

Newsletter of the Salt Lake Astronomical Society

Volume 35 No 6

Nov - Dec 2005

WICE TO TO A CONTINUE OF THE C



Provo Artist's stamp designs go "postal"

from the editor

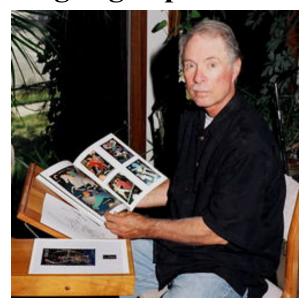
While there's been a number of stamps issued for various aspects of astronomy and space exploration, very few, if any, of us have probably ever met the artist behind them. It turns out that we literally have such an individual (see Sky & Telescope, October 2005 issue, page 100) in our own backyard.

Meet McRay Magleby of Provo. His constellation-themed postage stamps helped kicked off the US Postal Service's National Stamp-Collecting Month in October. The original artwork created by Mr. Magleby depict the constellations of Leo, Orion, Lyra and Pegasus. The stamps are sold on a flat sheet and are a beauty to behold!

Born in Coalville, the family moved to Salt Lake when he was about 2 years-old. McRay grew up here and eventually took up a job with BYU and has lived in Provo some 30 years. He attended Highland High School and the University of Utah where he majored in art with a degree in graphic design and illustration. What helped him choose this field?

"I've always thought of myself as an artist and in high school I did a lot of landscape paintings like the ones you see," McRay said pointing to the walls. I had two teachers at Highland, one a fine arts artist, Jack Vigas and the other one was a commercial artist, Harold Peterson. We called him Peter, who told me that if I wanted to make any money in the business of art, you ought to think about going into graphic design instead of becoming a painter."

After majoring in graphic design, McRay worked see **Artist** page 2



McRay Magleby, sitting in his in-home studio in Provo, displays some of his published illustrations that helped him to be chosen to design a set of constellation stamps (one sits on table) issued by the Post Office in October. photo by the editor

WINTER SOLSTICE FESTIVAL

December 10, 2005 6:00 p.m. start Zion Evangelical Lutheran Church 1070 Foothill Blvd

Also in this edition...

ASE 19th Planetary Congress	3,4
Two new Space Place web sites, Voices from the Cacophony (Space Place)	
Special Agents hosts SLAS, The new Board for 2006, Newcomers, Meeting Minutes	-
Meetings Minutes, New Meeting Location, Please return Questionnaires	6,7



Artist continued from front page

in Salt Lake for awhile for advertising agencies and then moved on to BYU the same month that Neil Armstrong walked on the Moon. He instructed and produced many of their publications before retiring from there a few years ago.

"Now I work at the University of Utah teaching graphic design and illustration and I have a studio here in my home where I continue to do artwork for various things," he said. "I'm quite diversified right now - I like doing these stamps, I do lots of posters and I just did a stain-glass window for the Provo library and designed some stonework for the Governor's mansion."

"So I have my fingers in a lot of different things," McRay continued. "My latest is designing rugs and this one on the floor is one of them." I have to admit, any home owner would be proud to have it on their own living room floor!

I asked McRay how he came about being selected to design the constellation postal stamps. "For about the last 20 years I've been asked to go to various art director's clubs and universities to give presentations about how I do my work." he commented. "And at one of these presentations I showed some examples of some poster I'd done for Greek mythology and also some posters of the night sky with the stars and constellations."

It turned out that one of the attendees was on the stamp committee for the U.S. Postal Service, the people who are in charge of selecting artists to produce the artwork for their stamps. So when the idea of the constellation stamps came up in the staff committee meeting, that member thought of McRay.

"I also just recently did the Wright Brothers stamp," McRay said adding that he also flies ultralight airplanes. "He also chose me to do that stamp because he'd seen the ultra-light which looked a lot like the Wright Brothers plane."

McRay was among three or four other designers

chosen by the committee to submit ideas, all who received compensation. The designs were kept secret, and the artist is required to sign a disclosure that they will not tell anyone about the stamp or show any of the artwork. These particular stamps, which he designed several years ago, took all this time to become a finished product.

McRay laid out his designs with pencil, scanned them into the computer and used Adobe Illustrator to make a digital file that he sent to the people who make the plates that would print the stamps.

When Mars made its closest approach in 2003, McRay enjoyed the show with his Meade ETX telescope. "For several nights I got up in the middle of the night when it was in view out of my kitchen window and sat my telescope up on the table and spent an hour or two just looking at it and thinking about it," he noted. "It was a very memorable experience, I loved it"

Mr. Magleby also has enjoyed watching Jupiter and its moons as well as observing the phases of Venus. He has taken his telescope to Bear Lake as well, due to the nice views of the Milky Way.

On trips to Lake Powell, McRay likes to lay on top of the houseboat and pick out the constellations. He commented that he perhaps always had an interest in star gazing as he looked up and pick out the Big Dipper, the Little Dipper and the North Star. One of his favorite constellations is Cygnus, the Swan.

He became familiar with the nighttime sky while doing posters for BYU and realized how exciting it was to look up in the sky and find those objects.

A man of many talents, Mr. Magleby has also been teaching banjo and guitar for a number of years, kind of as a hobby, he noted. He is in the process of writing a book adapting swing tunes from the '40's to banjo, three finger style. Approaching retirement from the U of U, we're sure to hear more about him!

As a final note, enjoy one of McRay Magleby's stamps that's affixed to your newsletter.

SLAS BOARD OF DIRECTORS

Name	Office held	Home Phone	General Assignments
Siegfried Jachmann	President	943-0115	Meetings/Events
William Cowles	Vice President	521-8110	Public Relations
Charles Green	Secretary-Treasurer	253-9003	Member dues & renewals
Guy Malmborg	Board Member at Large	943-8563	School & Special S.P.'s
Nate Goodman	Board Member at Large	277-0193	Public S.P.'s & schedules

The NOVA is a publication of the Salt Lake Astronomical Society, a non-profit organization. The bimonthly newsletter contains minutes of the Board and General Meetings, Board member names and phone numbers, activities, reports, calendars and new member information. It also announces special events and dates such as speakers, field trips and conventions. The NOVA may contain advertising of equipment for sale, etc., by it members.

The editor of the NOVA is appointed by the Board and may serve until replaced or resignation. The editor may be a Board member, and publication of the NOVA lies within the responsibility of the Vice President.

Members are encouraged to contribute articles and participate in publication. If you wish to help, please contact the Vice President, a Board member or the NOVA editor. The deadline for submitting articles or items of interest related to amateur astronomy is usually the last week in February, April, June, August, October and December.

Current NOVA editor is: Tom Sevcik; home phone no. (801) 262-6557. Email address is; sfv1ts@hotmail.com.

The Association of Space Explorers 19th Planetary Congress

by the editor

For space nuts like myself who's followed the space program since that first manmade satellite, the Association of Space Explorers (ASE) 19th Planetary Congress was like a vindication come true. After years of watching all those satellites, MIR, Space Shuttles and the International Space Station, it was finally time to meet some of those elite who's ventured into the next frontier, sometimes going where no man has gone before.

The 19th Planetary Congress was held on October 10 at the Salt Palace. The Opening Ceremony was kicked off with the Procession of Flags lead by the Christa McAuliffe School students. That was followed by the Grand Entrance of Astronauts and Cosmonauts and their spouses. Where else could one fine this club of 56 elite members that includes Utah's own astronauts Don Lind and Jake Garn?

Jake Garn, the Congress Host, opened the official Welcome to all attendees. Senator Garn recollected the time in January 1986 when he received a call from, at that time, Vice President Bush. He was asked by Bush to fly to Cape Kennedy with him because the Challenger had just exploded. Walking into the crew quarters with John Glenn, they met Mike Smith's teenage son, who collapsed in Jake's arms sobbing at the lost of his father. His voice faltering, Jake asked the crowd, "Excuse me for getting emotional." But that was ok. These pioneers have seen their share of successes and set-backs. Health and age has also taken its toll on the membership.

Due to other commitments, NASA administrator Michael Griffin was not able to attend, but did send a video for the attendees. Michael said he hoped that everyone was excited for the new direction that NASA is to be taking to return man to the Moon and eventually to Mars.

ASE Co-President, Alexei Leonov took the podium and through an interpreter, said the Cold War was no more and hopes it never comes back. He noted that the ASE has done a lot to bury that phenomenon in this world. He also mentioned that two Russian cosmonauts were due to return from the Space Station the next day.

John Fabian, Co-President, then introduced the attending space explorers from Austrian, Bulgaria, Canada, U.S. and Russia among others. He also introduced the widows of departed space explorers and followed with a video honoring those explorers who had passed away since the last congress.

Charlie Precourt, vice-president of strategic programs for ATK, mentioned that he was excited with the President's vision for space exploration. He fol-

lowed a short speech with a company produced video, "A World Without Borders," highlighting scenes from Apollo, MIR, the Space Shuttle and the Space Station.

Governor Jon M. Huntsman, Jr. was the keynote speaker. He opened with a humorous tale of how he was asked to speak by Jake Garn.

"I was asked in the most unique way," Jon said. "Jake was trying to come up with somebody who could offer a warm welcome on behalf of the state, which I am delighted to do."

"He also told me that they were up against some budgetary pressures, and they needed somebody who could do it for free," with chuckles from the crowd. And so going down the wish list, he said, "Do you believe in the U. S. Constitution?" and I said, "Yes Jake, I believe in the U. S. Constitution."

"Then I was asked if I believe in the Bill of Rights," Jon continued. And I went on to say, "Yes Jake, I believe in the Bill of Rights."

"And then he asked if I believe in the First Amendment, which guarantees free speech," the governor noted. "I said yes."

"He said, 'great, I want you to come and give us that free speech,' so here I am." The crowd roared and applauded at the governor's sense of humor.

The governor thanked the foundation sponsor, ATK, and major donors Lockheed Martin, Boeing, Larry H. Miller, Zions Bank and Delta. Additional sponsors included the Governor's Office of Economic Development, Westminster College and the Clark Planetarium among others.

Governor Huntsman compared the sacrifices of those pioneers who laid the first railroad with those pioneers who made the ultimate sacrifice in exploring space for a grateful humanity. He recognized Alexei Leonov, the first human to walk in space in 1965. General Leonov was to be the commander of the first Soviet Moon mission, but that was cancelled by the space shot, called Apollo 11, he noted.

The governor recognized June Rogers (wife of former astronaut Dick Scobee, who was commander of the fateful Challenger tragedy) for carrying on the good work through the Challenger Learning Foundation and which Utah will join the other 52 in existence in the near future.

Following the closing remarks by Senator Garn, who thanked the countless volunteers, the crowd flowed out into the lobby to view the exhibits and to meet and talk with the space explorers. Students and adults alike, gathered posters and then fanned out to gather as many of the keepsake signatures of the astronauts and cosmonauts as possible. Signatures from the likes of Scott Carpenter, Tom Stafford, James Voss, Vladimir Titov, Franz Viehbock and Bertalan see **Congress** page 4

Congress continued from page 3

Farkas to name a few.

What did youngsters think of the whole ordeal? Cody Parish, 5th grade, said, "I think it is great that the astronauts are coming here to Utah and that they get to sign autographs."

Fifth grader Austin Bloomfield, commented, "I think it's really great to meet the astronauts and for them to sign autographs and everything." Both boys want to become astronauts someday.

Marisa Garrett, a 4th grader, noted, "I like the signings at this event." Worthy of note was what she then said, "I'd like to go to the Moon and find some Moon rocks."

On Wednesday of that week the space explorers were to fan out across the state and talk to school-children about space and science. What better way is there to encourage our youth of today to follow the path of space exploration that these elite pioneers have already paved for them?

Two Great New Activities on the Space Place Web site!

Black Hole Rescue!

Nearby matter is not the only thing attracted by a black hole. These mysterious objects also attract a great deal of curiosity from kids here on Earth. Taking advantage of this interest, NASA's web site for kids, **The Space Place**, has just added a new game called "Black Hole Rescue!" After (or before) reading a short, illustrated article introducing black hole concepts, game players "rescue" the vocabulary words, one letter at a time, before they get sucked into the black hole. After playing this mesmerizing game for a while, kids of all ages will not soon forget what black holes are all about. Find it at:

http://spaceplace.nasa.gov/en/kids/blackhole/.

Sun Makes Cool Music

What do sunspots have to do with a Bach violin sonata? See (and hear!) the latest "Amazing Fact" on NASA's award-winning children's Web site, The Space Place, to find out about the unlikely connection between sunspot activity 300 years ago and the special qualities of the music played on violins made around that time. You can find it here; http://spaceplace.nasa.gov/en/kids/ulysses/.



Voices from the Cacophony

By Trudy E. Bell and Dr. Tony Phillips

Around 2015, NASA and the European Space Agency plan to launch one of the biggest and most exacting space experiments ever flown: LISA, the Interferometer Space Antenna.

LISA will consist of three spacecraft flying in a triangular formation behind Earth. Each spacecraft will beam a laser at the other two, continuously measuring their mutual separation. The spacecraft will be a mind-boggling 5 million kilometers apart (12 times the Earth-Moon distance) yet they will monitor their mutual separation to one *billionth* of a centimeter, smaller than an atom's diameter.

LISA's mission is to detect gravitational waves ripples in space-time caused by the Universe's most violent events: galaxies colliding with other galaxies, supermassive black holes gobbling each other, and even echoes still ricocheting from the Big Bang that created the Universe. By studying the shape, frequency, and timing of gravitational waves, astronomers believe they can learn what's happening deep inside these acts of celestial violence.

Furthermore, theorists expect the Universe to be booming with thousands of sources of gravitational waves. Unlike a regular telescope that can point to one part of the sky at a time, LISA receives gravitational waves from many directions at once. It's a cacophony. Astronomers must figure how to distinguish one signal from another. An outburst is detected! Was it caused by two neutron stars colliding *over here* or a pair of supermassive black holes tearing each other apart in colliding galaxies *over there?*

"It's a profound data-analysis problem that ground-based astronomers don't encounter," says E. Sterl Phinney, professor of theoretical physics at the California Institute of Technology in Pasadena.

Profound, but not hopeless: "We have lots of good ideas and plans at work - in theory," he says. "The goal now is to prove that they actually work under real conditions, and to make sure we haven't forgotten something."

To that end, theorists and instrument-designers have been spending time together brainstorming, testing ideas, scrutinizing plans, figuring out how they'll pluck individual voices from the cacophony. And they're making progress on computer codes to do the job.

Says Bonny Schumaker, a member of the LISA team at the Jet Propulsion Laboratory: "It's a challenge more than a problem, and in fact, when overcome, a gift of information from the universe."

For more information about LISA, see <u>lisa.nasa.</u> see **Voices** page 5

Voices continued from page 4

gov. Kids can learn about black holes and play the new "Black Hole Rescue!" game on The Space Place Web site at:

http://spaceplace.nasa.gov/en/kids/blackhole/.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautic and Space Administration.

* * * * * * *

NEW MEETING LOCATION!

Lowell Lyon is pleased to announce that the January 26th SLAS meeting will be held at the Salt Lake Community College, 115 South Main Street, Salt Lake City, on the 2nd floor that has elevator access. Half a block from TRAX, and free 2 hour parking at the ZCMI Center after 6 p.m.

Board Meeting starts at 6:45 p.m. and the General Meeting starts at 7:30 p.m. as usual. Be there to see what a First Class place it is! Thanks for all your support, Erik Hansen, SLAS Sec/Tres 2006.

Looking for the "Lost" Surveys

Out of nearly 200 questionnaires mailed out after the first week of December only 20 had found their way back to 2006 President, Lowell Lyon just before Christmas. *Please* fill them out and mail them in the return envelope that was provided. This club is only as good as the effort you're willing to put into it!

SLAS accepts luncheon invitation

The Salt Lake Astronomical Soceity was asked by fellow member, **Joe McCormick**, to attend the luncheon of **The Society of former Special Agents of the FBI** on October 18th. The editor obliged the invite and gave a short overview of what SLAS is and does for the public. Discussions on telescopes, the planets and satellites alos highlighted the gettogether of some 20 former agents. All were invited to the Mars Watch that was scheduled at the end of the month. A good time was had by all attending.

The new Board for 2006

Results of the October 2005 General Elections;

Lowell Lyon President
Tom Sevcik Vice President
Erik Hansen Secretary/Treasurer
Bill Kennedy Board Member at Large
Karla van Hemert " " " "

Your support and votes were much appreciated!

© Please Welcome these © Newcomers for Sep-Oct Aaron Orullian, Anna DeBeer, Steve Morton, Clark Hall and Chris Connole

* * *

Meetings of the

* * *

*

Salt Lake Astronomical Society

Board Meeting for September 27, 2005

The Board meeting was opened at 6:45 p.m. by President Siegfried Jachmann with most board members present. The President read a letter in which the question of whether a domestic partner is recognized by the club as a member, or if the club follows the state's non-recognition of the practice.

His reply (a personal opinion) was that domestic partners are unrelated friends and are not family in a legal sense and for the purposes of membership. The issue came up in regards to a current member who asked if a former member could sign for a loaner telescope for them. A divided debate followed, with the final decision being that only the current member could sign any paperwork.

Siegfried then announced that candidate Kurt Fisher withdrew his nomination for Board Member at Large for the upcoming general elections. With five candidates remaining, the president decided that there would be a vote to narrow the candidates down to the required four.

Rob Taylor would be the guest speaker for the evening with a presentation on the Night Sky Network's "Planet Quest" program.

Siegfried recognized Patrick Wiggins, Bruce Grim and Ken Harris for their work on the observatory. If present, Ken Harris would be asked to give a tribute to Andy Bogdan.

Electrical work for the Refractor House was estimated at around \$3,300 with at least another \$700 for the concrete. Once the funds for the Refractor House have been expended, the remaining funds will be drawn from the SPOC account the President announced. Patrick announced that the building now has electrical power and that there was an immediate need to install the membrane to weather-proof the corners of the building's roof.

The editor noted to the Board that the offer to members to advertise their products/services in the newsletter had not produced any results. He suggested using a check for \$25 from John-Michael Ermel of Solarscope LLC be used for postage purposes. In exchange, a Solarscope brochure would be mailed inside the NOVA. There was not any additional postage required above the regular letter rate. see **Minutes** page 6

Minutes continued from page 5

The editor noted that if elected vice president, that the newsletter might be assigned to a volunteer willing to take over that duty for 2006. If no volunteer is found, the editor will continue to stay on board.

Meeting was adjourned at 7:15

General Meeting

President Jachmann opened the General Meeting at 7:33 p.m. with an introduction of the Board and welcoming Nate Goodman back after 3 months due to an injury. There was 50 in attendance and 1 visitor. Siegfried read the treasurer's report as follows: General, \$7,768.93; Printing/Postage; \$44.01; Entertainment, \$400.48; Astronomical League, \$107.25; SPOC, \$9,465.41; Solar Filters, \$35.50; Insurance, \$179.00; Refractor House, \$1,940.45 for a total of \$19.870.03.

It was confirmed that the 29th and 30th of October would be public Mars Watch nights at SPOC.

A runoff vote to narrow the candidates to four for Board Member at Large was conducted, with Mike Wilson being eliminated.

Ken Harris gave a fitting tribute to Andy Bogdan who loved working on the refractor building. As a tribute, the refractor would be named for Andy with a plaque to be mounted on it.

Paul Welcker, 6th grade teacher at Foothills Elementary, took the floor to announce a school star party on October 5th. He was asking for 10 to 12 telescopes for that evening.

Siegfried turned the time over to Rob Oliver who gave the presentation "Planet Quest." Rob described the purpose of the Night Sky Network package in that it was the search for planets around other stars. He showed the handouts in addition to the interactive videos and props that can be used to demonstrate the principles of the subject.

Patrick Wiggins gave a update on the work at SPOC to include the mounting of the dome and pouring of concrete.

Tom Watson was the winner of the photo contest for his constellation entry.

Meeting was adjourned at 8:57 p.m.

Meetings of the Salt Lake Astronomical Society General Meeting for October 25, 2005

(Editor's note: a Board Meeting was no held due to the elections)

President Siegfried Jachmann opened the General Meeting at 7:45 p.m. with an announcement that the General Elections polls were closed and that the committee consisting of Charlie Green, Bill Cowles and Mark Bloomenthal would proceed to make the

count. He followed with an introduction of the Board. There were 56 members and four visitors present.

The treasury report was posted as follows: General, \$7,774.83; Printing and Postage, \$110.51; Entertainment, \$438.48; Astronomical League, \$202.25; SPOC, \$6,933.58; Solar filters, -\$25.50; Insurance, \$245.50 for a total of \$15,679.65. The President announced that the Refractor Building funds would be combined with the SPOC funds.

President Jachmann announced that Ann House would be heading the Winter Solstice Festival and has already formed a committee. The editor passed around a sign up sheet for those bringing pot-luck dishes. Siegfried warned that he would be bringing his red cabbage, and received a round of applause.

Siegfried had those club members who worked on the observatory and dome stand up to a round of applause. He presented a couple of articles handed to him from Patrick Wiggins. One of the articles was written by club member Joe Bauman.

The President then handed the floor over to the evening's speaker, Dave Bernsen. His presentation was on "Globular Clusters." Dave started by saying he began stargazing with a 60mm Tasco telescope that wobbled with the slightest touch. He discussed finder scopes, binoculars and star atlases.

Using slides, he pointed out such objects as the Pipe Nebula, Lagoon Nebula, the location of the center of our galaxy and several Messier objects.

Dave noted that there were two basic kinds of star clusters, open and globular. He pointed out that the most distance globular cluster an amateur can easily observe is NGC 2419 in the constellation Lynx. He pointed out that M12 and M14 were easy clusters in 7x50 binoculars. But clusters were not the only objects of discussion.

Other objects, such as galaxies, were also highlighted through slides. Dave would describe how to hunt them down with just a telescope in the member's back yard. In all, Dave gave quite a tour.

The election results were then announced. Lowell Lyon, President; Tom Sevcik, Vice President; Erik Hansen, Secretary/Treasurer; Karla van Hemert and Bill Kennedy, Board Members at Large.

Siegfried asked for volunteers to present another Night Sky Network kit to the members.

Karla presented samples of shirts she embroidered and can make for club members.

Ken Warner presented Tom Watson with \$10 for his winning photo last month. Patrick collected monies for the 2006 handbooks and calendars.

The President reminded attendees of the public Mars Watch parties scheduled that weekend. He closed with congratulations to the new Board.

Meeting was adjourned at 9:00 p.m.

The Universe is Free! A Guided Tour of Our Wonderful Cosmos

Review by the editor

While the title of this wonderful night sky tool might sound like a handout, believe me, it isn't. But, it was worth the small investment!

Richard Harshaw is the author of this brilliant package of handbook and CD-ROM. I met Richard personally at ALCON 2005 in Kansas City while picking up the club's Honorable Mention award for our entry into Sky & Telescope's Astronomy Day contest. The charts he had on the registration table drew me like a magnet!

Laying before me were sky charts that he had run off his computer for field use at the telescope. I was hooked by the quality and simplicity of the sky maps. Before he had finished telling me there were 2,793 finder charts on the CD, I had my greenbacks already in hand. I had to check this out deeper!

A veteran observer of 40 years, Richard compiled a wealth of information on everything from double stars to faint fuzzies he observed through either a Celestron C-8 or C-11 and has made it available to us through the Astronomical League.

No computer/techno wizard by any means, even I was able to surf through the CD's star charts and sky albums in less than 15 minutes! All of the files on the CD were prepared with Word and graphics programs, then converted into PDF's using Adobe Acrobat. If you don't have Adobe Reader 6.0 already installed, you can click on the provided icon to download it. Once loaded into your CD's drive, the program automatically starts in the Main Menu.

From there, it's essentially pick-and-choose. Submenus will get you to most anywhere you want. Of course there's also support files, index files, etc. Want objects sorted in Alpha-Numeric order? You got it! Want objects sorted by Constellation in Alpha-Numeric order? You got it!

What's really neat is going to the Sky Albums. Once there, you have the entire list of constellations visible in the northern hemisphere. Click on any constellation and up pops a list of objects. Say you select a page with a list of double stars. That page will contain a list of doubles in boxes with information as to name, map location, R.A. and DEC, magnitude and at the bottom, your entry as to the date that you observed that double. Like a stamp album where you place a stamp over a half-tone image of a particular nation or event to complete that set, so you enter your observations to complete your observations of doubles in that constellation. What a wonderful way for budding astronomers to learn their way about the night sky!

DR SPACE

The Life of Wernher von Braun

by Bob Ward foreword by John Glenn

Review by the editor

It's rare that I find a book that keeps my attention more than 15 minutes before putting it down to attend to something. But this biography on Wernher von Braun brought out his human qualities (which made me envious) kept me glued to it for hours!

Printed by the *Naval Institute Press*, this 282-page book caught my eye because of the picture of von Braun on the jacket. There are 24 pages of black-and-white photos with the first set dealing with his years with experimental rockets (such as the V-2) and association with the Third Reich. The second set shows him as an American with his family on a boat, showing former President Eisenhower the Saturn heavy-lift rockets and some Apollo photos.

The story of Wernher is very complex. He was a very well educated man. A man who loved music and played the cello as well as the piano. Of course, he was a man with dreams of space exploration and space travel. I found it interesting that, just like the Rocket Boys from *October Sky*, he and his group of rocketeers begged and borrowed for money and materials to support their rocketry research.

It's interesting how von Braun and his team was accepted in Huntsville, Alabama, and then turned around and gave back so much more than they received. He hunted and drank with his new-found buddies and the town eventually erected a statue in his honor for his contributions to the community.

Wernher was a man with wit and humor to boot, and I really got a kick out of one of his adult jokes dealing with a couple of male astronauts who'd landed on the Red Planet and found some Martian women in particular! Check it out on page 109.

Von Braun also loved to fly and even got to experience a ride on the famous KC-135 "Vomit Comet" in 1968, the year of my graduation from high school. It was only natural that he'd take a liking to the astronauts of the day and wished that he could join them on their journeys into space.

While I don't remember anything about the Hollywood production, *I Aim at the Stars*, it would be interesting to watch it again (after 40+years) to see how the movie story would compare to the book.

It's unfortunate that cancer cut his life short at age 65 as von Braun hadn't written any memoirs or a autobiography. This man, who helped put the United State's first satellite into orbit, would have made an excellent mentor for today's youths who