'50s Flavored Finds

A taste of the late '40s through the early '60s found in amateur stereo slides

by Mark Willke

Emergency!

Numerous times I've happened upon something worthy of a stereo photo but found myself without my camera. Luckily, the (three different) photographers of the images shown here were in the right place at the right time with their stereo gear!

Little is known about what was actually happening, but I can tell you that the first image was taken in the Tampa, Florida area in about 1964. The second was shot in West Allis, Wisconsin (That's the West Allis Police Department's Ambulance in the background) The last slide is labeled "2/58" and "Accident on Highway, Siskiyou", which I'm assuming is a misspelling of the Siskiyou Mountains near the Oregon/California border.

These shots don't exhibit the best composition or depth, but they're still interesting records of difficult moments in the past.

This column combines a love of stereo photography with a fondness for 1950s-era styling, design and decor by sharing amateur stereo slides shot in the "golden age" of the Stereo Realist—the late 1940s through the early 1960s. From clothing and hairstyles to home decor to modes of transportation, these frozen moments of time show what things were really like in the middle of the twentieth century.

If you've found a classic '50s-era image that you would like to share through this column, please send the actual slide or a high-resolution side-by-side scan as a jpeg, tiff or photoshop file to: Fifties Flavored Finds, 5610 SE 71st, Portland, OR 97206. You can also email the digital file to swid@teideport.com. If the subject, date, location, photographer or other details about your image are known, please include that information as well.

As space allows, we will select a couple of images to reproduce in each issue. This is not a contest—just a place to share and enjoy. Slides will be returned within 6 to 14 weeks, and while we'll treat your slide as carefully as our own, Stereo World and the NSA assume no responsibility for its safety.
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Front Cover:
The Fujifilm FinePix Real 3D W1 digital camera—a Realist for the 21st Century or a flash in the pan? See NewViews and Editor's View in this issue.

Back Cover:
Realistic Travels No. 523, “Officer in the car of an observation balloon testing the telephone.” A close look at balloon observers and crew in WWI, showing parachute containers and the telephone headset from Ralph Reiley's feature “When the Balloon Went Up – Observation Balloons of WWI.”

The National Stereoscopic Association is a non-profit organization whose goals are: to promote research, collection and use of vintage and contemporary stereoviews, stereo cameras and equipment, and related materials; to promote the practice of stereo photography; to encourage the use of stereoscopy in the fields of visual arts and technology; to foster the appreciation of the stereograph as a visual historical record.

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Member, International Stereoscopic Union
Late Mail

Those who attended the 2009 NSA convention in Mesa could find on the NSA table in the Trade Fair a stack of the July/August issue straight from the press. This, we all assumed, would be delivered to members’ homes sometime in mid July. Unfortunately, although printed and ready, the issue wasn’t mailed from Ohio until early August. We are still trying to determine the reason for the delay which especially affected members who get their Stereo World via bulk mail as well as all members outside the U.S. Those overseas members had already experienced a long delay in receiving the previous two issues due to a programming error which omitted their pickup by DHL Global Mail.

A 21st Century Realist, or, Can You Fuji-View?

Of course nobody can tell at this point if the new Fujifilm FinePix Real 3D W1 will ever earn that title. (A shorter name would help!) As the first digital stereo camera from a “mainstream” company, it could well end up being regarded as something more like a 21st Century Homeos, or maybe Verascope f:40. All will depend on possible improvements or refinements in similar cameras from other companies, or from Fujifilm itself. The speed at which consumer products change is orders of magnitude greater than in the early 20th Century, so there may never be anything even remotely similar to the Realist in terms of lasting appeal anyway.

Of course nobody expects any digital camera model to have the simple durability of a Realist. Some digitals may have respectable life-spans, but I doubt any will come close to 62 years! Smaller, more specialized makers like Loreo could certainly advance digital 3-D as well. But even if the W1 turns out to be the lonely first and last of its kind, it could become a beloved and very useful exception in the accelerated universe of consumer electronics.

It occurred to me that ideal promotion for the W1 would be product placement in 3-D movies. Then I remembered they’re all animated, but maybe that’s the key to boosting sales. Just include software that makes it look like your picture is a still from some 3-D animation, those kids at the birthday party becoming characters in a rollicking 3-D adventure! The concept isn’t so far-fetched. My grandson has a Disney digital camera which, at the touch of a button, inserts Disney characters into the scene so your dog can play with Pluto, etc.

Of course a better thing to insert with each W1 would be a tutorial on freeviewing (possibly crossviewing?) as part of the instructions. Images paired on standard 6” wide prints, advertised as “Viewed without glasses!” would beat even the Fuji screen with no power required, and would be infinitely superior to the Fuji lenticular prints seen in Mesa. Teaser ads in national magazines could promote the concept with the question, “Can You Fuji-View? The right PR effort could resurrect the whole Single Image Random Dot Stereogram craze of the early ’90s but featuring real photos of your family viewed with easier to learn crossviewing. One safe prediction may be that the number of suggestions for improvements to the W1 or its successor will match or exceed the number of units sold in the first year.
World War I in 3D, designed by the Center for Civil War Photography (www.civilwarphotography.org), opened in September at the South Carolina Confederate Relic Room and Military Museum (SCCRRMM) in Columbia. The twenty-minute 3-D show features over eighty stereographs and gives visitors a dramatic display of post-Civil War 3-D photography.

CCWP Director of Imaging John Richter selected the views from SCCRMM’s 300 card Keystone World War I set for the show. Selected not only for content but for a strong 3-D effect, the views were scanned for presentation as anaglyphs on a display screen. The original Keystone titles plus sound effects and period music were added.

The show will be on display at the South Carolina Confederate Relic Room and Military Museum in Columbia, SC to December 6, 2009. The museum is open Tuesday to Saturday from 10:00am to 5:00pm and on the first Sunday of the month from 1:00pm to 5:00pm. Visit their website at http://crr.sc.gov/exhibitions/upcoming/.

A Village in Depth

(Continued from page 33)

A later SW article, “T.R. Williams’ ‘Scenes in our Village’ NEW Discoveries, NEW Mysteries” (Vol. 31 No. 4) brought readers up date on the research as of 2006, including Williams’ vertical stereo camera employed for sequential pairs.

Now all of that 30+ years of research and footwork has been refined and organized into a 237 page volume that would no doubt amaze T.R. Williams himself. Not only are the 59 views of the original series reproduced in full color, but variants, related views and versions of the same view taken by the upper vs the lower lenses of Williams’s unique camera bring the total “scenes” in the book to about 80. Adding to these the view half enlargements of each scene on the left hand pages, the “now” views of the village today corresponding to many of the original stereo, and the detail enlargements below many of the views makes the total of illustrations in the book swell considerably. Almost alone among even the best stereoview collections, the detail enlargements below some of the views are all presented as stereo pairs themselves.

In addition to the images, this is the first time all the verses from the backs of the views have been published. Each is reproduced directly under the enlarged view half on the left hand pages. Both the tinted and monochrome versions of some views are included, sometimes to show detail obscured by the coloring and sometimes to show clear variations between the published versions.

An 1876 Ordnance Survey map of the village makes it possible to locate many of the structures in the scenes and understand their relationship to each other as well as the stereographer’s camera positions.

More than just a simple lorgnette viewer is provided with A Village Lost and Found. The custom, stand-on-the-page folding stereoscope included can be easily positioned over the views, providing an isolating black frame that includes a centering point for perfect alignment. Designed by the author, the stereoscope incorporates a 1.5” focusing range to allow as many readers as possible to view Williams’ work as it was intended. A brief biography of T.R. Williams is included, along with the promise of a future book, “on the whole spectrum of his life and work, as an artist, family man, and highly successful portrait photographer.”

Unlike other sets of stereos which he may have shot in response to a commission, Williams seems to have created “Our Village” as a labor of love, recording the scenes of his childhood summers and documenting a place and way of life that was already vanishing through the effects of the industrial revolution. His extraordinary dedication to the project and his quest for perfection in stereographic imagery are both honored and mirrored in the years of research, photographic explorations and thoughtful presentation that have made possible A Village Lost and Found—clearly another labor of love.
The world first learned of Sue Barry when Oliver Sacks published his article “Stereo Sue” in the June 19, 2006 issue of The New Yorker magazine. Sacks, a 3-D collector and an active member of the New York Stereoscopic Society, told the story of Barry’s discovery of stereopsis after undergoing a course of vision therapy using the Brock string under the care of optometrist Dr. Theresa Ruggiero.

After undergoing eye surgery for strabismus with a cross-eye, or esotropic, condition as a child, Barry was stereoblind for forty years after that. Even though the surgery produced binocular alignment, a cosmetic fix, Barry never learned to fixate both eyes simultaneously on the same spot in visual space for stereopsis. After she began focusing both eyes on a bead slid to different distances on the Brock string, Barry began to see in stereo at the age of 48.

In her recently-published book “Fixing My Gaze: A Scientist’s Journey into Seeing in Three Dimensions” (Basic Books: 2009), Barry writes about first seeing in 3-D after using the Brock string. “Throughout the day,” Barry observes, “my stereovision would emerge—intermittently, fleetingly, unexpectedly—bringing me moments of absolute wonder and delight. The most ordinary objects looked so beautiful. A large sink faucet reached out toward me, and I thought I had never seen such a lovely arc as the arc of the faucet. The grape in my lunchtime salad was rounder and more solid than any grape I had ever seen before. I could see, not just infer, the volume of space between tree limbs, and I loved looking at, and even immersing myself in, those inviting pockets of space.”

This late development of stereovision, two days after her 48th birthday, was surprising for Barry and other vision scientists because the common wisdom in the optometric field held that stereovision must develop in a child in a critical period before the age of 5 with proliferation of “binocular neurons” in the brain or it never will. In two workshops at the NSA Convention in Mesa, Barry demonstrated the use of the Brock string and the quoit, or rope circle, Polaroid vectogram test for stereopsis.

Barry also conveys her admiration for Emile Louis Javal and Frederick W. Brock, two heroes of stereovision therapy who worked in the field of orthoptics. Javal was the first person to measure eye movements during reading and he coined the term “saccade” to describe them. Dr. David Wells, in his book “The Stereoscope in Ophthalmology” (E.F. Mahady: 1928) also gives praise to Javal. “In 1896 Javal published his great work ‘Manuel du Strabisme.’ He seems to have been the first to adapt the principle of the stereoscope to ‘latent strabismus,’ or heterophoria, and to him the writer feels most indebted. It was his stereoscope with five adjustments that suggested the utilizing of the phoro-optometer for the same purpose. It seems incredible that a work of such great merit should not have appeared in English. His charts, graded from easy to difficult, opened up an entirely new and practical field in fusion training.”

For many years Wells authored a “Selection of Stereoscopic Charts,” 49 black-and-white and 21 colored charts published by the American Optical Company. This selection included numerous classic stereo fusion test charts by Javal. One, in particular, depicts an “F” in the left eye field and an “L” in the right eye field. When combined with stereo fusion, an “E” is synthesized from the binocular information.

Frederick W. Brock, the originator of the Brock string, was an orthoptic therapist of the first rank. Although Barry, doing research for her book, read the work of many vision scientists she found “that only the writings of Frederick Brock captured my thoughts and experiences.” Specifically, citing from Brock’s “Lecture Notes on Strabismus” (made for
Three of Javal's classic stereo test charts reprinted by Wells in his Selections.
lished Brock's "Lecture Notes on Strabismus" or not. Barry graciously provided me with a copy of the single-spaced 67-page typescript manuscript which she had obtained from Brock's daughter. Brock's "Lecture Notes on Strabismus" has to be one of the greatest, and most thorough, discussions of orthoptics ever written. Clearly defining his terms, Brock states that "the purpose of vision training is to bring about a better adjustment of the individual to his natural surroundings" and that "it is the nature of the posture which determines the nature of the responses." The posture specifically refers to the manner in which the eyes are used.

"Binocular posture," writes Brock, "means, essentially, 'looking at a single fixation object with both eyes, at the same time.'" A "monocular posture" he declares, "means that only one eye fixates the object of special attention" and a "strabismic posture" maintains "separate lines of direct gaze for each eye." The strabismic posture includes "ambiocular" visual behavior where "both eyes are used for separate and distinct purposes" and "attend to different functions at the same time." Even after Sue Barry's esotropia was corrected with surgery, she was still

the Keystone View Company) she notes that she nearly fell out of her chair when she read "It must be repeated here that, before stereopsis is actually experienced by the patient, there is nothing one can do or say which will adequately explain to him the actual sensation experienced."

Brock was nothing if not obsessive about orthoptics. Barry observes that "Brock seemed to have an uncanny understanding of how I once saw and how my vision had changed. Curious, I delved deeper into his writings and found out why. Frederick Brock was a strabismic. The first patient he had treated was himself."

It's unclear whether the Keystone View Company actually published "The Human Body is Strengthened by Proper Exercise - The Eyes are no Exception." From the Keystone Eye Comfort and Depth Perception series to develop a high degree of depth perception.
engaging in ambiocular visual behavior without assuming a binocular posture.

Julia E. Lancaster, in "A Manual of Orthoptics," (Charles C. Thomas: 1951) characterizes orthoptics as "that portion of ophthalmology which deals with helping the patient to get the best possible use of his two eyes." Lancaster worked at the San Francisco Ophthalmic Laboratory in the 1940s and noted that "In the past it was assumed that if the patient had two good eyes he would use them normally. The study of visual habits, stimulated by orthoptics, shows that this is frequently not so. Many people with two good eyes have faulty visual habits and a low degree of binocular skill. This is especially true if the faulty habits were established before the eyes were corrected by refraction [glasses, prisms], surgery or other treatment."

This is certainly true in Barry's experience. Despite achieving binocular alignment with her last surgery at the age of 7, Barry continued using her eyes in an ambiocular posture, viewing alternately through the left and right eyes, and suppressing the visual information from the eye not in use. Barry did not make the effort to use both her eyes simultaneously to view a single object in a binocular posture. When she began using the Brock string to do so, Barry began to see the world in stereo.

There has been a century long schism between ophthalmologists, promoting surgical correction of the eye muscles, and optometrists advocating stereovision therapy. Barry notes that "Javal's interest in strabismus stemmed from concerns for his strabismic father and sister, and he developed therapeutic techniques to help them as an alternative to the crude surgery of the day, which he called le massacres du muscles oculaire (or massacre of the eye muscles). His techniques worked but often required long hours of practice to be effective."
Many ophthalmologists, after surgically aligning the two eyes, have seen no further need for vision training once binocular alignment was achieved. As an infant with an esotropic (inward turning) eye condition, Barry underwent three separate eye surgeries without the subsequent stereovision therapy which could have trained her to see in 3-D at a much younger age.

With a June 21, 2009 opinion piece in the Los Angeles Times, Barry expressed both delight and dismay about her newfound stereovision after viewing the 3-D Disney/Pixar film “Up” with her children. “Combined with feelings of joy at my new view of 3-D movies were feelings of anger,” Barry recounted. “Why hadn’t anyone told me when I was a child that I lacked stereovision? Why had all my problems in school been blamed on my supposed lack of intelligence and not on my vision? Why hadn’t my parents been told about optometric vision therapy?”

For many years prior to Barry’s eye surgeries, therapeutic stereovision training charts had been in use by orthoptic physicians. Besides the large library of Keystone “Visual Survey Series” charts and the Wells “Selection of Stereoscopic Charts,” other orthoptic training aids were available.

Israel Dvorine, for example, was an optometrist and the author of “Theory and Practice of Analytical...

A playful stereo test chart by Israel Dvorine to measure fusion in esotropic children.

An animated fusion training chart for children by Dvorine.
Refraction and Orthoptics” (Self-published: Baltimore, 1948). In 1939 Dvorine published the “Dvorine Animated Fusion Training Charts,” a beautiful, somewhat fanciful series of stereotest charts with imagery for one eye on a rotating wheel that was designed for treatment of strabismus with colorful imagery created for children. Dvorine also produced test and training charts on perception and color discrimination.

George P. Guibor was the author of “Squint and Allied Conditions” (Grune & Stratton: 1959). “Squint” is an outdated term that was often used in the early 20th century to refer to strabismus. G.P. Guibor was from Chicago and in 1934 he published the Guibor Charts, updating some of the Wells Charts, and also produced new art with some interesting imagery on “split” charts for stereo fusion training.

In a separate chapter on “The Function and Value of Stereopsis in Orthoptic Training” in her manual of orthoptics, Julia Lancaster wrote that “It is an amazing experience to test a patient with a high degree alternating strabismus of several years’ standing and have him recognize stereopsis promptly.” She concludes that “Stereopsis may thus be considered a valuable guide to the patient’s binocular status, but its presence or absence must be interpreted in the light of other binocular findings. Its absence does not mean a hopeless case, and its presence does not mean that no further treatment is needed.”

The stereotest charts of Javal, Wells, Dvorine and Guibor have an intriguing aesthetic quality not unlike many of the great works of modernist painting (which are so often self-reflexive meditations on the nature of seeing). It is an aesthetic, however, that can only take place in the neural precincts of the cyclopean image after binocular fusion. This gallery is a rarefied world that requires mastery of a complex visionary toolset for entry. It is a gallery that Stereo Sue Barry can now freely explore.
When I dream, I'm aware of color when it's important to some key object or person. The green of a lawn, the yellow of a kitchen wall, the red of a neon theater sign or the glow of sunset on a woman's face can outlast memories of other dream details. The same applies to an impression of dramatic or exaggerated stereopsis depth and space, but it also anticipates depth in existing flat images.

But what's nearly impossible for most of us to imagine is never to have seen stereoscopically at all. To never have had any impression of depth or space in your mind. Those born with strabismus or cross-eye condition, even after surgery to "aim" the eyes in the same direction, often fail to develop the ability to fuse images from both eyes for actual stereopsis, or 3-D vision.

In Fixing My Gaze, neuroscientist Susan Barry explains for the rest of us in fascinating detail just what a truly and completely "flat" world is like to live in for 48 years. We in the "3-D community" generally assume we're more sensitive to all the implications of 2-D vs 3-D awareness. But we are literally unable to imagine the total, internal flatness she so dramatically describes and then compares to the later opening up of the third dimension inside her head. (Ray Zone's article in this issue covers the history of the vision therapy techniques which made that possible.)

For vision professionals, the various case histories in Barry's book offer added proof of the brain's ability to rewire itself and learn to fuse signals from both eyes well into adulthood. For stereoblind individuals, the book offers hope of actual improvement without promoting any magic diet or mail-order Tibetan herbs. For 3-D enthusiasts, it offers multiple reminders of the wonder and importance of stereopsis that are all too easy to take for granted in the midst of impassioned debates over lens separations, digital resolution or Medium Format viewers.

At an August reading in Portland's Powell's Books, the author demonstrated the paper tube and Brock String tests of stereopsis, just as she did in her NSA workshops in Mesa. The difference in August was that several people in the audience actually failed the tests, and were eager to hear about sources of therapy identified in Fixing My Gaze. It was intriguing to hear firsthand the personal stories of people who may, thanks to this book, someday be potential NSA members for the happiest of all reasons.

Not included in the book, but present in her workshops and readings is a personal observation that drives home the significance of stereopsis with an intensity and from a perspective that few other people on the planet could ever have. The final image of the NSA workshop was a shot of a January, 1996 night shuttle launch. Barry explained that her husband is an astronaut, and the photo showed the launch of his first mission. Then she added, "I've got to say this—it was fantastic watching him blast off into space, but it pales in comparison to seeing in stereo."
Anaglyph books have certainly enjoyed a publishing revival in recent years. One only has to consider recent tomes like those of Barry Rothstein's "Pop-up" books or the "In Your Face 3D" volume by Ron Labbe and Dave Klutho to see just how good anaglyph can be when its on the printed page. Digital imaging and pre-press have served to make the printed anaglyph look better now than it has ever been.

That is certainly the case with the new 3-D Atlas of Salt Lake Valley's Tri-Canyon Area by Steven L. and Benjamin M. Richardson. The very finest color printing on matte coated paper with a large 12" x 9" size in an easy-to-view comb-bound format makes looking at this book with one of the 2 pairs of anaglyph glasses included a pure joy, regardless of one's interest in the subject matter.

The Tri-Canyon area documented in depth in this book covers three canyons in the Wasatch Mountains just southeast of Salt Lake City, Utah. In all, the book covers an area of 216 square miles that is popular for year-round activities that include camping, rock-climbing, skiing and hiking. Though the authors, in their introduction, write that the book "is believed to be the first of its kind,"

(Continued on page 39)
Antique Engines and Tractors

It's late August and it is hot. Most schools in the area have started, but our local school district is having its first "vacation" day. Why? Well it is time for all the youth to help at the Lion Burger stand, the Optimist's booth and grocery, and to park cars for "the tractor and engine show". For 43 years the Tri-State Antique Engine and Tractor Show has brought exhibitors and visitors to the Jay County Fairgrounds in Portland, Jay County, Indiana. The show began with a few local collectors from Indiana, Ohio and Michigan bringing old gas engines and tractors together for other collectors and visitors. Slowly, the word spread, bringing more people. Soon all 50 states were represented. Now it is billed as the world's largest gas engine and tractor show because exhibitors and visitors come from Canada, England and Australia, even shipping their engines and tractors. The name of the show remains the same—the Tri-State Antique Engine and Tractor Show. Most locals just call it "the tractor and engine show".

My husband Steve and I had just returned from the NSA convention in Grand Rapids with new ideas, excitement about StereoPhotoMaker and new membership in the Stereoscopic Society of America. We needed to take some digital photos. The timing was perfect. Armed with our Cannon with a Loreo lens attachment we would attend the "tractor and engine show" and take 3-D photos of the things that interest all those people.

What is so interesting? Well, there is just about anything and
Engines in a Row.
Several "Indiana-Built" engines are displayed side-by-side. This exhibitor owns all these engines and several more not on display.

Lanterns in a Row.
Antique tractors and engines are not the only items on display or for sale. Any old item associated with the era when the tractors and engines were used can be exhibited.

Tractors in a Row. This row shows Ford, John Deere, International Farmall, CO-OP and Massey-Harris tractors from the 1940s and '50s.
The Farmall "B" was a small utility tractor made in the early 1940s. The first tractor my dad and grandfather purchased was a "B." It was the tractor we kids used to learn our driving skills.

Water Pump. At the turn of the century every home had several gasoline engines to help with various jobs. This engine is pumping water. It might also power the washing machine.

Starting her Up. Many exhibitors start their engines to demonstrate their restoration skills. It may look pretty, but if it does not run you did not do a very good job of restoration.
The feature engines this year are to the first four-wheeled drives. Every year there is a featured tractor manufacturer. This year the feature tractor is Allis-Chalmers. The association bills it as the 25th anniversary of the "Gathering of the Orange". The first sight you see under the tall trees of the fairgrounds is a sea of Allis-Chalmers orange and people everywhere are in hunter orange T-shirts and hats.

North and west of the orange sea, old engines once used to wash clothes, churn butter, pump water, trash grain, shell corn, pump oil and do many other household/ farm chores are lined up in rows. The feature engines this year are Indiana built engines.

There is much more to the tractor and engine show. Dealers of parts and manuals, people with hats and T-shirts with logos and others with old household items or odd related items. (Old sewing machines painted to look like tractors!) There is more, like vendors selling signs, belt buckles and whatever you can image with the logos of tractor and engine manufactures including John Deere, Allis-Chalmers, Farmall, Minneapolis-Moline, Case and many more.

I always wander to the Farmall section to look at the tractors we have used, like the Farmall "B", which was the first tractor my dad and grandfather purchased. I have trouble finding any Farmall "C"s, the model of their second tractor (one for each). Most Farmall "C"s commonly on display are the "super C"s. Next I head to the more modern 1950s Farmall International Harvester 400 that was my grandfather's on my mother's side of the family. These tractors are there in rows with the putt-putt John Deere's, the gray Fords, and the other red Massey-Harris tractors etc. A great stroll back in time.

It is amazing to look at all the different kinds of engines and to see how similar and yet different they all are. Also, one is glad that today it isn't necessary to use these engines to wash clothes or pump water. Some people collect small engines used for household chores. Others only collect the large threshers. Many others only collect engines used for a specific job, like drilling oil. Yet others specifically gather John Deere tractors into their barns and sheds.

This year as we wandered in the engine area I heard something familiar but I could not place the sound. Finally I saw a sign that said oil-field engines—ah HA! There were several oil wells on my grandmother's farm and I heard that sound once a week when the oil man came and pumped the oil. What a trip down memory lane!

While Steve and I are looking and taking photos we discover that people are looking at us. Some approach and ask what kind of cameras we're using. We meet some very interesting people and chat about the cameras, 3-D photos and stereoscopes. One man asks how we got into this 3-D thing. We explain that we both had an interest in photography and stereo photographs so it was natural that we would combine the two. With this reminiscence we realize Steve has been taking 3-D photos since we were dating, over thirty years ago.

We move on and begin to think of lunch when we come across the threshers, saw mills, and corn shellers from the turn of the other century. The sound of the big steam engines is deafening. I watch restorers tinker with their engines and soon we are in the middle of a "quick start" contest. This contest was for the Rumely's Oil Pull engines and they time the men to see who can start their engine first, not really quick by today's standards.

There are other special events including helicopter rides over the area, a fly-in breakfast at the small airport sponsored by a local church and a quilt show at the local art center. Like I said, there is something for everyone!

Suddenly, the booths have changed to suppliers of parts, oddities and just old things, flea market style. There are kerosene lanterns, glass door and drawer knobs, lightning rod globes, measuring tapes, push lawn mowers and various collector's items. We even buy a stereoscope to add to our collection. It reminds me of hours spent in my grandparents' home looking through stacks of stereo cards.

The "engine show" provides income for many community service groups. The Boy Scouts even run pay parking for the many visitors. We finally leave the fairgrounds with an Optimist's buttery corn-on-the-cob in our hands. When we arrive home, resting our feet and downloading our photos, Steve and I decide we had a good photo time. Maybe we'll go again next year after we have our Cannon twin-rigs.
Few images of the First World War are as indelible as a hydrogen filled observation balloon falling to earth in a ball of flame, leaving a trail of oily black smoke. For the fighter pilots of that war, few targets were more difficult to attack and live to tell the tale than the gas filled “sausages”. The French had pioneered aerial observation when the Committee for Public safety, a major arm of the Revolutionary government, created the first balloon company in April of 1794. The first use of a military balloon was two months later in June of 1794. The French were fighting the Austrians at Maubeuge. A balloon was brought in, and all Austrian maneuvers were observed, giving the French the ability to counter every Austrian move. This soon demoralized the Austrians, and lead to a victory for the new French Revolutionary army. During the 19th Century and into the early 20th Century, military balloons were used in Europe, the United States, South Africa and China, usually during long sieges. By 1900, all the major military powers had established balloon companies.

In August of 1914, the Europeans mobilized their vast armies and marched out for battle. In the first few months of the war, the armies were moving rapidly, and balloons were not used extensively. After November of 1914, the war...
LSU glass view, “Suzanne La Releve.” This shows troops marching toward Verdun, while a Caquot type balloon is being sent aloft. The French developed the Caquot balloon in 1915. The Germans copied the Caquot balloon, and named it the type Ae-800 Fesselballon. This design was very stable in high winds, and was used by the French, Germans, Americans, Austrians, Italians, Russians and British.

Troutman No. 5266, “Tubes of hydrogen for observation balloons.” A supply of hydrogen cylinders used for inflating balloons. This was a dangerous way to store hydrogen, and soon balloon companies were equipped with hydrogen generating plants.
of movement had ended, and both sides dug in for the winter. The front line stretched from the English Channel in Belgium across France to the Swiss border. The largest armies ever fielded were facing each other across the thin strip of No-Man’s-Land. Cavalry had always been the traditional, and preferred, scouting arm of the army. The machine gun had driven cavalry off the modern battlefield.

Aircraft were used, but they were few in number, and mechanically unreliable. The static nature of the First World War created the perfect situation for observation balloons to come into their own and become a vital element in waging war. By 1916, on the Western Front, about 500 balloons were in use on each side of No-Man’s-Land.

The pilots and aircraft of the First World War have been given most of what little glory and glamour there was in that war. The work done by the balloon observer was very important in the final outcome of the war. It was not glorious or glamorous to stand in a wicker basket for hours at a time watching the enemy, miles behind the front lines with a telescope, but it was a vital job. Balloons were equipped with maps, telescopes, cameras, and most importantly, a telephone or wireless set. They were in direct contact with headquarters and artillery batteries. They could direct minute changes in artillery fire as well as report the smallest moves made by the enemy, as well as report on troop movement miles behind the enemy front lines. They operated at altitudes of 1000 to 4000 feet, and could observe enemy operations up to 40 miles away. In areas

Glass view by an unknown French publisher, No. 339, “Ascension d’une saucisse.” This view was taken underneath a Parseval type balloon, developed by the Germans before the war. The tube at the rear is an air filled stabilizing fin that acted very much like a tail on a kite for keeping the balloon stable in a high wind.

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Troutman No. 5138, “German Sausage Zeppelin, ‘Horned Owl’, brought down by the French.” Publishers often used a lot of imagination in writing captions to liven up less than exciting stereo views. In this photo, a captured German balloon, of the Caquot type, is on display along with wreckage from a downed Zeppelin. The large aluminum alloy framework with the wheel is one of the elevator fins located at the tail end of the Zeppelin.
where there was heavy fighting, multiple balloons were used, so that nothing the enemy attempted to do could go undetected.
During WWI, the phrase, “The Balloon’s going up!” was an expression of impending doom. Shortly after an enemy balloon went up, the enemy artillery barrage would begin, and quickly be zeroed in. The front line soldiers truly hated enemy balloon observers. They were miles behind the front line, safe from all the horrors and misery of trench warfare. They could call a devastating artillery barrage down on them at a moments notice should they see the slightest movement in the trenches. The soldiers would rejoice when one of their airmen succeeded in sending an enemy balloon down in flames.

In 1915, aircraft began attacking enemy balloons to prevent them from carrying out their important mission. Balloons were soon well protected with machine guns as well as light and medium artillery. As time went on specially designed antiaircraft guns were in use to protect balloons, from modified machine guns to light and medium caliber antiaircraft artillery. In the last stages of the war, balloons often had fighters on continuous patrol, circling overhead to intercept any enemy aircraft that dared to attack. A pilot was given the same credit for shooting down an enemy balloon or an airplane.

Balloons were very dangerous targets, although some pilots became specialists in “roasting sausages”. These were the Balloon Busters, and their exploits are still celebrated, while the balloon observers have mostly been forgotten. These pilots were willing to fly

French glass view by STL, No. 809, “Ballonen feu” showing the fiery end of a balloon. As with any photos portraying downed aircraft of any type in WWI, it should not be taken at face value. This photo was probably a staged event. There are very few documented photos of actual air combat from WWI, although fakes and staged events are plentiful.
A German ground crew prepares a Parseval type balloon for being sent aloft. Feldstereo-Verlag was a German publisher that produced several series of small format, 1 3/4 x 4 1/4 paper stereo views during the war. The photos came with a folding cardboard viewer with viewer and views packaged in a wood-grained cardboard sleeve.

Deep into enemy territory and take on a target well protected by machine guns, artillery, and aircraft. After a successful attack, they had to get back to their own lines pursued by enemy aircraft, as well as taking ground fire from all enemy forces they flew over, sometimes with shreds of the balloon entangled on the wings and in the bracing wires of their aircraft. Many pilots who succeeded in roasting a sausage were shot down in the process and killed or made prisoners of war. Some were caught in the blast of the burning hydrogen.

Willy Coppens of Belgium was the king balloon buster, with a score of 34 balloons, and three aircraft. Leon Bourjade of France shot down 24 Balloons, and eight aircraft. Fritz Roth of Germany shot down 20 balloons, and eight aircraft. Anthony W. Beauchamp-Proctor of England shot down 16 balloons out of a total score of 54. Frank Luke of the United States shot down 14 balloons and four aircraft. It was not unusual for a pilot to shoot down multiple balloons in a few short harrowing minutes, and a few got four or five in a single day. The Germans alone lost 241 balloons during the war.

Various methods were used in shooting down balloons. In 1916, during the Verdun campaign, Captain Le Prieur of the French army developed a rocket. Four aluminum tubes were attached to
each wing strut, and the rockets, resembling oversized fireworks, were placed in the tubes. They were fired electrically in a volley with little result, as the rockets seemed to go in every direction except straight ahead. Some pilots tried dropping steel darts from above, or shot balloons full of holes with machine gun fire. Putting holes in a balloon would send it to the ground, but very slowly, and this sort of damage was easily repaired. In early 1917, a phosphorous filled bullet was developed, and these, combined with flat nosed bullets used to tear large holes in the balloons, worked very well in setting fire to the hydrogen gas bags if fired from close range. The tracer round became the preferred way for roasting sausages. Later on, the British company Vickers produced an 11mm machine gun, which proved to be especially useful in setting fire to balloons.

At the beginning of the war, spherical balloons were still in use, but these were quickly taken out of service, as they were not stable in high winds. All armies began using the kite balloons that were designed to turn into the wind, and remain in a stable position. They were also referred to as captive balloons, as they were tethered to the ground. Observers were trained to pilot free balloons, as captive balloons did come loose...
from their moorings from time to time. There were two basic kite balloon designs in use by all armies during the First World War. The first type, developed in Germany before the war, was the Parseval-Siegsfeld balloon. It was cylindrical in shape, and had single air filled cylindrical fin, set low on the rear of the balloon. The British and French called them Sausages; the German soldiers called them Drachen, a word meaning dragon as well as kite. The Germans also had a rude term for them, Nulle, or testicle. Captain Albert Caquot of the French Army developed the other type in 1915. It was tear shaped, and had three fins at the rear, set at 120 degrees from each other. The Caquot type could fly higher and remain stable in stronger winds that the Parseval type. The Germans produced their own copy of the Caquot balloon, the type Ae-800, as it held 800 cubic meters of hydrogen. Although the Caquot was the superior to the Parseval, both remained in use to the end of the war.

The balloon observer faced many risks and dangers, as did all soldiers of World War One. Balloon observers were equipped with parachutes, although the para-
chutes of that time had a failure rate just high enough to ensure that observers jumped only in an emergency situation. The balloon observer was a highly trained and specialized officer, and some pilots aimed for them as well as the balloon. Many observers who had successfully bailed out of the balloon were killed when the burning balloon overtook them on the way down to the ground. Willy Coppens was haunted to the end of his life by the memory of one of his victories. Coppens wrote that he had “just killed a brave man, and I killed him the worst way I could. The balloon observer didn’t jump—he kept firing at me with a little handgun. The burning balloon just swallowed him up.”

Other uses for balloons included home defense, where a series of barrage balloons were sent up over large cites such as London, with cables strung between them in the

Realistic Travels No. 479, “Silicol gas-plant making and storing gas for our Observation Balloons.” After the war of movement ended and was replaced by trench warfare, all armies began using mobile hydrogen gas plants, taking the place of storing highly explosive gas canisters. Balloons leaked constantly, even when not full of bullet holes, creating the need for a constant supply of hydrogen gas.
hopes of snaring enemy bombers. The British used them again in WWII. To evade the balloons the bombers had to fly at a higher altitude, and thus reduce the accuracy of their bombing raid. There are two recorded instances where a balloon, with the gondola packed with TNT, was used to trap would-be balloon busters. One instance was by the British on the Macedonian Front, and the other by the Germans on the Western Front.

The British trap worked well in that the German pilot was killed, although the RAF pilots were not proud that they resorted to such an un-sportsman like trick. The German attempt backfired, when the intended victim, Willy Coppens, shot the rigged balloon down while it was being sent aloft. It fell to the ground in flames and exploded on the ground. Balloons were carried on ships in convoys for spotting summaries, a job they performed very well in WWI, and again in WWII. There was some use of observation balloons by the Germans on the Eastern Front in WWII, but on a very small scale. The period of 1914-1918 was the heyday of military balloon operations. The balloon observer of World War One was a highly trained officer, with a strong devo-

Realistic Travels No. 523, “Officer in the car of an observation balloon testing the telephone.” An excellent portrait of the balloon observers in the gondola showing both cone shaped parachute containers and the telephone headset.

Realistic Travels No. 521, “Letting out the guide ropes of an observation balloon about to ascend to direct artillery fire.” Interesting view of the ground crew of a British Caquot type balloon about to ascend.
French glass view by STL, No. 2238-435, "Obus 105 fusant noir éclatant as dessus du Mont Tetu." Loosely translated as "A 105mm shell bursting in black dazzling smoke over Mount Tetu." This is a view of No-Man's-Land near Verdun, with a 105 mm shell bursting in the air. In WWI shrapnel shells were filled with lead or steel balls. They burst in the air over the heads of the enemy, sending down a rain of deadly shrapnel balls. Shells that burst on impact were called fragmentation shells, due to the steel splinters created when the shell burst apart by explosion. For some reason, we now call all fragments from exploding shells shrapnel.

"The First Air War 1914-1918" (Vol. 34 No. 6).

Sources:

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Jane's Fighting Aircraft of World War I, by John W. Taylor, Military Press


Military Observation Balloons (Captive and Free), by Emil J. Winder, D. Van Nostrand Co., 1917

The Balloon Observer, by Major T.W. Wrenn, (Field Artillery) Air Service Aeronautics, US. Army 1919

The Great War Through Keystone Stereographs, by Robert S. Boyd, Trafford Publishing

Balloon-Busting Aces of World War 1, by Jon Guttman, Osprey Publishing

Troutman No. 5195, "The tragic End of an Observation Balloon." This is the same view of the bursting shell as above, but spiced up with a catchy but misleading caption. All the stereo view publishers were guilty of being creative with falsified captions to liven up dull photos. Publishers also recycled old stock photos with new captions to make them fit current events.
SSA Annual Meeting

At the NSA Convention in Mesa, Arizona the SSA held its Annual Meeting and its traditional well-attended SSA Dinner. SSA Treasurer and Membership Secretary Les Gehman presented his yearly report at the annual meeting.

"At the SSA meeting in Mesa," reported Les, "members voted to eliminate dues for 2010 and 2011 since we are in such good shape financially. Those people who have prepaid for 2010 will have their memberships extended through 2012.

"Also, we are no longer collecting dues for people participating solely in the online folio. Hopefully, this will encourage more international participation now that no dues are required.

"Please keep in mind that even though we are not collecting dues for 2010 and 2011, nor for the online folio, NSA membership is still required for membership in the SSA. This applies to the online folio also. If anyone needs a NSA membership form, please contact me and I'll mail one to you."

Nicholas M. Graver—
New SSA Life Member

Currently the SSA has had a total of 13 Life Members. At the Mesa Annual Meeting of the SSA, Nicholas M. Graver, member #718, was voted in as the newest SSA Life Member. Graver has been for years a resident of Rochester, New York and has had affiliation with the historic Eastman Kodak House located there.


Darrah subsequently followed up publication of "Stereo Views" with a second volume titled "The World of Stereographs," an even more definitive history which he self-published in 1977. Graver's notes for this stereoview card indicate that he used a Wilmot camera to shoot the photograph on Super XX negative film and employed Versaflo as developer to process the unified stereopairs on Polycontrast F gloss paper. An additional note by Graver adds that "A small portion of his [Darrah's stereograph] collection is in the boxes at left."

Mr. Graver had modified the Wilmot to make his own stereo box camera. Many of the folio members, while laudatory of Graver's work, were critical about his handling of the stereo window and found the view a trifle wide.

"Nick is such a conscientious fellow," wrote R. Brelo on the stereoview card sleeve, "and I can't understand why he isn't more particular about trimming the outer edges better! (P.S. We've already discussed this.)"

NSA Founder and author John Waldsmith, who wrote his own definitive history of stereographs.
SSA members pose in Mesa, Arizona for the traditional group stereophoto after the annual dinner.

with “Stereo Views: An Illustrated History and Price Guide” (Wallace-Holmstead Book Company: 1991), was a member of this folio. “Brings back memories of my visits to the Professor’s library,” wrote Waldsmith. “He is a real charmer. Excellent print quality—a bit posed but still a good portrait.”

13th International SSA Card Exhibition

Under Chair Dennis Green the judging and exhibition of the 13th International SSA Card Exhibition took place at the NSA Convention in Mesa. Serving as judges were David Allen, Linda Nygren and H. Lee Pratt, assisted by Andrea Shetley and Barb Gauche, newest member in the SSA.

A diverse selection of fine entries from around the world made the judging quite challenging for the trio of stereocard experts. Below are the award-winning stereocards and their makers.

PSA Gold Medal for Best of Show
“Jagderfolg”
by Bruno Braun, EPSA, Kassel, Germany

Frank Lloyd Wright Award for Best Architecture
“Creek Street”
by David Thompson, Salem, OR

Eileen & Ray Bohman Best Scenic Award
“Hawaiian Scene”
by Peter Jacobsohn, Mequon, WI

Best Novice
“President & Mrs. Lincoln”
by Harold Jacobsohn, Mequon, WI

Keystone Award for Best Portrait
“Nicole-Mirror-Bedroom”
by Cecil Stone, Orlando, FL

Judge’s Choice (Judge #1)
“Passiflora ’Royale’”
by Michael Bittner, Ft. Lauderdale, FL

Judge’s Choice (Judge #2)
“Nibbling Gorilla”
by Dennis Green, Ferndale, MI

Judge’s Choice (Judge #3)
“Ice”
by Peter Jacobsohn, Mequon, WI

Muscogee 3-D Award
Best Photjournalism
“Zum Sieg” by Bruno Braun, EPSA, Kassel, Germany

Yellowfoot Award for Best SSA Member
“Porcupine - Campbell County, WY”
by Les Gehman, Ft. Collins, CO

Best Presentation (front and back)
“Besh-Ga-Gowah Ruins”
by Tom Dory, Gilbert, AZ

Honorable Mentions
“The White Knight”
by Michael Bittner, Ft. Lauderdale, FL

“Mit Schwung” by Bruno Braun, EPSA, Kassel, Germany

“Butterfly & Flower Painting”
by Robert James Leonard, FPSA, EPSA, Deale, MD

“Saguaro Desert”
by Chris Reynolds, Surfside Beach, SC

“Art”
by Ray Zone, Los Angeles, CA

How to Contact the SSA General Secretary

Ray Zone is the General Secretary of the Stereoscopic Society and in that position is responsible for production of this column in Stereo World magazine and, according to the Membership Rules of the Society, is also “responsible for trying to keep the Society functioning effectively and harmoniously.” Folio secretaries and any member of the NSA interested in the SSA is encouraged to contact Ray via email at:

r3dzone@earthlink.net.

How to Join the SSA

To join the SSA one must first, of course, be a member of the NSA. For placement in a stereocard, transparency or digital folio of their choice the new SSA member must send $10 to Treasurer Les Gehman at the following address:

Les Gehman, 3736 Rochdale Dr.
Fort Collins, CO 80525 (970) 282-9899, lesg@gehman.org.

The Stereoscopic Society of America is a group of currently active stereo photographers who circulate their work by means of postal folios. Both print and transparency formats are used, and several groups are operating folio circuits to meet the needs in each format. When a folio arrives, a member views and makes comments on each of the entries of the other participants. His or her own view, which has traveled the circuit and has been examined and commented upon by the other members, is removed and replaced with a new entry. The folio then continues its endless travels around the circuit. Many long distance friendships have formed among the participants in this manner over the years.

Stereo photographers who may be interested in Society membership should contact the Membership Secretary, Les Gehman, 3736 Rochdale Dr., Fort Collins, CO 80525, (970) 282-9899, lesg@gehman.org.
New Fujifilm Real3D W1 Digital Camera

by David Starkman

One of the highlights of the NSA convention was getting to see the new Fujifilm digital 3-D camera in person. We not only got to hold the camera and see the autostereoscopic display, but we got to upload some sample photos to see what the results really look like.

Considering some of the misinformation that seems to be in even the most recent listings on an Internet Google search, I hope that this report will bring you all up to date, as accurately as I can manage.

First, the camera seemed to be near the final production stage. We got the impression that the "prototypes" we handled, were basically early production models. Perhaps more hand made than the final models would be, but not mockups. Three identical (working) cameras were on display, in addition to the working camera brought from Japan by Japanese NSA member Takashi Sekitani, who seems to be acting as a Beta tester for Fujifilm. It's nice to know that they have at least one person who is not a Fujifilm employee, but is a 3-D expert, giving them some feedback.

Takashi let us take a few 3-D pictures, and then remove the SD card and upload them to our laptop.

According to the developer of the camera, the native storage format is one side-by-side stereo pair in one file, also containing a header area in which extra information is stored. This format is called "Multi Picture Format" (MPF), and is standardized by CIPA, the Camera & Imaging Products Association of Japan. An English translation of this very new standard ("Stereo Still Image Format for Digital Cameras") is available for download: www.cipa.jp/english/hyoujunka/kikaku/pdf/DC-006_E.pdf.

The way the camera preferences were set up, we found that for each image taken, there was a single standard JPG image, followed by a file of the same name, with an MPO. (I noticed that there is also a menu option to store the MPO image pair only.). Using a simple executable file called MPO2JPG the MPO files could be quickly converted to Left and Right JPG files that had the same name (number) but with L and R tagged to each one. This required converting the images one image file at a time. Takashi says that he is already beta testing a version of StereoPhoto Maker that will support this file format, and that Fujifilm will also be including better software than the MPO2JPG with the final production product.

I've included an example of right and left image files, not adjusted in any way. As one might expect, they can be improved for stereo window and small corrections by using...
A sample of "raw" left and right image files from the camera. (Stereo by David Starkman)

Back view of the Fujifilm Real3D W1 camera showing the auto-stereoscopic preview and playback screen. Separate, directional light sources for the left and right images are employed. (Stereo by David Starkman)

StereoPhoto Maker. However, these samples show that even without SPM correction they are pretty good.

The Real3D Finepix Digital 3-D W1's dimensions are 4.9" (W) x 2.7" (H) x 1.0" (D). This is just a bit wider than a slimline compact digital camera, with the 2 lenses located 77mm apart.

The 10 Megapixel label on the camera applies to each sensor. When looking at the image files uploaded from Takashi's sample camera we found that the compressed MPO file containing the pair of 10 Megapixel images is about 9.1 to 9.6 MB in size.

When the Left and Right images are extracted using MPO2JPG they come out about 3648x2736 pixels in size which is almost exactly 10 MP. The compressed JPEGs are about 4.6 to 4.8 MB each—it is good to see that Fujifilm is using relatively low JPEG compression. The bottom line appears to be a much more than adequate resolution for a pocketable 3-D digital camera!

The single flash is located between the lenses, and a slide-down cover protects them and turns off the camera when not in use. The camera easily fits in a shirt pocket, and, in use, the casual observer would not realize that this is a 3-D camera. The camera can also take 3-D movies, with stereo sound from the two microphones located near each of the two lenses. It has a 2GB limitation on video clips, which works out to be approximately 14-16 minutes of video, which, of course, can be repeated up to the storage capacity of the SD card. I also recall mention that the camera will take up to a 32GB SD High Capacity card. See the close up photo of the camera for a front view layout.

I have taken the back view of the camera in stereo, with an attempt to get the lenticular 3-D display so that it can be seen in 3-D in the stereo pair. I think you
will get the idea. In use the view is quite three dimensional, and allows for a mini 3-D preview (as well as playback) of the image being taken. Horizontal adjustment of the on-screen view may be made with the large rocker button to the center left of the viewing screen. This has an overlapping circle symbol that looks a bit like the old Polaroid logo. This only adjusts screen viewing, not the taken image. There is also an internal 3x optical zoom, the equivalent of 35 to 105mm in a 35mm film camera.

So, these few sample photos, all taken indoors with flash, look very promising. With StereoPhoto Maker these images look comparable to my twin digital camera results, and would make great stereoview cards, or could be projected with twin digital projectors. Down the road (when I have the equipment) they also should be viewable on 3-D-Ready DLP TVs, when converted to the checkerboard format (which SPM can do).

Of course, this is not quite what Fujifilm has in mind for the average consumer. As a companion to the camera, they have created a very good quality 8" autostereoscopic (lenticular) digital 3-D picture frame viewer. Without conversion (I believe) the images can be uploaded to the picture frame, or the SD card from the camera can be inserted into the 3-D picture frame, for instant no-glasses-needed 3-D viewing (optimally for one person at a time). 3-D Movies, with sound, may also be shown on the 3-D picture frame. I have to say that the image quality on the picture frames was not just good—it was actually much better than I expected. The sample video clip was even better, as the motion parallax added more depth impression to the video. This would not have been the case with a video taken with a nonmoving camera.

As impressed as I was with the 3-D picture frame, I was not impressed at all with the sample lenticular prints that were shown. Presumably, Fujifilm intends to offer these to the 3-D camera users, and this certainly would be another selling point for consumers. The pictures were colorful and sharp, without double imaging. However, unlike the depth of the digital 3-D picture frame, the prints were virtually flat. This could be a turnoff for new customers, who are not 3-D enthusiasts to begin with.

For a first factory-made consumer digital 3-D camera from a major manufacturer I think Fujifilm has done a pretty good job. The final retail price is not yet set, but the Fujifilm reps were hinting at around a $600 price range for the camera, and possibly $500 for the viewer (digital 3-D picture frame). I hope the price will come down for the final release, but, if not, I can understand that, compared to conventional digital cameras, this is probably a very limited production (at least to get started), and, therefore, will command a premium price.

The 3-D digital picture frame, on the other hand, would seem a bit too high priced if it comes out at $500—over 80% of the cost of the camera alone. I’d also love to see a much larger version of this frame: at least 12".

Would I buy one? Yes, indeed! It’s pretty hard to resist having a decent 3-D camera capability literally in my pocket, and in a size
The Fujifilm Real3D V1 screen combines a high quality lenticular screen with the dual light source technology used in the camera screen to produce bright and sharp stereo images. (Realist stereo by John Dennis)

Fujifilm Real3D W1 camera and Real3D V1 lenticular viewer on display, with the help of Shinchi Fujimoto from Fujifilm Japan, at the Trade Fair, NSA Mesa Convention, July, 2009. (Stereo by David Starkman)

Second, due to the left lens being virtually at the upper left corner of the camera, it is easy to put a finger over the lens if held in a more "conventional" manner. And the camera cannot be held at the back sides, as these are where the control buttons are. This leaves the only correct holding position being a bit like on a Stereo Realist—at the top and bottom corner edges of the camera, using both hands at either end. Since the thin edge of the camera is shiny chrome, this edge is a bit slippery. I have suggested changing it to a rubberized surface, with finger indents or depressions in the appropriate places to facilitate proper holding of the camera.

Last, I suggested that the software include options for making quick anaglyphs (as they are easy to share online), and for making "Modern" or "Thorpe" Format 4" x 6" stereo prints (these are 4" x 6" prints which have the stereo pair placed side-by-side with a border around the images). This would allow for making cheap prints at any digital lab. Then Fujifilm could, for example, also supply a nice viewer for these prints, and a low-cost folding viewer (like the Loreo Lite) for mailing to friends and family. Just a thought.

Fujifilm has now announced the camera officially, as a real product to go on sale in the USA in September, apparently. It is going on sale a bit sooner in Japan at 60,000 Yen which is about US$640. The USA price is supposedly going to be around $600.

One press article is stating the 8" Viewer (lenticular picture frame) will be around $200. I hope that's correct—it's a lot better than the...
$500 the sales reps at NSA were hinting at!
The Fujifilm web site: www.fujifilm.com/products/3d/. Also, if you google "Fujifilm 3D Camera" now there are suddenly a lot of new articles from many sources about the camera. One quoted that Fujifilm is targeting sales of 100,000 units on this camera (if I read correctly). The press does not always get it right, or that could be company press hype to boost sales. That would be interesting.

Cyclopital3D Viewer

by Mary Ann Sell

If you love 3-D and digital photography and want to both see and share your images easily, you'll love the Digital Stereoscopic Hand Viewer from Cyclopital3D, released at the NSA convention in Mesa, AZ on July 12th. The Viewer was immediately proclaimed the "missing link in digital 3-D photography!"

Until now there has not been an easy way to view and share digital 3-D photos. Previously, the most common method of viewing digital 3-D photos was by using a computer or projection screen with the viewer wearing 3-D glasses. No bulky computer is required to use the Cyclopital3D Stereoscopic Hand Viewer. With this remarkable new device you are able to easily share your digital 3-D photos with friends using a viewer that holds up to 20,000 photos! It's completely portable and perfect for showcasing your 3-D photography anywhere at any time.

The Cyclopital3D Viewer has 16GB of internal storage and built-in batteries that provide six hours of bright, ghost-free viewing between charges. It has focusing capability with large achromatic lenses and fully coated optics. Some might compare this to a digital version of a Realist red button viewer. Being lightweight and smaller than a Holmes style viewer, it's great for passing around images to share at any gathering. (Actual dimensions 7.75 inches by 4.5 inches, by 3.25 inches.) The viewer has dual mini-LCD displays to present each stereo image independently for each eye. Big bright images make it easy for even a stereo "newbie" to fuse into proper 3-D alignment.

Historically the hand viewer has been favored by 3-D enthusiasts as the best way to view 3-D images, largely because of its "immersive" nature that eliminates distractions.

Its typically large fields of view (ortho-stereo and wider), and because no "skills" are required to use it images fuse naturally. The field of view of the Cyclopital3D Digital Hand Viewer is amazingly wide; it really "puts you there"! Of course image aspect ratios can be adjusted in preprocessing to display strictly ortho-stereoscopic view angles, but even wider views tend to be more "dramatic".

The actual image resolution is 800 X 480 pixels per eye. Of course these days 800 X 480 does not sound like that much, but there is more to it than just the number of pixels. The displays used in this digital viewer are the state of the art LTPS LCDs that have the highest color fidelity, the highest pixel density, and narrowest inter-pixel spacing of any other type currently on the market. They are considerably better than the high quality displays used in the IPhone. You really have to see it to understand just how beautiful a picture looks in 3-D, pairing two of these modern displays.

To some people, resolution may be paramount in a digital display device. It may not matter as much to them that the Cyclopital3D device can store thousands of images or video, be sturdy, compact and portable, self powered, well balanced, easily handled, and present a stereo image that is easily viewed even by novices to stereo. The resolution on this devise is the best current technology will allow but still is not the resolution one gets with film. If resolution is paramount to a user, they might be a bit disappointed at first in this viewer. However, when one starts viewing the images you find that the overly critical eye very soon adjusts to the pleasant 3-D presentation. Needless to say, there is no other complete compact 3-D viewer like this on the market. The viewer is great for folks like me who wear glasses and for those who are not sight impaired as well.

The ease of use, the lightweight feel and portability of the device far outweighs any negatives and provides a pleasurable and easy way to view and share digital images, sans computer or 3-D glasses. For pricing and specifics, see www.cyclopital3d.com.
Some lavishly illustrated books have been published over the years reproducing stereos of particular subjects or exploring the work of particular stereographers. But few if any are exclusively dedicated to one specific series of views by one stereographer, annotating through intensive research both the subject and the photography of every image, devoting two full pages to each one.

A Village Lost and Found by Brian May and Elena Vidal is subtitled An Annotated tour of the celebrated 1850s stereo card series “Scenes in Our Village” by T.R. Williams. If something there sounds familiar, check out the author's feature in SW Vol. 30 No. 1, “New light on T.R. Williams ‘Our Village’ found at last!” The article reports on the discovery of the actual village so lovingly documented in the original 1850s series and includes research material as of 2004 into the views and stereographer Williams.

(Continued on page 3)
On Aug. 1, Monsterwax.com released Shock Stories/Urban Legends, a set of horror trading cards that has been in the works for 10 years. There are two series in one box with 50 Shock Stories and 50 Urban Legends, plus a 3-D Shock Stories card in every pack!

The cards are drawn in the style of EC horror comics like Tales from the Crypt and The Vault of Horror by Terry Beatty, an artist whose work has appeared in Batman Strikes comics and Scary Monsters Magazine. Beatty also drew 250 sketch cards randomly inserted into card packs. Chris Bailey and Michael Collins helped with pencils on a handful of cards. The cards have stories written by Kurt Kuersteiner.

Beatty's original black-and-white artwork was scanned in high resolution and I used computer software to create the 3-D stereo pairs. These stereo pairs were then made into anaglyphic 3-D versions using Takashi Sekitani's 3-D Anaglyph Maker software. I did the 3-D conversion for 33 of the cards in the set.

I tried to create as much depth as possible for the Shock Stories trading cards. Some of the artwork allowed for a lot of depth while others had minimal objects in the scene. The minimal images were easier to convert to 3-D because they had less items to position into 3-D space. Sometimes the 3-D is easier to see in the simpler art, such as the drawing featuring a skull and skeletal hands floating over a hospital patient. Some of the more complex depth created from 2-D to 3-D is found on the artwork for the "Moss Monster". That image has different levels of depth for the monster's arm, hair, jaws, teeth, nose, eyes and for surrounding items including fog, trees, weeds and the moon. On the trading card, some of the subtle depth created for these drawings might be harder to see than on the less complex images...but they really pop off the computer screen in the high resolution originals.

The other artist who converted the first 18 images was Joe Riley from Dallas Texas. Joe was an accomplished artist in a variety of mediums, including painting and sculpture. He designed a variety of masks for Hollywood horror movies like Blade and The Trinity. Unfortunately, Joe passed away in 2007 from a sudden heart attack, at the age of 43. The artist who did the coloring on the 3-D images was Keven Graham. Keven also did various sketch cards for the series and also did the artwork for the Prize Card.

An advertisement for the cards is in Non Sport Update magazine's August-September 2009 issue (Vol. 20, No. 4). The magazine also includes a feature article about the cards, title cards and previews of several cards from the sets. There is also a bonus promo card packaged with the magazine.

Each box contains two series: 50 classic Urban Legends tales we all feared growing up, plus 50 original Shock Stories to terrorize future generations! There's a 3-D parallel card in every pack (51 different), three special background inserts (1 per 12 packs), an original autographed sketch card (1 per box) and unique Monsterwax Metal Cards (1 per 2 boxes). Ultra-limited to just 1,000 numbered boxes, so order early. Each box includes a free pair of 3-D glasses, six cards per pack, 36 packs per box.

There are also randomly inserted Prize Cards. Find one of the prize cards and you can redeem it for an uncut sheet featuring nine 3-D cards and other full color cards for only the cost of postage. Shock Stories pre-orders are being taken now on the Monsterwax.com web site.

Van Beydler operates www.3-Dreview.com, home of 3-D Review Online Magazine. He is a member of the NSA and is the 3-D photographer of the Branson, Missouri and Missouri State Fair: 100 Fairs of Fun View-Master® 3-reel Blister packs.
My first experiences with free-viewing came accidentally. As a photography geek in high school in 1957, I was determined to create my own stereo-views, making print pairs for mounting on the blank sides of box lids in crude imitation of the Keystone cards from my tiny collection. Getting things even close to right involved a lot of reinserting the cards in the stereoscope, but I noticed that I could fuse the pair on my own by crossing my eyes, do a final trimming of the prints, then switch sides just before gluing them on the card. The thought of intentionally presenting stereos for viewing by this method never occurred to me, since I figured I must be the only person on the planet who made 3-D "work" by this manipulation of eye muscles so often warned against by teachers and parents of the time.

With Crossview 3-D, Barry Rothstein has compiled a sampling of 62 outstanding 3-D images printed quite brazenly with the left and right images reversed, and announced as such by the title itself. The work of only two of the artists featured has been generally associated with large pairs exhibited for crossview freeviewing, and the book is dedicated to Abe Fagenson and Jerry Oldaker in gratitude for helping inspire the project, as well as to Marge Fagenson for teaching Mr. Rothstein the simple trick of crossviewing in 2008. A total of 26 of the most honored and recognized 3-D artists in the world fills its 50 pages.

So, why has crossviewing never caught on for the reproduction of stereos in books or their display as large prints in exhibits? Removing the expense of viewers or anaglyphic glasses would alone seem encouragement enough, along with the possibility of larger images up to full page size. The visual skill required to fuse images this way is far easier (and more "natural") than learning parallel freeviewing—yet millions of people learned just that to view Single Image Random Dot Stereogram books and posters in the early 1990s.

Much of the resistance has been due to simple inertia, and the fact that publishers can offer readers the choice of either freeviewing or the use of an included optical viewer by sticking with traditional pairs. Of course traditional pairs do save space, but many books reproduce the image flat in full page size on a facing page in order to show detail. The most compelling reason for the use of traditional pairs comes with the reproduction of vintage stereoviews, where the full mount and original image are important for both historical and artistic reasons. Stereo World has always honored this treatment of view-as-artifact, although we’ve managed to repeat a few images for crossviewing on front and back covers.

In his Introduction for the book, Ray Zone mentions the miniaturization effect of crossviewing images as perceived by the brain. While the effect can be easily observed by viewing otherwise identical image pairs via both cross and parallel freeviewing in sequence, an entire book filled with crossview pairs didn’t once leave me frustrated by the perceived size of the art. In other words, you get over it! Especially interesting are the crossview Phantograms scattered through the book. What a treat to see the artists’ intent in these magic images without concerns about anaglyphic ghosting interfering, or a lack of ghosting in any particular example giving it a technical advantage over otherwise great images. With any luck, Crossview 3-D will pave the way for the wider use of this simple but effective solution to the reproduction of 3-D imagery on the printed page. After all, it’s been there in front of our noses all along!
A Trio of 3-D Movies
CG and Conversion Dominate Stereo Cinema

by Ray Zone

As the wave of 3-D films continues to roll out in 2009, computer-generated (CG) animation, with its ease of stereoscopic application, maintains a flow of G-rated cartoon action into the theaters. The bizarre dichotomy of CG 3-D for kids and violent horror 3-D for young adults will continue to seesaw in theatrical exhibition until the release of Robert Zemeckis's *A Christmas Carol* and James Cameron's *Avatar* early in 2010 lend some variety to the 3-D fare making its way into theaters.

**Space Action in 3-D**

An independent production produced for very little money and directed by Aristomenis Tsirbas, *Battle for Terra 3D*, I'm sorry to say, marks no advance for stereoscopic cinema. Though the computer generated imagery was competently created, using a somewhat sweet variation on the alien invasion narrative trope with the extra-terrestrials attempting to environmentally save the planets they invade, the use of stereoscopic imaging throughout this feature film was perfunctory and pedestrian, to say the least. Released on May 1, "Terra" is a textbook example of merely doing something because you can. In this case that simply meant rendering a second eye view (in Maya software) by creating a camera 2.5 inches to one side of the first camera. A fast and cheap, but not effective way, to exploit 3-D, the same interocular value was used throughout the entire film for close-ups, battle scenes and star fields alike.

Most indicative of the lackadaisical approach to 3-D is the continuous use of rack focus throughout the entire film. All of the new techniques in the evolving visual grammar for stereoscopic storytelling were absolutely neglected, if the filmmakers were even aware of them at all. No multi-rigging of IO (interocular values), no dynamic floating stereo windows, no variations in use of the z-axis. Of course this sophisticated stereoscopic language costs money to speak. It's apparent that the stereoscopic version of the film was merely an afterthought on the part of the director and a ploy to get a leg up in a crowded theatrical market.

We are approaching an era in stereoscopic cinema when the artful and evolved use of the new visual grammar in depth on the screen will yield real dollars as a premium at the box office. With limited release in 3-D in only 5 theaters in Southern California, *Terra* had grossed slightly less than $2 million at the end of its two-week run. Audiences may not be able to articulate what it is they're seeing in 3-D but, as human mammals with tremendously sophisticated vision systems, they know it with their eyes and brains, which work in concert to interactively weave that percept we call the third dimension.

**Cute and Fuzzy Dinosaurs**

The third installment in a series of CG prehistoric adventures, *Ice Age: Dawn of the Dinosaurs*, released July 1, is the first 3-D movie in the current cycle from 20th Century Fox. Directed by Carlos Saldanha and Michael Thurmeir and featuring the voice talents of John Leguizamo, Ray Romano and Queen Latifah, "Ice Age" continues the frenetic antics of Scrat the prehistoric squirrel and his tussles over an acorn with furry paramour Scratte. When Romano's Manny the wooly mammoth and his mate Ellie (Latifah) are about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammoth, Sid the Sloth (Leguizamo) is about to give birth to a mini-mammo
Numerous stereoscopic technical directors are listed among the Visual Effects end credits and they have produced a fine 3-D movie which is easy to look at over the 1 hour and 34 minute running time yet has moments of highly dramatic depth. A consistent stereoscopic virtue, and one that is facilitated by the versatility of CG imaging technology, is the consistently changing and dynamically variable interocular (IO) values through the film.

Sometimes, with panoramic vistas, the IO values assume hyper-stereo dimensions and the spacious depth, with the puppet theater effects, are perfectly suitable for the narrative moments onscreen. At other times the depth will quiet down but at all times the visual space in z-axis is dynamic and continuously changing. This makes Ice Age 3 a joy to watch in stereo.

Perhaps in anticipation of its December release of Avatar in 3-D, Fox has begun its own tussle with exhibitors over who picks up the costs of the 3-D glasses at the theaters exhibiting stereo. Supplied by RealD, the circular polarizing plastic 3-D glasses in the past have cost the studios 75 cents to $1 per moviegoer. Fox picked up the tab for the glasses for Ice Age 3 but, as noted by Ben Fritz and Richard Verrier in a June 19 article in the Business Section of the LA Times, “With nearly 50 3-D movies due out in the next two years, the issue of who will pay for 3-D glasses is hardly settled. Fox is expected to keep pressuring theaters to pick up the tab and push for them to reuse the glasses.”

Guinea Pigs Save the World

G-Force, the new Jerry Bruckheimer action pic, rated PG, pits a crew of talking guinea pigs under the guidance of their human handler (Zach Galifianakis) in a battle to prevent a consumer-electronics mogul (Bill Nighy) from taking over the world. Directed by Hoyt Yeatman, G-Force is a fast-paced narrative (call it “Bruckheimer Lite”) that combines live action photography with CG guinea pigs and visual effects (VFX) on a very active stereoscopic canvas on the motion picture screen.

The digital guinea pigs exhibit considerable personality, rendered in 3-D under the guidance of veteran 3-D VFX Supervisor, Rob Engle at Sony Imageworks and a host of digital artists from many VFX houses around Hollywood. Interestingly, the live action photography was all shot “flat” or 2-D, and subsequently converted to stereo by the In-Three company of Agoura Hills and composited in stereo by Sassoon Film Design (SFD) in Santa Monica.

Compositing live action stereoscopic conversions with CG animation is a delicate bit of post-production. The use of stereo conversions, rather than existing dual-band live action 3-D photography, provides a measure of control that likely facilitated this visually seamless marriage between CG and live action. The extensive end credits include numerous stereoscopic attributions like the following for Mercedes Paulino: “stereoscopic compositing and occluded surface reconstruction.”

Another visual device used quite effectively in G-Force is, what I’m going to call, “occlusion of black horizontal surround.” Within the 1:1.85 screen aspect ratio are black areas on all sides of the image. This black area is particularly useful on the side vertical surrounds for manipulation of the dynamic floating window. But a new device in G-Force exploits negative parallax “through the window” effects by having the protruding imagery, sparks, cables and hurling debris, overlap or “occlude” the horizontal black bars at the top and bottom of the screen.

In a July 30 article in the LA Times by Patrick Kevin Day, Hoyt Yeatman comments about what Day characterizes as the “false frame” at the top and bottom of the frame. “I think [G-Force] plays in front of the screen a lot more than other movies,” Yeatman stated. “You used to have to have a frame of reference for the human eye to detect something coming out of the screen. Human heads in front of you used to work, but modern theater design, with stadium seating, prevents that. So we came up with the black bars.”

This visual device has been used for decades in 2-D advertising to convey the stereoscopic experience and in “3-D Effect” comic books of the 1950s. In G-Force it’s quite an effective visual device to emphasize the 3-D and make it even more exciting. And it works. Let’s hope this visual technique, unique to stereo, becomes common parlance in the new visual grammar of 3-D motion pictures.
## Classifieds

### For Sale

| ARCHITECTURE and Design Classics in View-Master® 3D. Works by Frank Lloyd Wright, Charles and Ray Eames, Bruce Goff, Antonio Gaudi and others. For info, visit viewproductions.com |
| CENTRAL PACIFIC RAILROAD Photographic History Museum. Stereographs of the first transcontinental railroad are now on display at: [http://CPRR.org](http://CPRR.org) |
| NEW REVISED EDITION of John Waldsmith’s “Stereo Views, An Illustrated History and Price Guide” is available signed by the author, $24.95 softbound, add $2.95 postage and handling. (Foreign customers add an additional $12.50.) Please note there is no hardbound of this edition. Mastercard or Visa accepted. John Waldsmith, PO Box 83, Sharon Center, OH 44274. Website: [www.YourAuctionPage.com](http://www.YourAuctionPage.com) / Waldsmith. |
| Q-VU FOLDOVER MOUNTS simplify mounting your print stereo views. Sample kit $8. Med. format mounts, white or (new!) black. Beginner’s stereo kits: camera, viewer, views, etc., $89.99 up. Q-VU, Box 55, Holltvilie, CA 92250-0055. |
| STEREO CAMERA Verascope f40 with leather case, $400. View-Master/rodenstock/made in Germany with film cutter, lighted $350. Stereo viewer Wollensak, inter ocul. focusing, lighted $250. Stereo viewer inter-ocul. focusing, lighted in orig. packaging, never used, Model 14 $300. Stereo Camera Wollensak with leather case in orig packaging, possible never used $400. Stereo viewer Arrow, repeater 10 slides frm 35mm slide film, lighted, inter-ocul. focusing $350. Stereo viewer Kodak II inter-ocul. focusing, rheostat light $350. Stereo viewer Belkaskop 7 sprocket 35mm slide film, for Belpasca stereo $200. Stereo viewer antique, ca. 1906, focusing, large lenses, beautiful, perfect for 120 size slides. Hundreds of glasses of all formats for mounting slides. Dragan Smekal, [OPAL1@SHAW.CA](mailto:OPAL1@SHAW.CA). |

### For Sale

| STEREO PHOTOGRAPHY WORKSHOP Videos. Topics include Making Anaglyphs, 3D To 3D Conversion, Making Stereo Cards, etc. More coming. $25 each. Details: [http://home.comcast.net/~workshops/](http://home.comcast.net/~workshops/) or send SASE for list to Dennis Green, 550 E. Webster, Ferndale, MI 48220. |
| STEREO VIEWCARD book boxes. Now accepting orders for handmade, fully personalized boxes. Fit sleeved viewcards. Send SASE for full details to Boxcrafters, PO Box 55, Holltvilie, CA 92250 or call (760) 356-4102. |
| STEREO VIEWS FOR SALE on our website at: [www.daves-stereos.com](http://www.daves-stereos.com) email: cdwood@std.net or contact us by writing to Dave or Cyndi Wood, PO Box 838, Milford, PA 18337, Phone: (570) 296-6176. Also wanted: views by L. Hensel of NY and PA. |
| STEPOVIEW AUCTION PRICES. Only $10.00 in CD format!! Great for people buying from auction and for collectors who want to know the latest realized auction values. Only numbered views over $50 are listed. Doc Boehme, PO Box 326, Osakis, MN 56360. |

### Wanted

| ALASKA & KLONDIKE stereo needed, especially Muybridge; Maynard; Brodeck; Hunt; Winter & Brown; Continent Stereoscopic. Also buying old Alaska photographs, books, postcards, ephemera, etc. Wood, PO Box 22165, Juneau, AK 99802, (907) 789-8450, [dick@AlaskaWanted.com](mailto: d l c k@ A l a s k a W a n t e d . c o m). |
| ANY IMAGES of Nevada City or Grass Valley, California. Mautz, 329 Bridgeway, Nevada City, CA 95659, [cmautz@ncn.net](mailto: cmautz@ncn.net). |
| BRISTOL, CONNECTICUT Stereoviews wanted. Tom La Porte, 126 Fleetwood Rd., Bristol, CT 06010. |
| COLLECT, TRADE, BUY & SELL: 19th Century images (cased, stereo, CDv, cabinet & large paper) Bill Lee, 8658 Gildiator Way, Sandy, UT 84094. [billlee@juno.com](mailto: billlee@juno.com) Specialties: Western, Locomotives, Photographers, Indians, Mining, J. Carbutt, Expeditions, Ships, Utah and occupational. |
| CORTE-SCOPE VIEWS or sets, any subject or condition. No viewees unless with views. John Waldsmith, 302 Granger Rd., Medina, OH 44256. |
| I BUY ARIZONA PHOTOGRAPHS! Stereoviews, cabinet cards, mounted photographs, RP post cards, albums and photographs taken before 1920. Also interested in Xeroxes of Arizona stereographs and photos for research. Will pay postage and copy costs. Jeremy Rowe, 2120 S. Las Palmas Cir., Mesa, AZ 85202. |

### Wanted

| INDIANA EXPOSITION. Not-for-profit Indianapolis neighborhood organization seeking historic photos from 1870s Indiana Exposition for history display. Copy/photo/scan of 1/2 of stereograph would be ideal. Have seen poor photocopies labeled “Salter & Judd,” “Indiana Exposition,” and “Indianapolis & Vicinity.” If interested, can provide extensive history/details. Please contact: tiffany@homehistoryhunter.com |
| INFORMATION about C.C. Curtis stereo for historical research. Charles C. Curtis worked in and around Tulare County, California, 1860s and ’90s. Ken Zech, (559) 638-7162, [mozbette2@comcast.net](mailto:mozbette2@comcast.net). |
| INFORMATION about views by stereographers J.H. Harter (Nevada, MO) and H.D. Rumsey (Homer, NY). Bart Conchar, 86 Benson Dr, Harpers Ferry WV 25425, [wvconchar@frontiernet.net](mailto: w v c o n c h a r @ f r o n t i e r n e t . n e t), (304) 876-3756. |
| MUYBRIDGE VIEWS - Top prices paid. Also Michigan and Mining - the 3Ms. Many views available for trade. Leonard Walle, 47530 Edin­borough Lane, Novi, MI 48374. |
| PANAMA - ASPINWALL: Collector looking to buy early related stereoviews, CDVs or other photographic views. Please contact Vicente Pascual at [vap@vipinvest.com](mailto:vap@vipinvest.com). |
| 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. |
| THE DETROIT Stereoscopic Society invites you to attend our monthly meetings at the Livonia Senior Center, on the second Wednesdays; September through June. Visit our website [http://home.comcast.net/~dssweb](http://home.comcast.net/~dssweb/) or call Dennis Green at (248) 398-3591. |
| WHITE MOUNTAINS: Early photographic views and stereoviews of new Hampshire White Mountains and northern NH regions, 1850s-1890s wanted for my collection. Town views, main streets, bridges, homes, occupational, coaches, railroads, etc. E-mail images to dsundman@LittletonCoin.com, or send photocopies to David Sundman, President, Littleton Coin Company, 1300 Mt. Eustis Rd., Littleton, NH 03561-3735. |
| WILLIAM ENGLAND stereos. Would like to contact collectors for academic research project. Especially interested in rare views and dags. Please contact Gerlind Lorch at [william.england@web.de](mailto: will iam . e n g l a n d @ w e b . d e). |

### Classified Note

As one of the benefits of membership, NSA members are offered free use of classified advertising. Members may use 100 words per year, divided into three ads with a maximum of 35 words per ad. Additional words or additional ads may be inserted at the rate of 20¢ per word. Please include payments with ads. We cannot provide billings. Ads will be placed in the issue being assembled at the time of their arrival unless a specific later issue is requested. Send all ads, with payment to: STEREO WORLD Classifieds, SE10 SE 71st, Portland, OR 97206. (A rate sheet for display ads is available from the same address. Please send SASE.)
I feel obligated to mention a prior published tome that is certainly germane to the subject. That book is "Aerial Photographs in Forestry" (Ronald Press Company: 1948) by Stephen H. Spurr, who at the time of publication was Assistant Professor of Forestry at Harvard University. Spurr's book includes no anaglyphs and only uses black-and-white stereo pairs of images but includes a chapter on Stereoscopy and detailed information on stereoscopic methods for aerial photogrammetry.

The Richardsons, however, have produced a uniquely formatted book of anaglyphs that works amazingly well in providing a giant's 3-D view of this area rich with natural wonder. Each spread juxtaposes two views of the same area. The view on the left page is an aerial photograph and facing it to the right, is a topographic view of the same area. The entire book covers a grid with each sheet overlapping its adjacent neighbor on the grid by about 1000 feet or 320 meters.

Digital versions of the maps, supplied by the US Forest Service's Geomatics Service Center, along with maps from Utah's Automated Geographic Reference Center, were used as digital raster graphics (DRGs) to create digital elevation models (DEMs). The DEMs were used to make relief shading for the topo maps and to distort the imagery to produce the 3-D effect. The anaglyph maps were produced on a scale of 1:24000 for each section of the grid. Adobe Photoshop CS3 was used for anaglyph production along with the well-known Stereo Photo Maker (SPM) program by Masuji Suto of Japan. An algorithm by Eric Dubois, incorporated in SPM, was also useful in optimizing the anaglyph color.

Reasonably priced at $19.95, this intriguing anaglyph tome will undoubtedly attract new visitors to the Tri-Canyon area. Those who have been there already will undoubtedly relish the giant's-eye view this book so luxuriantly provides.
19th and Early 20th Century Stereoviews For Sale

Over 10,000 all illustrated, graded & priced, (including glass views), work by Bedford, England, Sedgfield etc. Especially strong on UK and European views.

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← Left: Helene Leutner (German Actress)  
→ Right: The Young Velocipedist

← Left: Edward Stokes, who shot Jim Fisk over a woman.  
→ Right: View from the wood car, behind the locomotive in full motion.

← Left: Tissue Genre View.  
→ Right: General U.S. Grant