



# STELLAFANE

The 70th Convention of Amateur Telescope Makers on Breezy Hill in Springfield, Vermont. Friday, August 5<sup>th</sup> and Saturday, August 6<sup>th</sup>, 2005  
43° 16' 41" North Latitude, 72° 31' 10" West Longitude  
Hosted by the *Springfield Telescope Makers, Inc.*



*"For it is true that astronomy, from a popular standpoint, is handicapped by the inability of the average workman to own an expensive astronomical telescope. It is also true that if an amateur starts out to build a telescope just for fun he will find, before his labors are over, that he has become seriously interested in the wonderful mechanism of our universe. And finally, there is understandably the stimulus of being able to unlock the mysteries of the heavens by a tool fashioned by one's own hand."*

Russell W. Porter

[www.stellafane.com](http://www.stellafane.com)

March 1923 -- Founder of Stellafane

The Stellafane convention is a gathering of amateur telescope makers. The convention was started in 1926 to give amateur telescope makers an opportunity to gather, show off their creations and teach each other telescope making and mirror grinding techniques. If you have made your own telescope, we strongly encourage you to display it in the telescope fields near the Pink clubhouse. If you wish, you can enter it in the mechanical and/or optical competition. There are also mirror grinding and telescope making demonstrations, technical lectures on telescope making, the presentation of awards for telescope design and craftsmanship and a new series of lectures for those who are just beginning in amateur astronomy. **Please note the policy regarding the Swap Tables and commercial exhibits inside this bulletin.** Enjoy the convention!

## SCHEDULE OF EVENTS

A description of each event is inside this bulletin.

### Friday, August 5<sup>th</sup>:

- 9 a.m. Registration gate opens.
- 10 a.m. - 6 p.m. Shuttle bus operates.
- 12 p.m. - 6 p.m. Mirror grinding demo under the tent.
- 1 p.m. ATM Short Talk under the tent.<sup>1</sup>
- 1 p.m. Beginner Talk (meet behind Pink clubhouse).<sup>2,3</sup>
- 1:30 p.m. Horseshoe pitching contest near McGregor Obs.
- 2 p.m. ATM Short Talk under the tent.<sup>1</sup>
- 3 p.m. Astronomy activities for kids in McGregor Obs.
- 3 p.m. ATM Short Talk under the tent.<sup>1</sup>
- 4 p.m. ATM Short Talk under the tent.<sup>1</sup>
- 4:30 p.m. Solar System Walk (behind Pink clubhouse).<sup>2,3</sup>
- 5 p.m. Beginner Talk in the McGregor Obs.<sup>2</sup>
- 5 p.m. - 8 p.m. Hartness House museum open.
- 5 p.m. - 8 p.m. Registration for optical competition.<sup>4</sup>
- 8:30 p.m. Informal tent talks begin.
- 10 p.m. Beginner Talk in the McGregor Obs.<sup>2,5</sup>
- 10 p.m. Optical competition begins.<sup>4</sup>
- 10 p.m. Registration gate closes.

### Saturday, August 6<sup>th</sup>:

- 7 a.m. Registration gate opens.
- 7 a.m. - 5 p.m. Swap Tables open.
- 8 a.m. - 9:30 a.m. Registration for mechanical comp.<sup>3</sup>
- 9 a.m. - 5 p.m. Shuttle bus operates.

### Saturday, August 6<sup>th</sup> (continued):

- 9:30 a.m. - 1 p.m. Mirror grinding demo under the tent.<sup>1</sup>
- 10 a.m. - 1 p.m. Telescope mechanical competition.<sup>3</sup>
- 11 a.m. Astronomy activities for kids in McGregor Obs.
- 12 p.m. Beginner Talk in the McGregor Obs.<sup>2</sup>
- 12:30 p.m. Solar System Walk (behind Pink clubhouse).<sup>2,3</sup>
- 2 p.m. - 5 p.m. Technical talks under the tent.<sup>6</sup>
- 3 p.m. Astronomy activities for kids in McGregor Obs.
- 4 p.m. Informal social hour in the Pink Clubhouse.<sup>3</sup>
- 4:30 p.m. Solar System Walk (behind Pink clubhouse).<sup>2,3</sup>
- 5 p.m. Beginner Talk in the McGregor Obs.<sup>2</sup>
- 5 p.m. - 8 p.m. Registration for optical competition.<sup>3,4</sup>
- 7 p.m. Evening program begins in the amphitheater.
- 10 p.m. Beginner Talk in the McGregor Obs.<sup>2,5</sup>
- 10 p.m. Optical competition begins.<sup>3,4</sup>

### Sunday, August 7<sup>th</sup>:

- 8 a.m. - Noon. Convention cleanup.
- 9 a.m. - Noon. Hartness House museum open.

- 1 - Beginner Amateur Telescope Maker talk.
- 2 - Beginner general astronomy talk.
- 3 - Event takes place in or near the Pink Clubhouse.
- 4 - The optical competition on Saturday will take place only if the competition is clouded out on Friday!
- 5 - Night-time beginner talk schedule is preliminary.
- 6 - Advanced Amateur Telescope Maker talk.

## MIRROR GRINDING DEMONSTRATION

There will be a HANDS ON mirror making demonstration Friday at Noon under the big tent in the main camping/parking area. You can gain first-hand experience working on mirrors at every stage of grinding, polishing and testing. Experienced ATMs will help explain each step of the process. The demonstration will continue Saturday at 9:30 a.m.

## ATM SHORT TALKS !!

There will be a series of short talks on various ATM topics Friday under the tent every hour on the hour during the ATM demo starting at 1 p.m. The purpose of these talks will be to describe in detail the procedures that will be demonstrated during the ATM demo and to introduce beginner ATMs various introductory subjects.

1 p.m. "Putting a Telescope Together"

2 p.m. "Mirror Cells"

3 p.m. "Finder Telescopes"

4 p.m. "A Refractor You Can Build"

## BEGINNER TALKS

There will be six ~45 minute talks during the convention which will be geared for people who are new to amateur astronomy and the Stellafane convention. Please consult the schedule of events for the times and locations of these talks.

## HORSESHOE PITCHING CONTEST

The 8th-Annual Stellafane horseshoe pitching contest is scheduled to begin at 1:30 p.m. Friday near the McGregor Observatory. There will be adult and kid's competitions. "Astro" prizes will be awarded. The winner of the kid's competition will receive a telescope kit from "Stargazer" Steve Dodson and will build the telescope Saturday.

## CHILDREN'S ACTIVITIES

There are several astronomy related classes for children ages 5 to 12 which will take place in the McGregor Obs. Please consult the schedule for the times.

## SOLAR SYSTEM WALK

There will be three ~½ hour walks of our scale model of the Solar System which are geared for those just beginning in astronomy. Please consult the schedule of events for the times and meet behind the Pink clubhouse.

## FRIDAY EVENING TALKS

Friday evening, August 6th, at 8:30 p.m. Bob Morse, of the *Springfield Telescope Makers*, will conduct the informal talks under the tent located in the main camping/parking area. If you wish to contribute a short talk during this session, you must submit a brief description of your planned presentation with your registration payment or at [www.stellafane.com](http://www.stellafane.com). Talks are limited to 10 minutes and 20 slides. The time limit will be strictly enforced! A 35-mm slide projector, overhead projector, VCR and a digital projector will be available for your use. Note that if you plan to use the digital projector you must bring your own laptop.

## HARTNESS HOUSE

The Hartness/Porter Museum of Amateur Telescope Making is located in the underground rooms at the Hartness House Inn. Conventioneers can plan a visit to the museum on Friday or Sunday (see the schedule of events). **Admission is free.** Follow the signs in town. Many of the items on display are by or about Russell W. Porter, including the Springfield and Garden telescopes. His artwork traces his arctic exploration years to his work on the 200" Palomar telescope, culminating in his famous cutaway drawings. Other items of interest include early 'scopes and mirror making parts. The Hartness turret telescope, with its 10" Brashear objective may also be inspected. We are actively pursuing the addition of new items and a new room and several new exhibits have been opened this year.

## SATURDAY TECHNICAL TALKS

The Saturday afternoon program begins under the tent at 2 p.m. Wayne Zuhl, of the *Springfield Telescope Makers*, will be master of ceremonies.

S. Dodson of *Stargazer Steve* & A. Ward of *Moonward Vacuum Coatings* "Perfecting the Top 60 Nanometers of Your Mirror"

Matt BenDaniel of *Slooth.com*

"How To Fit Five Thousand People In A Ten Foot Dome"

Brian Lula of *Heaven's Glories Observatories*

"Telescope Control & Automation – Part 1"

Chris Houghton of the *Springfield Telescope Makers*

"Telescope Control & Automation – Part 2"

## SATURDAY EVENING PROGRAM

The evening program will begin at 7 p.m. Saturday in the hillside amphitheater. Bob Morse, of the *Springfield Telescope Makers*, will be master of ceremonies.

-- Greetings, announcements and raffle drawing.

-- Stellafane Shadowgram: by David Levy.

-- Presentation of telescope competition awards.

-- Stellafane Keynote Talk: "*Observing Saturn & Titan in the Infrared from Cassini*" by Dr. Donald Jennings. A planetary scientist from NASA/Goddard, Dr. Jennings will speak on the infrared observations being performed by Cassini on Saturn and its largest moon, Titan, and how these observations are revealing information about the composition, temperature, dynamics and origin of these mysterious, and beautiful, worlds.

## JEANNE KRZYWICKI ATM LIBRARY

The Jeanne Krzywicki ATM library, in the McGregor Observatory, will be open throughout the convention, unless the room is otherwise occupied by convention events.

## CONVENTION DEDICATION

This year's convention is dedicated to Peg & Hearty Beardsley.

### **POLICIES REGARDING OPTICAL JUDGING ENTRIES**

REGISTRATION for the optical competition will take place on Friday from 5 p.m. to 8 p.m. in the Pink Clubhouse. In addition, you are encouraged to register your telescope via the Stellafane web page. Keep in mind that if you register your instrument via the web, you must still check in at the Pink Clubhouse Friday from 5 p.m. to 8 p.m. or your telescope will not be judged! Set up your scope on Breezy Hill before you check in at the Pink Clubhouse and inform the judges of the location of your scope. If the position of your scope changes it is your responsibility to report its new location to the judges in the Pink Clubhouse. Failure to do so will result in your scope not being judged!

All telescopes in the competition must be fitted with an eyepiece with a focal length, in millimeters, approximately equal to the focal ratio of the instrument. Your instrument must be properly collimated before judging begins at 10 p.m. Also, be prepared to point your scope at the star Altair when the judges arrive. Please note that the judges may inspect your telescope more than once. Therefore, you should remain on the field with your instrument until the preliminary results are announced via loud speaker.

If the weather permits the completion of the judging on Friday night the optical judging will be closed for the duration of the convention and optical awards will be presented during the Saturday evening program. If the optical judging cannot be completed Friday night, it will be continued on Saturday night, weather permitting. Additional optical entries may be accepted on Saturday, at the discretion of the judges. To inquire about this possibility, please ask a judging representative in the Pink Clubhouse from 8:30 a.m. to 10 a.m. or from 5 p.m. to 8 p.m. on Saturday.

In the event that the competition will have to be continued Saturday, some telescopes that were judged on Friday might need to be judged again. Please inquire with the judges if your scope will need to be available again on Saturday. If the optical judging cannot be completed by the end of Saturday night, a partial field of optical excellence awards may be given, at the discretion of the judges.

Please note that it is the intention of the Stellafane judging committee to have the optical competition completed Friday night, weather permitting. Therefore, to ensure that your instrument is judged you must be registered for the Friday night judging.

2005 Optical Judging Chairman: Rick Hunter

### **FAMILY SERVICE RADIOS**

The convention staff uses family service radio channel 7 to facilitate communications during the convention. Please avoid using this channel when you are at the convention site. Of course, if you have an emergency please contact the staff via channel 7.

### **TELESCOPE MECHANICAL COMPETITION THE HEART AND SOUL OF STELLAFANE!**

If you have built a telescope, special gadget or restored a historical instrument, we strongly encourage you to bring it and enter it in the competition. **We welcome all home-made telescopes in the display area. They do not have to be entered in the competition!**

REGISTRATION: Registration for the mechanical competition will be between 8:30 a.m. and 10 a.m. Saturday morning in the Pink Clubhouse. In addition, you are encouraged to register your telescope via the Stellafane web page. Keep in mind that if you register your instrument via the web, you must still check in at the Pink Clubhouse Saturday morning or your telescope will not be judged. You can drive up to the Pink Clubhouse area Fri. or Sat. to drop off and pick up your telescope but there is **no parking** as space is very limited. The telescope judging for mechanical excellence will begin at 10 a.m. so please register your telescope as early as possible.

COMPETITION: Only telescopes that are operative both mechanically and optically will be accepted in the mechanical competition. Telescopes do not have to be entered in both categories. The judges will visit the telescopes in several small groups. You should attend your telescope until the end of the competition is announced via the loud speaker! Be prepared to describe any special construction techniques and components to the judges. Awards for mechanical design, craftsmanship, special gadgets, restoration of historical instruments and junior telescopes, made by persons less than 16 years of age, will be awarded at the Saturday evening talks.

2005 Mechanical Judging Chairman: Chris Houghton

### **STELLAFANE LIGHTING POLICY**

Stellafane does not allow open white lights, on clear nights, except for ½ hour after the Friday and Saturday evening talks end. Vehicular travel after this time is strongly discouraged and is done only at the risk of the operator. We thank you for your cooperation.

### **WHERE TO SET UP YOUR TELESCOPE**

We strongly recommend that you set up your telescope in the fields around the Pink Clubhouse or in the field to the south of the McGregor Observatory. You may not set up your telescope in a designated parking area. Please consult the site map, which you will receive when you arrive, or the signs posted throughout the convention site for the designated parking locations.

**POLICY OF THE SPRINGFIELD TELESCOPE, INC.  
REGARDING COMMERCIALISM AND THE SWAP  
TABLES AT THE STELLAFANE CONVENTION**

At the January, 2005 meeting, the *Springfield Telescope Makers, Inc.* clarified its policy regarding commercialism and Swap Table sales at the *Stellafane* convention. The Swap Tables (located at the NORTHEAST edge of the main camping/parking area) are provided to give amateur telescope makers an opportunity to trade, buy or sell their surplus astronomical and telescope related items. For the sake of historical continuity, to preserve the uniqueness of the *Stellafane* convention and to encourage conventioners to build their own instruments, the *Springfield Telescope Makers, Inc.* do not allow commercial exhibits or sales, of any kind, at the *Stellafane* convention. All sales must comply, in concept, with the above objective but are also specifically subject to the following criteria:

- 1) Only surplus astronomical, telescope and telescope making related items may be sold.
- 2) Each person will be allowed 16 square feet of table or ground space.
- 3) Items which have the appearance of being specifically purchased or manufactured for sale at the Swap Tables may not be sold.
- 4) All sales must take place within the designated Swap Table area only between 7 a.m. and 5 p.m., the Saturday of the *Stellafane* convention.

The *Springfield Telescope Makers, Inc.* may choose to grant a limited exception to the above policies to astronomy related organizations for their fundraising. Any request for an exemption must be made, in writing, at least one month prior to the convention. If granted, the President of the *Springfield Telescope Makers, Inc.* will notify the requesting organization in writing.

Any member of the *Springfield Telescope Makers, Inc.* has the authority to determine whether a party is in compliance with the established regulations. Any person who is found to be in violation of the stated policies will be required to comply. Failing compliance, the offending party will be asked to leave the convention and may be escorted from the premises by convention security.

The *Springfield Telescope Makers, Inc.* encourages those with questions regarding this policy to contact the Club via the *Stellafane* web page ([www.stellafane.com](http://www.stellafane.com)). During the convention, any questions regarding this policy, the appropriateness of items being displayed, or any information being disseminated should be directed to a member of the *Springfield Telescope Makers, Inc.*

**HAVE A GREAT CONVENTION!**

*The Springfield Telescope Makers*

**2004 COMPETITION WINNERS**

**MECHANICAL DESIGN, ADULT AWARDS:**

1st	Douglas Arion	6" Newtonian on Bowling Ball Mt.
2nd	Jan Wisniewski	20" Newtonian on Dobsonian
3rd	Ed Jones	8" Maksutov on Dobsonian
4th	John McLean	16" Cassegrain on Fork Mt.

**MECHANICAL DESIGN, JUNIOR AWARDS:**

1st	Marissa Boucher	6" Newtonian on German Equ. Mt.
2nd	Paul Sunstov	3" Newtonian on Salad Bowl Mt.

**CRAFTSMANSHIP:**

1st	Norman Fullum	12 1/2" & 8" Newt. on Dobsonian
2nd	Jeffrey Albro	6" Newtonian on Dobsonian
3rd	John McLean	16" Cassegrain on Fork Mt.
4th	Ed Jones	8" Maksutov on Dobsonian

**SPECIAL AWARDS:**

Kevin Iott	Machined German Equ. Mt.
David Groski	2.4" Solar Telescope
Thomas Lumenello	Solar Projection Telescope

**INNOVATIVE COMPONENT:**

Frank Bov	Equatorial Platform
Jeffrey Albro	Retractable Secondary Light Shield

There was no optical competition due to clouds. For photos of the competition please see the *Stellafane* web page.

**STELLAFANE ENDOWMENT FUND**

The Endowment Fund will one day guarantee that *Stellafane* can pay unavoidable costs due to a catastrophic event or if the convention cannot be held. For info please go to the Pink Clubhouse or [www.stellafane.com](http://www.stellafane.com). All contributions to the endowment fund are tax deductible.

**CONVENTION COORDINATES**

43° 16' 41" North Latitude, 72° 31' 10" West Longitude

**THE FLANDERS PAVILION**

Following the tradition set down by our founder, Russell W. Porter, the *Springfield Telescope Makers* continually work to improve the *Stellafane* convention to give amateur telescope makers an opportunity to gather, show off their creations and teach each other telescope making and mirror grinding techniques. The current project to continue that tradition is the construction of the "Flanders Pavioion". This 6000 square foot meeting hall will provide a dry and comfortable environment for lectures and demonstrations on telescope and mirror making both during the *Stellafane* convention and for public classes at other times of the year. It is hoped that this facility will be completed by the 2005 *Stellafane* convention. To accomplish this goal the *Springfield Telescope Makers* need your help to raise the funds necessary for the completion of this ambitious project that will greatly improve the quality of the convention. If you are interested in donating to this project please go to [www.stellafane.com](http://www.stellafane.com) for details. *Thanks!*