While we wait for entries to start arriving in response to the new assignment, some selections from the best of the entries in the "Unusual" assignment will be published. Shown here are two relatively recent entries in that assignment, one of which was the only entry to document an unusual event—an area in which we had expected to see more entries. Maybe someday we should try an assignment related specifically to public events, whether scheduled or accidental.

(Continued on page 38)

"JIF, My Favorite Snack" by Ernie Rainikin of Cedar Rapids, Iowa, who gets several raccoons at his back door every evening. This one invites himself in to eat the cat food if the door is left unlocked, and sometimes gets treated to peanut butter and mixed nut snacks in exchange for posing for Ernie's Realist. (Rabies is a concern with raccoons primarily on the east coast.)

"Drive-in Cleaners" by Dave Davison of Helena, Montana, was taken in May, 1994 using a Kodak stereo and Fujichrome 30. Rounding a curve on Highway 12 through Helena, a log truck had rolled its center unit and sent logs flying into Danny's Drive-in Cleaners, turning the office and desk into match sticks. The story would have been unusual enough on its own, but almost exactly a year later another log truck rolled on the same curve, smashing the same office of the same cleaners. No one was injured in either incident, but in the accident pictured here, the owner of the cleaners was less than ten seconds away from being at his desk when the logs came through the wall.
IN THIS ISSUE

Across the Sea of Time .................................................. 4
Vintage Stereos on the IMAX Screen
by Sheldon Aronowitz

The Reel Sea of Time .................................................. 8

The Bathing Machine .................................................. 9
by Norman B. Patterson

Clarence G. Henning .................................................. 11
1911 - 1995
by Gordon Simons

Learning to Love POV Stereo on your PC .......................... 12
A Personal Learning Experience
by Craig Daniels

Reely Deep in the Body and the Sea ................................. 14
Reviews by John Dennis

NATO Personalities of the '50s ....................................... 18
In Commander's Stereo Collection
by Richard L. Gruenther

Next Reel, Please ..................................................... 23
Review by John Dennis

StereoScript ............................................................ 27
by Horst Hoyer

Making a 3-D Greeting Card ......................................... 28
Three Stereo Puzzles .................................................. 29
by Raymond Smullyan

REGULAR FEATURES

Editor's View Comments and Observations, by John Dennis .... 2
Letters Reader's Comments and Questions ....................... 3
The Unknowns Can You Identify the Subjects of These Views?, by Neal Bullyington 16
NewViews Current Information on Stereo Today, by David Starkman & John Dennis .... 24
The Society News from the Stereoscopic Society of America, by Norman B. Patterson .... 30
Calendar A Listing of Coming Events .............................. 33
Classified Buy, Sell, or Trade It Here .............................. 34

ON THE COVER

Peter Reznik, who plays Tomas Minton in the 3-D IMAX film Across the Sea of Time, poses with his stereoscope near the stereo photography exhibit in the lobby of New York's Sony IMAX Theater. Details about the first 3-D film to fill the screen with vintage stereoviews and use them as an integral part of the story appear in "Across the Sea of Time—Vintage Stereos on the IMAX Screen" by Sheldon Aronowitz.
A Time Machine in New York

If this issue’s cover looks a bit on the People Magazine side, it’s because the young fellow holding the stereoscope is the star of one of the most unique 3-D films released in many years. He is Peter Reznik, who portrays Tomas Minton in Across the Sea of Time, a film as much about stereoviews as it is in 3-D. Peter happened to be in the special 3-D photography exhibit in the lobby of the Sony IMAX Theater in New York for some publicity photos on the day Stereo World contributor Sheldon Aronowitz was there shooting stereo for this issue’s article about the film. Naturally, the Star of the film became the subject of several stereographs along with the impressive displays and large Wheatstone viewers highlighting the theme of the film.

Just a couple of years ago, who could have imagined that one of the leading multinational electronics and entertainment corporations would produce a 3-D IMAX movie in which vintage stereoviews, instead of being used as period-piece props, would fill the screen and carry the visual keys to the story line of the film? That’s exactly what Sony Pictures Classics has done with Sea of Time, which will run in several IMAX theaters, both 3-D and flat. Having examined several sample strips of the film’s IMAX footage, I can say that the reproduction of views directly from glass negatives in the Keystone-Mast Collection is superb. The film frames look as good as any high quality glass positives newly printed for use in an elegant stereoscope, but these are projected on the 80x100 foot IMAX screen. Some have been cropped to more closely match the IMAX format, but others have been left as verticals to include important parts of the image.

Being part travelogue and part New York promotional film as well as being in 3-D, Across the Sea of Time wasn’t likely to get much attention from movie reviewers. Travelogues with stories imposed on them have even worse reputations, their “plots” generally having about as much to do with their images as those of the average porn film. Fortunately, the Sea of Time story is based on the logical and unique device of the stereoviews through which New York was so well documented. They make Sea of Time (which at over 50 minutes is the longest 3-D IMAX film yet), a living series of “then & now” images that celebrates the time machine quality of stereo views and the exciting city of today. (Don’t expect anything even hinting at unpleasantness—this is a promotional film.)

In the one review we’ve seen so far, New York Times writer Janet Maslin expressed no feelings of historical connection to the turn-of-the-century stereoviews or the people in them, referring to them as “black-and-white stills” that held the film “in museum mode.”

Sea of Time’s spectacular roller-coaster and helicopter ride sequences earned her highest praise, but she did stop short of wishing for programmed hydraulics to bump and sway the seats. Obviously, those who think of stereoviews as simply boring old photos will miss much of what is unique about the film.

The Views Themselves

In a coming issue, we hope to present a selection of the vintage New York stereoviews used in the film. Not all of the images used are from negatives that were published as prints, but there are plenty of stereos in the film that collectors of New York views will recognize. The Stereo World feature will present some of the best of these views in their original published card form—just as Tomas Minton’s ancestors and turn-of-the-century New Yorkers saw them.

Corrections

3-D Web address

The correct address for the 3-D Web (Vol. 22 No. 3, page 12) is:

http://www.tisco.com/3d-web/index.html

Our bad luck with internet addresses seems to be holding. The arcane complexity of these codes is confirmed by the fact that the error (a period instead of a slash between “web” and “index”), originated in the text supplied by the 3-D Web’s administrator! The correct address could be seen in the screen reproduction in the center of page 13.

It’s hard to imagine use of the information highway ever spreading to the majority of the public unless very common English words and perhaps a few numbers replace the “URL” codes. (If the current movement to have English legislated as the “official” U.S. language succeeds, will there be any choice in the matter?!?)

Atlanta Flub

Guenther Gerlich’s name was both misspelled and transposed in the item about his exceptional Stereo Theater show “3-B in 3-D: Scenes of Costa Rica” in the Atlanta International 3-D Festival coverage in Vol. 22 No. 2. The same error appeared in the announcement of his 2nd place selection in the Paul Wing Stereo Theater Awards and in the Festival Program itself.
Letters

Retrieving Film from Nishika

After a trip to Germany early this year, I sent two films to Nishika for processing. In June Nishika sent me two cards advising me that they had run out of lenticular print materials and would hold my film. When I read that Nishika had gone bankrupt...I tried to get my films back. I first wrote to Nishika July 7th and they mailed only one film back to me July 31. I wrote a certified letter August 8 asking for the second film and this letter was ignored. Eventually it cost me $50 in telephone calls to get the second film back.

I first phoned Bankruptcy Court in Las Vegas (702-388-6257). They had no interest in an ordinary citizen's complaints and passed the buck to Michael Bloom at the U.S. Trustee Office (702-388-6600) who in turn passed the buck to the Attorney for Creditors, Stephanie Smith (702-385-5161) who could not do anything and gave me the name for Nishika's attorney Lenny Schwarz (702-362-5118) who's assistant Linda Doherty did do something so that Connie at Nishika phoned me a day later and said that she would try to find my film, and did finally mail it on October 16.

As I was upset that no one represented the lowly customer, I phoned the U.S. Trustee's office again and they gave me the name of a Mr. Randy Brook of the Federal Trade Commission, 915 Second Ave. Suite 2806, Seattle, WA 98174, 206-220-6350. Mr. Brook was genuinely interested in my and other customer's problems with Nishika. He told me that he had tried to make sure during court hearings, that customers who had sent in their films would have some recourse and that letters to him of any problems would help him.

In the meantime if you want your film back, write to Connie at Nishika Ltd., One Nishika Drive, Henderson, NV 89014. If that does not work or if you had any problems with Nishika, write to Mr. Brook at the FTC.

Alexander Kruecener
New York, NY

Photo Show Falls Flat

The May/June issue was wonderful, but please let me complain about the "Calendar" entry for the Phtotorama USA show in New Orleans. For years, I have ignored this show's announcements, not expecting to find anything stereo. On the strength of the "Calendar," however, I decided to attend. To be safe, I called ahead five times between 8 a.m. and the 11 a.m. opening time, finally receiving an answer only fifteen minutes before the opening, with the hasty assurance that dealers were just then starting to set up but that they indeed did have "stereoscopic stuff." When I asked specifically about View-Master, the answer was again affirmative. A detailed look at the show disclosed stereo items at only one dealer's table: a handful of late, ordinary card stereo-graphs; a late, rickety wooden stereoscope; and a bulgy postwar stereoscope for eye testing that could fuse its own built-in views but none of the card views that the dealer kept on insisting would work. No V-M. To add insult, another dealer responded by pulling two unrelated items from opposite ends of his table, holding them up side by side, and announcing, "See, stereo." When asked about stereo, almost every dealer responded with ignorance, disbelief, or outright derision. Complaining to the show's organizer resulted in a refund of the entry fee but not of the three hours I lost in transit to and from. To add still further insult, the organizer informed me that, on the rare occasions that his shows do include worthwhile stereo items, you can expect these to be traded among the dealers even before the doors open. Why list shows where we will find little or nothing and where our hobby is so uniformly disrespected? Thank you for the good work, but, please, "Calendar" needs to be reformed.

Lester Sullivan
University Archivist
Xavier University of Louisiana

If we were to call in advance like you did, it seems likely we would be given the same optimistic appraisal of the availability of stereo items at nearly any of the photo/camera shows in the Calendar. To be able to absolutely count on finding a good selection of stereographica, one would need to concentrate on the large shows in Boston, D.C., Florida and Los Angeles, especially those advertised as image shows. On the other hand, some amazing finds have been made at smaller shows from Oregon to New Jersey.

If we were to stop listing shows reported as mostly marginal, I'm sure we would soon hear from a collector who missed out on the chance of a lifetime when someone they heard of found that pink and green Australian reflex View-Master at the Acme Camera, Computer and Electric Can Opener Swap Meet in Kansas City. If there are any rules for camera shows, they should be (1) believe only what you see and (2) expect to be frustrated about 80% of the time.

If anything, the Calendar needs to list more shows, especially the many locally organized shows we seldom hear about in advance. Then, at least, people wouldn't have to drive so far to be disappointed and waiting on one of those tables could be that batted box labeled "Sight-See" with a strange looking viewer inside.

- Ed. 66

If you have comments or questions for the editor concerning any stereo-related matter appearing (or missing) in the pages of Stereo World, please write to John Dennis, Stereo World Editorial Office, 5610 SE 71st Ave., Portland, OR 97206.
Across the Sea of Time, the latest IMAX 3-D film, premiered at the Sony IMAX Theater, Sony Theaters Lincoln Square in New York City on October 20, 1995.

Sony New Technologies, the company that produced Wings of Courage, intended that the new film should be the ultimate New York experience, serving as a permanent presentation at their showcase New York theater. (See SW Vol. 21 No. 5, page 20.) Sony wanted a film that would provide a thrilling entertainment experience for both native New Yorkers and tourists alike while telling a story sufficiently universal that it could play wherever IMAX films are shown.

I must say that Across the Sea of Time not only met, but far exceeded these expectations.

The central character, Tomas Minton (played by Peter Reznik), is an eleven year old Russian stowaway who is bound for America for a very special reason. Almost a hundred years ago, Tomas' ancestor, Leopold Minton, emigrated to America to start a new life. After becoming a stereographer for a view publishing company, Leopold sent stereoviews of New York, his new home, to his family back in Russia. His wish was for them to join him in America. Now, armed with these old stereocards and Leopold's letters, Tomas comes to New York to find the American branch of his family.

Jumping off the Russian freighter that has been his home for the past few weeks, Tomas swims toward Ellis Island, a place where all immigrants must go, according to one of Leopold's letters. The letters serve as a narration, while Leopold's stereoviews become Tomas' only map and guide to lead him to his family. From Ellis Island, Tomas takes a ferry into New York City, ready to

Tomas matches today's Manhattan with the Keystone view in his stereoscope in a scene from Across the Sea of Time. The UCR/CMP estimates that of the 100 stereos from the Keystone Mast Collection appearing in the film, about half are from unpublished negatives. Many of the rest will be identified by alert collectors of New York views. The use of unpublished images is logical within the context of the story, since a stereographer might have sent samples of many views back to his family in Russia besides just those eventually published and marketed. © 1995 Sony Pictures Entertainment Inc.
begin his search. Without much success in finding his ancestor's brownstone (all he has is a stereoview of the house with a street number on it, number 117), Tomas remains energetic and optimistic. Enchanted by the sights of the city, he travels happily from one part of town to another.

Wall Street, Chinatown, Little Italy, the subway system, the Empire State Building, the Woolworth Building, the Lower East Side, South Street Seaport, Coney Island, Central Park, Broadway—Tomas sees it all, from a roller coaster to the high kicking cast of the Broadway show Crazy for You. Always keeping an eye out for the distinctive brownstone, Tomas enjoys his whirlwind tour of New York, a city even more impressive now than when the stereoviews were taken.

Wherever he goes, he manages to meet people who are friendly and helpful—people who appreciate the fact that he is a young boy on a great adventure. The entire city becomes Tomas' playground. While he surveys the city, the audience hears the narration from the letters written by Leopold and his wife Julia.

Recreating New York's geography from Leopold's photographs, Tomas miraculously finds the brownstone he has been seeking. Number 117 looks older and is covered with ivy, but it definitely is the building depicted in the stereoview. As Tomas approaches, the sound of a piano leads him inside. Julia Minton, now ninety-five years old, awaits within. When Tomas introduces himself, she takes him in her arms and welcomes him to America. Finally, Tomas has a home and a family.

Sea of Time is actually many films in one, and could stand alone on any of its several elements. It is simultaneously a travelogue, a history of New York City, a mystery, a fairy tale, a drama, an adventure, a comedy, a child's story, and last but certainly not least, one of the best 3-D films I have ever seen, both artistically and technically. Although not a tearjerker in the Hollywood sense, a tissue or two in hand for the last few scenes would be a good idea.

The most fascinating and unique element of this film is the juxtaposing of the stereoview scenes of old New York buildings, streets, factories, subways, Ellis Island, bridges, beaches, etc. with New York City today. Some scenes have barely changed in nearly 100 years, particularly a shot of Wall Street which fades from 3-D stereoview to 3-D present day color. Taken from the same vantage point, the two scenes are virtually identical. The Keystone stereographers and the people appearing in the views could never have imagined that these images, intended to be mag-

---

"Staring you in the eye, the images of these people who lived 100 years ago...generate an overwhelmingly emotional experience."

---

Peter Reznik, who plays Tomas Minton in the film, poses with his backpack and stereoscope during a publicity visit to the 3-D exhibit in the lobby of the Sony IMAX Theater. All photos by the author except as noted.
The IMAX 3-D camera is suspended above the water on a crane for a shot of the New York Skyline. © 1995 Sony Pictures Entertainment Inc.

nified only as large as the stereoscope would permit, would some-
day be shown in 3-D to thousands
of people on an 80 x 100 foot
screen. Staring you in the eye, the
images of these people who lived
100 years ago (and have long since
disappeared without a trace) gen-
erate an overwhelmingly emotional
experience.

All patrons of the IMAX theater
pass by a permanent display area

Entrance to the world's only 3-D
museum located in a theater lobby is
through this archway in a model of
Coney Island's famous Cyclone roller
coaster. Visible through the arch is
one of the tall Wheatstone viewers
displaying enlargements of vintage
New York views.

where they can examine various
3-D exhibits. The “wall” surround-
ing the exhibit is a custom made
mock-up of the Cyclone Roller
Coaster in Coney Island, which is
featured in the film. Inside, there
are display cases filled with various
styles of Holmes viewers, Brewster
viewers, stereo cards, book box
sets, 3-D cameras, etc. The most
interesting part of the exhibit per-
mits visitors to view stereos of New
York in 3-D through tall Wheat-
stone viewers, each presenting 18
x 18 inch enlargements of vintage
New York views. As the mirrors are
tall enough to accommodate visi-
tors of any height, each internally
illuminated Wheatstone is able to
display two pairs, one above the
other. Congratulations to Stacey
Goldman, director of interior
design for Sony Theaters, for this
most creative effort.

The film's star, Peter Reznik, is a
real-life Russian immigrant who
has been in America for only two
years. He studies dance at the pre-
sigious School of American Ballet
and appeared in the movie version
The Nutcracker as well as the New
York City Ballet's stage version of
The Nutcracker at Lincoln Center
last Christmas.

Steve Low, the director and pro-
cessor of Across the Sea of Time has

past 3-D IMAX experience in direct-
ing and producing The Last Buffalo
and the feature length 2-D IMAX
film Titanica. Currently, Low is
working on several new IMAX films
in collaboration with Sony New
Technologies, including Mark
Twain's America in IMAX 3-D.

Composer for Sea of Time is John
Barry, who has 30 years of experi-
ence composing film scores. He is
best known for his scores and hit
title songs for all the James Bond
spectaculars like From Russia With
Love, Goldfinger, You Only Live
Twice, etc. The versatile composer
has also provided scores for histori-
cal dramas like The Lion in Winter
and Mary Queen of Scots, contem-
porary dramas like Midnight Cow-
boy, adventures like The Deep, peri-
od romances like Out of Africa, and
thrillers like The Ipcress File and
Jagged Edge. One of his most recent
credits was the multi-Oscar win-
ing Dances With Wolves.

The audience hears the sound
track not only from the main
speakers. Selected tracks and back-
ground sound are heard through
the speakers in the headphones—what
Sony refers to as the PSE, or Personal
Sound Environment. The real-
ism of this process is so true to life
that, in combination with the 3-D,
you are not so much watching, but
part of the movie.

Andrew Kitzanuk, Sea of Time
director of photography, started
working in the IMAX format in
1987. He worked with director Low
on The Last Buffalo (the premiere
presentation at the Sony IMAX 3-D

Peter Reznik checks out a Wheat-
stone viewer in the 3-D Image
Exhibit.
Theater in New York) and also collaborated on _Titanica, Acquaint_, _Beavers, Rolling Stones at the Max_, and _Echoes of the Sun_. This is his seventh IMAX film.

_Sea of Time_ has many delightful surprises, including more “through the window” effects than other IMAX 3-D films. The audience really enjoys this, but it is not overdone and where the effect is used, it is done with technical and artistic skill.

There are two scenes which, due to the camera’s perspective, put you directly into the film’s action. One is in the New York City subway where you feel as if you are standing in the head car looking out on the tracks as the train speeds along faster and faster. The other and more spectacular scene is a ride on what I think is still the best and scariest roller coaster in the U.S., the Cyclone at Coney Island. Those afraid of heights or roller coasters had better close their eyes for this scene. For others, this scene alone is worth the price of admission.

New York Mayor Rudolph Giuliani offers his own thoughts about _Across the Sea of Time_ and the impact it will have on New York: “It is a timeless story and probably the most basic story about why New York is such a great city. The spirit of New York has always been the spirit of immigration. There are more people of different languages, backgrounds, religions, practices, and races in New York than any place else. It is the most diverse city in the world. _Across the Sea of Time_ shows off New York City and, most importantly, shows off the wonder of New York City’s people.”

The film features 100 stereo images from the huge Keystone-Mast Collection of the University of California Riverside California Museum of Photography. The museum has an extensive collection of New York views on the original glass negatives, which were used to create image pairs sharp enough to fill the 80 x 100 foot IMAX screen.

One by-product of this film will certainly be the positive effect it will have in spurring new and renewed interest in the collection and appreciation of stereoviews. From the thousands of people who will see the film and the 3-D exhibit daily for years to come, many new collectors and enthusiasts will emerge, along with a greater overall understanding of the value of 3-D imaging in art, history, entertainment and education.

A very special part of the film for me personally was a scene toward the end where Tomas locates Pete’s Tavern, where Leopold Minton once played at the piano bar. Pete’s Tavern, which opened in 1864, is still a thriving bar and restaurant with much of the same ambiance and character today as when it opened 130 years ago. It’s also the very place where I sat on a warm August night a few months ago going over my Realist slides of the Sony IMAX theater with its director, Mary Jane Dodge. This was in preparation for the new View-Master packet _Across the Sea of Time_, scheduled for release with the October opening of the film itself. It contains many of the black & white views seen in the film as well as color scenes in addition to the stereo I shot in the IMAX theater and its projection booth.

I urge all NSA members to make every effort to see this most beautiful and innovative film. I promise you will leave the theater with a renewed sense of pride in the one common interest which makes every NSA member part of one large 3-D family.
The Reel Sea of Time

While shooting stereos for his article "A View From Inside the Sony IMAX Theater" (Vol. 21 No. 5, page 20), Stereo World contributor Sheldon Aronowitz suggested that a View-Master packet featuring scenes from a 3-D IMAX film and views of the theater itself be created for sale in the theater gift shop. With eventual approval from Sony and the help of NSA member Charley Van Pelt, the 3-reel set ACROSS THE SEA OF TIME was produced.

Ten of the scenes on the reels are vintage stereoviews from among the 100 appearing in the film, beautifully reproduced from originals in the Keystone-Mast Collection. Eight scenes are frame pairs from the IMAX film footage of New York today and of the characters in the story. Three of the scenes are stereographs taken inside the Sony IMAX Theater by Sheldon.

It's unique enough for 3-D movie reels to be published for sale at the theater, but these reels will appeal to collectors of New York stereoviews, View-Master collectors, AND 3-D movie material collectors!

The gift shop at the Sony Theaters Lincoln Square complex isn't set up to deal with mail-order business, but the Sea of Time blister packs are available for $10.00 each, postpaid, from Sheldon Aronowitz, 487 Palmer Ave., Teaneck, NJ 07666.

Scene No. 1 from Reel B of the Across the Sea of Time View-Master packet. "Central Park at the Turn of the Century" is one of the 100 vintage stereographs to fill the IMAX screen. Keystone-Mast Collection, UCR/CMP.

Scene No. 2 from Reel B. "Central Park Today." Some great "Then & Now" sequences like this are worked into the Sea of Time story line. © 1995 Sony Pictures Entertainment Inc.
The Bathing Machine

by Norman B. Patterson

The article on beaches and bathing costumes in Vol. 21 No. 4 of Stereo World elicited responses from several readers. Among these were reports from two NSA members who had in their collections stereo views of the so-called "bathing machines" described in the article as seemingly rare in close-up versions. David Wood of Milford, PA, stated that, "...it identified the scene for a view I've had for some time but didn't know what it was." Chester Urban of Sutton, MA, was able to find three English views among his holdings showing these strange devices.

Modesty Exemplified
Public modesty and acceptable standards of dress and behavior were inherent factors to be dealt with when fun at the seaside slowly became popular for greater masses of people in Europe and America. A more affluent population found increasing numbers of its members able to travel to the famous spas as well as lesser known watering places.

One might think that bathing in the sea would require the least of equipment, but that was not always the case. The forerunner of the swimsuit was an elaborate structure designed originally to eliminate the need for the wearing of any special attire by those fortunate and adventurous enough to visit a seaside spa.

Basically, it shielded the bather from public view. I make no attempt to explain or understand the evolution of the mind-set that led society to consider such things important. Attempts to fathom attitudes of human cultures toward the human body encounter deep-seated obstacles, not to be surmounted here.

Herzog No. 519, "Damenstrand" (Women's Beach) shows bathing machines lined up on an unnamed northern European beach. David Wood collection.
Origins

The bathing machine originated around 1735 in Great Britain and was developed for use where the slope down into the water was reasonable mild and smooth. It was a hut seated on four large wheels like a carriage. Steps led down from a door on at least one end. In the novel *Humphrey Clinker*, Tobias Smollet describes its use, which I summarize. The bather enters the apartment by the steps, shuts the door and proceeds to undress. An attendant hitchs a horse to the portal end and draws the carriage into the water to a level with the floor. The horse is then reattached to the other end. The bather, now stripped, opens the sea-ward door and enters the water. When finished bathing he re-enters the hut and dresses at leisure while the carriage is drawn back onto the land. Early models of the hut were only four feet square but later embellishments enlarged the floor size and also the height for comfortable standing. Architectural niceties were added to accommodate the tastes and purse of the owner. The concept combined the principles of the dressing room, beach buggy, and diving platform into one mobile unit. It survived a long time and was quite popular in Europe, though it did not transplant well to America.

Francis Bedford No. 1525, “Torquay-Antis Cove and Beach.” Bathing machines are lined on a stony beach looking out on the English Channel. Chester Urban collection.
The Modesty Tunnel
By and large, women were not inclined to venture unattended into the open sea. And the bathing machine, while gaining widespread acceptance, had some severe problems in the area of preserving modesty, especially for the ladies. But in 1753 a caring Quaker named John Beale devised an attachment in the form of an awning referred to as a modesty tunnel. This was a canvas tent which hung from the sea-end of the machine and covered an area around the steps so that the occupant could leave and enter safe from probing eyes. Further, it protected the bather from the sun's rays, which many considered none too healthy. (Fashionably pale skin, not tanned, was in vogue.) This improvement was welcomed by women who made full use of it for many years until acceptable bathing costumes rendered the awning unnecessary.

Thumbs-Down in the USA
The bathing machines were never very popular in the United States. They found some use in the first half of the nineteenth century but were virtually gone before the end of the third quarter. There was also a bit of taint to their reputation, deserved or not, relating to the need for a male attendant to aid the female bathers. But basically they were awkward to use and served little meaningful purpose beyond being a place to change clothes after beach wear became more common. Still, it did establish the idea of a dressing room close to the point of use. So, in effect, the hut lost its wheels and the sentry-box type of individual unit became commonplace along with the larger public bathhouses.

Clarence G. Henning
1911-1995
Clarence G. Henning, the original inventor of the macro stereo camera which employed David White Stereo Realist components, passed away on November 7, 1995 at the age of 83.
He was employed by David White Company in Milwaukee, Wisconsin for over 27 years. His love of nature photography led to his pursuit of a better method for photographing macro nature studies. This in turn produced a camera that opened up a whole new world of possibilities ranging from scientific and industrial applications to uniquely personal artistic involvements.
Clarence was a warm and generous person with a uniquely analytical mind. A person of considerable reserve who shied away from attention or “the spotlight” in preference of a quiet self-involved existence with his family and his love of photography. He would have been 84 years old on December 5, 1995. Over the past two years he lost his sight to macular degeneration. This would be hard on anyone, but to a stereographer it must be absolutely devastating. Clarence kept me informed of his progressively deteriorating eyesight, but never complained.
His daughter Linda stated at his funeral that she knew he now would walk again in the light. I hope she’s right.
-Gordon Simons
Learning to Love
POV Stereo on your PC
A Personal Learning Experience

by Craig Daniels

ross thanks to Ray Ingels for getting me up to speed on these resources (he sent me a “POV-Ray” generated New Year’s card and then—), and for contributing to the following understanding of what resources are available. Ray had learned about POV-Ray (a shareware ray tracing program) by reading John Williamson’s article “POV” in Stereo World (Vol. 20 No. 5), an article which I managed to overlook. It turns out that POV-Ray and “Imagine”, another that Ray sent me, are but two of many such ray tracing and “rendering” programs. After exploring POV-Ray and the companion “Fonts to Shapes”, I discovered a local advertising layout artist (Carol Gillette) running the easy and intuitive “AddDepth” program by Ray Dream™ under Microsoft’s Windows.

AddDepth, FS (and “Designer”—see below) start with computer program fonts (or an in-potted 2-dimensional bit-mapped shape), from which extensions are grown out of their backsides into the 3rd dimension. The resulting objects can be rotated, shifted, embellished, colored, variously viewed, and illuminated in a defined space. You can add a texture, ground plane and horizon, light/sun placement, and adjust values for color and reflectivity; the elaborate features which make ray tracing programs so realistic. The tremendous advantages of AddDepth and Designer are in their fully developed Windows style “GUI” operation (with numerical option), efficient vector graphics file format, and that you can stay with them to the printed output.

Both POV-Ray and “Designer” have a stable of stock image types (“primitives”; sphere, cone, box, freeform) which one can trick out to build up a wee surrealistic world in space—with or without textual contributions from FS (see John Williamson’s article for examples). The time for a given rendering operation (to get a finished pair of 2-D output frames) might run to hours for a full screen scene containing a number of embellished objects, and both programs give rendering time estimates. You need a fast computer. For any advanced Windows based vector graphics program you should, at a minimum, have a 386DX processor, the math chip, at least 8 megs of memory, and a good chunk of space cleared off in your hard drive. The DOS based POV-Ray, however, can get by with 2 to 4 megs of RAM.

Storage of finished bit-mapped pairs rapidly becomes a problem. I’ve a standard Conner tape back-up ($200-$250, sometimes called “mini-cartridge” or “Colorado Tape”) the cartridges for which cost about $15 for 250Mb of 2X compressed data (the basic model is now 350Mb). I use it with Central Point Tools’ “backup” program (6.0 or 7.0 in the “tree” mode both work fine) as an endless archive storage system for (now) 2.5 gig of files. CP backup routinely detects and restores the several drop-outs per tape run, can select any single file on the tree display, and lets you (slowly) call it up from a huge multi-directory “backup”. There’s a world of storage alternatives! Whichever course you take, use top notch, name-brand media and clean your heads as necessary. For both storage and operations, regularly run a program like “Norton Disk Doctor” on hard drives (be sure to “REM” out your cache program first if it’s other than Norton’s) to get rid of lost data and confused “FAT” files. Such bêtes noires in your system will reduce you to tears (which short out the keyboard).

You’ll want to export your finished pairs to a good graphics program (like older versions of Picture Publisher [3.1] or Corel Draw [4.0]), which is easier if you use Designer rather than AddDepth. I don’t believe that any of these ray tracing programs have enough tools to window, tweak, and print pairs directly. Simply trim and mount AddDepth’s printer output manually.

My copy of Ray Dream’s “Designer” (version 3.1.3, $199) works great! The program and manual are very keen on being able to see the correct relative placement of image details in 3-D.
on a 2-D screen, and the provisions for that are excellent. Designer is also capable of watching one’s progress through the side-by-side screen displays of two virtual cameras, though I get the impression that neither having stereo pairs as the output (nor the idea of operating stereoscopically at all) has occurred to Designer’s producers. I tried it, and it works well if you get close-in and square-on the camera pair.

Components and adjustments are drag-&-place, textures apply in 3 dimensions, and Designer directly outputs quality bit maps. While there’s no provision to continuously display “rulers” or cursor position by the numbers, it’s easy to fine tune the working grids for one’s scale/units and precision numerical operation is just a window away. I’ll have much more to say after growing old and gray in the service of learning it all!

To order, call Ray Dream at 800-846-0111 and have your credit card handy. For the faint-of-heart, their AddDepth 1.0.1 also has numerical capacity, but is only $49. By using its Wizard and Template modes, you can get results in 15 minutes, sans tutorial. AddDepth prints directly and outputs in several vector formats.

For the latest version of Fonts to Shapes, send a mere $15 to Mark Peterson, Rt.2 Box 13S, Lake Crystal, MN 56055. You’re then entitled to free (SASE) fixes, advice, and $5 upgrades!

The POV-Ray team is at least to version 2.2 now which carries a righteous legal document (proper, but ethics and socially based, eschewing [though not abandoning] fear of litigation), such real world features as optical refraction, critical angle total internal reflection, penumbral shadows cast by finite light souring, and the subtle effects of Brownian turbulence on passing light rays! For the latest POV-Ray version, contact Chris Young, POV-Ray Team Coordinator, 3119 Cossel Drive, Indianapolis, IN 46224, or access the directory pub\pov-ray\pov-ray.2.2

ftp.alfred.cccs.carleton.ca

on the internet.

Publisher’s Toolbox (1-800-390-0461) is an excellent catalog of “wares” for these activities.

My lead-sled 386DX-33+ coprocessor PC breezes along in Designer since its display only represents the finished work. The crunch comes at output time—and it’s dreadful. (The Designer manual tells us to use at least a 486 computer.) The finished “EuroHolmes” pair (figure 3) with its folding viewers floating in space required 9 hours of continuous run time!

But there’s good news: Intel is no longer shipping defective Pentium chips. If you go that route, try to purchase a recent release (3.5 volt 90 meg Pentium—not the 5 volt 60 meg). And there’s better news! Although a Pentium motherboard change-out for your computer might cost you something like $1200, you can get a 486 board with a big 80Mhz or 100Mhz whiz for under $400. My computer dealer here feels that a 486 with that much motivation is—at this point—close competition for the Pentiums. (One hears rumors: that Pentium chips can and will eventually be offered in parallel processing configuration [a new ball game], or that one should stay away from those snap-in 386-to-486 chip upgrades.)

It’s mind-boggling: 33 million operations per second each in the main processor and math coprocessor, running continuously for hours. To see how these ray tracing programs struggle makes me appreciate the richness of the real world they only approximate. That our old stereo cameras gobble up a pair of images in, say, 1/100th second—that measure to hours by computer standards, engenders additional respect for what we have in the stereo photographic process.

While the average Realist format snap shot resolves something like 2000 x 2000 pixels per frame

(Continued on page 15)
Two outstanding books, both illustrated with View-Master reels, from 3-D Book Productions are overdue for attention. Most recent is a STEREOSCOPIC ATLAS OF HUMAN ANATOMY—The Bassett and Gruber Legacy by Robert A. Chase, M.D. Illustrated in color with twelve View-Master reels and the corresponding labeled drawings from the original volumes on its 192 pages, this ambitious work traces the careers of stereographer and View-Master inventor William B. Gruber and anatomist Dr. David L. Bassett. Their meeting, the history of the production of the original 23 volume, 1,547 view Atlas, and their close working relationship are covered in the introduction. (See "A 3-D Look at the Human Body", SW Vol. 20 No. 2.)

The rest of the book's 8"x8" pages are devoted to the dissection drawings, with their original Latinized terminology preserved for historical accuracy. Each dissection's reel and page number appears at the top of the page to tie the drawings to the stereographs. The book and its twelve reels display samples from each body region, representing about 5% of the images in the original Atlas which included a total of 221 View-Master reels. While many of the stereotypes are certainly strange looking, Dr. Bassett's carefully dissected and colored samples have an almost sculptural appearance, with no resemblance to stereographs of surgical procedures on live patients.

Collectors who have despaired of ever finding or affording any of the original Atlas volumes will find in this book set some of the most fascinating images from the original work, confirming the precision and elegance of both Bassett's dissections and Gruber's stereography. Harry zur Kleinsmiede of 3-D Book Productions in The Netherlands has done a great service for both View-Master enthusiasts and the stereo imaging community in general. The book is a stereoscopic tribute to the efforts of Bassett and Gruber, who's monumental work is unequaled to this day.

Stereoscopic videos and computer programs incorporating the entire Atlas promise to make the images more accessible to medical students, ending the need to flip pages between changing scenes or reels while following stereotypes, text and drawings. Areas of interest can be enlarged or rotated and the labeled drawings (now Anglicized) can be superimposed over the images. Currently, two field sequential, stereoscopic video versions of the Atlas are available to medical schools, and any of today's students interested in seeing what the original Atlas was like will now at least be able to sample the highlights through this new publication.

A STEREOSCOPIC ATLAS OF HUMAN ANATOMY—The Bassett and Gruber Legacy is available from 3-D Book Productions, PO Box 19, 9530 AA Borger, The Netherlands, for $89.00 U.S., plus $6.00 surface shipping or $15.00 air mail. American customers may send personal checks drawn on an American bank. From other countries, the price is Dfl. 159.00 - PP air mail, International Postal Money Order, Eurocheck or cash.

WINDOWS ON THE SEA—The Amazing Underwater World is one of 3-D Book Productions' exquisite 3-reel album folders that have so widely demonstrated View-Master's continuing potential to the world. The 21 underwater images by stereographer Mark Blum equal or surpass most other published underwater stereo work, regardless of format. Using his own custom made equipment, he is able to shoot dramatic stereotypes of subjects ranging in size from large schools of fish to tiny individual shrimp. His work
combines obvious skill and patience with an imaginative sense of composition that makes many of the scenes look as if he'd choreographed trained fish in artfully designed underwater stage sets. (In fact, all were stereographed as they were found, in natural habitats from Fiji, Malaysia, and the Caribbean to Monterey Bay and the Sea of Cortez.)

The text includes a natural history paragraph for each scene, describing the creatures and including details that generally prompt another look in the viewer. Several of the stereos are truly memorable. As in most collections of undersea photos, there's a face-to-face close-up with a Moray eel, but many of the less threatening creatures are also fascinating. The frogfish from the Netherlands Antilles looks like a character cut from Star Wars as too ugly for any galaxy to claim. The coralline sculpin from Carmel Bay, with its smiling, sock-puppet mouth and its pink and green coloration looks like something created in cloth and foam for Sesame Street.

Windows on the Sea is, simply, a small gem of a 3-D publication that most buyers will wish could grow into a book with a dozen or more reels. The album is $17.95 U.S. plus $3 shipping. (See ad in this issue.)

---

**Picture No. 52 (Reel VIII), "Tricuspid Valve" from A STEREOSCOPIC ATLAS OF HUMAN ANATOMY—The Bassett and Gruber Legacy. One of the tighter close-ups on these reels, the text across from the labeled drawing reads: "DETAILED DISSECTION OF HEART—Interior of right ventricle viewed through ostium of tricuspid valve—The walls of the open right atrium have been stretched apart. The fibrous ring of the tricuspid valve...is held in an open position to expose the cavity of the right ventricle..."

---

**Scene No. 19 from Reel C of Windows on the Sea, "PURPLE JELLYFISH (Pelagia panoprya) Seen from below, the dangling tentacles of the purple jellyfish contain poison stinging cells (nematocysts) used to stun prey... Carmel Bay, California."

---

**Learning to Love POV Stereo on Your PC**

(about 12 MB of data in a computer at 24 bits of color), consider also that the "objects" in the Realist images are an infinite continuum—as are the "attributes" of each object. The Ray Dream Designer program I'm using considers only the most obvious attributes via 7 categories in its "shaders" utility: color, shininess, reflectance, transparency, refraction, bumpiness and highlight.

This is not at all to minimize the delight and impressiveness of Designer: a thing capable of creating convincing scenes that exist nowhere but in one's imagination. (Try that with your Realist!) And I'm working with TRUE solid images (which interact with their virtual ambiance), not just the 2 perspectives of a solid object that we mount up.

Figure 1 is a case in point, showing a target painted with replications of the Ray Dream logo, a lens, diffuse astral light (we're in the shadow of my orbiting space station studio), and soft light from a local lamp. I "made" the simple plano-convex lens in figure 2, giving it a chip-resistant chamfered edge that acts like an annular prism. No, I didn't draw in the magnified image. The defined shape, refraction, and transmission/reflect of the lens produce what you see here!

The purpose of this exercise was to make a pair of lenses to be fitted into my product illustration (figure 3) for The Added Dimension's new Euro-Holmes folding stereoscope. Unlike the care I have to take in getting the radius of curvature right when I design real molded plastic lenses, in this virtual world I can simply "re-mold" the lenses with a higher or lower index of refraction to get the focal length right. Imagine: a product illustration with FUNCTIONAL lenses—and changeable view cards!

(Now if I could just figure how to make my real income even slightly simulate the fantastic virtual living I'm making off all the virtual customers I'm able to replicate on the monitor screen here....)
We have received various opinions for the city view at the top of page 4 in the May/June 1995 issue, but George Enos and Israel Stollman have the best documentation. They identify it as the 1892 Columbian Exposition in Chicago, Illinois. The photo was taken from the giant ferris wheel. In the foreground is the Turkish pavilion, street in Constantinople, and Cleopatra’s needles. The next visible structure on the left includes the auditorium for Hagenbeck’s Trained Animal Show. Recognizable in the background is the broad dome of the Horticulture Building and behind it, the rambling Manufacturers & Liberal Arts Building. The conspicuous dome at their left is the U.S. Government Building. The railway is along East 60th Street, the south edge of the Midway Plaisance.

In the same issue, at the top of page 5, was a view of several men posed in front of an Ivy-covered wall. Debbie Griggs Carter, Museum Specialist at the National Museum of American History, wrote to say that the building is the Smithsonian Institute “Castle” in Washington, D.C.
Our unknowns this time were submitted by R.G. Wilson. First we have an orange card by C. Seaver, Jr. of Pittsfield, Mass., of an unusual building with all its windows at the roof level. The setting may be the grounds of a hotel or resort. A sign on the corner of the building reads "Gentlemen's Bath". (This would have been a welcome accommodation when I attended the annual convention of the National Speleological Society held in Pittsfield a few years ago. The bathing facilities were limited to cold water showers in the gym at the college.)

Next we have an unlabeled green card view of what appears to be a hotel, perhaps at the seaside. The sign on the fence in the foreground reads "Stonington Line". A Connecticut view?

The third view is another orange card, but with no label. The imposing building with cupola may be located at a university, or perhaps it is a government structure. Does anyone recognize it?

Finally, we have a city street scene. Signs include "Lyman and Dunn, toys, dolls, etc.", "J.W. Lyman, Toys", "Lapp & Fleshem", "C.D. Peacock", "Davies & Rudd Co."", "U.S. Express", "Mrs. Cobb. Manicu...", and "W.P. Dunn & Co., Printers". With that many business names, it should be no trick for someone to dig out an old directory and tell us what city is involved. Anyone care to have a go at it? ☟

Going crazy guessing the who, what or where of unidentified views in your collection? Get help from the entire NSA membership by sending views to The Unknowns, 5880 London Dr., Traverse City, MI 49684 with return postage. Even views with printed titles from major publishers can sometimes fail to identify some aspect of the subject. (Unusual subjects or interesting street scenes are more likely to be printed here than generic houses or pastures.) Send information on subjects you recognize to the same address.
NATO Personalities of the '50s in Commander's Stereo Collection

by Richard L. Gruenther

The March/April 1990 issue of Stereo World carried the article "Stereographer Like" which described in interesting detail a little known hobby of General Dwight D. Eisenhower—his penchant for stereo photography. This companion piece highlights the stereographic interest and collection of another Supreme Allied Commander (the NATO military command) in Europe.

General Alfred M. Gruenther was a long-time friend and confidant of Eisenhower. Their military careers were closely entwined from before World War II in San Antonio when General Walter Krueger commanded the Third Army. Eisenhower was his Chief of Staff and Gruenther was Eisenhower's Deputy. When Eisenhower was ordered to London in 1942 as Commander of British and American Forces, he called his friend Al Gruenther to London as the principal planner for Operation Torch, the October, 1942 invasion of North Africa.

In 1950, when Eisenhower was recalled to active military service to organize and command the NATO military command known as SHAPE (Supreme Headquarters Allied Powers In Europe), he again chose Gruenther to be his Chief of Staff. Gruenther later (1952) took over as the third Supreme Commander after Eisenhower became President.
This article covers mostly the social activities of General and Mrs. Gruenther during their 6 years in France (1950-56). Many of the stereographs were taken at their palatial home in Marnes la Coquette near Versailles, France. As the senior military man in the 14 nation NATO force, Gruenther came in contact with most of Western Europe's leaders and many distinguished American visitors.

Among the British nobility recorded in the Gruenther stereo collection are such notables as the Duke & Duchess of Windsor, Prince Philip and Queen Elizabeth, Admiral Louis Mountbatten of Burma, Field Marshal The Viscount Montgomery of Alamien, and General Lord Ismay, who was Churchill's World War II Chief of Staff.

Figure 1 shows (left to right) The Duke of Windsor, The Duchess of Windsor, General Gruenther and Field Marshal Montgomery. [All stereographs are from the Gruenther Collection, which includes no record of the actual stereographer.] Figure 2 captures Field Marshal Montgomery and The Duke of Windsor in serious conversation. The world has not forgotten the romantic story of King Edward VIII, who abdicated the British throne in 1936 to wed his life's love, the American divorcée Wallis Warfield Simpson. Residing near the Gruenthers in France, the Duke and Duchess were occasional visitors to the Gruenther home. The Duchess was known for her fashion and the Duke for his debonair lifestyle.

Field Marshal Bernard Montgomery was the senior British officer of the SHAPE staff. He was the Deputy Commander in Chief and Commander of all NATO land forces. Perhaps the most successful British military leader of World War II, Montgomery was nevertheless a controversial figure. Winston Churchill wrote in Montgomery's Wartime Diary: "The fame of your Army Group [21st Army Group at Normandy and onward] like that of the Eighth Army [commanded by Montgomery in North Africa and Italy] will long shine in history, and other generations besides our own will honor these deeds and above all, this character, profound strategy and enduring zeal.

Fig. 3. Admiral and Lady Mountbatten. Some of the glass mounted Kodachrome slides in the Gruenther Collection are faded or have suffered from moisture. In this example the two sides had faded differently on top of being overexposed originally, making black & white copying and manipulation nearly the only way to preserve the image.

Fig. 4. Prince Philip in front of the piano with Mrs. Norstad.

Fig. 5. Jimmy Stewart with General Gruenther at Marnes la Coquette. Probably taken in the evening, the original slide is nearly too dark to detect an image.
of their commander [Montgomery] who marched from Egypt through Tripoli, Tunis, Sicily & Southern Italy and through France, Belgium, Holland & Germany to the Baltic and the Elbe without loosing a battle or even a serious action (24 May 1945)."

Admiral Lord Louis Mountbatten, shown with Lady Mountbatten in figure 3, received the British rank of Admiral of the Fleet (equivalent to our 5 star rank) in 1956. He had served as the Aide de Camp to his cousin the Prince of Wales, later King Edward VIII and finally the Duke of Windsor, in the 1930s. In 1943 he became Supreme Allied Commander of the Allied Southeast Asia Command in World War II. He was the uncle of Prince Philip, husband of Queen Elizabeth. Later in the NATO organization he served as Commander in Chief, Allied Forces Mediterranean. Mountbattan was killed by an IRA bomb in 1979.

Prince Philip, shown in front of the piano with Mrs. Norstad in figure 4, was a Greek citizen by birth who renounced his title and rights to succession to the throne of Greece and became a British citizen in 1947. Showing some similarity to the Duke of Windsor, he did this in order to marry Princess Elizabeth that same year. She became Queen of England in 1952. It’s interesting that Philip took the name Mountbattan as his family name on moving to England. His mother was the sister of Admiral Mountbattan. Philip was made Duke of Edinburgh by King George VI on the day of his wedding to Queen Elizabeth.

Many of the distinguished Americans who were entertained at Marne la Coquette appear in the Gruenther stereo portfolio. Such well known personalities as Jimmy Stewart (Figure 5) and W. Averell Harriman, Secretaries John Foster Dulles and Robert T. Stevens, and military leaders such as Generals Eisenhower, Ridgway, Maxwell Taylor, Jacob Dovers, Anthony McAuliffe, and William "Wild Bill" Donovan of O.S.S. fame.

Figure 6 includes General Maxwell Taylor, an unknown guest and General Gruenther enjoying stereo slides. The pictures of General Max Taylor and General Tony
McAuliffe (figure 7) bring to mind the story of the Battle of the Bulge in December, 1944. Taylor was Commanding General of the 101st Airborne Division, whose mission was to hold the key road junction of Bastone, critically restricting the German advance to the west. Brigadier General Tony McAuliffe was acting Division Commander, as Taylor had been called to the U.S. by General Marshall for an important conference. In his absence the Germans launched a desperation offensive in the region of the Ardennes in Belgium. Severe weather throughout Western Europe and the Atlantic prevented Taylor’s return to his command. By late December, the airborne division was completely surrounded by the Germans. When asked to surrender, Tony McAuliffe sent his famous monosyllabic reply—“NUTS”—which somewhat confused the German commander but which became a battle cry to the gallant men of the 101st Screaming Eagles Division.

Ambassador W. Averell Harriman (next to a lady observer with General Gruenther in the foreground in figure 8) was a frequent visitor to Western Europe in those early days. After a distinguished career as a railroad tycoon, he had served as U.S. Ambassador to Russia from 1943 to 1946, and Great Britain in 1946. From 1948 to 1953 he administered the European Recovery Plan (Marshall Plan) and he had been with Roosevelt at Yalta.

The bridge table was a common meeting place for the Gruentthers and Harrimans. As a young Lieutenant, Al Gruenther had concentrated his unusual intellect toward the game of contract bridge—one of the few affordable recreational outlets during the ’20s and into the depression. While serving on the faculty of the Military Academy at West Point, Gruenther had become an expert in organizing and refereeing bridge tournaments. By the 1930s he had become New York City’s favorite tournament referee and was selected as the chief referee of the celebrated Colbertson/Lenz matches in New York City, 1931-32. In later years Eisenhower and Gruenther were to become as highly respected at the
bridge table as they were as a military team. As the host country for NATO and SHAPE Headquarters, French officials were frequent visitors to the Gruenther residence. President Coty of France is entertained with stereo slides in figure 9. Prime Minister and Madam Mendes France appear in figure 10. The French President is elected by direct universal suffrage for a seven year term. He appoints the Prime Minister and, on his recommendation, the other government members. General Gruenther was very popular with the French officials, as with the other NATO nations as well. In 1956, Gruenther was given a rare honor by the French government, which bestowed on him their coveted "Medaille Militaire" award. At the time it had only been granted by the government of France to four other foreigners—General Pershing, President Roosevelt, General Eisenhower and Prime Minister Churchill.

In all there are about 800 stereo views in the Gruenther historic collection. As with the Eisenhower collection, there is no guarantee that many of these were actually taken by General Gruenther.

Because this article is intended to be a companion piece to "Stereographer Ike" in the March/April 1990 Stereo World, it ends with one view of Eisenhower signing a portrait photo (figure 11), and another of Ike and Mamie (figure 12) relaxing at Marnes la Coquette.

---

**EMDE**

**BINDERS ARE BACK!**

The binder machine is back in production! The exclusive EMDE® aluminum binder eliminates awkward tape edging and assures jam-proof slide projection. Here's a special offer: one box of No. 3300 binders, one box of No. 3200 cover glass, and a 4" x 5" genuine leather chamois for only $59.95, plus shipping. You save $5.45. VISA and MasterCard accepted. Call in orders or write for flyer—but hurry, this offer is limited to the first 100 customers.

Available exclusively from the manufacturer:

S & D ENTERPRISES
40604 N KENOSHA RD
ZION IL 60099-9341
(708) 731-EMDE
3633
Bob Shotsberger is an ardent View-Master collector who is also experienced with computer data base systems. In cataloging his collection, he realized that he wanted to know not just what reels and packets he had, but what actual views, in the same way that a collector of stereo cards would know about individual views, their variants, the different captions used under the same image, and the various sets in which the same view is appears.

The views on View-Master reels have much of the same complexity of usage as the images on vintage stereoviews, and with the help of his computer, Bob created a list of over 1,000 reels and over 6,000 views. At an NSA Southwest Region meeting last year in Eureka Springs, AK, members urged him to turn the list into a book. The newly published result of that effort is the monumental, 297 page book Next Reel, Please.

Building on Roger Nazeley’s View-Master Single Reels list (available through Dalia Miller’s catalog or the author), Next Reel uses Nazeley’s reel variety numbers in its listings to help identify reels. (Often, when a reel variety changed, there was also a change in views.) The book is divided into three main sections: “The Reels”, “The Reels and Views”, and “The Views”. The first section on Reels includes the 1,000 reel titles, one to a line, each with its View-Master reel number, Nazeley variety number, and copyright date.

The second section on Reels and Views lists all the reels in the same order as section one, but each reel gets seven lines, with each view on the reel having its own line. Captions of each of the seven views are included, along with any other reels on which the view is used, a special reference number, and comments further identifying the subjects of certain views.

The third section on The Views is a listing of all the views by subject. Since most of View-Master’s views were scenic, the views are primarily listed by geographic areas, country and state, followed by more detailed subjects. Included are the full caption, the reels on which the view is used, and a reference number for this particular subject, photo and caption. These numbers are cross referenced to help identify images used on two or more reels but with different captions. (One view is used on six different reels, while several hundred appear on two or more reels.) Some views in this section also include comments to help identify unique subjects or differences between similar views.

Among the interesting views to locate in the third section were views found on several reels published in conjunction with recent NSA conventions. Among the data identified by the author’s computer, these view totals appear in the introduction. Found so far on View-Master reels are 325 flower views, 183 cactus views, 139 train views, 383 World’s Fair Views, and 47 volcano views.

Next Reel, Please should prove a valuable resource for dedicated View-Master collectors, and even casual collectors could find the listing of views by subject helpful in enriching their collections. The book is $42.50 U.S. including postage, from Bob Shotsberger, 4917 Cockrell Ave., Fort Worth, TX 76133-1701. In Canada the price is $45.00 U.S. including postage. From other countries, write first for price.

**ARCHIVAL SLEEVES:** clear 2.5-mil Polypropylene

<table>
<thead>
<tr>
<th>Size</th>
<th>Price</th>
<th>Case Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDV (3 3/8&quot; x 4 3/8&quot;)</td>
<td>per 100: $7</td>
<td>case of 1000: $60</td>
</tr>
<tr>
<td>CDV POLYESTER (2-mil)</td>
<td>per 100: $10</td>
<td>case of 1000: $90</td>
</tr>
<tr>
<td>CDV PAGE 6-pocket top load</td>
<td>per page: $0.50</td>
<td>case of 100: $20</td>
</tr>
<tr>
<td>POSTCARD (3 3/4&quot; x 5 3/4&quot;)</td>
<td>per 100: $8</td>
<td>case of 1000: $70</td>
</tr>
<tr>
<td>POSTCARD PAGE 4-pocket top load</td>
<td>per 100: $16</td>
<td>case of 500: $70</td>
</tr>
<tr>
<td>4&quot; x 5&quot;</td>
<td>per 100: $8</td>
<td>case of 1000: $70</td>
</tr>
<tr>
<td>STEREO / #6 3/4 COVER (3 3/4&quot; x 7&quot;)</td>
<td>per 100: $9</td>
<td>case of 1000: $80</td>
</tr>
<tr>
<td>STEREO POLYESTER</td>
<td>per 100: $12 or 3-mil</td>
<td></td>
</tr>
<tr>
<td>CABINET / CONTINENTAL (4 3/8&quot; x 7&quot;)</td>
<td>per 100: $10</td>
<td>case of 1000: $90</td>
</tr>
<tr>
<td>#10 COVER (4 3/8&quot; x 9 5/8&quot;)</td>
<td>per 100: $10</td>
<td>case of 500: $45</td>
</tr>
<tr>
<td>5&quot; x 7&quot;</td>
<td>per 50: $7</td>
<td>case of 200: $25</td>
</tr>
<tr>
<td>BOUNDING (5 1/2&quot; x 8 1/2&quot;)</td>
<td>per 25: $6</td>
<td>case of 500: $80</td>
</tr>
<tr>
<td>8&quot; x 10&quot;</td>
<td>per 25: $8</td>
<td>case of 200: $40</td>
</tr>
<tr>
<td>11&quot; x 14&quot;</td>
<td>per 10: $8</td>
<td>case of 100: $45</td>
</tr>
<tr>
<td>16&quot; x 20&quot; (unsealed flap)</td>
<td>per 10: $20</td>
<td>case of 100: $99</td>
</tr>
</tbody>
</table>

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

Stereo Imaging Technology at SIGGRAPH '95

by Lincoln Kamm

One of the biggest conventions for computer graphics and animation held each year is SIGGRAPH. This year there was a lot involving 3-D, even though more companies were using 3-D as a buzzword or as a description of computer generated graphics that have perspective but aren't stereoscopic. There were still quite a few companies exhibiting actual stereo related products.

Lenticular 3-D
Hot Off the Press

Dimensional Visions Group Ltd. produces lenticular lithographs using twelve to twenty-four images. They can use actual supplied photographs or computer generated images, or they can do everything themselves, creating the scenery and photographing it using a computer controlled optical tracking system. DVG can produce images in sizes from 2.5x3.5 to 11x14 inches.

Image Tech

Another company producing lenticular prints is Image Technology International, producers of the 3D MAGIC, 3D WIZARD, and 3D-1000 consumer lenticular three-lens cameras. I spoke to one of the executives (many of them used to work for Nimstio), asking when or if they had plans to make prints from all four images of four-lens cameras. I was told that they can do it but the price is based on a commercial level because of the setup it takes. There are no plans for making the full four-image prints at a consumer price. Image Tech is making a five-lens professional camera as well as 3-D printers, and they are still printing three-image lenticular prints from their single-use and other three-

lens stereo cameras. For prices of prints from three or four-lens cameras (made using three images) see SW Vol. 22 No. 2, page 26.

VReX Video

Although there were a few companies selling interleaved stereovideo systems, two of them stood out the most. The first was VReX, Inc. They make just about anything you could need for stereo video and stereo computer imaging. The CAM-3000, at less than $10,000, is the least expensive stereoscopic video camera in current production. If you already own a stereo video camera and would like to be able to project your videos to a crowd, nothing could be more simple than handing out standard polarized glasses, popping in an interleaved video, and playing it through the VR-2000 Ultra-Compact 3-D Stereoscopic Projector. This is an LCD projector that polarizes the liquid crystals in sync with any standard field sequential (flickering) video.

Also in the VReX product line is the Cyber Book, a notebook computer with a special, full-color LCD screen that polarizes the pixels, allowing anyone wearing standard polarized glasses to see fabulous still or moving, color 3-D images. To create stereoscopic computer images for viewing on your Cyber Book you will want some sort of computer program that creates 3-D objects. In you have 3D Studio, creating stereoscopic images is as simple as adding two "cameras" and clicking on a button. Even if you want to move the camera on a path, all that is necessary is to move the main camera and the rest is left to the Stereo KXP IPAS from VReX.

Flickerless Faster Fields

Another company creating quality products for use with stereo video is SOCS/3D. The most amazing product they have is the S3D-1010 Stereoscopic Video Enhancement Processor. This device accepts field-sequential NTSC of S-Video (60Hz field rate or 30 Hz per eye) signals. It outputs flickerless full-color RGB video at a field rate of 120 Hz. Using interpolation, the S3D-1010 actually doubles the lines of resolution. This solves the common problem of jagged edges with interleaved 3-D video.

Aliens on Paired Screens

Straylight Corp. is a company with a new approach to 3-D movies. They have developed the 3D Virtual Theater system in which people wear head mounted pairs of small TV monitors and headphones while seated in motion seats. They are then treated to a stereoscopic movie, with the left and right eyes being shown the respective video images on each monitor. The difference between seeing 3-D video like this vs. watching a screen through glasses is comparable to the difference between a projected slide and using a good quality hand viewer.

This year at SIGGRAPH over 5,400 guests became the lead character of U.F.O.—Upon Further Observation, as they were abducted by an alien spaceship, examined by gruesome space creatures, and sent through psychedelic time warps. Not only does Straylight make VR units, but more importantly, they create 3-D movies. I was told that their main use of the VR Theater has been at trade shows. VR is a very hot attention getter and people will wait in long lines to try it.
A video frame pair from the head mounted "VR Theater" movie U.F.O. - Upon Further Observation, seen at SIGGRAPH '95.
© 1995 Starlight Corp.

Out. Once everyone is strapped in the head gear, they have no choice but to sit there and enjoy whatever message is contained within your stereo movie. This has to be the best to prevent potential customers from walking away before the end of the sales pitch—not to mention that it's a fun and memorable experience.

**ChromaDepth Captivates Crowd**

Chromatek, one of my favorite companies to recently surface, was also at SIGGRAPH. They master-minded the ChromaDepth™ 3-D glasses that give the appearance of each color having its own depth. The glasses and images have appeared at Wendy's restaurants and in Crayola's "Jumping Colors" markers as well as in Count Chocula cereal boxes. (See SV Vol. 21 No. 2, page 28.) So many people came by the booth that security and trade show organizers checked to make sure there wasn't a "dead person" or any other strange activity happening. Chromatek had only a 10x10 foot space, but so many people were interested in seeing ChromaDepth that they were pushing each other out of the way in huge lines! The show was such a great success that Chromatek has already signed up for a 20x20 foot booth for SIGGRAPH '96 in New Orleans.

This report covers only the highlights of the 3-D related products seen at SIGGRAPH '95. There were at least five lenticular companies, six stereo video companies, and more than ten companies exhibiting head mounted stereoscopic displays.

---

**Loreo's Folding Mini-Viewer**

A new Folding Mini Stereo Print Viewer by Loreo is available from Reel 3-D Enterprises. Loreo is the maker of the self-transposing 3-D print camera that incorporates a built-in beam splitter to produce image pairs within the area of normal 35mm negative frames. Without special instructions, any lab can make ready-to-view 3½"x5" or 4"x6" stereo color prints. Like the larger viewer supplied with the camera, the Mini Viewer will take both sizes of prints, which are held in a slot at one end of the viewer. The lack of a back supporting panel means that print pairs in an album or magazine may also be viewed with the Mini Viewer.

The lens panel has several locking positions making the focus adjustable, and the prismatic plastic lenses are of very good quality. It works well for Loreo, Franka, and other beam-splitter prints up to 4x6". For convenience it folds flat to 4"x3½"x3½" and will fit in a shirt pocket.

The viewer (stock # 2027) is available from Reel 3-D, Box 2368, Culver City, CA 90231 for $12.95 each, less in quantity. Prices don't include shipping, so contact Reel 3-D for details.

**Loreo Repair Service**

A repair service for Loreo stereo Ac cameras is now available in the U.S. through 3D Products, Dave Pierce, 1717 E. College Ave., Lompoc, CA 93436, (805) 735-8061. Under the one year warranty period, parts and labor are free of charge, while free replacements are at the discretion of 3D Products. (Save your purchase receipt as proof of purchase.)

For repairs not covered by the warranty, an estimate on the parts and labor charges will be given before a repair is carried out. A telephone advice service is available (no collect calls), and all shipping charges are at the camera owner's expense.

---

This column depends on readers for information. (We don't know everything!) Please send information or questions to David Starkman, NewViews Editor, P.O. Box 2368, Culver City, CA 90231. SPECIAL THANKS TO: Kurt Jackson & Bill Walton for sending in items of interest for this installment.
CyberSight Sharpens Computers' Stereo Vision

A new technique for the computerized capture and display of true 3-D motion imaging has been announced by the Department of Energy's Lawrence Livermore National Laboratory at the University of California. Dubbed "CyberSight", the new technology uses a stereo video camera system to provide images for computer motion and surface studies with a degree of realism and detail never before achieved.

The thought of taking a perfectly good stereoscopic video and making it look like some computer generated animation experiment may seem a bit backward to some, but CyberSight could lead to advances in health care, manufacturing techniques, and even movie special effects. Most people who watch TV science programs have seen examples of how computer motion studies are now done. Markers are stuck on various parts of the subject's body as reference points, and a tape of a golf swing or a jump is transferred to a computer which produces animated stick-figure pictures based on the movements of the markers.

"Unfortunately, the marker method is time consuming, provides minimum data and produces poor quality images," according to CyberSight developer Shin-ye Lu.

Instead of markers, the CyberSight system projects line patterns on the subject during the stereo videotaping of the motion. The pattern data is picked up by the cameras and fed to a computer, which transforms the data into complete surface reconstructions, in motion, to exact measurements. The technique combines unsurpassed detail with the potential to represent true biomechanics. It delivers accurate, detailed images of body surface features such as skin, bone and muscle, and also determines torque and force—the actual biomechanics of movement.

CyberSight could be used to analyze the movement of patients with cerebral palsy, to assist surgeons in predicting the effects of plastic surgery, or to help determine optimum ergonomics. It could guide robots involved in an assembly process, or, using Micropower Impulse Radar (also developed at the Lab), it could be used to develop a speech recognition system for computers. Laurence Livermore is seeking firms interested in commercial applications of the technology, as well as other researchers or institutions interested in studying the potential of the new capability.

NSA Members Succeed at PSA International

Several NSA members did well in the Photography Society of America's Stereo Image of the Year 1995 competition, held at the PSA International Conference in Williamsburg, VA, in September. Entries in the competition were limited to stereo images which had won prizes, including honorable mentions, in international stereo exhibitions during the past year. For the first time ever, stereo cards were accepted in this competition. There were 32 entrants with a total of 75 images, 8 stereo cards and 67 stereo slides. The stereo cards did better than expected, winning 1st and 3rd places.

NSA Members Who Placed

1st: Stan White, APSA, St. George, Ontario Canada for "Garden, Oakville" (stereo card).

2nd: Robert J. Leonard, APSA, Deale, MD, for "Painting the M&M Rainbow" (stereo slide).

3rd: Bill C. Walton, Columbus, GA, for Venus in the Bath" (stereo card).

Honorable Mentions (all stereo slides)

Robert Bloomberg, Forest Knolls, CA, for "How to Train Your Cat" and "Hog Nose Snake".

Allan Griffin, HonPSA, Pymble, Australia, for "Dumped", "Hell, It's A Long Way Down" and "Along the Beach".

Paul Milligan, APSA, Gallup, NM, for "Bobcat Kitten".

Albert Richards, Ann Arbor, MI, for "Easter Lily".

Albert Sieg, EPSA, Rochester, NY, for "Salmon for Lunch".

Our New...

Fall 1995-Summer 1996 CATALOG OF

PUBLICATIONS & PRODUCTS IS NOW AVAILABLE!

We handle a wide variety of 3-D publications: books (instructional, technical, photographic, 3-D art), posters, viewers, View-Master reels, and misc. 3-D items (no mounts, photo equipment, etc.) plus some brand new works that have just become available!

Order your copy today by sending:
For the U.S.A., Canada, & Mexico:
$3.00 or 4 International Reply Coupons
For all other nations:
$4.00 or 6 International Reply Coupons
(International Reply Coupons are available at most post offices)

Either of the above amounts is partially or wholly refundable with your future order!

CYGNUS GRAPHIC
P.O. Box 32461-X
Phoenix, AZ 85064-2461
U.S.A.
Stereo Script

When Ron Labbe sent in the following item from the June, 1919 issue of The Photo Miniature magazine, his timing couldn't have been better. This issue's feature on the IMAX 3-D film Across the Sea of Time describes how the film dramatically ties together stereography's past and present in a way never before seen by the general public. Part of a Photo Miniature issue devoted to several aspects of stereo photography, the pessimistic treatment of stereo projection techniques was written just three years before projected 3-D, both still and moving, was presented to the public in New York, pioneering a technique not mentioned in the article.

In fact, the eclipsing method of stereo projection was to be introduced many years ahead of its time just 26 blocks from the site of today's Sony IMAX 3-D theater. Laurens Hammond's Teleview process, installed in the Selwyn Theater on 42nd Street, used mechanical pinning shutters positioned in front of each seat and synchronized with the right and left image projectors. A less than convenient improvement over early anaglyphic attempts, Teleview anticipated today's cordless, liquid crystal, eclipsing headset in use at the Sony IMAX theater.

Stereoscopic Projection

The question is very frequently asked, "Can stereograms be projected so that they may be used in a theater?" The answer is that no method for such projection has been worked to a successful conclusion as yet. There are at least two possibilities: (1) The principle of Wheatstone: One of the two pictures making the stereo-photographic couple is mounted upon the right-hand side of a pair of stereoscopic lenses and the other picture on the left. A pair of mirrors bring the images properly to the viewing lenses. Such a scheme might be composed upon a large scale for an audience, opera glasses being used in place of the stereo lenses. Even moving stereograms might be possible if one could synchronize the passage of the pictures on the two sides of the mirrors. (2) The principle of the anaglyph (from the Greek meaning "chiseling in relief"). The stereograms are colored, the one for the right eye red, the one for the left eye bluish-violet. The observer holds a stereoscope, the right lens of which is blue, the left one orange. By this means it has been possible to throw enlarged stereograms upon a screen, the observing audience holding the special glasses while viewing these pictures. Obviously such a matter is of more novelty than utility. Until a new advance is made, we shall not have stereograms presented to general audiences.

View-Master Illustrated Books and 3-Reel Albums from 3-D Book Productions in Holland

**NEW:** We've been here throughout the ages...

**56 Extra-Terrestrials on 8 Unique View-Master Reels!**

In exciting box with European viewer + 120-page book that tells the story of Ans Hoornweg who frequently meets Aliens! Text in Dutch. Full-color brochure included. A must for View-Master/UFO collectors!!!

**USA:** $69.00 PP Sea Mail + $10.00 Air Mail
Others: Dfl. 99,50 PP Sea Mail + Dfl. 10.00 Air Mail

**NEW:** A Stereoscopic Atlas of Human Anatomy

The Bassett and Gruber Legacy by Robert A. Chase, M.D.

This new book displays 83 beautiful stereo pictures from each body region photographed in the years 1950-1960 by William B. Gruber, inventor of the View-Master system, and taken from the original Atlas by David L. Bassett. Hardcover, 192 pages, 173 ill. and 12 View-Master Reels!

**USA:** $95.00 PP Sea Mail + $9.00 Air Mail
Others: Dfl. 159,00 PP Air Mail

**NEW:** View-Master Viewers—An Illustrated History

by Mary Ann and Wolfgang Sell 1939-1994

A historical overview of View-Master equipment. Hardcover, 36 pages, 20 ill. and 6 View-Master Reels!

**USA:** $49.90 PP Sea Mail + $6.00 Air Mail
Others: Dfl. 89,00 PP Air Mail

3-D Book Productions

P.O. Box 19, 9530 AA Borger, The Netherlands

**NEW:** 18th World Jamboree 1995
August 1-10, 1995 Holland

This 3-D Album contains three View-Master Reels with 21 unique three-dimensional pictures of this gathering of almost 28,000 scouts from more than 150 countries. Available December, 1995. Order now!

We offer more exclusive 3-Reel Albums:

- Windows on the Sea: Amazing Underwater World
- The Amazing Insect World: Honeybee and Wasp
- Berlin Around 1900
- Life in China in 1978

Price of each of these five View-Master 3-Reel Albums is:

**USA:** $17.95 PP Air Mail (+ $3.00 if you order only one album)
Others: Dfl. 30,95 PP Air (+ Dfl. 5,00 if you order only one album)

How to order?

Send your order to the address above, and include payment:
- Personal check in US dollars drawn on an American bank
- Eurocheck (up to Dfl. 300,00 and card number on back)
- Cash or international postal money order
- When sending a bank check, add $9.00 or Dfl. 15.00

Don't be afraid to order from us: we ship at our risk!
Making a 3-D Greeting Card

by Horst Hoyer

If you have a computer and image modification software, making a 3-D greeting card is relatively easy. I used a Macintosh IIIi and Photoshop 2.5 to make the Christmas card described in this article. Photoshop 3.0 is currently being distributed and contains features (layers) which simplify some aspects of the work.

First, of course, it is necessary to select the greeting which you wish to render in 3-D. I purchased several old Christmas cards at an antique card show and then scanned one from 1915 into my computer. At 300 DPI (dots per inch) and in RGB (red/green/blue) mode the 9 x 14 cm image took up 5.43 megabytes of file space. In gray scale mode it takes up 1.81 megabytes. Cutting down the scanning resolution by half decreases the file requirement to one quarter the size. If you are planning to make an anaglyph card, scan in gray scale mode. Stereo pair cards may be in either gray scale of color.

If you don’t have a scanner, locate a computer service bureau in your area and have them scan it for you. Unless you have a portable hard drive, your image will have to be scanned at a lower resolution.

An alternative to the scanning procedure is to have a 35mm slide of your image put on a Kodak PhotoCD. You’ll need a CD ROM drive connected to your computer, but the CD provides five possible levels of image resolution, up to and including photographic quality. There is room for approximately 100 single images on one PhotoCD.

I placed two identical copies of my image into Photoshop. One, unaltered, would be the right eye view. The other would be modified into the left eye view. It is necessary to decide on the relative position-in-space for each part of the image and it is here that your 3-D sense will be important. I wanted the sky and forest in the distant background, stretching from a depth of about 5 cm at the left to about twice that depth on the right. A farmhouse, replacing a teepee in the original, would be placed at a depth somewhat less than 5 cm. The boy, sled and reindeer are moving towards the viewer so the front of the boy would be at a depth of 3 cm and the front of the reindeer at about 1 cm. The holly would be just slightly beneath the plane of the paper. The original greeting message would be erased and replaced by a personal one in the plane of the paper. The easiest way to accomplish this is by erasing the greeting from the original unaltered image in Photoshop and replacing it with the new one before making a copy. The copy and the original will then have the greeting in identical right & left positions, placing it in the plane of the paper.

The apparent depth, d, of a stereo point depends upon the separation, s, of the points of the right and left eye views and upon the viewing distance, D, that is, the perpendicular distance from the eyes of the observer to the plane of the paper or computer screen. Assuming 40 cm as a convenient viewing distance and taking 6.5 cm as an average for eye separation, the equation for the separation of the two points is

\[ s = (6.50x d) \div (40.0+d) \]

I first selected the sky and forest using the Quick Mask mode and moved the selection 0.73 cm to the left. The Scale command was then chosen and the entire selection of sky and forest scaled to the left by moving the right side an additional 0.73 cm. I replaced
the teepee with a farmhouse and moved it 0.65 cm to the left.
Next, the boy, sled and reindeer were selected and moved 0.45 cm to the left. In order to have the reindeer moving towards the foreground it is also necessary to scale the selection to the right by 0.28 cm. The left and right antlers were then individually selected and separately scaled, the left antlers 0.35 cm to the right (forwards) and the right antlers 0.03 cm to the left (backwards). The holly was moved 0.2 cm to the left.

There are several options for printing out your stereo greeting. If you desire a stereo pair card, first reduce each image to 7.5 cm width and then position them alongside one another. Then print the image. Remember that the clarity of your card will depend upon the resolution of your printer. You may be satisfied with the output of a 300 or 600 DPI laser printer. Increased sharpness can be obtained by sending your image to a computer service bureau for a film output on a high resolution image setter. A commercial printer can use this film to produce high resolution prints, but this costs plenty! The stereo pair image in my greeting card shown here was done on my LaserWriter Pro printer at 600 DPI.

When you make your own 3-D greeting card, send one to me at 165 Watchung Ave., Montclair, NJ 07043, and I'll reciprocate.

Anaglyphic Greetings
Anaglyph images may be of any size and may be preferred for this reason. To see your image as an anaglyph on your computer screen (assuming you are in Photoshop), proceed as follows:
1. Go into RGB Mode and select the left eye view.
2. Select Hue/Saturation from Adjust in the Image menu.
3. Select Colorize.
4. Change: Hue = 180, Saturation = 100, Lightness = 50%. This produces the cyan color.
5. Save as Left Eye View.
6. Repeat above for the right eye view, but set: Hue = 0, Saturation = 100, Lightness = 50%. This will produce the red color.
7. Copy the right eye view and PASTE it INTO the Left Eye Image.
8. Select Paste Controls: a. Opacity + 50%, b. Click OK.
9. Save. However, if the image lacks contrast—
10. Open Levels in Adjust in Image menu: a. Move left hand pointer to right, (under left end of histogram) until contrast is as you like it. b. save.

For my anaglyph Christmas card I printed the right and left views of my greeting out on my LaserWriter Pro printer as positives on 3M Transparency film. The images were then photographically transferred to a photo sensitized screen printing frame with a 260 mesh (holes per inch) screen and printed, one on top of the other, using acrylic water-based inks. I used Hunt's Speedball Orange #4664 for the right eye view and Hunt's Speedball Process Cyan #4690 for the left. The intense colors should be diluted one part color to 15 parts of Extender Base #4661.

Screen printing is fun, and by doing it yourself you can control the colors to match those of your anaglyphic glasses. If you wish, you can have the printing done commercially but make sure the ink colors are suitable. [The book at the top of page 16 in the current Reel 3-D Enterprises catalog could be of help here.]

Three Stereo Puzzles
by Raymond Smullyan

1. I have recently started a 2 1/2 x 2 1/2 slide circuit. (Anyone interested in joining, please contact me.) I received one stereo slide, made by a Sputnik, from which I could deduce that the sender's left eye must be better than his right eye. How did I know?

2. I phoned one prospective member to see whether he would be interested in joining my circuit, but he was not home, so I spoke to his wife. The next day I reached him and told him that from his wife's voice I could deduce that he must be very much in love with her (which he confirmed). How did I deduce this?

3. What is the exact probability that there must be at least two stereographers in this world who have exactly the same number of stereographer friends? [Yes, this probability can really be computed with absolute precision! I am assuming that friendship is mutual (if John is a friend of Joe, then Joe is a friend of John) and I am not counting a person as his or her own friend. Also, I am not assuming that each stereographer has at least one stereographer friend (that would be too easy)!] So, what is the probability?

Raymond Smullyan
Box 75
Elka Park, NY 12427

Answers

3. The probability of finding two stereographers who have exactly the same number of stereographer friends is approximately 0.03%.

4. The number of stereographers who have exactly the same number of stereographer friends is determined by the probability of a match in the number of friends. The probability of a match is 1/2, and the probability of no match is 1/2. The probability of exactly two matches is 1/2 x 1/2 = 1/4. Therefore, the probability of finding two stereographers with exactly the same number of stereographer friends is approximately 1/4.

5. The probability of finding exactly two stereographers with exactly the same number of stereographer friends is determined by the probability of a match in the number of friends. The probability of a match is 1/2, and the probability of no match is 1/2. The probability of exactly two matches is 1/2 x 1/2 = 1/4. Therefore, the probability of finding exactly two stereographers with exactly the same number of stereographer friends is approximately 1/4.

6. The probability of finding exactly two stereographers with exactly the same number of stereographer friends is determined by the probability of a match in the number of friends. The probability of a match is 1/2, and the probability of no match is 1/2. The probability of exactly two matches is 1/2 x 1/2 = 1/4. Therefore, the probability of finding exactly two stereographers with exactly the same number of stereographer friends is approximately 1/4.

7. The probability of finding exactly two stereographers with exactly the same number of stereographer friends is determined by the probability of a match in the number of friends. The probability of a match is 1/2, and the probability of no match is 1/2. The probability of exactly two matches is 1/2 x 1/2 = 1/4. Therefore, the probability of finding exactly two stereographers with exactly the same number of stereographer friends is approximately 1/4.
SSA Life Membership for Paul Wing, Jr.—Stereo Superstar

One of the most satisfying aspects of my hobby has been in teaching others to learn of its potential and to nudge those already into 3-D toward improvement of their skills. I am still at it."

- Paul Wing.

In keeping with the updated rules and bylaws of the Stereoscopic Society of America, I am pleased to announce that the Life Membership status of Paul Wing was approved at the Atlanta meeting of the SSA this year. Currently, only one person has been a member of the American Branch longer than Paul. I doubt if there is anyone in the world who knows more about stereo than he, both as an active stereographer and a theorist. But, I think, more than anything, Paul is a teacher who gets the most satisfaction from helping to bring new stereographers up to their highest levels of potential by means of timely advice and instructive examples. There are no “trade secrets” that Paul will not share—but he does expect one to listen and to heed his advice.

 Origins

Paul Wing, Jr., was born in Sandwich, MA, on March 9, 1913. He graduated in 1934 from the Massachusetts Institute of Technology with a degree in Chemical Engineering. He has been a leading specialist in the design and application of process control valves throughout a 48-year career in instrumentation.

He worked for the Universal Oil Products Company from 1935 to 1941 as department manager responsible for planning and specifying refinery process control systems. In 1942 he began a 38-year career at the Masonelian Division of McGraw Edison Company as senior design and application engineer, specializing in the design of control valves, pressure regulators, and displacement level controls. He has served in the positions of manager of engineering, product planning and marketing, worldwide engineering manager, and vice president of engineering at Masonelian. Since retiring in 1980, Paul Wing has engaged in general consultation for Masonelian.

Paul joined the Instrument Society of America in 1961 as a senior member, became a fellow in 1972, and a life fellow in 1981. He was awarded the status of Honorary Member, the highest membership grade bestowed by ISA and reserved for individuals deserving of special recognition.

Paul Wing with Pedestal Stereoscopes, March 25, 1976. The display was arranged for the Spring Photographic Trade Fair held by the Photographic Historical Society of New England. Stereo © Nicholas Graver.
Stereo Photography and Beyond

Active participation in 3-D photography began for Paul in the late 1930s with a Voightlander 45x107mm three-lens reflex camera using glass negatives and positives. He has worked in the other formats (6x13cm, 5"x7", etc.) and especially has been active in the 35mm format since its introduction via the Realist system in 1949. Thus was embraced a lifelong romance with the 3-D medium that would take a volume to detail. Its scope can be appreciated by the level of recognition that has accumulated to Paul Wing along the way.

Honors and Awards

As a member of the Photographic Society of America and its Stereo Division, Paul is a five-star exhibitor in international competition in stereo photography with over 725 acceptances in PSA salons. He was twice awarded the PSA’s EK CO Kinsley Award for the best set of four slides showing diversity. In 1994 he received the double honor of the PSA’s Stuyvesant Peabody Award (for Pictorial Photography) and being named a Fellow of the PSA in recognition of his volunteer education programs, his service to PSA, and for the many awards he has received.

Paul Wing was named a Fellow of the National Stereoscopic Association in 1985. He has served on the Board of Directors of NSA and also received a Special Outstanding Stereographer Award in 1990 from the Association. At the NSA annual meeting in 1979 he was recognized with a Life Achievement Award from the Stereoscopic Society American Branch (now SSA).

Wing is also a Fellow in the Third Dimension Society of Great Britain and a charter member of the Photographic Historical Society of New England. He is a member and past president of the International Stereoscopic Union (ISU) and has been a member of Great Britain’s Stereoscopic Society for nearly fifty years. In 1994, the ISU awarded Paul a Certificate of Appreciation in which he is characterized as “a teacher and inspiration to us all”.

Lecturer and Author

Among other activities, Paul Wing is a lecturer and author. He gives special 3-D projection shows and workshops in the USA and abroad for camera clubs and other social groups. He is currently writing a detailed reference book on stereoscopes from their beginnings until the advent of the 35mm camera in the 1930s. Over the years, Paul has contributed numerous papers and articles on 3-D subjects for publication in appropriate periodicals, including Stereo World.

As A Collector

The collection of 19th century stereoscopes that Paul gathered is important and outstanding, and was the basis upon which he began working on the aforementioned eagerly awaited book that is now nearing completion. He displayed an impressive Invited Exhibit of stereoscopes at the 1990 NSA convention in Manchester, NH, where many enthusiasts enjoyed a hands-on look at a host of rare pieces.

He has an extensive stereo print collection and in the drawers and files of his home and studio in Hingham, MA, are prints from all around the world—historic views from England and France as well as the USA, covering many categories and subjects. Some of the most impressive nature views extant are included in his modern collection.

As A Stereographer

Paul Wing has traveled extensively throughout the world and he always has his stereo cameras at hand. His nature and travel views are near legendary among present-day stereo shooters. He is the recognized master of hyperstereo, and the jewels in the crown are the aerial hypers he has made from aircraft of land forms and urban areas. His close-up views of flowers
and birds are truly remarkable nature studies. No stereo-worthy subject escapes his attention.

As the Teacher

Although he has a passion for making stereoscopic views, showing his work, and collecting antique stereographs and viewers, Paul admits that his real gratification comes in spreading the excitement he continues to experience through the art form of stereo photography.

The basic Paul Wing philosophy he sums up as follows: “What I really love is to get people excited over stereoscopy. I do not do this to make money or to become revered in the world of photography. I love to create photos and I love to show people. My photos are a way to share nature’s beauty with others.” This is the way of the true teacher—to impart to others the love and excitement one finds in a subject that he or she finds deeply moving.

The Stereoscopic Society of America is fortunate to have had Paul Wing among our ranks for close to half a century. The status of Life member is richly deserved by Paul and thankfully bestowed on him by the Society.

Atlanta

The Atlanta convention was very successful from the Society point of view. A large contingent of Society members was present and many of them were able to attend the annual Society meeting on Sunday morning. Dr. Paul Milligan of Gallup, MN, was nominated for life-Member status (more on this in a later column). During the trade show, the Society table was staffed by volunteers from those attending and eight applications from new members were processed.

Japan/USA Folio

During the Atlanta meetings, Mr. George Saji, representing Japan 3-D Club, suggested that a folio exchange between their club and the SSA should be established. This was very agreeable to quite a few of our members who were present and Harry Richards of Mequon, WI, volunteered to serve as the SSA secretary. Mr. Saji offered to do the necessary translations. There will be about 18 Japanese participants and about the same number of SSA members—however we still have openings at this writing and anyone interested in taking part should contact the Membership Secretary listed below.

SSA Pin

The new SSA pin is being distributed to the members. I would like to congratulate those involved in bringing it into existence, especially Bill C. Walton who kept an ear out until it happened. Lois and Manley Kohler submitted the winning design. Steve Best did the artwork, and Jack Cavender saw to its manufacture. Members attending the Atlanta meetings received their pins at that time—those who were missed will receive theirs in time to order supplies. Some members have purchased extra pins for family members. One pin for each member is supplied at no cost. It’s a handsome pin and it looked good seeing so many wearing them at the convention.

New Circuits

Interest in prints continues to grow and we now need a fourth regular print circuit. Donna Reuter of Swedesboro, NJ, has agreed to be the secretary and the details of starting a new circuit are under way (it does take time and patience). Some experienced members from the other circuits usually sign on for a time to help the startup process and guide the newer members. Any printmakers out there are encouraged to join the fun.

Bill C. Walton, secretary for the Speedy Print Circuits (12 members each), reports that all such Speedy circuits are now full and a second black & white circuit (called Speedy Keystone) has been started.

It was reported that the proposed (2¼ x 2¼) x 2 circuit has enough participants and its launching was expected during the summer. Ray Smulian is the Secretary. It is based on stereo views using 2¼ square transparencies (120 film). If this is your forte and you wish to join, contact the membership secretary.

Bill C. Walton had an article published in the April 1995 issue of the P.S.A. Journal, page 10. It’s appropriate title is “Why Make Stereo Cards?”. The Photographic Society of America has recently recognized the existence of stereo in print format, having dealt only in transparencies for many years. I would add the observation that when one is out of sorts and the world is acting badly—there is no therapy quite as good as putting it all out of mind and making a nice stereo viewcard.

New Alpha Transparency Secretary

Naoma Roe of Orem, Utah, has taken over the reins as Secretary of Alpha Transparency Circuit, replacing Matt Rebolholz who had to take a hiatus from Society participation due to problems resulting from illness and accident. (I am pleased to report that Matt is progressing well and was able to attend the Atlanta convention in late June.) Naoma therefore is shepherding our oldest continuously operating postal circuit.

Milestones and Mishaps

I am saddened to report the sudden death last spring of Jack Kirsch of Boynton Beach, FL. Jack was a charter member of the (2x2)x2 circuit founded in 1987, and was probably our foremost proponent of one-lens stereo (“...every camera is a stereo camera” was his favorite statement). Jack was visiting in New York when he failed to wake up one morning. His views and candid comments are sadly missed.

The (2x2)x2 circuit was further stricken when Secretary Joe O’Toole of Los Altos, CA, fell while tending his apricot orchard and suffered painful fractures of the

(Continued on page 33)
December 9  (CA)  Culver City Monthly Camera Show & Sale, Veterans Memorial Building, 4117 Overland Ave., Culver City, CA. Contact Derek M. Borthwick Show Prods., Box 1018, West Covina, CA 91793, (818) 913-4046, Fax 913-1703.


December 10  (CA)  Buena Park Camera Expo, Sequoia Club, 7530 Orangeforhe Ave., Buena Park, CA. Call (714) 786-8138.

December 10  (FL)  Camera Expo Elks-O-Rama, Clearwater Elks #1525, 2750 Sunset Point Rd., Clearwater, FL. Call (813) 791-6448.


December 16  (GA)  Atlanta Camera Show, Castlegate Hotel, 1-75 and Howell Mill Rd., Atlanta, GA. Contact Nancy Green, Box 11267, Ft. Lauderdale, FL 33339, (305) 564-1022.

December 16  (WI)  29th Milwaukee Camera Show & Sale, Quality Inn-West, 201 W. Main Rd., Milwaukee, WI. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

December 16-17  (AZ)  Tucson Arizona Camera Show, Tucson Convention Center, Tucson, AZ. Contact Robert Watson, Box 85422, Tucson, AZ 85754, (520) 743-8199.

December 17  (AL)  Birmingham Camera Show, Hanna Armory, 5601 Oporto-Madrid Blvd., Birmingham, AL. Contact Nancy Green, Box 11267, Ft. Lauderdale, FL 33339, (305) 564-1022.

December 17  (CA)  Pasadena Camera Show and Sale, Pasadena Elks Lodge, 400 W. Colorado Blvd., Pasadena, CA. Contact Anton at Bargain Camera shows, Box 5352, Santa Monica, CA 90409, (310) 578-7446.

December 17  (IL)  Chicago Camera Show & Sale, Holiday Inn-Skokie, 5300 W. Touhy Ave., Skokie, IL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

December 17  (NY)  New York City Camera Show, Park Inn, 440 W. 57th Street, New York, NY. Contact New York City Camera Show, 25 Leary Ave., Bloomfield, NJ 07043, (201) 838-4301.

January 6  (FL)  3rd Sarasota Photorama USA Camera Show & Sale, Ramada Inn-Airport, Sarasota, FL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

January 6-7  (CA)  20th Annual Photo Fair, San Mateo Expo Center, 2495 S. Delaware St., San Mateo, CA. Contact Photo Fair, Box 32932, San Jose, CA 95152, (408) 251-9197.

January 7  (FL)  14th Tampa, FL Camera Show, Holiday Inn-Ashley Plaza, 111 W. Fortune St., Tampa, FL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

January 13  (HI)  2nd Annual Cameras in Paradise Show & Sale, Hawaii Prince Hotel Waikiki, 100 Holomoana St., Honolulu, HI. Contact Don Solcum, 74-5614 Palani Rd., Kailua-Kona, HI 96740, (808) 326-7355.


January 14  (FL)  Camera Exchange Show & Sale, Holiday Inn, Rt. 92, Deland, FL. Contact Florida Camera Shows, (904) 738-0549.

January 20  (FL)  10th Jacksonville Camera Show, Best Western-Orange Park, 300 Park Ave. South, Orange Park, FL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

January 21  (CA)  Hayward Camera Show & Sale, Centennial Hall, 22292 Foothill Blvd., Hayward, CA. Contact Carney & Co., 231 Market Place #379, San Ramon, CA 94583, (510) 828-1797.

January 21  (FL)  8th Gainsville Camera Show & Sale, Holiday Inn-West, 7417 NW 8th Ave., Gainsville, FL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

January 27-28  (FL)  Orlando Camera Show, Holiday Inn-Orlando Arena, 304 W. Colonial Dr., Orlando, FL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

February 3-4  (FL)  Florida West Coast Camera Show & Sale, Miramar Building, 6340 126 AVE., LARGO, FL. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

February 10-11  (FL)  Florida Photocollectors 20th Annual Miami Regional Camera Show, North Miami Armory, 13250, NE 8th Ave., Miami, FL. Contact FPC, Box 222, West, MA 01082, (413) 937-6505.

February 11  (IN)  Camera & Computer Swap Meet, Century Center, South Bend, IN. Contact Roger Smith/Heirloom Images, 8883 E. Black Point Rd., Syracuse, IN 46567, (219) 856-3863.

February 17  (FL)  Florida Photocollectors 1st Annual Gainsville Camera Show, University Center Hotel, 1535 Archer Rd., Gainsville, FL. Contact FPC, Box 222, West, MA 01082, (413) 937-6505.

February 18  (GA)  Atlanta Camera Show, Ramada Hotel, 1880 Cotillion Dr., Atlanta, GA. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236, (313) 884-2242.

The Society

Continued from page 32)
chest and ribs. He was laid up in bed for about six weeks and was not able to attend the Atlanta convention.

Longtime Corresponding Secretary Jack Cavender of Atlanta, GA, suffered a stroke in the spring which may have been brought on by stress associated with a fire early in the year at his architectural business. Reports at the Atlanta meetings were very positive on Jack's progress and indicated he was hoping to get back into stereo activity. ☺️
BUY, SELL, OR TRADE IT HERE

Classified

For Sale

3-D ANAGLYPH T-SHIRTS made up of text that relates to different aspects of stereo interests, limited edition. $15, each plus $3 shipping. Lincoln Kamm, 2733 East Harbor Blvd., Ventura, CA 93001, or call: (805) 639-0109.


15 STEREO VIEWERS, including 1 Revolving, 1 Combination viewer & stereoscope, 1 Universal Photo Art Co., 1 Kevko, 1 Stereo-Graphoscope and 8 Monarch. Also, 1,767 stereo views. Sell as lot only. Bob Gallagher, 1202 Berry Lane, Flomoor, IL 60422, (708) 799-5746.

24 1870's VIEWS of Buffalo, Delhi, Dunkirk, NY & vicinity, public buildings, churches, street scenes, residences, railroad scenery, etc. Mostly A.W. Simon; good condition. $150. M.A. Swayne, 8125 High Dr., Leawood, KS 66206, (913) 649-3036.

60 Hz STEREOSCOPIC video multiplexers with built-in glasses drivers for sale. Composite only. $250. Component (Composite, S-video, Hi8, YUV, RGB, or RGBS) $1,000. Some liquid crystal glasses available. E-mail d.hunter@bix.com

AN ILLUSTRATED HISTORY OF VIEW-MASTER VIEWERS is available from 3D Book Productions, PO Box 19, 6530 AA Borger, The Netherlands. Send personal check of $55.00 for beautiful book by Mary-Ann and Wolfgang Sell. Contains six unique V-M Reels. Prompt air shipment!

For Sale

ANTIQUES PHOTOGRAPHY MAIL AUCTION. Hundreds of early vintage images. Daguerreotypes, ambrotypes, tintypes, stereoviews, ephemera, and paper photographs of many formats. $3 for next illustrated catalog, or next 4 catalogs for $10. Subscription includes Prices Realized mailed out after sale. Don Ulrich, PO Box 183, Weeping Water, NE 68463.

ARTHUR GIRLING'S "Stereo Drawing - A Theory of 3-D Vision and Its Application to Stereo Drawing". 100 pages hardbound 8½ x 12. Stereo photographers are finding that the book applies equally to stereo photography and is a mine of information on methods of making 3-D pictures and viewing them. Written in non-technical language and profusely illustrated with B&W drawings as well as 11 pages of superb anaglyphs, this book is a must for the serious stereoscopist. Now available from NSA Book Service, 4201 Nangle Rd., Bryan, TX 77801. Price (including postage) $19.00 USA, Canada. Overseas add $2.00 surface, $4.00 air.

BACK ISSUES OF STEREO WORLD: Jan/Feb 83 - Nov/Dec 88, complete; all mint condition; best offer. Fred Hooper, 1003 Orange St., Selinsgrove, PA 17870.

BRIGHTEN YOUR AC VIEWER with a 75/6W bulb, $3.95 ea. Screw base halogen bulbs for DC viewers; $5.95 ea.; $50/10. Also, adjustable reg-ulated DC power supply, attaches to any viewer for AC operation, supports all 2.5 V bulbs (including halogen); $30. Contact G. Themelis, 10243 Echo Hill Dr., Brecksville, OH 44141.


LOREO Stereo Camera & Print viewer, as new in box - $80. C. Simms, (619) 757-7116.

MAINE PHOTOGRAPHIC BBS: Computer users! Access a list of stereo views, View-Master, TruVue, CDVs, Daguerreotypes, ephemera, equipment, etc. available for immediate sale. Modern: 207-582-0402, #22, #22, #22, #22, Wed-Sun 10am - 9pm EST, David Sphar SYSOP.

"NEXT REEL, PLEASE!": The Book of View-Master Views. In two sections; the first has 1,000 reels indexed, with their views, by reel and variety number, it identifies which reels and varieties have the same or different names. The second has the views indexed, with their reel numbers, by subject. It helps find the views about a subject no matter on what reel it is located. Prices include postage and handling: U.S. $42.50, Canada $45. U.S. From other countries please write first. Orders must include Texas sales tax. Order from Bob's Double Vision, 4917 Cockrell Ave., Fort Worth, TX 76133-1701.

For Sale

PROCESS BLACK AND WHITE stereo slides at home for pennies. Now you can afford to experiment with a new approach to creativity. For information send SASE to Seamer Productions, 28865 Ellis Ave., Romoland, CA 92585.

RBT STEREO MOUNTS: easy to use and re-use, plastic snap-together, five sizes, SASE for infoample: to: Jon Golden, 16 Roundwood Road, Newaton, MA 02164 or leave address on machine 617-332-5460, Jgolddnr@AOL.com

SEND SASE for short list of stereo equipment for sale. Bruce Hanson, Box 89437, Honolulu, HI 96830-9437. I would like to buy the Exacta stereo attachments and will pay any reasonable amount for the complete set or individual pieces. I would also like to buy: Kindor or Hypnor lens, Wollensak and Realist 2.8 and Custom Cameras, stereo daguerreotypes, and the Toshiba Stereo Camcorder. Fax: (808) 732-9761.


STEREO TREASURES from macro 35 camera to standard 3.5". All first class. Send $2 for Xerox-ed list which shows items, prices, Realist slides, books, etc. Write Glen Peterson, 6 Bromoville Lane, Bronxville, NY 10708.

STEREO VIEW CARDS - Private collection U.S. & Foreign. Dolores Hendrickson, 2650 West 223rd St., Buckley, CA 95013, (913) 964-3360.

TOSHIBA 3-D CAMCORDER, complete outfit with LCD glasses, Mint. $850. PP, Hollywood Stereo, Box 7331, Burbank, CA 91510, (818) 767-6578.
For Sale


VIEW-MASTER PERSONAL 36° close-up attachment, Mint—In Exc. leather case with original instructions, $200; Flash unit, Exc., corner of shield cracked, $15; Model F AG transformer, for use with model D and later viewers, Exc., $15; Phantogram Perspective Charts kit, with colored pencils, glasses, etc., for making D-3 anaglyphic drawings, never used, $20. Please add UPS. Mark Wilke, 200 SW 89th Ave., Portland, OR 97225, (503) 297-7653.

VIEW-MASTER REELS from "Warner Brothers"; 1) House of Wax; 2) Second Chance; 3) Hondo; all in original "plain-vanilla" sleeves. Send written offers to: John Huddleston, 39651 Lupine Court, Davis, CA 95616.

Wanted

ARIZONA TERRITORY: All pre-1920 stereo views, postcards, images, documents of Arizona stage stations, stage coaches, Cochise County towns including Cochise Dragoon, Tombstone, Willcox, Pearce, Bisbee. Send price and copy to: Brad Smith, Box 1093, Cochise, AZ 85606.

ARROW VIEWER with AG Rheostat power cord and some magazine trays, also - Iloca viewer. Call or write Brent Barley, 43 West Main St. - R.T. 44, Avon, CT 06001, (860) 677-8422.

ART MUSEUMS, GALLERIES, AUCTIONS. For Ph.D. research I would appreciate receiving photocopies of 19th century art auctions, galleries, museums, salons, or other art institutions. Jerry Bolas, Director, Ackland Art Museum, University of North Carolina at Chapel Hill, Campus Box 3400, NC 27599.

ASTRONOMICAL STEREOS & photos. Telescopes, observatories, unusual moons, comets, etc. All letters get response. Peter Abraham, 1948 Mapleleaf Rd., Lake Oswego, OR 97034, (503) 636-2968, e-mail: Telscope @ europa.com


Wanted

BUFFALO/BISON stereo views wanted, especially ones by N.A. Forsyth, R.M. Rowell, 4510 Gregg Road, Madison, WI 53705.

BUYING STEREO SLIDE VIEWERS. Any model, any condition. Paying top prices. Examples: Realist DC $85, Realist AK/Codakside II $120. Also: Revere/Wolensak, TDC, V-M, Brumberger, and more. Contact: G. Themelis, 10243 Echo Hill Dr., Brecksville, OH 44141, phone/fax (216) 838-4752.


COLORADO railroad & mining stereo views, cabinets, tintypes, CDVs, glass negatives, large photographs, photo albums, books illustrated with real photographs: Specialists: Locomotives, mines, towns, stage coaches, freight wagons, occupational. David S. Digerness, 4953 Perry St. Denver, CO 80212, (303) 455-9306.

DARIUS KINSEY - flat mount stereo views and large format only. Also material by Clarke and Clarence Kinsey, Alan Young, 404 Westlake Dr., Westfield IN 46074.

FAIRMONT, WEST VIRGINIA, and other West Virginia stereo views and better post cards, cabinet cards, CDVs and other photos. Tom Pratt, PO Box 155, Weston, WV 26452.

FILM CUTTER for IS0 Duplex Super 120 Stereo Camera. Please call or write: Mike Passarelli, 144-64 Sanford Ave. Apt-61, Flushing, NY 11355, (718) 939-9444.

FLORIDA STEREOS of historical value, especially Tallahassee, Tampa and Gainesville: Price and describe or send on approval; highest prices paid for pre-1900 views. No St. Augustine, Hendrickson, PO Box 21153, Kennedy Space Center, FL 32815.

GERMANY STEREOS, single views of boxed sets (towns, villages, scenery, markets, people). Also interested in correspondence and exchange with "Germany-collectors". Please send xerox, list or descriptions. Klaus Kemper, Kommer- schiederstr. 146, D-52385, Nideggen, Germany.

HARDHAT DIVING WANTED! Stereo views, CDVs, Cabinet Cards, Albumen prints, R.P. post cards, glass negatives, daguerreotypes, ambrotypes, tintypes, etc. Also underwater photographs, diving helmets, pumps, shoes, etc. Gary Pilecki, 617 Guaymas Court, San Ramon, CA 94583, (510) 866-0848.


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

(Continued on next page)
WANTED


INFORMATION NEEDED about any companies that sell/produce lenticular type plastic or glass screens. Also looking to buy Lentic Camera/Enlarger, Paul Silverzweig, 227 East 3rd Street, #3L, New York, NY 10009, (212) 260-9187.


MICHIGAN, especially B.F. Childs and Schuyler Baldwin, also H.H. Bennett ratlin views. We will buy or trade. Ken & Bonnie Williams, Box 458, Mattawan, MI 49071, (616)

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

WANTED


PARK CITY, UTAH WANTED. Please send stereo view quotes. Also collect stock certificates and post cards from Park City. Thank You! Linda Roberts, 1088 East Rubio St., Altadena, CA 91001.

SLIDE CARRIER to fit TDC 116 projector. C. Simms, (619) 757-7116.

STEREO DAGUERRÉOTYPES; all kinds, all nations & subjects. Any condition. Ken Appolito, PO Box 241, Rhinecliff, NY 12574, (914) 876-5232.

STEREO REALIST 1525 Accessory Lens Kit for Macro Stereo Camera; Realist 2066 Gold Button Viewer; Realist 6-drawer stereo slide cabinet in Exc+ or better condition (must contain Realist logo); Baja B-8 drawer stereo slide cabinet with plastic drawers marked "Versatile". Mark Wilkie, 200 SW 89th Ave., Portland, OR 97225. (503) 297-7653.

STEREO VIEWS OF SHANGHAI (China), any format, any year; original VM blank reel mounts (made in the 50s); SW back issues; Illusion-Aid SR-1. Herbert Qin, 42-02 Layton St. #205, Elmhurst, NY 11373, (718) 779-7652.

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.


VECTOGRAPH, materials for making vectographs; Leica Stermax outfit; Stereo Binocular viewfinder for Exakta beam splitter; Zeiss Stein-tax outfit; Stereo daguerreotypes in viewing cases; LeRoy Nordby, 2521 103rd Ave. SE, Bellevue, WA 98004, (206) 451-9688.

WILD WEST WANTED! Buffalo Bill, Annie Oakley, Indians, Cowboys, outlaw, lawmen. Wild West Show performers, Western town views. Stereos, cabinets, CDVs, large photos. Please send xerox copy and price, serious buyer. Art Sowin, 8436 Samra Dr., West Hills, CA 91304, (818) 346-2171.

---

RBT

STEREO CAMERAS
PROJECTORS AND ACCESSORIES

PLASTIC STEREO MOUNTS
"NOW AVAILABLE FOR DELIVERY"

Reuseable, snap-together, projectable, precision designed, glassless or one-sided Anti-Newton glass design. For information, leave your address on service at 617-332-5460 or E-mail: jgoldenrrp@aol.com

---

or SASE to:
3-D Concepts By Jon Golden
16 Roundwood Road
Newton, MA 02164

---

21 x 16
NIMSL0 or ULTRA
CLOSE-UP

23 x 21
REALIST NORMAL

23 x 28
EUROPEAN

23 x 31.5
WIDE

23 x 33
FULL-FRAME

---

September/October 1995 STEREO WORLD
Explore the World of 3-D Imaging, Past & Present, in

STEREO WORLD

Only $26 a year from:

NATIONAL STEREOSCOPIC ASSOCIATION, INC.
P.O. Box 14801 Columbus OH 43214

PRECISION FOLDING STERE VIEWER

For all standard Realist 3D stereo slides.
Glass or cardboard mounted. Folds flat, weighs only 1 oz.
Prepaid minimum order $10.00. Add $1.00 for shipping and handling.
FREE CATALOG AVAILABLE.
TO ORDER CALL TOLL FREE 800-223-6694

TAYLOR MERCHANT CORP. 212 West 35th Street • New York, NY 10001

The Next Best Thing to Being There!

The three-reel View-Master packet for the Atlanta International 3-D Festival was designed and produced by 3-D Book Productions in the Netherlands and includes detailed text describing the scenes.

Reel A: Contemporary views by Atlanta Stereographic Association members Bill Walton, Larry Moor, Cynthia Morton and Clark Brown.

Reel B: The Battle of Atlanta commemorated through rare stereo-views.

Reel C: The Atlanta Cotton States Exposition of 1895, using some of the historic views seen in the Stereo Theater show, and the invited Exhibit of the same name by Mike Griffith.

While they last, the packets are available for $10 (postage included) from the NSA, PO Box 398, Sycamore, OH 44882.

D.C. Antique Photo Show
24 March, 1996
90 tables of stereoviews, etc.
Roslyn Westpark Hotel Ballroom
Arlington, VA
1900 N. Ft. Myer Dr.

No Cameras!
Boston Antique Photo Show
31 March, 1996
50 tables of stereoviews, etc.
Westford Regency Hotel Ballroom
I-495 exit 32 to route 110 W.
Westford, MA

Public Admission 10AM $5
Preview Admission 8:30AM $20
Managed by Russell Norton
PO Box 1070,
New Haven, CT 06504
(203) 562-7800

HASSLE-FREE 3-D
WITH THE TECO-NIMSL0 CAMERA AND 3-VIEWER

Use the lightweight auto-exposure camera to make:
• 36 Slide pairs
• Close-ups at 3 distances
• Lenticular Prints

Use the Universal viewer to display:
• Realist and View-Master rolffilm
• Nimslo/Nishika rolls
• Mounted slide pairs

PRICES:
• New camera .................... $145
• Your Nimslo modified (UK) ... $63
• Close-up attachments
  6", 12", 30" dist's (ea) ....... $29
• Opti-Lite flash .................. $29
• Eveready case ................. $12
• Teco 3-Viewer ................ $87

Add $3 shipping per order.
California residents add 7½% sales tax.

MFD. BY:
TECHNICAL ENTERPRISES
1401 Bonnie Doone
Corona Del Mar, CA 92625
Tel. 714-644-9500
800-903-TECO
Assignment 3-D

(Continued from Inside Front Cover)

Keep your camera loaded!

Note:
The following new assignment should have appeared in the previous issue, as the Oct. 25 deadline for the "Unusual" assignment had already passed before most members received their magazine. Efforts to bring Stereo World's publication schedule back in sync with the calendar have resulted in various unanticipated glitches, but we hope to have things near "normal" by early 1996.

New Assignment: "Weather"

This category is really wide open. It could involve obvious views like snow scenes or wind damage, or things like close-ups of rain or dew covered leaves, ice encrusted flower buds, mud puddles, flooded fields, dry cracked earth, etc. Any image of "weather" itself in action (hypers of lightning or a tornado would be ideal) or images in which the effects of weather have had a visible, short term effect (this means other than formations created by centuries of normal erosion) are what we have in mind. On other words, "weather" here refers to conditions at least slightly beyond a calm sunny or overcast day. Anything from a rain shower to a hurricane or a light frost to a blizzard would qualify. Deadline for entries in the "Weather" assignment is July 7, 1996.

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

Prizes are limited to the worldwide fame and glory resulting from the publication of your work. Anyone and any image in any print or slide format is eligible. (Keep in mind that images will be reproduced in black and white.) Include all relevant caption material and technical data as well as your name and address. Each entrant may submit up to 6 images per assignment.

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

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

---

Explore the World of Stereo Images

Please enroll me as a member of the National Stereoscopic Association. I understand that my one-year subscription to Stereo World will begin with the March/April issue of the current year.

- U.S. membership mailed third class ($26).
- U.S. membership mailed first class for faster delivery ($38).
- Foreign membership mailed surface rate, and first class to Canada ($38).
- Foreign membership mailed international airmail ($56).
- Send a sample copy ($5.50).

Please make checks payable to the National Stereoscopic Association. Foreign members please remit in U.S. dollars with a Canadian Postal Money order, an International Money Order, or a foreign bank draft on a U.S. bank.

Name
Address
City State Zip

National Stereoscopic Association
PO Box 14801, Columbus, OH 43214

The Only National Organization Devoted Exclusively To Stereo Photography, Stereoviews, and 3-D Imaging Techniques.
Leonardo
PINHOLE

4”x5” STEREO CAMERA

for only $120.00

Explore pinhole photography for soft, impressionistic, 3-D images

© Eric Renner Burnt Tree, Guadalupe Canyon, AZ 1995

The *Leonardo* is a beautifully constructed, handmade 3” focal length wooden stereo camera. It features a propeller-type moveable shutter, a positive locking film holder mechanism and a tripod mount. Brass shimstock pinholes are .012”. Each image is 2-1/8” wide by 2-7/8” high with 1/2” space between images. Takes 4”x5” film holders or Polaroid backs.*

*Camera does not include film holders or Polaroid back.

**Price: $120.00 postpaid** (All foreign orders add $15.00 surface or $30.00 airmail.)

Order by VISA, MasterCard, or check:

Pinhole Resource
Star Route 15, Box 1355
San Lorenzo, NM 88041
(505) 536-9942

We also carry a complete line of pinhole cameras (4”x5” and 8”x10”), laser drilled and micro-drilled pinholes, and books. We publish the periodical *Pinhole Journal*, now in its 11th year. Write or call us for our catalogue.
NEW • FOLDING • MAILABLE 3-D VIEWERS

THE ADDED DIMENSION, INC.

Now there are 3-D cardboard viewers that can be painted, decorated, assembled, and mailed to show reproduction of your stereo views. There are two versions. Both versions view the European format of 6 x 13 cm and the American 2.5" x 3.5". For inexpensive reproductions simply make 71% whole card reductions of 3.5" x 7" Holmes-Bates cards.

**EH 71-A**

Cut from 14-point Bristol board, this viewer is shipped as an unprinted flat in order to receive your appliques, printing, stampings, or other custom art work. It's then easily assembled with double face tape, staples or your favorite glue. The EH 71-A features a self-erecting lateral septum piece (like that in a standard stereoscope). Fold-up sides lock the erect viewer into a rigid trapezoidal cross section. Its stage can be cut away for use as a 6 x 13 transparency viewer or a page-posed "book" viewer.

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10</td>
<td>$2.50 Each</td>
</tr>
<tr>
<td>11 to 50</td>
<td>$2.00 Each</td>
</tr>
<tr>
<td>Over 50</td>
<td>Call for Quote</td>
</tr>
</tbody>
</table>

**EH 71-B**

This viewer differs from the "EH 71-A" version in being pre-printed, assembled, without sides, and having a fold-up longitudinal (separator style) septum that locks the viewer erect.

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10</td>
<td>$3.00 Each</td>
</tr>
<tr>
<td>11 to 50</td>
<td>$2.25 Each</td>
</tr>
<tr>
<td>Over 50</td>
<td>Call for Quote</td>
</tr>
</tbody>
</table>

**HAND-HELD LORGNETTE**

The Added Dimension lorgnette (the one with the popular flip-up brow rest feature) now has even better optical quality. Its 10" focal length and prism power can accommodate stereo pairs up to 4 inches wide (8" total, any height).

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10</td>
<td>$3.95</td>
</tr>
<tr>
<td>11 to 50</td>
<td>$3.00</td>
</tr>
<tr>
<td>Over 50</td>
<td>Call for Quote</td>
</tr>
</tbody>
</table>

**TEMPLATES**

These flexible, snap-on temples have a 4-position adjustment for comfort. They convert our lorgnette into a pair of 3-D viewing glasses, which frees your hands to hold a book or magazine and turn the pages. With its temples and flip-up brow rest, our lorgnette can be worn with or without your normal reading glasses.

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10</td>
<td>$.50</td>
</tr>
<tr>
<td>11 to 50</td>
<td>$.35</td>
</tr>
<tr>
<td>Over 50</td>
<td>Call for Quote</td>
</tr>
</tbody>
</table>

Minimum Order $5.00. Add $3.00 for Shipping and Handling. Orders $5.00 and above, add $2.00 for Shipping and Handling. Check or Money Order only. No Credit Cards

THE ADDED DIMENSION, INC.

PO Box 15325 • Clearwater, Florida 34629 • (813) 781-6220
Jefferson Stereoptics  
(since 1981)

John Saddy  
50 Foxborough Grove  
London, Ontario  N6K 4A8  
CANADA  
Main Phone Line (519) 641-4431  
Personal Fax Line (519) 641-2899

CONSIGNMENTS WELCOME FROM ANYWHERE ON EARTH

TERMS FOR CONSIGNMENT

EACH LOT IS CHARGED ITS INDIVIDUAL COMMISSION DEPENDING ON ITS REALIZED PRICE.

If lot realizes up to $40..........................30%
If lot realizes $41.00 to $200.00..............25%
If lot realizes $201.00 to $500.00............20%
If lot realizes $501.00 or more...............15%

"I SPECIALIZE IN CONSIGNMENTS"

VIEW-MASTER (Etc.) These auctions include fine View-Master, strong in both U.S.A. and Belgium-made reels, packets, etc. I’ll handle any 3-D format including Tru-Vue films and cards, Meopta reels & Realist format slides. I also handle cameras and other equipment.

STEREOT CARDS Ranging in price from bulk lots at 25 cents per card, to single-card lots at hundreds of dollars per card. I also handle viewers, Richard glass views, full-size glass views, tissues, cased images, boxed sets, and more (from 1850s to 1930s).

Packet #A 571

Packet #B 486

Sir David Brewster  
and his invention

Mark Twain

Contact me to get on my mailing list (No Charge). Please specify if your interest is Stereo Cards, View-Master, or both.
Francis Bedford No. 1525, "Torquay-Anstis Cove and Beach." This scene of bathing machines on a stony beach looking out on the English Channel is from one of the rare stereoviews of these strange devices. More such views illustrate Norman B. Patterson's article "The Bathing Machine" on page 9.