a preshow film for the 3-D motion simulator ride HAUNTED GRAVEYARD for Cinema Ride. To me, her presence in E3D seems like a gimmick that is surely not necessary, but apparently the makers of this film are counting on her to bring in more viewers.

3-D Film Clips from 1903 to Today

Max takes us on a journey through time, from early cave drawings to the discovery of perspective by Renaissance artists. After discussing the world's first stereoscopic viewer from 1838, we travel to the turn of the century and stereo photography's "Golden Age." What I had hoped would be actual footage from the Lumiere Brothers L'ARRIVEE DU TRAIN (1903), instead turned out to only be a digital reproduction.

The 1950s 3-D films are discussed and we see some great clips from Richard Carlson introducing us to THE MAZE (1953, Monogram Pictures—this is from the trailer and is uncredited) (SW Vol. 20 No. 4 & Vol. 8 No. 6) as well as clips from several Paramount films and a couple of clips from CAT-WOMEN OF THE MOON (1954) (SW Vol. 21 No. 1 & Vol. 8 No. 6). CAT-WOMEN was courtesy of Last Chance Productions and will hopefully someday be part of their 3-D film festival (they are currently searching for a corporate sponsor). I asked Sean about the films that they had picked to use clips from. He said it was very hard to get permission from the film studios. All the studios had their reasons. Universal and Disney were not interested, because they currently have 3-D attractions at their parks. He said Paramount on the other hand was very accommodating. So we are treated to clips from FLIGHT TO TANGIERS (1953), JIVARO (1954), MONEY FROM HOME (1954) and THOSE REDHEADS FROM SEATTLE (1953).
After the 1950's film boom, 3-D might have appeared gone. But we know it is not gone or forgotten, with many of today's 3-D films coming from World's Fairs, amusement parks and museums all over the world. To prove that 3-D is bigger and better than ever, the Professor next lets us take a peek at his collection of themepark films. In his laboratory, the Professor has "stored" some of the best of these films of the past twenty years. As he proudly shows off his collection, we come face to face with the giant mercurial chrome spider from James Cameron's TERMINATOR 2: 3-D (SW Vol. 22 No. 6) and are chased by a dinosaur from DINO ISLAND II-3D: RETURN TO DINO ISLAND.

After the Professor's 3-D film presentation, he decides to demonstrate his motion simulator and Max reluctantly takes a test ride. Max enters a contraption that looks as if it were devised by Jules Verne. With the giant video screen looming above the laboratory serving as Max's eyes, we experience the 3-D ride film JOURNEY THROUGH THE CENTER OF THE EARTH. The submarine-like device drills through the earth, dives through mysterious subterranean caverns, and navigates a furious river of lava to the planet's core. Amidst radiant beams of light, the vessel bursts through the earth's crust and emerges at the foot of the Great Wall in China. I for one, am happy that I was not in a motion simulator seat while watching this portion of the film. Max also shows what happens to the appearance of every day objects when the interocular distance is varied: a busy freeway looks like matchbox cars racing through a toy city, an owl seems the size of Godzilla, a camel looks like a tiny wind-up toy.

**Months of Digital Rendering and Transfer Work**

nWave Pictures, founded by Ben Stassen and Brussels-based D&D Entertainment Group in 1994 (along with its sister companies Movida and Trix) became a pioneer in the use of computer technology for the production of ride films. In early 1995, Charlotte Clay Huggins, one of the top producers in special venue filmmaking (visual effects producer for HONEY, I SHRUNK THE AUDIENCE, WINGS OF COURAGE and AHEAD OF TIME) joined forces with nWave to establish the Los Angeles office of the company.

On E3D, Stassen served as Executive Producer and Director as well as sharing the Screenplay credit. Huggins served as Producer. With the extensive use of already available 3-D footage, this film's budget was kept to a minimum. But producing the film required a huge investment of time. The live action elements were composited with the completed imagery. The digital files were then transferred to film via a film recorder (essentially a machine comprised of a computer and a high resolution monitor with a large format camera placed on top of it). Computer files were scanned onto the monitor which reads the primary colors of red, green, and blue. In turn, the monitor exposed the film three times, one for each color. For a large format, high resolution film like E3D, the film recorder takes nearly two minutes to record each frame of film. Considering the entire film has a total running time of forty minutes and requires two sets of images (a left eye and a right eye) at 24 frames per second, E3D has approximately 115,000 frames.

**Where and When to Encounter E3D**

Encounter in the Third Dimension is currently scheduled to run in 22 theaters around the world, with more to be added this fall. Contact the theater nearest you for length of run and format (headset, polarized, or anaglyphic).

**February 1999 Openings:**
- California Science Center IMAX Theater, Los Angeles, CA
- Edwards IMAX Theater, Irvine, CA
- Edwards IMAX Theater, Ontario, CA
- IMAX Berlin Potsdamer Platz, Berlin, Germany

**March 1999 Openings:**
- Sony IMAX Theater, New York, NY
- Loews Cineplex Navy Pier IMAX Theater, Chicago, IL
- Regal IMAX Theater, Lincolnshire, IL
- IMAX Filmtheater, Dusseldorf, Germany

**May 1999 Openings:**
- SilverCity Riverport Famous Players IMAX, Richmond, BC
- Colossus Famous Players IMAX, Langley BC
- Paramount Festival Hall Famous Players IMAX, Toronto, Ontario
- Colossus Famous Players IMAX, Vaughan, Ontario
- SilverCity Famous Players IMAX, Edmonton, Alberta
- Moody Gardens, Galveston, TX
- White River State Park IMAX, Indianapolis, IN
- Empire IMAX Theater, Halifax, Nova Scotia

**June 1999 Openings:**
- Marcus IMAX Theater at Crosswoods Centre, Columbus, OH
- Coliseum Famous Players IMAX, Mississauga, Ontario
- Paramount Famous Players IMAX, Montreal, Quebec
- IMAX Le Theatre, Quebec City, Quebec

**July 1999 Openings:**
- Suntory Museum, Osaka, Japan
- Tokyo IMAX Theater, Tokyo, Japan
Working twenty-four hours a day non-stop, with a record rate of 800 frames a day, it took nearly five months to transfer E3D from computer to the giant screen.

Almost 140,000 hours (the equivalent of 5,755 days) of digital rendering were required to create the CGI for the film. E3D represents an incredible achievement in digital filmmaking. The largest part was done by Movida, Brussels and the rest by Trix, Brussels. Their previous work includes motion simulator films, DEVIL'S MINE RIDE, COSMIC PINBALL, SECRETS OF THE LOST TEMPLE, and VIRTUAL TIME MACHINE, among others.

E3D was created by a team of 14 CGI animators over a one year period. Each worked on separate computers on a different part of the film at the same time. The live action film was scanned into computers at a resolution of 5.5K or 4K, at least twice or more than that of traditional 35mm. Scenes that contain the Professor, Max and Elvira have thirty-seven layers of images. Almost 2,800 Internet hours were spent transferring the data files from nWave's headquarters in Brussels to its post-production offices in Los Angeles.

From the beginning, nWave and Iwerks had planned to release E3D only in 3-D. With E3D, they want to maximize the market for the film with a multi-pronged attack. The film will be distributed in multiple formats and versions: a 40 minute, stereoscopic 3-D version for large format 3-D theaters (8170 and 15/70); a 40 minute, anaglyphic 3-D version for other (single-strip projection) theaters; a four-minute ride film version for simulation theaters; and a 12 minute 3-D entertainment version for specialty theaters in amusement parks.

Sony distributed nWave's first film, THRILL RIDE. With E3D nWave becomes the first independent film company to produce and distribute a large format 3-D film. Someone recently said “With regard to IMAX...there are two kinds of 3-D movies...bad 3-D and REALLY BAD 3-D.” I believe E3D helps prove this statement wrong. Not to worry, with the success of EVEREST and with the growth of 3-D IMAX theater locations, [45 worldwide as of

June, '98] there are still plenty of new titles in the works including:

- GALAPAGOS: THE ENCHANTED VOYAGE
- CYBERWORLD
- SIEGFRIED & ROY - THE MAGIC BOX
- MEMORIES: THE BEST OF ANDREW LLOYD WEBBER
- URSA MAJOR
- DIMENSION DETECTIVE
- SPACE STATION 3D
- THE BEAST
- GULLIVER'S TRAVELS
- ADVENTURE PLANET
- OCEAN OF LIGHT
- STAR TREK 3D
  (has been put on hold)
- SHREK
  (rumored 3-D LF version of DreamWorks' next CGI feature).

A VERY 3-D Virtual Stereoscopic World

I’ve been seeing 3-D movies, slides, etc. since 1976, and this film represents a quantum leap in the ability and presentation of displaying a virtual stereoscopic world that integrates with the live actors so well that we can accept it as a real, and VERY 3-D environment. It is not perfect. Those familiar with stereo will certainly find a few 3-D anomalies (however the giant IMAX screen is so filled with a richness of interesting things to look at, that it is quite easy to overlook a minor error here or there). Any 3-D enthusiast (myself included) will surely want to see the film several times to appreciate the detail to be found there. One caveat—if loud sound bothers you, bring along earplugs to make it a bit more comfortable.

- David Starkman, NewViews Editor
End of an Era

Word from the mother branch of The Stereoscopic Society in the United Kingdom informs us of the passing of John Singleton who was the most senior member of the Society at the time of his death just before Christmas, 1998. John was 93 years old and a Society member for sixty five years, having joined in 1933. Sorting out his records and other artifacts is quite a task as he accumulated a lot of material over the years—much of it related to Society activities. He was the main link between the pre-WW2 members (mono-chrome printmakers) and those of today, having seen everything in between. Outgoing Society President Don Wratten (who is also the UK representative for the Photographers Society of America) and Bernard Makinson are trying to sort out the material he left. In addition to records there are also literally thousands of stereo views on glass or glassed slides in several formats including 6x13, 4x107, and modern 35mm. In addition to John’s work there are included the works of other sometime Society members such as Phil Shenton and Stuart Hills.

It was always a treat to receive correspondence from John Singleton as he invariably added new (to me) aspects of Society history. He lived a long life and until recently was still active in Society matters and was able to continue enjoying stereoscopy through seven decades.

**BW-3D-CD**

For those who love to look at stereographs (and don’t we all?) a real treat is in store. 3D by Dan Shelley, sometime in late March, 1999, expects to release the *Bill Walton 3D-CD*, and this is one that we do not want to miss. The CD ROM is said to contain 1000 stereo views which one can call up for viewing on the computer—compatible with DOS/WIN, MAC, & UNIX.

The bulk of the views represent a considerable sampling of the subjects that have come before Bill Walton’s stereo cameras, including military views from his book *Back to Basics* as well as other military views mostly taken at Fort Benning, GA. Other Walton subjects covered include (but are not limited to): Bill’s trips to Japan; Scotland “Then & Now” comparisons; Rochester and Niagara Falls, NY; Arkansas and Georgia; Flensburg, Germany; and his *Personalities and Places* series.

But it doesn’t stop there. Also included are samples of the stereo work of current members of printmakers in the Stereoscopic Society of America, the Photographic Society of America, and the International Stereoscopic Union. Also a sizable heritage selection from the archives of the Stereoscopic Society of America features surviving examples of the work of old-time members as far back as the 1920s.

For more information one might visit the web site: http://www.dddesign.com/bw3dcd/bw3dcd.htm#1. The price is expected to be $35 postpaid. This is really a unique offering and I cannot think of anything to compare it to. I supplied the vintage Society views from which more than fifty were chosen as examples of the work of our onetime members who kept stereography alive when it was receiving little public attention. Once again Bill Walton is at the forefront of stereo pioneering, this time getting it onto compact discs.

**Voting Results**

Once again it is that time of year when the several folio circuits are sending in the results of voting for the prior year (calendar year 1998 in this case). Each circuit determines the manner of voting and the method of tallying and reporting the results. The leading vote-getters are announced here.

**Gamma Transparency Circuit**

Secretary George Themelis reports as follows for the Gamma (Realist format) circuit.

**Top Makers for 1998**

1st ............... Alan Roe ............... 78 points
2nd .............. Dale Walsh ............... 70 points
3rd ............... Franklin Flocks ....... 63 points
4th (tie) ........... LeeRay Kuipers ...... 50 points
Wolfgang Sell ........ 50 points

**Favorite Views for 1998**

“Desert Sunset” by Allan Roe (21 points)
“Get the Point” by Wolfgang Sell (20 points)
“The Latch” by LeeRay Kuipers (17 points)
“Sunflower Field” by Dale Walsh (17 points)
“Teton Reflections” by Alan Roe (16 points)

**Ovine Print Circuit**

Secretary David Lee reports the combined results for 1998 for the Ovine circuit which has eight circulating folios.

**Total Average Score**

1st place ........... David Lee
2nd (tie) ............ George Freeman
3rd ................. Mike Isenberg
4th ................ Michael Pierazzi
5th ................ Brandt Rowles

**Favorite Views**

1 “Waianapanapa State Park” by David Lee
2 “Looking Upstream” by David Lee
3 “Aspens” by David Lee
4 “Self Portrait” by George Freeman
5 “The Road to Somewhere” by Michael Pierazzi
6 “Lost and Found” by Michael Pierazzi

(Continued on page 28)
Henri Lefort—A Stereo Stage Director

When (Pierre) Henri (Armand) Lefort gave up the ghost on February 20, 1880, in a clinic of Paris twelfth arrondissement, few people outside his circle of family and friends took any notice of his death. Lefort’s name was soon forgotten until the two inquisitive collectors responsible for this article started digging up information about one of the most imaginative Parisian composition photographers.

Though Lefort still remains a shadowy figure, research in public archives and private collections yielded enough data to reconstruct a sketch of his life. Lefort was born in the town of Corbeil (near Paris) on August, 16, 1804, a few months before Napoleon I was crowned Emperor of France. Of his childhood, little is known. His father, Nicolas Aubin Lefort, was a schoolmaster and his mother died when he was fifteen.

On April 30, 1835, Henri Lefort, then a draftsman living at 33 rue du Croissant in Paris, married the Belgian-born Elisa Josephine Christophe. In 1848, he is listed in the commercial directory as a toy-maker at 35 (later 33) rue du Faubourg Saint-Martin where he will remain until his retirement from business. An 1848 header also advertises him as a painter of dioramas (scenes painted on the two sides of a large canvas which could be lit from the front or from the back and thus made day and night effects possible. Before being interested in the invention of the process that still bears his name, Daguerre was a well known painter of diorama).

On February 21, 1849, Lefort patents improvements to the construction of optical toys which he calls “Polyoramas panoptiques.” In a second patent taken out in 1852 for an “Eidoscope,” he dubs himself “maker of optical instruments.” His first connection with stereoscopy seems to date from the 1855 International Exhibition held in Paris. An article in the photographic journal La Lumière mentions stereoscopes exhibited by Lefort and the 1855 Bottin lists his name in the Optician section. It is not until 1859, though, that we can trace any stereographs published under his name. On August 2 and August 20, 1859, Lefort registers for public sale a total of 114 unique views by European stereographers. Past Stereo World articles have examined some famous European stereo subjects and producers, but you’ll get an idea of how much more there is to see and learn through this series written from a European point of view.

In this column, Denis Pellerin and Pierre Tavlitzki provide fascinating stories behind both the subjects and the makers of some unique views by European stereographers. Readers’ comments or questions concerning this column or European stereoviews are invited. Write to Denis Pellerin, 2, Porte-Vendômoise, 41170 Mondoubleau, France.

“The Concert.” A typical bourgeois drawing-room has been reconstructed in Lefort’s studio which could be changed into a restaurant, a cave, or a forest. Twenty-seven people can be counted in the picture, some of whom appear in many other views. Unfortunately, (except for the lady sitting on the left in the foreground) it is not known whether they were friends or paid models.
staged scenes numbered 1 to 213 (some numbers are missing). Although paid advertisements in the 1861 to 1864 commercial directories mention groups, interiors, churches, and picturesque sites, nothing else is registered until August 24, 1864 when another 150 compositions (numbers 790 to 961) are deposited at the Ministry of Interior in accordance with the law.

A few months later, Lefort, aged sixty, passes on his business to his former son-in-law, Paul Nicolas Deverdun, who, owing to his poor health soon sells it to the prominent stereo publisher Charles Gaudin. The new owner of Lefort's negatives advertises the deal in the July 15, 1865 issue of the photographic journal La Lumiére which, short as it is, remains the most important document about Lefort’s work. Written by Charles Gaudin’s own brother, the chemist and daguerreotype photographer Marc-Antoine Gaudin, this article mentions that the Lefort Collection includes 1,500 views of the main towns of Europe, 500 Pictures of

"The Singing Cafe" ("Café Concert"). Singing cafes were popular places of entertainment. They proliferated in Paris during the reign of Napoleon III and offered all sorts of attractions. The most famous ones were the Bataclan, the Alcazar, and the Eldorado where the singer Theresa, who was later to be painted by Degas, had her first success.

"At the Champs Elysées." The hustle and bustle of this famous Parisian avenue has been fully reconstructed with real trees, street lights, chairs, benches, crinolined ladies, and top-hatted gentlemen. The soldier and the nanny, the flower girl and the street musician were common characters. The Napoleonian Arc de Triomphe is clearly visible on the backdrop.
palaces in France and Italy, as well as 1,200 staged scenes said to be remarkable for their inventiveness and to include bus, swimming-school, and railway scenes.

If we consider the highest number of the last stereos deposited by Lefort (#960) and keep in mind that photographers hardly registered the whole of their production (which accounts for the missing numbers 214 to 789) we can accept 1,200 as a correct figure for Lefort's compositions. A comparison of the list of the 264 registered scenes (now at the Bibliothèque National de France) with the stereos to be found in private collections further corroborates the existence of a large amount of unregistered scenes.

Apart from his large number of published views, what differentiates Lefort from fellow composition photographers like Gaudin, Furne, and Tournier, or Thiebault is his masterly use of the biggest photographic studio of the period, of a crowd of models (up to thirty) and of a huge variety of painted backdrops and cumbersome props (trees, a horse-drawn bus, a rowing boat, a church altar and pulpit, to list but a few). Lefort's studio was first located on the third floor of the house where he had his business but he soon moved it to a big and rather dilapidated vacant shed.

"The Two Ways of Life." Probably inspired by O.G. Reijlander's famous composite photograph, first shown in 1857, this allegorical composition depicting Industry and Idleness was taken around 1859 in Lefort's first studio and seems to be one of a series. (Another view, #377, shows an old miser on one side and drunk young men on the other).

"The Smithy." This rustic scene clearly shows how big Lefort's studio was. Note the stuffed horse and the backdrop cleverly cut to integrate the existing beams of the shed.
“Italian Country Girls.” Sitting around an open-air altar, these Italian girls are resting in the shade after or prior to performing a country dance. The volcano in the background is shown erupting in other views, depicting the last day of Pompeii.

at 69 rue de la Grange-aux-Belles. The vicinity of the numerous theaters of the Boulevard du Crime probably helped him get hold of all the various costumes and props he needed for his staged scenes. His training as a draftsman and painter of dioramas turned out handy for the fifty odd different backdrops he made use of over his short period of activity. He also remembered his experience as a toy-maker by using dummies when children were needed or life size cardboard figures instead of live models to appear in the background.

What we have read or seen about film making has made us familiar and even blasé with the daily deeds of studio decorators, but one cannot help being reminded of Méliès and of the pioneers of the film industry (some forty years later though) when one goes through the work of Henri Lefort. Though expensive to make, Lefort’s compositions probably sold well, as can be corroborated by the large number of his views still to be found on the market and by the fact that, unlike many other stereographers, he did not go bankrupt but died a well-off if not famous man. Prints made from his

(Continued on page 31)

“Rag-and-bone men.” With their baskets, sticks, and lanterns, rag and bone people were familiar if somewhat sinister figures of Parisian life. Living in squalid parts of the city, they usually came out at sunset. Poking with their sticks into the rubbish heaps scattered on the pavements (the use of bins was made compulsory in the mid-1880s), they picked up rags, nails, newspapers, bones, broken glass, and even dead cats and dogs.
Get set to go eye-to-eye with wild cats, nocturnal creatures, birds of prey and coral reef predators in four new diverse books featuring the stereography of NSA members Simon M. Bell and Mark Blum. The quartet is a welcome addition to the first two books in the Eye-to-Eye" series which began with Bell's Snakes and Lizards and Insects and Spiders (SW Vol. 24, No. 2).

The new books were released late last year and, once again, we're happy to report that they are a visual treat. The Eye-to-Eye" series was created to encourage children to focus on nature, the environment and photography. Although recommended for children ages 8 to 12, we still stand by our earlier statement that children of all ages—and the young at heart—will admire the stunning photography and appreciate the informative text. These books could very well be the vehicles that introduce 3-D to young readers for the first time. Old-timers (I mean experienced stereo aficionados) will certainly welcome the books to their ongoing 3-D libraries.

Bell's photography is featured in three of the books, Night Creatures, Wild Cats and Birds of Prey. He shot all of his photographs at a variety of public and private zoos and care centers. They include: The Toronto Zoo, African Lion Safari and Northwood Buffalo and Exotic Animal Ranch in Ontario, Wildlife on Easy Street in Tampa, SOS Care in Escondido, CA., and Alberta Birds of Prey Center. Many of the owls and hawks were photographed at Joseph Van OS Photo Safaris, HawkQuest, Rock Mountain Raptor Center and Raptor Education Foundation in Boulder, CO.

Some of the most fascinating pictures that Bell has taken include images that are totally unidentifiable in 2-D. In Night Creatures, for example, one photograph ablaze in swirling psychedelic colors comes alive in 3-D as a Bell's Horned Frog (no relation). (Blum plays similar tricks with our eyes in his book.) One of Bell's best shots in Night Creatures is the one of a snarling Jaguar with piercing, killer eyes that would make anybody shiver—

certainly the photographer, who seems to have a death wish when you view his breathtaking photographs of the majestic animals in Wild Cats. Was there any apparent danger? "Well," chuckles Bell, "even with attendants close by, you're always on your guard because you are invading the cats' space." Bell seems to have met his match while shooting three playful Cheetah cubs in their enclosure. "Just when I would get one of the cubs in focus and get ready to shoot, the other two would jump on my back and knock me over."

Some of the cats featured in this book are close to extinction, so Wild Cats offers a unique opportunity to come eye-to-eye with them in life-like 3-D. One such cat is the rarely seen Sand Cat, which can be found in the Sahara desert as well as in desert areas of Asia. Bell relates that during the Gulf War in the early '90s, the government of Saudi Arabia, fearing the loss of many of their zoo animals, sent a pair of Sand Cats to SOS Care in California. Up until that time, the Sand Cat had never successfully been bred in captivity, but SOS Care triumphed. In Wild Cats, Bell offers us two shots of this beautiful, docile-looking cat, one in 3-D, the other in 2-D.

Birds of Prey features some breath-taking closeups of an assortment of owls, hawks, vultures, fal-
The small folding StereoFocus™ viewer (seen here on a page of views in Birds of Prey) works well if handled and stored with care. The 4.5 inch lenses enlarge the small images just enough to make the fine screen pattern visible, but the high quality of the printing makes this a minor intrusion. When viewed with longer lenses or free-viewed, the pairs come close to photographic print quality.

Cons and eagles. Most of these birds are not what we consider to be colorful, but Bell's photographs capture the sharp details of a multitude of lavish earth tones on everything from a fluffy face of feathers to the spectacular plumage of a bird's extended wings in preparation for flight.

For his photographs, Bell used the RBT X3 German-spliced stereo camera, an Exacta with a Hyponar attachment, and a Nikon single-lens camera. Simon Bell is a familiar name to NSA members. His 12-projector synchronized stereo presentations have been consistent hits at several of our conventions. He specializes in stereo nature photography and he is the founder and president of BPS, a multimedia studio in Toronto.

Coral Reef Life in 3-D

Coral reefs are teeming with life and, thanks to Mark Blum, we get the chance to see it in realistic 3-D by visiting fringing reefs, barrier reefs and atolls in the book Coral Reef. Underwater life, with its infinite floating images, lends itself perfectly to stereo photography. Blum takes full advantage of these 3-D opportunities, and the result is nothing short of amazing. Each photograph is beautifully composed and "layered" with contrasting colors and images to great effect. True, Mother Nature can take a bow for the natural underwater "layering" of rocks, corals and plants—all buzzing with life—but it takes a great photographer to seize the right moment and capture the right images on film. In our journey underwater, we get an intimate look at everything from large predators to minuscule parasites, and we get to marvel at the wondrous explosion of hues among neon-colored fish and spectacular coral. I have far too many favorite photos to list here, but I found the candid, eye-to-eye shot of a tiny Cleaner Goby going about its parasitic work in the mouth of a Nassau Grouper to be both amusing and mesmerizing.

Blum shot many of his photos near Sipadan Island, Borneo, Little Cayman, Fiji, Bonaire and Cozumel. His equipment includes a one-of-a-kind custom camera built on a Mamiya 645 body which takes two images through a single 80mm lens. "Twin apertures create two images that are directed back to the film plane with mirror," explains Blum. "The camera is reflex viewing at F2.8 and features a huge Pentax high eyepoint pentaprism viewfinder from the Pentax 645 series. This is ideal for viewing underwater through a dive mask. The camera will focus at four distances with magnification varying from .2 to .7 life-size. When the focusing distance is changed, the aperture size and spacing (the stereo base) is automatically changed too. All controls may be operated from outside the custom underwater camera housing."

The image of the Leopard Shark was taken very, very deep. Blum reports that these animals frequent a shelf below 150 feet at one of the...
bound in perforated sheets, are placed, along with the cards, in the photography. We definitely think that the Eye-to-Eye books will win a page is devoted to explaining 3-D over new 3-D fans and help develop equipment to meet the new and special challenges of 3-D wildlife photography. Two of his books (not in the Eye-to-Eye series) have been previously reviewed in SW: Beneath the Sea (Vol. 24, No. 1) and Bugs in 3-D (Vol. 25, No. 2).

More 3-D Books Planned

The Eye-to-Eye series will continue to grow, with two more books expected within the year. Bell has already traveled to Africa to shoot photographs for Animals of the Serengeti and he is currently working on Butterflies.

There are many things to applaud in the Each Eye-to-Eye series of books. The informative text features sidebars to highlight little known facts about animals or their habitat and this makes the layout more visually pleasing. The illustrations by Julian Mulock and 2-D photos add additional interest to every page. The 3.5 inch wide cards feature two 1.5 inch wide images on the front. The backs of the cards highlight important information about the subject and show a map pinpointing the subject’s habitats. The cards, which are bound in perforated sheets, are easy to remove. The StereoFocus viewer pops up quickly and can be placed, along with the cards, in the handy storage pocket at the back of the book. The text in all four books is by four different authors. To complete the stereo experience, a page is devoted to explaining 3-D photography. We definitely think that the Eye-to-Eye books will win over new 3-D fans and help develop future stereo photographers.

Society

(Continued from page 21)

Speedy Print Circuits

Bill C. Walton tends all of the Speedy print circuits which are limited to 12 members each and reports as follows.

### Speedy Alpha

1. "Lilies" by Bill Patterson
2. 2 (tie) "Dancers" by Craig Daniels
3. "Dogwoods and Greybacks" by Mary Carpenter
4. 3 "Touch of Venus" by Eileen Bohman

### Favorite Views

1. "Lilies" by Bill Patterson
2. 2 (tie) "Dancers" by Craig Daniels
3. "Dogwoods and Greybacks" by Mary Carpenter
4. 3 "Touch of Venus" by Eileen Bohman

### Speedy Bravo

1. 1 "Summer Does Not Go Gentle" by Dick Twichell
2. "Lily" by George Freeman
3. 3rd (tie) "Ten Pickets" by George Freeman
4. 4 "German Dog Days" by Bill C. Walton

### Favorite Views

1. 1 "Summer Does Not Go Gentle" by Dick Twichell
2. "Lily" by George Freeman
3. 3rd (tie) "Ten Pickets" by George Freeman
4. 4 "German Dog Days" by Bill C. Walton

### Speedy Keystone

(a Black & White print circuit)

1. 1 "MT Shasta" by Jonne Geller
2. 2 (tie) "Leporello" by Stan White
3. 2nd "Looking Upstream" by David Lee
4. 3rd "Backlight and Thistles" by Charles Trentleman

### Favorite Views

1. 1 "MT Shasta" by Jonne Geller
2. 2 (tie) "Leporello" by Stan White
3. 2nd "Looking Upstream" by David Lee
4. 3rd "Backlight and Thistles" by Charles Trentleman

### Speedy Mike

(a Black & White print circuit)

1. 1 "Lithia Creek" by Jonne Goeller
2. 2 "Lily in Dog Camp" by George Freeman
3. 3 "Mountain Stream" by David Lee.

Congratulations to all of the high scoring vote-getters.
Readers who enjoyed our feature “Seneca Ray Stoddard” by Lois and Guenther Bauer (Vol. 23 No. 2) and who are eager to learn more about Stoddard’s life and work will be delighted with Early Days in the Adirondacks — the Photographs of Seneca Ray Stoddard by Jeanne Winston Adler. While the book doesn’t use stereos, it does reproduce Stoddard’s work in various formats with great care, and often at the full 9.5” x 10” page size.

This generous reproduction of 112 Stoddard images provides a unique look at the lakes, wilderness, boats, and resorts of the Adirondacks in the late 19th century. The text is a major piece of research that examines in detail Stoddard’s life, professional career, politics, and photographic style as they related to and contrasted with those of his contemporaries. It shouldn’t really be surprising that this very busy man of so many talents and interests (and who played a key role in the preservation of the region as a State park), would prove to be as complex an individual as the one revealed in Adler’s research.

Stoddard’s early training and experience in art is covered in fascinating detail, and even includes an account of how his likely first painting instructor, Hiram Cartwright, instigated a July 4th, 1861 incident in which a “secession” flag was raised by a drunken mob in the very depressed area of Burke Hollow, NY. Threatening to shoot anyone attempting to take down the flag, the mob was eventually confronted by hastily organized railroad machine shop workers from nearby Malone.

At the time, Stoddard had already moved with his parents to Troy, where he became a decorative painter of railway carriages for the Gilbert Car Company. Civil War related violence caught up with Stoddard there in July of 1863, when he witnessed anti-draft, anti-black riots that caused the burning of an eight-block section of the city.

During his later years as a photographer in Glens Falls, Stoddard apparently shared the interests of many writers and artists of the time in the search for religious inspiration in unspoiled nature, spiritualism, the temperance movement, and homeopathic medicine. In the 1890s, he painted ghosts, sprites, trolls and goblins into some of his negatives.

Another element often present in that same “intellectual package” of beliefs of the time was a sympathy for abolitionist-oriented politics, but Stoddard seems to have joined the opposite camp on matters of race. Adler includes several passages from Stoddard’s writings that reveal racial attitudes ranging from paternalism to outright hostility toward African Americans, along with some similar quotations regarding Irish immigrants.

Stoddard seems to have been dedicated to preserving the inspiring natural beauty of the Adirondacks for its existing population of small farmers and visiting campers, hikers and boaters of only particular racial and ethnic backgrounds.

An entire chapter is devoted to the artistic concept of “luminism” as applied by some to Stoddard’s photographic style. With sources in the artistic inclination of the day to look for God in images of wild nature, it is applied to both painters and photographers of about 1860 to 1875 who combined a stark landscape realism with serious attention to light. In the words of the author, “The chief subject of the luminist landscape is light, which beams from a single strong source and fills these often austere-ly constructed scenes with an ecstatic radiance.” It would be interesting to hear what Stoddard would have thought of all this. It certainly does place him in good company, as the other noted photographer most associated with the concept is Carleton Watkins. Adler concludes that “Stoddard, as a photographer with a background in craft painting and a family tree packed with Calvinist (and later Methodist) ministers, possessed natural links with some of the chief sources of luminism.”

(Continued on previous page)
It would be hard to exaggerate the significance of the connection between world’s fairs or expositions and the history of stereoscopic imaging. They are forever associated from the beginning, both having been introduced to the general public (not to mention Queen Victoria) with London’s Crystal Palace Exposition of 1851. The fairs that followed all over the world were generously documented by stereographers and publishers who advertised their “exclusive” coverage of various expositions on the backs of stereoviews now prized by collectors.

From the beginning, stereographs were a part of the commercial exhibits and competitions at fairs as well as a vital means of documenting the events and circulating images of the buildings, monuments, exhibits and assorted oddities to people separated by oceans or years from the original scenes. But written histories of specific fairs or of expositions in general have rarely included more than passing mention of stereo images, even when using halves of stereoviews to provide dramatic illustration for articles or books.

With a Keystone view tantalizingly included on its cover, World’s Fairs and the End of Progress by Alfred Heller marks a welcome change to the above omission even though the book, to be published in April of 1999, uses no full stereoviews inside. Next to the famous “Sea of Humanity” image from the opening day of the Columbian Exposition (and identified as being from a stereoview) is Mr. Heller’s chapter “Bringing World’s Fairs Back to Life”. Here he explains that to best augment his historical reading, “…I prefer to spend time with my stereoscopic view cards of world’s fairs of long ago. I have a faded one showing the inside of the Crystal Palace, photographed during the Great Exhibition of 1851…Here is a photo of the crowd on opening day at Chicago in 1893, each face and body as if alive and about to move…And in an instant, you can be transported to the Pay Streak at Seattle, 1909, or the Fountain of Energy, all lit up of an evening in San Francisco, in 1915…”

“When I am looking through my stereoscope, if anyone should ask me to choose between all the advancements in visual communication—the videocasts and the videotapes, the computers, the movies, the laser light shows, the virtual realities, the Internet’s resources—and an old-fashioned stereoscope with a good supply of views, I’d choose the ‘scope, and say of the rest, ‘Good riddance’. A basket of views lay on many a parlor table around the turn of the century…A week of reading, and then some sharp, engrossing stereo views after lunch on Sunday—that, I suppose, was a particularly Victorian state of grace.”

Would that books on other aspects of popular history included even a fraction of that recognition of stereo’s place in visual documentation!

Of course the association of new stereo technologies and world’s fairs didn’t stop with traditional views. Chicago’s 1933 Century of Progress introduced (and was documented by) Tru-Vue filmstrips, while practical polarized 3-D projection was introduced to the public at the 1939 New York World’s Fair, as was the View-Master. While Heller doesn’t go into that level of detail in his sections on these fairs, he does give considerable attention to the 3-D technology introduced at fairs of the past few years—special venue and large format stereoscopic film.

Films that generally get only passing mention, if any, in other material about fairs of the 1980s to the present are covered, often in some detail, and often in positive terms. Even the 70mm 3-D film on “Water” presented at the 1984 Louisiana World Exposition in
New Orleans in the U.S. pavilion is mentioned—a film covered in few if any publications outside New Orleans except for Stereo World. In the chapter on Tsukuba '85 in Japan, the OMNIMAX anaglyphic film We Are Born of Stars rates an entire paragraph full of praise concluding with, "...the potential for this medium was and is awesome."

The coverage can be critical when needed, as in describing how We are Born of Stars was shown in the Fujiitsu pavilion at Brisbane in 1988: "An excessively worn version of their original 3-D graphics film of the formation of the universe didn't show well in a cramped space on a small slice of an IMAX screen, in a dirty, crudely detailed pavilion staffed by bored young people." Most of the 3-D films and formats introduced at various fairs of the '80s and '90s to be found in Stereo World get at least some mention, including such now obscure efforts as Bayley Silleck's 3-D film about global pollution shown at Expo '92 in Seville.

Of special interest is an entire chapter on a fair and a 3-D film that never happened—World City Expo '96 in Tokyo and a short, animated film about Leonardo da Vinci actually flying that changed themes and titles several times, from Leonardo's Dream to Fly, Da Vinci, Fly! As an industry insider (Heller published and edited the magazine World's Fair for several years) the author was in a unique position to follow in depth the progress and eventual cancellation of that fair. Starting with the 1939 Golden Gate International Exposition in San Francisco, he has attended 15 world's fairs and has researched earlier fairs in detail, including visits to the sites of many where only foundations, markers or less remain.

More than any sentimental look at days gone by or compilation of statistics, World's Fairs and the End of Progress examines the commercial and political purposes behind fairs, and the gradual changes in focus from unbridled "progress" to increasing environmental and social awareness. In a chapter on future fairs, the formal "themes" of two upcoming fairs make the point well. For Expo 2000 in Hanover, it's "Humankind-Nature-Technology" and for Expo 2005 in Seto, Japan it's "Beyond Development: Rediscovering Nature's Wisdom". Both seem perfect for large format 3-D films and stills in various stereo formats.

While it's refreshing to see any book like this take stereo imaging seriously, a writer of Mr. Heller's impressive experience and knowledge of the subject makes its inclusion even more significant. For collectors of fair or exposition views, collectors of world's fair memorabilia, or anyone interested in these massive events that both celebrate and make history while forecasting and sometimes influencing the future, this is a fascinating and vital book.

**Correction:**

For several issues this ad was omitted and in others phone & fax numbers were wrong.

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**WANTED for an Upcoming Stereo World Feature:**

Author needs stereoviews of the Civil War era locomotive "The General" in any format including Tru-Vue, View-Master, etc. Amateur stereo from the Civil War Centennial and 1964 New York World's Fair including this and other vintage locomotives are also of interest.

Send descriptions or photocopies to:

Richard C. Ryder
1806 Cedar Dr.
Medford, NJ 08055.

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**A Boxed Set Booklet Archive**

The NSA Information and Book Service gets many requests for copies of the booklets which accompanied the boxed sets of views issued by Underwood & Underwood, Keystone and H.C. White. An archive of reproductions of these booklets is being started, so that copies can be made available to NSA members. If you have copies of these booklets which you are willing to share with other stereo enthusiasts, please contact Tex Treadwell at 4201 Nagle Road, Bryan, TX 77801 or e-mail: TexTreadwell@compuserve.com. Contributors will be given full credit for their generosity.

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**European Gems**

(Continued from page 25)

negatives were published well into the 1900s. His plates changed hands several times and some which have survived are now part of the Roger-Viollet collection in Paris. A whole book could be devoted to the work of Henri Lefort and more will probably be later mentioned in this column.
Gilde camera: Wide Format 120 Stereo and More

by Paul Pasquarello

This past fall while attending PhotoPlus Expo East, a megaphotography trade show with educational seminars, held yearly at the Jacob Javits Convention Center in New York City, I found my personal “dream machine”.

Having been a professional photographer for the past 35 years, with very special interests both in stereo and Panoramic photography, I was particularly drawn to an all new camera introduced at this year’s show: the GILDE, more specifically the Gilde 66-17 MSTN (3D). Handcrafted in Germany by Dr. Kurt Gilde, the Gilde is a multifunctioning, 120 roll film camera with the ability to shift its lens 15mm horizontally and up to 42mm vertically, in addition to offering lens tilt of up to 10mm. Along with these lens movements, the camera offers an adjustable image format of 6x6, 6x9, 6x12, 6x14 and a 6x17 (a 1:3 image ratio).

It doesn’t stop there. It is a medium format stereo camera as well. Using paired and linked 58 through 135mm lenses called Stereoblocks, 6x7 or 6x9 stereo pairs may be produced. Should this not be enough in the way of versatility, when using the 75, 90, or 135mm Stereoblocks, one of the paired lenses can be capped and the camera functions with one lens as a normal (I should say not so normal) multi format panoramic camera covering up to the full 6x17 format.

The GILDE is supplied with a vario viewfinder, an ingenious device that not only masks to the desired picture format of 6x6 to 6x17, but also zooms to enable viewing all of the formats at the various lens focal lengths.

Dr. Gilde offers several accessories for his unique camera to aid both the stereo and panoramic users. Accessories include optional ground glass screens, either a deluxe version, with collapsible hood and built-in magnifier, or a more basic screen that necessitates the use of a focusing cloth. Either ground glass is very useful for critical focus and cropping, particularly when lens shift or tilts are employed. A Polaroid back is also available. Fitting inside the film magazine, it enables the proofing of a full 6x17 scene on two sheets of Polaroid film. The Rollie Digital-Chip-Pack DSP 104, a digital back, with a format of 31x31mm and 2048x2048 pixels, is also available.

I viewed several dramatic stereo 6x9 transparencies in a beautifully crafted, lighted, hand viewer made by Franz Miller of Germany. More information about this fine camera is available by visiting the Gilde camera web site, http://www.gilde-kamera.de
A Stereo Print Master on CD

The Bill Walton 3D-CD Project includes a historical collection of several hundred stereo views presented as both stereo pairs and as anaglyphs. A lorgnette viewer, and a pair of anaglyph glasses will be included with every CD. The contents include images and information about:

- Army basic training from Bill’s book—Back to Basics
- Personalities & places
- Celebrity stereographs
- Miscellaneous military stereographs including Vietnam memorials, helicopters, ranger and airborne training
- Images of old Stereoscopic Society members, from the SSA archives
- Images from Dick Twichell & Bill Patterson representing the SSA

- Images from Shab Levy and Klaus Kemper representing the North America-Germany Stereo Card Circuit.
- Images from Stan White representing the PSA
- Images from Walter Dubronner representing the ISU Stereo Card Circuit
- Mono (2D) to stereo (3D) conversions by Craig Daniels
- Miscellaneous Stereos including a series of Scotland then & now views
- Stereographs of Bill’s Trips to Japan, Rochester NY & Niagara Falls
- Flensburg, Germany including several then & now views
- Arkansas and Georgia stereographs including several then & now views
- Several years of Walton Christmas card views
- Stereo photographers. Direct questions about prices and ordering to International Photo Trading, Box 9069, Hurlburt Field, FL 32544, (850) 863-2972, e-mail: IPTrading@aol.com.

One of the celebrity shots to be found on the Bill Walton 3D CD, this view of Vice President Al Gore was taken by Bill in March, 1998 and includes a caption on the back: “VP Al Gore works the crowd who awaited his arrival at Lawson Army Airfield, at nearby Fort Benning. He visited Columbus State University and made a major speech on education. Security was extremely tight for his visit and I was required to fully explain Stereo Realist to the Secret Service agents, before I could get media credentials.”

The CD will be DOS/WIN, MAC and UNIX compatible. It will cost $35 US, postage included, to anywhere in the world. Anyone who places an order within the first 90 days of release (currently planned for July 1, 1999) will receive a raffle ticket with their CD. This raffle ticket will provide an opportunity to win a custom made set of 20 celebrity stereographs which we will be giving away to one lucky person. This set of 20 cards will be visible at the NSA 99 convention Trade Fair.

Sample images, more information and on-line credit card ordering are available at the project’s web site:
http://www.dddesign.com/bw3dcd/.

For those who do not wish to use a credit card to order, personal checks and money orders can also be used. Simply mail them, along with your mailing address to Dan Shelley, DDDesign, 2441 Ranch Lane, Colorado Springs, Colorado 80918, USA.
RealityVision: Autostereoscopic Nirvana?

Glowing reports circulating on the internet and in magazines like Wired and New Scientist have generated a lot of interest in an autostereoscopic display system called RealityVision. In development for about the last ten years, RealityVision is the work of London holographers Edwina Orr and David Trayner who have the technology near the marketing stage with 50 patents worldwide.

An explanation of the system should probably start with what it lacks. As with any autostereoscopic display, no viewing lenses or filters need to be worn, but this one involves no lasers, no moving parts, no barrier strips, no lenticular lenses, no image projection, no multiple lenses, no mirrors, and no special software or electronics. To function, the system needs only left and right images from paired cameras, 3-D video tapes or stereoscopic computer programs.

What RealityVision does, in the most basic terms, is guide light visible only from the angle of the left eye through vertical image strips on a liquid crystal screen making up only the left image. Light guided to just the right eye illuminates the alternating right image strips. If this sounds something like the HinesLab 3DTV system (SW Vol. 22 No. 6, page 12) based on the "exit pupil" concept, you're probably on the right track. But in place of the fresnel condenser, LCD projection panel, seven lenses, and mirrors that take up an arcade game size unit, RealityVision uses a holographic plate (a "Holographic Optical Element") to split light from a point source into narrow left-eye and right-angles directly behind an LCD panel on which the left and right images are interlaced to match the corresponding optics in the hologram. The desk-top unit plugs into a computer like a standard monitor and will also display 2-D images.

Like other autostereoscopic displays, this one has a limited viewing zone but an image reported to be cleaner than others. A head-tracking system and movable light sources could make the zone larger, and multiple light sources could allow two people to view the screen at once. Apparent depth is reported to be from 8 inches in front of the screen to 16 inches behind it.

Since the seven images and lenses of the HinesLab system mentioned above are used to provide a wider viewing zone (for even multiple viewers) and look-around ability, a better comparison with RealityVision might be provided by the very pre-holographic table viewer for standard 3-D slides designed by Bill Ewald at Kodak in the 1950s. In it, the images being projected on a small ground glass screen are guided toward the appropriate eyes via a fresnel field lens. To learn his secret treatment to keep the ground glass from diffusing the directionality of the two images, see SW Vol. 23 No. 4, pages 27 & 31.

Besides its relatively compact size, the RealityVision display (if mass produced) could be far less expensive than other autostereoscopic units, since material costs for the key Holographic Optical Element could be as low as $5 each. The current resolution of 800 x 600 pixels will later be improved to 1024 x 1280. Details of the system can be found in an illustrated paper by Orr and Trayner at: www.brunel.ac.uk/depts/mes/Research/Groups/vr/vr97/proceed/hasdpape.htm.

She's Got A Ticket to View....

The world's first 3-D bus tickets appeared in London during December of last year as part of a promotional campaign for the new LEGO construction toy system, ZNAP.

Over 20,000 special tickets with a 3-D photo and logos printed on the back were issued to passengers on selected routes in London's West End. Drivers issued the tickets in the normal way and gave each rider a pair of anaglyphic glasses to view the wheeled LEGO vehicle emerging from the surface of the ticket while the type twists through several planes of depth.

Busy London 3-D entrepreneur and NSA member David Burder created the 3-D graphics and supplied the glasses for the unique promotion.
Due to limitations of time and space, the Calendar will now concentrate on events of clear stereoscopic content or association. This will enable us to give more attention to photographica shows oriented toward images and to exhibits, meetings or other events specifically including stereoscopy in whole or in part. The added space will also allow events to be announced longer in advance and, when possible, in more than one issue.

NOTE: Events listed in boldface type are likely to be of special interest to stereo collectors and photographers.

April 11 (MA) Photographica '99 - The Boston Show! Sponsored by the Photographic Historical Society of New England at Waltham High School, 617 Lexington St., Waltham, MA. Dealers from U.S., Europe, and the Orient at 200 tables of cameras, equipment and images with a generous representation of NSA members and stereographica. Contact PHSNE, PO Box 650189, West Newton, MA 02465-0189, (617) 965-0807 before 9:00 pm EST.

May 2 (NY) American Photographic Historical Society Photographica Fair. Open 10:00am to 4:00pm, Metropolitan Arts & Antiques Pavilion, 110 West 19th St., New York, NY. Contact Sai Mule, (718) 386-9627. Ampile street parking available on Sunday.

May 16 (OH) Columbus, Ohio Book & Paper Show, Vets Memorial Hall, 300 W. Broad St., Columbus, OH. 325 tables, including photos. Contact Columbus Productions, PO Box 261016, Columbus, OH 43226, (614) 781-0070, www.columbusproductions.com.

July 8-12 (WI) NSA Green Bay '99, Regency Suites Hotel, 333 Main St., Green Bay, WI. See the website www.dddesign.com/3dbydanlnsa99 or contact Harry Richards, 11506 N. Laguna Dr, Mequon, WI 53092, hjrich@execpc.com.

The Last Nimslos?

Offering lenticular 3-D print processing services for 4-lens cameras, 3-Dx of Duluth, GA, is now also offering (via their web site), "the last of a limited number of new 35 mm Quadra Lens 3-D cameras." (A photo of the camera reveals what is clearly a Nimslo with the name blacked out.)

The $169.00 price matches closely that of the Nimslo when it was introduced, as does the price of the "Opti-Lite" flash under its original name at $28.00. Shipping charges in the U.S. are $11.95 if both camera and flash are ordered, $7.95 for camera only. For film and print processing prices or to order a camera, contact 3-Dx, 4850 River Green Parkway, Duluth, GA 30096, Tel 770-497-0727 Fax 770-497-8334, or visit: www.3-dx.com/home.htm.

The Column depends on readers for information. (We don't know everything!) Please send information or questions to David Starkman, NewViews Editor, P.O. Box 2368, Culver City, CA 90231.
INVENTORY REDUCTION:

DARIUS 3-D BOOK, 3-D viewer, 3-D Woods Dr., Peachtree City, GA 30269, (770) only. Alan Young, 404 460-74. "Stereo Photographs" will sell you copies of 10 of Blum, "Stereo Photography".

NEW STAR-D ACHROMATIC AND STAR-D STEREO SLIDE VIEWER now available. Comes with a halogen bulb and is offered in Realist ($84.99), European ($99.99) and Full Frame ($99.99) formats. Also new, archival stereo slide storage boxes not available for years! Also available: halogen viewer bulbs [frosted ($11 for 3) and clear ($13.50 for 3)], replacement 20mm achromats, reproduction stereo cards and Viewmaster reels. Berzin Stereo Photography Supplies, 21866 Avenida Mission Viejo, CA 92691, (949) 581 8378. http://www.berzin.com/3d, steve@berzin.com

NIMOSO 3-D CAMERA with Nimiso Optilo-Mite in Japan, Nimiso International Limited. $75.00, Zak, W5081 S. Oakhaven Circle, Waucoma, WI 54982, (920) 566-2323.


STEREO VIEW PRICE GUIDE. Only $5.00! For people buying from auctions, collectors who want to know the latest realized auction values, or for insurance companies insuring large collections. Only numbered views over $50 are listed. Doc Bohme, 5690 Brandwith Ct., WBT, MN 55110-2725.

STEREO VIEWER LENSES - Two wedged-shaped lenses, each molded and embodied in 1/4" square frame. Precision optical quality; build experiment. $7.95 postpaid (USA). Taylor-Merchant Corporation, 212 West 35th St., New York, NY 10011, (800) 223-8694.

STEREOVIEWS, CDVs, CABINETS, etc. Direct sale: send me your wants. Tim McIntyre, 137 Nile, Stratford Ontario, N5A 4E1, Canada. Tel: 519-273-5360, Fax: 519-273-7310, email: timoni@orc.ca, web page: http://www.orc.ca/~timoni. I collect Canada and Europe views - let me know what you have.

VIEW-MASTER FILM CUTTER: Used, but cuts nice clean chips. I will include a good photo of original instructions. $275 includes shipping in U.S. Charles Trentelman, 3556 Fowler Ave., Ogden, UT 84403, (801) 394-0239, e-mail: summicron1@aol.com.

WILLIAM C. DARAH'S "The World of Stereographs," the definitive book on stereography, is available directly from the publisher. Send check or money order for $24.95 (US), postage paid to: Land Yacht Press, PO Box 210262, Nashville, TN 37221-0262.

WRAYSCAPES AND VIEWS - More new cards available. Write for or call for updated list on NuViews or Wrayscope information. Jim Wray, 8921 E. 49th Place, Tulsa, Oklahoma, 74145-7320, (918) 664-4909.


1 MORE! Will buy or trade for more Mono Lake views. Old or new. Send photocopies with titles: GC Freeman, POB 189717, Sacramento, CA 95818.

19th CENTURY NUMBERED sequential sets of local scenery, buildings, factories, towns, etc., by regional issuers. While it would be nice if the sets are complete, I realize that most sets, particularly obscure ones, are not. Please quote what you have. Immediate decision, immediate payment. Dave Bowers, Box 1224, Wolfeboro, NH 03894, Fax (only): (603) 569-5319.

ALWAYS BUYING STEREO VIEWS AND REAL PHOTOS of U.S. Mint, U.S. Treasury, and Bureau of Engraving & Printing. High prices paid for stereo views and real photos I need of U.S. Mint coinings, Treasury and BEP paper money engraving & printing operations 1860s-1920s. Especially seeking U.S. Mint interiors and exteriors from Philadelphia; San Francisco; New Orleans; Denver; Carson City, Nevada; Dahlonega, Georgia; Charlotte, NC; plus U.S. Treasury & Bureau of Engraving & Printing operations, Washington, DC and various U.S. Assay offices. Please mail or FAX photocopy, with price and condition noted. I'll reply within 48 hours. Attn Dave Sundman, c/o Littleton Coin Co., 646 Union St., Littleton, NH 03663, FAX 603-444-3512, est. (1945).

BICYCLES, TRICYCLES, manuportive transport and motorcycles. Stereoviews or any photographica, memorabilia and ephemera, Singles, duplicates or collections. Thanks! Lorne Shields, PO Box 211, Chaplin Falls, OH 44022-0211, (937) 389-6911, e-mail: vintagel@gmail.com.

"BK" DEVIL TISSUES (Diablerss), especially #20 (Concert Internale). Also, SW & Mexican archaeological sites - stereo views, Russ Bodnar, Box 226, Nagezi, NM 87037, (505) 786-5837.

CINEMA TREASURY: I collect all types of photographs of New York City's Central Park (stereoviews, CDVs, cabinet cards, postcards, etc.) 1850-1940. Herbert Mitchell, 601 W. 113th St. Apt. 8-H, New York, NY 10025-5712, (212) 932-8667.

3-D MAIL/BID AUCTIONS: View-Master, stereoviews, and more! Top quality/nice prices! Send LSASE. Satisfaction absolutely guaranteed. New bidders encouraged to join. Call for simple instructions on how to bid successfully. Also, always buying 3-D Norb Schneider, 7215 W. Palo Verde, Peoria, AZ 85345, (602) 486-3721.

3-D SCANNING SERVICES. Send 35mm negatives, slides or prints and we'll scan your images onto CD-ROMs. Only $5.00 per stereo pair! Contact DDF, PO Box 2689, Costa Mesa, CA 92628. www.DigitalDreams30.com (877) 362-2436 toll-free.

3-D WITH YOUR CAMCORDER - The Nu-view® adapter is an electro-optical device that when attached to most camcorders, produces stereoscopic three-dimensional video recordings. Camcorder Magazine (Feb. 1998) stated, "This is real, bona-fide stereo-lens, look around the pole 3-D, our first reaction - WOW!" Video Magazine highly recommended the Nu-view® 3-D system as an excellent value and Penthouse Magazine (both June 1998) called the Nu-view® a product "You just have to buy." Nu-view® fits camcorder lenses up to 50mm and sells for $395. A complete starter system including two pair of Nu-Shades™ LCD glasses are available for $499. Call (888) 883-3843 today.

AUTHOR OF "HOW TO CORRECTLY TAKE Super Stereo Photographs" will sell you copies of 10 of his best efforts. Color, 4x5, Loreo format. Send $4, plus 42¢ & H/S to: Christopher Baer, 2501 Riverside Dr. #509A, Coral Springs, FL 33065.

BOOK, The Siege at Port Arthur; hardback with 3-D viewer. $15 Econ Air. (Cash preferred), Ron Blum, 2 Hussey Ave., Oaklands Park SA 5046, Australia.

COLLECTOR'S GUIDE TO EARLY PHOTOGRAPHS - new edition, by O. Henry Mace. Contains chapter on stereographs. $19.95, plus $3 shipping. Check or money order. Thge Dixie Press, PO Box 110783, Nashville, TN 37222.

DARIUS KINSEY flatmounts. Serious inquiries only. Alan Young, 404 Westlea Dr., Westfield, NJ 02329, timoni@orc.ca, phone: (949) 581 8378. http://www.berezin.com/3d, steve@berezin.com

FED-STEREO CAMERAS: serial #433012 $275, serial #534556 $250. With original case, shades, instructions in Russian. Stereo Realist Manual by Morgan $120 - top condition. Stereo Photography by Waak $25. (905) 886-6911, e-mail: vintage@globalserve.net

CHINESE BOXER REBELLION/Chinese crime and punishment/Russo-Japanese War - Please enclose titles and condition - to Harry Jarosak, PO Box 92, Stormville, NY 12582.

CIVIL WAR STEREO CAMERA - Top price paid for good original Anthony or Stock camera. Robert Jaffe, MD, One Rykovsky Lane, Middletown, NY 10941, (914) 343-8977 eves.


COPIES OF VIEWS of Brigham Young (1801-1877), cowboy and cowboys and Utah views. Researching for scholarly publication. Any information appreciated and acknowledged. Send photo-copies to Richard Neltzel Holzapfel, 270-H JDB, BYU, Provo, UT 84602 or e-mail: richard_holzapfel@byu.edu

CORTE-SCOPE VIEWS or settings, any subject or condition. No viewers unless with views. John Walchsmuth, 302 Granger Rd., Medina, OH 44256.

FLORIDA AND SOUTHERN STATES views especially small town, riverports, street scenes, identifiable buildings, occupational also early military - Jacksonvile/ST. Augustine if priced right - please no scenic generics - buy swap. Box 1325, MacClenny, FL 32063.

FLORIDA STEREOS of historical value, especially Tallahassee, Tampa and Gainesville: Price and describe or send on approval; highest prices paid for pre-1890 views. No St. Augustine. Views by Sinclair, Stridborg, Loornis, Weiner, PO Box 12193, La Jolla, CA 92039.


I COLLECT VIEWS OF SAN DIEGO, California in Realist or View-Master format! Contact Dave Weiner, PO Box 12193, La Jolla, CA 92039.

I AM LOOKING FOR the following 1950s Realist Permanent slides from "The Realist Library of Scenic Stereoscopic Originals": 410, 413, 501, 522, 3100, 3112, 3113, 4100, and 4101. Mark Wilke, 200 SW 89th Ave., Portland, OR 97225. (503) 797-3458 days.

MAGIC LANTERNS SLIDES: 3 1/4 x 4", photographic, advertising, coming attractions. Related ephemera. Tom Ball, 1101 N. Kentucky St., Arlington, VA 22205, (703) 534-7612, fax 534-0285 e-mail: markf@aoel.com

MUYBRIDGE VIEWS - Top prices paid. Also Michigan and Mining - the 3Ms. Many views available for trade. Leonard Walle, 47530 Edinboro Lane, Novi, MI 48374.

NEED STEREOS AND OTHER pre-1920 photos for book research on photography and photographers such as Howard, Mitchell, Fouche, Newcombe, Scott, De Long, Hamilton, Perry etc. Robert Kolbe, 1301 So. Dulinth, Sioux Falls, SD 57105.

NSA LIST - I am preparing a list of "Peter Bergheim's Holy Land Series" for publication in the NSA series list. Needed information is the Number and the description of the view which appears on the reverse, Contact by mail or E-mail. Bert Zuckerman, 59 Overlook Drive, Amherst, MA 01002 or Zuckerman@pinpath.com

SARATOGA AND SARATOGA SPRINGS, NY stereos wanted. Send priced photocopies or original stereos on approval. All postage paid for approvals. James B. Dorsey, 42 Saratoga Circle, Saratoga Springs, NY 12866.


SINGLE VIEWS, or complete sets of "Longfellow's Wayside Inn" done by D. C. Osborn, Artist, Assabet, Mass., Lawrence M. Rochette, 169 Woodland Drive, Marlborough, MA 01752.

ARCHIVAL SLEEVES: clear 2.5-mil Polypropylene

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Russell Norton, PO Box 1070, New Haven, CT 06504-1070


WANTED

SPUTNIK W.CASE, stereo Kodak in orig. carton box and info, Belpasca w.case, Realist st. view-er with researat. D. Smekal, fax (604) 922-2955.

STEREO DAGUERREOTYPES: all kinds, all nations & subjects. Any condition. Ken Appollo, PO Box 241, Rhinecliff, NY 12574, (914) 876-5232.

STEREO REALIST 1525 Accessory Lens Kit for Macro Stereo Camera: Realist 2066 Gold Button Viewer; Realist 8-drawer stereo slide cabinet in Exc.+ or better condition (must contain Realist logo); Baja 8-drawer stereo slide cabinet with plastic drawers marked "Versatile". Mark Wilke, 200 SW 89th Ave., Portland, OR 97225, (503) 797-3458 days.

U.S. ARTISANS. American albums, cards, stereo to mammoth plates, esp. Savage, O'Sullivan, Russell, Hilliers, Jackson, etc. Bryan Furtak, 476 E. South Temple #236, Salt Lake City, UT 84111, (801) 532-6855.

VISTA - REALIST viewer, pay cash or if preferred partial trade for antique stereo items possible. D. Smekal, 1765 Roseberry Ave., West Vancouver, BC, V7V 2Z5, Canada, fax (604) 922-2955.

WEST VIRGINIA STEREO VIEWS, CDVs, photo postcards and other older photography relating to West Virginia, including Fairmont, Harper's Ferry, Morgantown, Parkersburg, Weston, Wheeling and other places. Tom Pratt, PO Box 155, Weston, WV 26525, wvabooks@aol.com

WILLIAM H. RAU - I collect all types of catalogs and photographs by Rau (stereoviews, lantern slides, prints, etc.) Arthur Farrell, 3720 Country Lane, Charlotteville, VA 22903-7637, (804) 977-3861, e-mail: Bewulf@aoel.com

YOU COULD HAVE told the world of your stereo needs in this ad space! Your membership entitles you to 200 words per year, divided into three ads with a maximum of 35 words per ad. Additional words and additional ads may be inserted at the rate of 20¢ per word. Send ads to the National Stereoscopic Association, P.O. Box 14801, Columbus, OH 43214. A rate sheet for display ads is available upon request. (Please send SASE for rate sheet.)
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STEREOSCOPIC SOCIETY OF AMERICA

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A PSA recognized exhibition for makers of full size stereo print views
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For rules and entry form, write to:
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Columbus, GA 31906

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November/December 1998  STEREO WORLD
Our April 27th, 1999 sale of photographs from the Collection of David Feigenbaum will offer over 4,000 stereographs in approximately 8 lots, and will include topics such as the Civil War, the American West, the United States, Humor and Genre, Boston, and New England, as well as photography-related subjects.

EXHIBITION OPENS
Saturday, April 24 at 10 am

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fax 212.606.7833

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Italian Country Girls." Sitting around an open-air altar, these Italian girls are resting in the shade after or prior to performing a country dance. This and other examples of the work of "Stereo Stage Director" Henri Lefort are included in the column "European Gems" on page 22.