The FBAC Observer

Volume 19, Issue 9

The Nail Gun Affair
By Wes Whiddon

Part One
I'm flat on my back, staring straight up at the ceiling. Somewhere off to my left the anesthesiologist says, "I'm going to give you something that will put you to sleep for a few seconds." Within a heartbeat there is a peculiar taste in my mouth and darkness descends.

Eternity passes. Then I swim up out of the darkness and there's a drape covering my face. I feel no pain but I feel motion behind my head and over my face where the surgeon is slicing open my right eyeball.

For years I knew this day was coming. In the past few months my near-sightedness has been steadily worsening and now it's reached a point where it can't be corrected. An ophthalmologist's instrument is no longer required to see the source of the problem. I can plainly see it with a penlight. When I peer into my right eye, there is a scummy looking film surreptitiously creeping across my vision, threatening to steal my sight. I have a cataract and now I am on the receiving end of a phacoemulsification. The doctor is removing the cataract by making a tiny slit in my eyeball, inserting an impossibly small wand into the slit, and breaking up the cataract with ultrasound. Then he will vacuum out the pieces and insert a replacement lens, one that will serve me for the rest of my life.

I'm more awake now and make a smart remark, something like, "Boy, that was a nice nap." The surgeon replies that while I was out, I was talking in my sleep, mumbling about Baywatch. When the anesthesia's effects are beginning to wear off and I'm more attuned to what's going on above my head. The surgeon and nurses banter back and forth while he tweaks my eye. Then I hear him say, "Good grief, I can't believe this is happening!" When I hear this, my stress level shoots off scale. Alarm bells ring. And red flags wave. I want to shout at him, WHAT IS WRONG? but I keep quiet because he's already told me that if I move my head he might make a big mistake. I lie quietly, listening for more warning sounds but there are none.

The human eye is a wonderous thing. Far more complex, it works similar to the refracting telescopes we use as amateur astronomers. When photons of light reach the eye they first enter through the cornea, a transparent section of the sclera which is the outer, white part of the eyeball. If needed, the iris either closes down or opens up to control the amount of light received. The pupil or opening of the iris directs the light to the lens located a short distance behind the pupil. The lens can be shaped by muscles in a way that allows focused light to fall on the retina. This focused light is sensed by the retina and it generates an electrical force, triggering impulses that flow from the back layer of the retina to the optic nerve and then to the brain. The brain transposes the upside down images and visual sensations are created in the mind.

During a routine eye exam a few years ago, the doctor told me I had the beginning of cataracts in both eyes. I'm no spring chicken but for someone my age, it seemed too early. I got a good prescription and could see well in both eyes so I didn't give it much thought. But within a year, I realized all wasn't going to be well. Vision in my right eye began to change almost monthly. Observing with my right eye became more and more difficult. Through the eyepiece the moon took on a murky hue and dim objects were becoming invisible. Glare from streetlights was almost unbearable and point source lights had halos around them. I realized I was slowly going blind in my right eye.

Everyone in the operating room begins rustling around. There have been no more alarm bells and they are wrapping up the procedure. A bandage is taped over my eye and the doctor says I'm ready to go to recovery. They take the suffocating drapes off my face and I can finally breathe. I'm trundled out and we stop in an intermediate recovery area. I'm told I will be here only a short time. The doctor comes in and the first thing I want to know is what he meant by, Good grief, I can't believe this is happening! He laughs and says that it was just a minor glitch when someone else in the eye.

Cataracts may be preventable. Although not absolutely proven, some research shows that antioxidants like vitamins A, C, and E can help stave them off. Beta-carotene and Lutein have also been mentioned as potential cataract busters.
There also seems to be a direct correlation between smoking, alcohol consumption, and a fatty diets to cataract formation.

In a while, a nurse comes along with my clothes. She says I should get dressed but I can’t without exposing myself to the whole world so she pulls the curtain around the gurney. I crawl off the gurney, and after a wobbling around a bit, manage to get most of my clothes on. She escorts me into the next room where there’s a bunch of people sitting around in recliners. I’m still disoriented, so I slide down into one and, since I’ve had no nourishment for 18 hours, accept the offer of apple juice on the rocks. The nurse says I should rest for a while and that it’ll be my turn to go home soon. I sit back waiting for my ride in the wheelchair and, while I wait, I think about all the things I’ll be able to see with my new eye.

**Part Two**
Tropical fish are beautiful creatures. Their colors and shapes are boundless. They’re graceful and watching them swim peacefully in an aquarium can be relaxing. But not today. It’s 5:45 AM and I’m wondering why, on this Saturday morning, I, my wife, and a tank of fish are the only living things to be found in the day surgery section of the hospital. It’s two weeks and a day since my cataract surgery and things have not gone well. Before surgery I heard all the glowing reports about restored and better vision. With me it didn’t happen. Instead of 20-20, I got a bad case of astigmatism. A couple of my friends who had the surgery claimed they could see like eagles within days. Two weeks later I was still struggling to see at 20-200. My new eye is a dud. As I stare at the fish, I think about what happened yesterday…

I rolled out of bed with one thing on my mind. TGIF. I was looking forward to the weekend and just wanted the Friday work day to be over. As I went from the bedroom to the bath, I noticed a small dark shadow in the lower left corner of the peripheral vision in my right eye. When I moved my eye, the shadow tracked with it. I didn’t give it much thought because the cataract removal had replaced the old, darkened lens with a new transparent one and floaters were much more visible. I showered, had breakfast, and went to work.

The day was busy and I was wearing sunglasses. At mid-afternoon, I removed the sunglasses. Alarm bells began to ring again. The shadow had grown and was blocking twenty percent of my vision. This was not a floater and it was time to call the doctor.

By 5:30 P.M. I was in his office. By 6:00 P.M. I was in the examination chair with the doctor shining a million candlepower light into my right eye. I looked up, I looked down, I looked left, I looked right. He produced a magnifier and we repeated the looking operation. The light was incredibly bright and the examination went on forever. It was the closest thing to torture I had ever encountered. Mercifully he stopped and said, "You have a swelling on your retina and I have to get the retina specialist in here to look at it."

Before I could ask him what he really thought was wrong, he was out the door and down the hall.

After a long wait, there was a stir outside the door and the retina specialist rushed in. He repeated the light torture routine and I repeated the eye movements. Finally he said, "You have a detached retina. You need an operation now."

"You mean laser surgery", I said.

"No, I mean surgery. You'll be under a general anesthesia, you'll be in the operating room for 3 to 4 hours, I'll suture a small piece of sponge to the outside of your eye, and I'll put a band around the eye that will buckle the eyeball and reattach the retina. I'll do it tomorrow morning at 9:00 AM but you need to be at the hospital at 5:00"

"What happens if we do nothing."

"There's a 95 percent chance you'll go blind in that eye."

I was numb. All I wanted was good vision. Now I was facing blindness. "See you tomorrow morning," I said.

Now it's 7:00 o'clock and the fish and I are still the only living things around because Ellie had to go to the bathroom. I walk into the hall, look around and spy an official looking lady coming through a non-descript door. By now I'm desperate. "Ma'am", I say, "Can you help me? I've been here for two hours and I'm supposed to have eye surgery this morning and I can't find anyone that knows anything about where I'm supposed to be or what I'm supposed to do or anything about anything. I'm even considering asking one of these fish if it knows anything." Not only am I desperate but I'm babbling.

She gives me a look and says, "What's your name." I tell her and she says, "I work in the lab but maybe I can find out where you belong." Then she disappears behind another non-descript door.

Ellie comes back and we sit down in front of the fish tank. I haven't eaten or had anything to drink since last night and I begin to eye a cup of cold coffee someone left on the stand by my chair. Then, miracle of miracles, the lady from the lab is back. "You're supposed to be in room 905. Come with me"

You walk into hospital rooms but they always wheel you out. You just hope and pray you're still breathing when they do the wheeling part. Room 905 is no exception. I walk in, the nurse hands me one of those despicable rags they call a hospital gown, I put it on, and I get into bed. I think I might relax for a while but it's not five minutes before the wheels arrive. I manage to get on the gurney without exposing more than half of my rear end and we go bumping along to the prep room. About this time I realize I'm going to have something serious done to my body. Fear rushes into my mind.

The ride to the prep room is short and the room is deserted. I briefly wonder why then realize it's Saturday morning. All the doctors are on the golf course and all the nurses are at home recuperating from Friday at the hospital. I spot my doctor on the other side of the room and realize that maybe he doesn't play golf and would rather be here sewing sponges onto my eyeball.

Anesthesiologists are always so calm. Mine is asking me questions like when did I eat last, am I allergic to anything, when did I have my last angioplasty, etc. He finishes the inquisition and says, "I'm going to give you something that will make you relax." I say, "OK" and glance across the room at my retina surgeon. He gives me a thumbs up and I'm suddenly not afraid anymore...mainly because I'm out cold.

Someone is trying to get me to eat meatloaf. I hate meatloaf and look around to try and find the one who is torturing me with it. It's my wife, Ellie, but she has an angelic aura around her entire body. For a moment I think that if I'm seeing angels, the operation wasn't a success. Then I realize I'm not seeing anything very clear because my right eye has a huge bandage on it and I'm not wearing my glasses. I'm back in the hospital room and it's already
supper time.

I reject the meatloaf and settle for some saltines and a few sips of decaf iced tea. Anesthesia is still raging in my brain and I slip in and out of sleep for another hour. My mind partly comes back to me and I hear Spanish being spoken from somewhere. I realize it’s that abominable thing they always hang on the wall in hospital rooms: a television.

Ellie appears from somewhere and says I have been out for hours. I say that’s an understatement since it’s almost dark. We talk for a while and I convince her that she should go home. She starts out the door but turns back and tells me my roommate is an Hispanic teenager who was shot in the head with a nail gun. He’s been here for two weeks and is permanently paralyzed on his right side. Even in my deranged state I know that’s not a good thing.

My mind is becoming clearer and I begin to look around. On the left of the bed there’s a huge IV bottle hanging on a hook. I trace the tubing down and find that it terminates in my left hand. When I see it, I have an extreme urge to go to the bathroom. There’s just one problem. I’m completely opposed to making water in one of those gooseneck devices they give you in hospitals. I look over at the bathroom door. It doesn’t seem that far away so I decide to make a break for it before a nurse catches me. I take the IV bottle off the hook, climb out of bed, and stagger to the bathroom. I make it inside before collapsing and I sit down on the commode. I’m woozy and don’t know what to do with the bottle but then I see a hook on the inside of the door. The spigot on the IV must be turned wide open because it feels like the Niagara river is racing through my eyelids, peers in for a minute and says, "I'll be back."

"Mi ojo es muy hurting", I say. Then I wonder how I learned to speak Spanish.

The burro squeezes between the bed and the wall, reaches over and pulls the IV needle from my hand. I know that donkeys don’t have opposable thumbs and can’t understand how it could do that. I glance away and when I look back, the end of the IV needle has grown and somehow transformed itself into a giant nail-gun. The burro says, “This should help relieve the pain”, and stabs the nail-gun toward my right eye. A scalding liquid streams out of the gun and I scream and reach up to grab its hoof.

Someone is holding my arm and saying, “Sir, it’s alright. I’m just here to remove your IV line and put drops in your eye.”

“Oh, thank God”, I say, “I thought a donkey was trying to nail me to the bed.” Even in the dark I can tell the nurse thinks I’m a complete lunatic. She backs out of the room and I never see her again. It’s not long before the codeine returns and I’m asleep.

When I wake up, the burro is gone and it’s daylight outside. I lie there wondering about my situation. What will I see when the doctor comes in this morning and removes the bandage? Will I get back my eyesight? Fear returns but I’m hungry and breakfast arrives so I push the fear aside and eat everything on the tray.

The doctor is here. He’s jovial and asking questions about how I slept, did I have any pain, all the things that doctors ask. I say I slept fine considering I was attacked by a Spanish-speaking donkey. He asks what they gave me for pain. When I tell him he nods his head knowingly, reaches over and pulls back the bandage.

"Open your eye so I can look in."

"My eye is open", I reply. He says nothing, just pries open my eyelids, peers in for a minute and says, "I'll be back."

At last he finishes and has good news. "Your eye looks like a tomato on the outside but looks great on the inside. The retina is completely reattached and you can go home right away."

He pats me on the shoulder and I mumble my gratitude but by then, cotton swab in hand, he’s gone on to his next patient. I lie quietly in the bed for a minute thankful that I will be healed and wondering if my roommate will be so fortunate. My nail-gun affair was only a dream. His may turn out to be a living nightmare.

Authors Note: I wrote this story because as observers we need to understand and appreciate our most precious sense: our vision. In the U.S. 10 to 15 thousand people a year are afflicted with either a detached or torn retina. Some will not be as blessed as I was; some will lose their sight. The retina of the eye can be compared to our CCD cameras. Extremely sensitive, it converts light to the signals our brain needs to give us sight. The sclera (outer part of the eye) is tough but the retina can stand no mistreatment. Between the retina and sclera there is a system of blood vessels called the choroid. When the retina either tears or pulls away from the sclera, it can no longer receive blood from the choroid and will die in short order. Some symptoms to be aware of are flashing lights in one eye, an increase in large floaters, a large, dark spot or dark curtain across your vision. Any of these symptoms are reason to visit an ophthalmologist but the dark spots or curtain in your vision could be an emergency. If this happens, don’t take a chance. Go immediately to a doctor or even consider going to the emergency room. My problem surfaced early in the morning and I waited too long before doing anything about it. Be aware, too, that some people are more susceptible to retinal detachment. If you are myopic (nearsighted) by 5 or more diopters, chances are greater. Family history is another potential cause. There is also—and I can vouch for this—a high risk of detachment after cataract surgery. As for the story, I took some poetic license when I wrote it. Things weren’t exactly the way I depicted them. They were worse.
Altars are a frequent feature in Greek legend, for heroes were always making sacrifices to the gods. So it's not surprising to find an altar among the stars. However, this altar is a special one, for it was used by the gods themselves to swear a vow of allegiance before their fight against the Titans. That fight was one of the most significant events in Greek mythology.

At that time the ruler of the Universe was Cronus, one of the twelve Titans. Cronus had overthrown his father, Uranus, but it was prophesied that he would be deposed by one of his own sons. In a desperate attempt to forestall the prophesy, Cronus swallowed his children. Hestia, Demetr, Hera, Hades, and Poseidon as they were born. All were destined to become gods and goddesses. At last Cronus's wife, Rhea, could not bear to see any more children swallowed so she smuggled the next child, Zeus, to the slave of Diete in Crete and gave Cronus a stone to swallow instead, telling him it was the infant Zeus.

On Crete, Zeus grew up safely. When he reached maturity he returned to his father's palace and forced Cronus to vomit up the children he had swallowed, who emerged as fully grown gods and goddesses. (Ain't mythology something). Zeus and his brother gods then set up an altar and vowed on it to overthrow the rule of Cronus and the other Titans.

The battle raged on for ten years between the Titans, led by Atlason on Mount Othrys, and the gods led by Zeus on Mount Olympus. To break the deadlock, Mother Earth (Gaia) instructed Zeus to release the ugly brothers of the Titans, whom Cronus had imprisoned in the sunless caves of Tartarus, the lowermost region of the Underworld. There were two sets of brothers, the Hecatonceries (hundred handed giants) and the one-eyed Cyclopes, and they wanted revenge against Cronus. Zeus stole down to Tartarus, released the creatures and asked them to join him in the battle raging above. Delighted by their freedom, the Cyclopes set to work to help the gods. They fashioned a helmet of darkness for Hades, a trident for Poseidon and thunderbolts for Zeus. With these weapons and their allies, the gods rousted the Titans.

After their victory, the gods cast lots to divide up the Universe. Poseidon became the Lord of The Sea, Hades won the Underworld, and Zeus was allotted the sky. Zeus then placed the altar of the gods in the sky as the constellation Ara in lasting gratitude for their victory over the Titans.

The Greeks regarded Ara as a sign of storms at sea, and according to Aratus, if the altar was visible while other stars were covered by clouds, mariners could expect southerly gales.

Originally the Greeks visualized the altar with its slope rising northwards. Atlases also show Ara as the altar on which Centaurus is about to sacrifice Lupus, the Wolf.

Ara ranks 63rd in size among the constellations, occupying 237° and at a combined magnitude of 8.015 makes the constellation very dim. There are no Messier objects in Ara's 149 non-stellar objects, nor are there any named stars. Ara abounds with open clusters and planetary nebulae. Ara is completely visible from latitudes south of +22°, and completely invisible from latitudes north of +45°.

An interesting fact is that Ara contains NGC 6397, with a visual magnitude of 7.5, probably the nearest globular cluster to our solar system. It lies at a distance of only 8,440 light years.
Leonard Pattillo, FBAC, January, 2005
ARIES
-The Ram-

It is not surprising to find a ram in the sky, for rams were frequently sacrificed to the gods, and Zeus was at times identified with a ram. But the mythographers agree that Aries is a special ram, the one whose golden fleece was the object of the voyage of Jason and the Argonauts. The ram made its appearance on Earth just as King Athamas of Boeotia was about to sacrifice his son Phrixus to ward off an impending famine.

King Athamas and his wife Nephele had an unhappy marriage, so Athamas turned instead to Ino, daughter of King Cadmus from neighboring Thebes. Ino resented her step-children, Phrixus and Helle, and she arranged a plot to have them killed. She began by parching the wheat so that the crops would fail. When Athamas appealed for help to the Delphic Oracle, Ino bribed messengers to bring back a false reply that Phrixus must be sacrificed to save the harvest.

Reluctantly, Athamas took his son to the top of Mount Laphystium, overlooking his palace at Orchomenus. He was about to sacrifice Phrixus to Zeus when Nephele intervened to save her son, sending down from the sky a winged ram with golden fleece. Phrixus climbed on to the ram’s back and was joined by his sister Helle, who feared for her own life. They flew off eastwards to Colchis, which lay on the eastern shore of the Black Sea, under the Caucasus Mountains (the modern Soviet Georgia). On the way Helle’s grip failed, and she fell into the channel between Europe and Asia, the Dardanelles, which the Greeks named the Hellespont in her memory. On reaching Colchis, Phrixus sacrificed the ram in gratitude to Zeus. He presented its golden fleece to the fearsome King Aeetes of Colchis who, in return, gave Phrixus the hand of his daughter Chalciope.

After Phrixus died, his ghost returned to Greece to haunt his cousin Pelias, who had seized the throne of Iolcus in Thessaly. The true successor to the throne was Jason. Pelias promised to give up the throne to Jason if he brought home the golden fleece from Colchis. This was the challenge that led to the epic voyage of Jason and the Argonauts.

When he reached Colchis, Jason first asked King Aeetes politely for the fleece, which hung on an oak in a sacred wood, guarded by a huge unsleeping serpent. King Aeetes rejected Jason’s request. Fortunately for the expedition, the king’s daughter, Medea, fell in love with Jason and offered to help him steal the fleece. At night the two crept into the wood where the golden fleece hung, shining like a cloud lit by the rising Sun. Medea bewitched the serpent so that it slept while Jason snatched the fleece. According to Apolloninus Rhodius, the fleece was as large as the hide of a young cow, and when Jason slung it over his shoulder it reached his feet. The ground shone from its glittering golden wool as Jason and Medea escaped with it.

Once free of the pursuing forces of King Aeetes, Jason and Medea used the fleece to cover their wedding bed. The final resting place of the fleece was in the temple of Zeus at Orchomenus, where Jason hung it on his return to Greece.
FBAC Bulletin Board

T4T—Telescopes For Telethon was a success. Including matching donations, FBAC collected over $2300 for Muscular Dystrophy. Many thanks to everyone who participated.

FBAC Club Meeting
7:30 p.m.
Friday, September 16, 2005
3232 Austin Parkway
Sugar Land, TX

Astronomy Day—Oct. 22, 2005
Displays
Technical Talks
Kid Stuff
Observing
Help Wanted—Sign Up Now!

Houston Astronomical Society

50th Anniversary Picnic

September 24, 2005

Please plan to attend our 50th Anniversary Picnic at our Columbus Observatory. For our guests the gates to the Observatory will open at 10AM. Activities begin at 3PM with the unearthing of the time capsule that was placed in the ground 20 years ago. At 5PM dinner will be served. The HAS will supply hamburgers and hot dogs with several sides and desserts available. Please bring your own drinks and chairs to sit in. As twilight falls, prepare your observing equipment for a night of observing.

In order to make sure we have enough food, we ask that you RSVP by September 10th to you Club Contact: Amelia Goldberg at goldberg@infohiwy.net

Visit our Event web page for further information: http://spacibm.rice.edu/~has/AnniversaryPicnic.htm
The Fort Bend Astronomy Club meets on the third Friday of every month except for those months when special meetings are called. The next regular meeting will be at 7:30 PM on September 16, 2005 at the First Colony Conference Center, 3232 Austin Parkway, Sugar Land, TX. Dues are $30/year for the first member, $5 per additional household member. Student dues are $15/year.

The Houston Astronomical Society meets the first Friday of the month in room 117 of the University of Houston Research Building. The novice program begins at 7:00 PM and main meeting at 8:00 PM.

For the Johnson Space Center Club, refer to the JSCAS web site for meeting times and sites. There is a link on the FBAC web site.

North Houston Astronomy Club meets on the 4th Friday of the month at Kingwood College. The meeting starts at 6:45 PM, main meeting at 7:30 PM.

Sometimes life just doesn’t cooperate. Lately my job and personal demands have been interfering mightily with my hobbies. It’s totally unfair but there’s not much I can do about it.

So, again I’m late with my duties as newsletter editor. Sorry things are running behind but working with hurricane relief was another stumbling block that put me behind the 8 ball.

Some readers might recognize the front page article as one that was included in an issue of The Observer some time back. This is indeed true and I can only say that article submissions were lacking this month and my time wouldn’t allow me to do anything thus the reprint. Next month will be better.

As I write this, Houston is winding down it’s Katrina relief effort. My wife and I were scheduled to work at the George R. Brown Convention Center this weekend serving food but it looks like the hurricane victims will be moved out by then. Houston has done a marvelous job taking care of so many unfortunate people and I’m sure that many of you participated in some way to help in the relief effort. If not, this situation will be ongoing for a long time and there are many ways to help out. Donating to the Red Cross or Salvation Army is a good way to begin. We have to remember that we aren’t immune to what happened in New Orleans.

On the other hand, there’s lots of good things just over the horizon. The great square of Pegasus looms in the east early in the evening. Beautiful M31 is easily seen by late evening and Orion can’t be far behind. Winter observing and the long hours of darkness will be here before we know it. The beauty of the sky beckons. So, as our country recovers from another major disaster, let’s look to the future and not the past.

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DEDICATED TO ASTRONOMY
BY TEACHING, SHARING,
AND OBSERVING