Chamberlin History
By David Shouldice

Herbert Alonzo Howe, 1858 - 1926
Growing up the son of a Mathematics Professor at the University of Chicago, Herbert’s abilities in math and education were easily seen. His early interest into astronomy expanded as he supported himself as an astronomy assistant while completing his Masters degree at the University of Cincinnati. While working to get added income for the observatory, he began work on a catalog of double stars. This work gave him exposure to the astronomical community. His double star work brought him into communication with S. W. Burnam, and he met Alvan Clark, who came to re-figure the university’s telescope lens.

He received an offer to teach at a new university forming in Denver by the future chancellor of DU. Herbert, perhaps motivated by spiritual as well as health considerations (he was given to bronchial disorders), came to Denver in 1880 at 21 years old. Accepting the teaching position, he became one of the first four professors of DU. Howe, now responsible for teaching mathematics and astronomy, desired to have some astronomy equipment for his students. The university, located at 14th and Arapahoe, had none so Howe made do borrowing a 3-inch telescope from the ex-Governor Evans, and a surveyor’s transit from the U.S. Coastal Survey. Within a month of the start of the fall quarter of 1882 the public was treated to the appearance of a bright comet. On December 6, 1882 there was to be the last transit of Venus across the sun till June 8, 2004. All this brought a strong public interest in astronomy. Herbert responded by writing articles for the local papers. This activity motivated the chancellor to tell the professor that he would like to get an observatory for the university. This was enough direction for Herbert, who immediately began to raise money. When Herbert got a letter from a man in Milwaukee offering a 5-inch telescope and dome for sale for $850 he went into high gear. During his speaking and fundraising efforts he met Humphrey Chamberlin, a philanthropic businessman, religious like himself, and interested in astronomy. When the money was almost raised, he made the arrangements for the purchase of the telescope and dome. The seller would come out and help in the set up. The telescope and dome would be placed on the top of the junior preparatory building in downtown.

(Continued on page 3)
This will be number 14 for "The Weekend Under the Stars." Last year's number 13 turned out to be very unlucky for us. A threatening forest fire was within 3 miles of our observing sight which was being used to house helicopters to fight the fire. The forest service moved us to another open spot about 6 miles as the crow flies from Foxpark but on the other side of a mountain. The new sight was larger but housed a large number of biting deer flies and mosquitoes. The new area was named Dry Park (better known as Dry Creek on the brochure) but we had to change the name to Cloud Park or Rain Park since we got rained out about every night. Those who persisted and got up to check throughout the night were rewarded with clear skies in the morning but it didn't last for long. Despite the last minute change of location, nearby fires and poor weather we still had a nice crowd. We had about 180 registered guests and about 1200 inches of unused aperture. We are looking forward to what the 14th Annual Weekend Under the Stars brings. We hope to see you there.

Marty Curran; President, Cheyenne Astronomical Society

Directions to the Star Party
From Laramie Wyoming, take HWY230 West 28 miles to Woods Landing. Continue from Woods Landing up HWY. 230 12 miles to the turn off to Foxpark (Forest Road 512). The turn is well marked and there will also be a sign marked "Weekend Under The Stars" with an arrow pointing the correct way. Take the county road approximately 2 miles to the small town of FoxPark. The town is closed up with big gates so you turn left when you get there. There will be a "Weekend Under The Stars" sign near that turn. After turning, go about 1/2 mile (approximately) and you will come to stop sign that enters another road. Get on that road and you will find the turn off to the observing site is to the right after you get on the other road. Watch close for the "Weekend Under the Stars" signs.

See Page 7 for more WUTS info.
Denver.
The comet of 1882 also brought the opportunity for Herbert to gather data that would allow him to calculate the comet’s orbit. This required his strong math skills to solve Kepler’s equation. This task, which had begun years earlier in Cincinnati, would become the basis for his doctorate. All parts of his life were in high gear, he was committing himself to marriage, solving Kepler’s equation, applying for a doctorate, and getting his own first observatory. When the observatory was finally operational he had visitor nights to show the 50 donors the result of their gift.

With a small operating observatory, his interest and experience in astronomy continued to grow. Now his life’s dreams and accomplishments were beginning to come together. Using his thesis on Kepler’s problem that he completed in 2 months, he received his Doctorate in 1884 from Boston University. That same year he married Fannie Shattuck, and a year later was the father of a son Julian. His plate was seemingly full.

Meanwhile, the University, in its desire to move the seminary and students to a more appropriate environment, was planning a move to recently donated land from a successful farmer, Rufus “Potato” Clark. It was to be called University Park. As the move in 1888 was being planned, an anonymous benefactor (Humphrey Chamberlin) offered to build and equip an observatory for the university. The logical one to take charge was Herbert.

Excerpts and information used with permission from:

Next: Astronomical Convergence

FROM ONE PRESIDENT FOR ANOTHER

We have, from time to time over the last 20 months, been the humbled and gifted recipients of visits from our President Emeritus, Larry Brooks, whom as most of you know, suffered a debilitating stroke in October of 2002. There was an immediate "hole" in the DAS' atmosphere following this time -- Larry was such a presence on two legs -- would we get him back?

Well, I believe we're all aware by now that a perfectly working body and mind do not necessarily a presence make. In fact, I think it safe to say that President Brooks is as much a terror and best friend on two wheels as he ever was previously -- and he misses us.

It’s not unusual for folks to be a little trepacious when it comes to visiting a handicapped person -- things are a bit different. But, in all honesty, it's much like walking into a lake -- kinda tough at first, but you do get used to it. The first thing you notice is that the words, "Hey", "Yeah", and "No" are big in his vocabulary. Interestingly, with these three words, you understand just about everything he's trying to get across -- a good lesson to those wordy folk who could do with a little less talk. The second thing is that indomitable smile -- hail, sleet, rain, strokes couldn't take that part away.

When you visit, make sure you voice your intent to kick his rear out of the wheelchair -- he'll love it and will respond with a rousing, "YEAH!", which, loosely interpreted, means, "Dare Ya! -- Bring it on"! By the way, he loves the astronomy magazines, being read to and (if you've a laptop) anything you might have downloaded from NASA, JPL, The Johnson Space Center and the Playboy Channel -- yep, that's right.

You'll find Larry at the Heritage Club at Lakewood Assisted Living Center, 3151 South Wadsworth, just north of Hampden on the west side of the road. Be sure to call ahead to make sure he's not chasing nurses or at least help him catch one when you get there. The number is (303) 969-7666. He'd love to see you and the feeling will be mutual. All the best,

Steve

Our Speaker for the August 20th DAS General Meeting is Dr Dan Durda of the Southwest Research Institute (SWRI)

Topic: “Tiny Moons and Global Wildfires: Exploring the Effects of Asteroid Impacts”

Frank T. Mancini, V.P.
Participation Prize Winner

Congratulations to Adam Simler, 2nd quarter DAS Participation Prize Winner. Adam Simler is an Associate (Student) Member of DAS. He joined our group fairly recently, January of 2004. He lives with his parents in Centennial, and encouraged his father to join DAS as well, so they could participate in DAS activities together. Adam's Participation Prize Slip was earned when he worked the April DAS Open House at Chamberlin.

Adam owns an Orion Dob XT 10" Intelescope, that was purchased in December of 2003. The DAS Participation Prizes awarded to Adam, an Astronomy Encyclopedia by Oxford Press, and a year's subscription to Sky and Telescope, should complement that new telescope very well!!

You can become eligible for a Participation Prize by volunteering for Public Nights, Open Houses, school star parties, clean up days at Chamberlin, or work days at the Edmund G Kline Dark Site. Just ask an E-Board Member for a participation slip and their signature, and you could be the winner at the next quarterly drawing.

Frank T Mancini

For Sale

Time has come that I must sell my "SKY - TENT" portable, rotating-dome, 10-ft. Dia.OBSERVATORY. Due to increasing arthritis and cataracts, I've "cut back" to nearly "zero" on my backyard viewing! I'm offering this system, complete with Owner's manual and 3-canvas Carry-bags, for less than HALF the original "Intro"-Price---$695 Complete!

See it in person via appointment in Lakewood!

Gordon Teall, (303) 986-0289
A RESOLUTION OF THE DENVER ASTRONOMICAL SOCIETY INC.
URGING NASA TO PROCEED WITH THE HUBBLE SPACE TELESCOPE SERVICING
MISSION

WHEREAS The Denver Astronomical Society Inc., (DAS) is a non-profit society of approximately 360 members from the Denver, Colorado area, consisting of amateur and professional astronomers who share a mutual interest in the heavens, and

WHEREAS Our Credo is to provide members a forum for increasing and sharing knowledge, to promote and educate the public about Astronomy, and

WHEREAS The NASA Hubble Space Telescope (HST) has provided outstanding images and new knowledge of Astronomy and our Universe, and although the HST has more than any other government sponsored telescope or observatory provided that knowledge to the DAS and citizens of Earth under the administration of NASA, the NASA Administrator has decided to abandon Hubble before its mission is complete, and

WHEREAS NASA Astronauts have repaired, serviced, upgraded and maintained the Hubble Space Telescope, and Hubble was designed to be improved by new technology which can only be carried out by NASA Astronauts, and because Hubble was intended to be improved in a future shuttle mission for which the equipment and instruments are completed and ready, it is fiscally responsible to carry out the servicing mission, and

WHEREAS NASA Astronauts have a proven track record of safely servicing the Hubble Space Telescope on four missions, with no injuries, lost lives or damage to the Hubble, and

WHEREAS NASA has accepted the findings of the Columbia Accident Investigation Board and is making all the recommended improvements to the Space Shuttle Orbiters to reduce the risk of launching and landing the shuttle as much as possible, while continuing to fly the shuttles on other missions, and

WHEREAS The mission of the Hubble Space Telescope is not yet complete and has a significant number of years planned for its mission; imaging and measuring the Universe, and inspiring people, young and old, in the United States of America and on the whole Earth, and

WHEREAS The United States of America was founded by and has advanced through the exploration of new frontiers only by those Americans willing to risk their lives, without turning back in the face of hardship, extreme conditions and high risk before new frontiers were mapped, and their new knowledge shared. President J. F. Kennedy in inaugurating the Apollo program to land humans on the moon quoted: "William Bradford, speaking in 1630 of the founding of the Plymouth Bay Colony, said that all great and honorable actions are accompanied with great difficulties, and both must be enterprised and overcome with answerable courage."

THEREFORE, BE IT RESOLVED THAT The members of the Denver Astronomical Society Inc. strongly urge NASA to proceed with the Hubble Space Telescope servicing mission with all diligence to complete Hubble’s mission, without turning back, before the torch is ready to be passed to the next great generation of Space Telescopes.

Steve Solon, President

Sandy Shaw, Treasurer

Frank Mancini, Vice-President

Ronald Pearson, Secretary
**SCHEDULE**

**August**

12-14 **WUTS**  See pages 2, 7
14-15 Dark Sky Site Weekend
20 General Meeting at Olin Hall, rm 105, DU, beginning at 7:30. Speaker is Dr. Dan Durda of the Southwest Research Institute. Topic is “Tiny Moons and Global Wildfires: Exploring the Effects of Asteroid Impacts.”
21 Open House, 7:00 pm, Chamberlin Observatory
27 8:00 PM E-Board meeting, Chamberlin Observatory

**September**

11-12 Dark Sky Site Weekend
17 8:00 PM E-Board meeting, Chamberlin Observatory
18 Open House, 7:00 pm, Chamberlin Observatory
24 General Meeting at Olin Hall, rm 105, DU, beginning at 7:30.

**FOR SALE**

Meade 12.5" Research Telescope

Owner: Robert Morris. This telescope has not been used for several years. Robert is moving into an apartment and is no longer is able to keep this telescope. It is currently mounted on a two part pier. The upper section of this pier could have legs attached for portable use. The mirrors need cleaning but appear to still be in good condition. The outer skin the tube is peeling, but the substrate is still good. This scope needs some TLC.

**MAKE OFFER**

Please contact Cathie Havens for more information at (303) 789-1089.

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The weather did nothing to quell the Annual Picnic, held July 24. Everything went off without a hitch, the food was great, the company more so. There was even a sighting of the rare Ivanus Geislerus!
The 3rd quarter participation prize is a Celestron Power Tank and a subscription to S&T or Astronomy or 1 years membership extension.

Frank T. Mancini, V.P.

Information About The WUTS Observing Site

The observing site is the winter sports parking area for the south side of the Snowy Range. The site sits a 9100 feet with typical 7th mag stars visible naked eye. Most Messier objects are naked eye as well. The days are hot and the nights can be cold. Bring shorts, t-shirts, sun block, long johns, parkas, gloves and sun glasses. The sun will cook you to a crisp in less than an hour and the night can freeze you in less. Of course if you sun-burn your legs they'll be warm all night ;-) .There are almost no facilities at the site. As a matter of fact, there are six outhouses and nothing else so bring water, food and any supplies you will need to camp out. There is food, gas and supplies at Woods Landing, so it's not too far to go if you forget something but their supplies are limited. There are two large camping areas and the ground is flat and level so you can camp right at the observing site or almost anywhere you like around Foxpark. There are specific campgrounds at Rob Roy Reservoir, Miller Lake, Lake Evans and Lake Owens. Laramie is about a 50 minute drive from the site.

REGISTRATION

There is no pre-registration for this Star Party. All registration will be taken care of at the time of arrival. Please sign in at our registration desk (at the big tent).

FEES:

ADULTS = $10.00 each
CHILDREN (12 and under) = FREE

We record the number of people and how much aperture they brought with them for a grand total Saturday evening.

CONTACT US AT:
Marty Curran; President CAS
3539 Luther Place, Cheyenne, WY 82001
(307)635-5944 (curranm@bresnan.net)

OFFICERS AND E-BOARD of THE DENVER ASTRONOMICAL SOCIETY

The Executive Board conducts the business of the DAS at 8 pm. at Chamberlin Observatory. Please see the Schedule of Events for meeting dates. All members are welcome.

OFFICERS
President Emeritus
Larry Brooks
President:
Steve Solon (303) 932-7613
galaxyshots@att.net
Vice President:
Frank Mancini (303) 414-0300
frank.mancini@jpl.com
Secretary:
Ron Pearson (303) 679-1299
rpearson@central.com
Treasurer:
Sandy Shaw (303) 234-0264
m6m7@earthlink.net

EXECUTIVE BOARD
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David Shouldice  Ted Cox
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ALCor: (Astronomical League Correspondent)
Sandy Shaw; m6m7@earthlink.net
Past President: Carla Swartz; orion42@comcast.net

DAS Contact Info

DAS INFORMATION LINE:
303-871-5172

DAS CORRESPONDENCE:
Denver Astronomical Society
Chamberlin Observatory
C/O Steve Solon
2930 East Warren Avenue
Denver, Colorado 80208

VAN NATTAN SCHOLARSHIP FUND
P.O. Box 150743
Lakewood, Colorado 80215-0743

WEBMISTRESS: Patti Kurz  (p_kurz@comcast.net)
Denver Astronomical Society Website:
www.thedas.org

Newsletter Editor: Patrick Ryan
(pluto6@gwest.net)
About the Denver Astronomical Society

The DAS is a group of amateur and professional astronomers that share a mutual interest in the heavens. The DAS operates the University of Denver's Chamberlin Observatory, along with its prized 1894 Alvan Clark 20-inch refracting telescope. Our members have been involved with the first public planetarium at the Denver Museum of Nature and Science and the Smithsonian Astrophysics Observatory’s “Moon Watch” program. The DAS successfully petitioned to have the Chamberlin Observatory listed on the National Register of Historic Places.

Our Credo is to provide members a forum for increasing and sharing their knowledge, to promote and educate the public about astronomy, and to preserve the historic telescope and observatory in cooperation with the University of Denver. To these ends we have established three tax deductible funds: the Van Nattan Scholarship Fund, the Chamberlin Restoration Fund, and the DAS Dark Sky Site Fund. This last fund was established in order to construct and maintain observing facilities near Deer Trail in eastern Colorado.

Please call our Info Line at (303) 871-5172 and drop by the General Membership meetings. Become a member and enjoy speakers, facilities, events, and our monthly newsletter, The Denver Observer.

Application for membership to the Denver Astronomical Society

New ______ Renewal ______

Name: ____________________________
Address: __________________________
City, State, Zip: ____________________
Phone numbers: Home ( ) Work ( )
E-mail Address: ____________________
Occupation: _______________________
Other Interests: ____________________
(Associates Only) School: Grade: __________
Do you want to download the newsletter in PDF format from our website instead of by postal mail?

Yes ______ No ______
Do you want the above information excluded from the yearly roster?

Yes ______ No ______

Please Circle All That Apply:
Regular Membership: $35 Associate: $12 (Age 23 and younger) $__________
Astronomy Magazine/$29
Sky & Telescope Magazine/$32.95 $__________
Van Nattan Scholarship Fund $__________
Chamberlin Restoration Fund $__________
Total Amount Paid $__________

Please make Dark Sky Site donations payable to the DAS EGKIDS Fund and mail to Steve Solon, 9774 W. Elmhurst Place, Littleton, CO 80128. Please make other amounts payable to the Denver Astronomical Society and mail this completed form or a copy to: Sandy Shaw, DAS Treasurer, 1095 Yank Street, Golden, CO 80401

Denver Astronomical Society
C/o Chamberlin Observatory
2930 East Warren Avenue
Denver, CO 80208

Membership expires 1/1/2005
Bradley D. Gilman
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