



# the Spectrum



JUNE 1965

THE BUFFALO ASTRONOMICAL ASSOCIATION

EDITOR B. COOK

## NO REGULAR MEETING

Instead of our regular monthly meeting, the Buffalo Astronomical Association will take a trip to the Allegheny Observatory on Saturday, June 12th. The bus, as previously announced will leave the Museum of Science at 1:00 P.M. and return at 2:00 A.M. We wish to remind all those taking the trip to bring a box lunch. There are still 7 openings left and any who wish to participate and bring guests are urged to call Dick Zygmunt at 877-7625. All those who have not paid in full please send the \$7.00 to cover the cost of the trip IMMEDIATELY to Dick. His address is 48 Colonial Ave. Kenmore, 17, N.Y.

## SECTION MEETINGS

The May meeting of the Instrument Section was well attended and a number of mirrors were tested. The parts of our telescope for Newstead are almost all completed. The tube has been very handsomely finished in speckled black and white. What remains is the rotating eye-piece for which the committee is trying to get brass or copper.

The other section meetings for May were cancelled and none will resume again until fall.

## STAR NIGHTS

Our highly successful Star Nights will start this month and we expect record breaking crowds. We wish to remind those who expect to attend to bring warm clothing - whatever the temperature of the preceding day - and mosquito repellent, as well as, of course, a telescope and/or binoculars. The meetings are scheduled for

Friday and Saturday. If a Friday Star Night is rained or clouded out, it will be postponed until the next night at the same time. If in doubt, call NF4-4718, TF3-4138 or 887-7625.

Following is the list of Star Nights with dates and locations. Maps showing routes to the places where they are to be held are on separate pages.

1. June 25 or 26 : Newstead Observatory
2. July 9 or 10: Newstead Observatory
3. July 16 or 17 Camp Sprucelands
4. July 23 or 24: Ed Stoklossa's "Farm".
5. July 31st Saturday only. SOLAR PARTY at Walter Semerau's  
135 Zimmerman Blvd. Kenmore, N.Y.
6. Aug. 6 or 7: Ernst Both's ANNUAL PICNIC.
7. Aug. 13 or 14 Camp Sprucelands
8. Sept. 24 or 25: Newstead Observatory

## RUDOLPH BUECKING

(The Spectrum proudly presents the second in a series of character sketches by Edith Geiger, on B.A.A. Fellow Rudolph Buecking)

Rudolph Buecking is a quiet, gifted man, who has been a staunch member of the B.A.A. for many years.

Born in Brooklyn N.Y., Rudy and the two other children in his family, along with their parents, moved to Germany when Rudy was four years old. Here, Rudy's father opened a music store. Rudy started school in Germany, but continued his education in the United States after the Buecking family returned to this country and came to Buffalo, when Rudy was nine years old.

Mr. Buecking is rightly proud of his cultured ancestry. His paternal grandfather, whose name was Martin Buecking, was a principal of a school for girls in Oldenburg, Germany. Martin's son, of the same name, who

was Rudy's Uncle, was a Protestant minister and the author of several novels, which were well received in literary circles of the period (ca. 1890 - 1925).

Rudy's life has been filled with artistic and scientific endeavors of various kinds. No doubt, he inherited his love of the violin from his father, who "played by ear". Rudy studied the instrument for about four years, and played in the orchestra at Masten Park High School for two years.

He was not only a capable violinist but was a talented artist, having won a scholarship to the Albright Art School, based on his fine drawings while in high school.

Rudy soon became interested in amateur radio, and received his first license in 1921. He still has his license, his present call letters being W2SJF,

His desire for knowledge led young Mr. Buecking to become a student at the University of Buffalo, where he majored in chemistry. He also took advanced courses in math and physics, and graduated with a B.S. degree.

To further his education, Rudy did graduate work at Cornell University. It was there that he became interested in Astronomy. While visiting the Fuertes Observatory, he had his first look through a telescope, a Brashear 12" refractor. He observed M13 and Jupiter, and listened to Professor Boothroyd explain about galaxies and how the Milky Way provided evidence that we are located in such a galaxy.

During the depression years of the 30's, Rudolph attended the Museum Training Course at the Buffalo Museum of Science, where he built models which are on display in the Hall of Civilization. These models include a Chinese cart, several steam engines, and engines for ships of the triple expansion steam engine type, such as were used in the old steamers at the turn of the century and around 1920. This fine craftsman also made a stage-coach which is in the exhibit, and parts for a covered-wagon and blast furnaces which are on display. The next time you enter the Hall of Civilization, be sure to see the excellent work of our own Rudy Buecking.

He not only gave of his talent to help produce this fine exhibit, but also demonstrated the equipment in the Hall of Physics and Chemistry.

During the 30's, Rudy attended evening astronomy classes under the leadership of Dr. John E. Merrill, then Curator of Astronomy at the Museum. Dr. Merrill planted an idea that started Rudy on the way to becoming a fine telescope maker when he posed the question, "Why don't you make a telescope?"

Rudy attended some of the meetings of the Buffalo Astronomical Association, and joined the then recently organized Amateur Telescope Makers of Buffalo.

In 1938, this man with a flair for art continued his education by attending the Art Institute of Buffalo. He did work in charcoal and in water-colors, some drawings in a life class and some sketches.

With his college training in science Mr. Buecking found permanent employment in the chemistry lab at Wickwire.

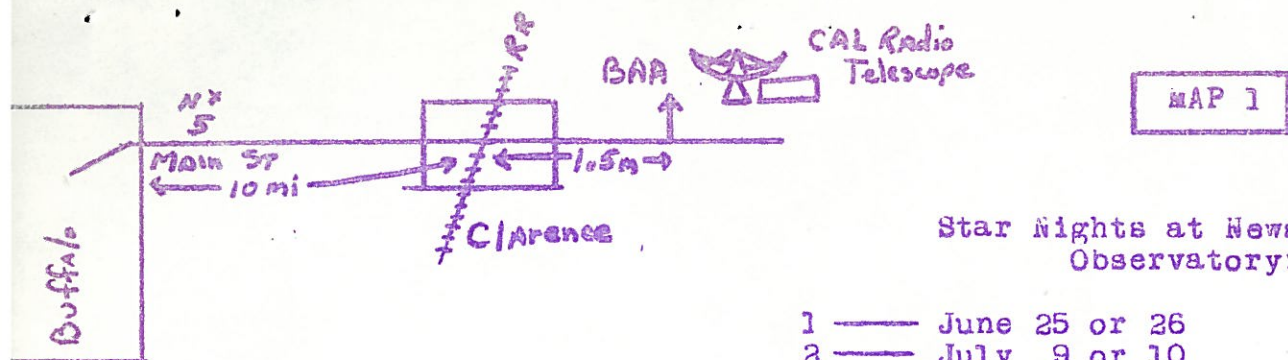
Amateur Telescope Makers disbanded in 1942. After the war it was reorganized with James H. McArtney as president. Rudy rejoined. The club conducted a class in telescope making as a project. When others dropped out Rudy carried on alone until about 1955. Mr. McArtney died in 1950, and Rudy, who had been vice-president, succeeded him to the presidency, and was reelected for another year. Somewhere along the line, says Mr. Buecking the Name A.T.M. and O's was changed to the Buffalo Astronomical Association. Rudy is part of the backbone of our association, and we are proud that he has been honored by being elected to the College of Fellows of the B.A.A.

Rudy has made several telescopes: a 3 1/4" refractor, a 5" refractor, and a 6" reflector. He is now making a Schiefspiegler (i.e. oblique telescope). He has several projects, including a 10" refractor, which have not as yet been completed.

Beside telescope making, Rudy's hobbies include optic calculations, ray tracing, and his ham radio.

Hats off to Rudolph Buecking, a fine gentleman of many accomplishments.

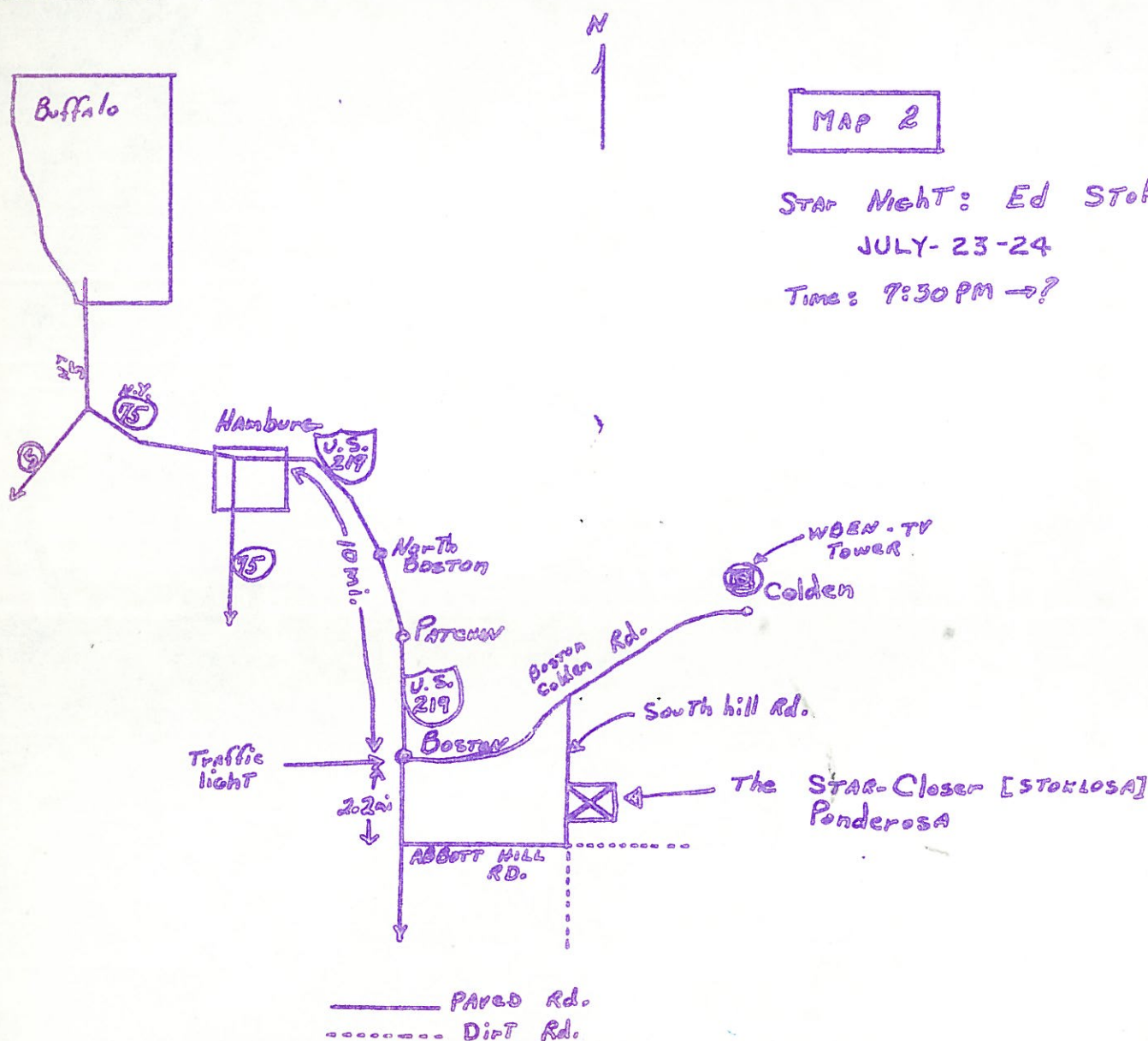
\*Should be "Society"

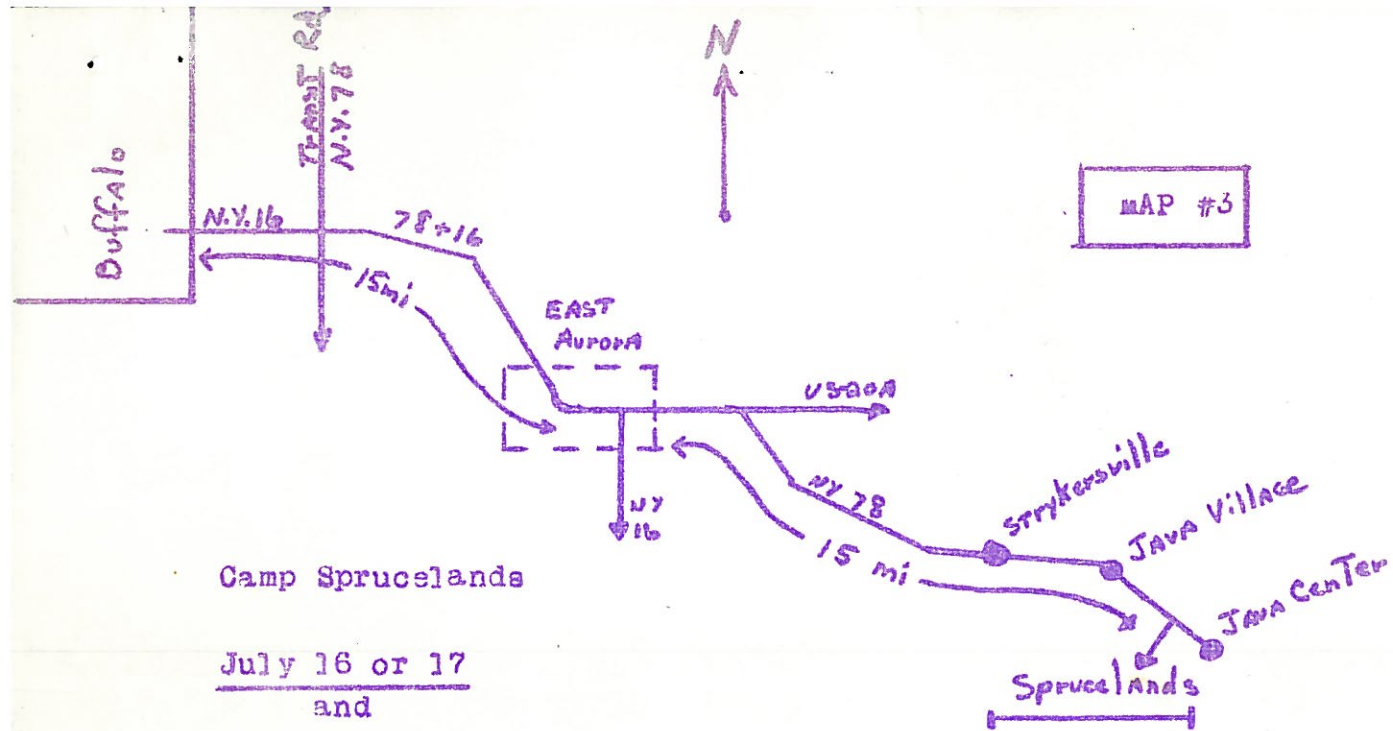


Star Nights at Newstead Observatory:

- 1 — June 25 or 26
- 2 — July 9 or 10
- 3 — Sept. 24 or 25

Time: 7:30 PM until ??

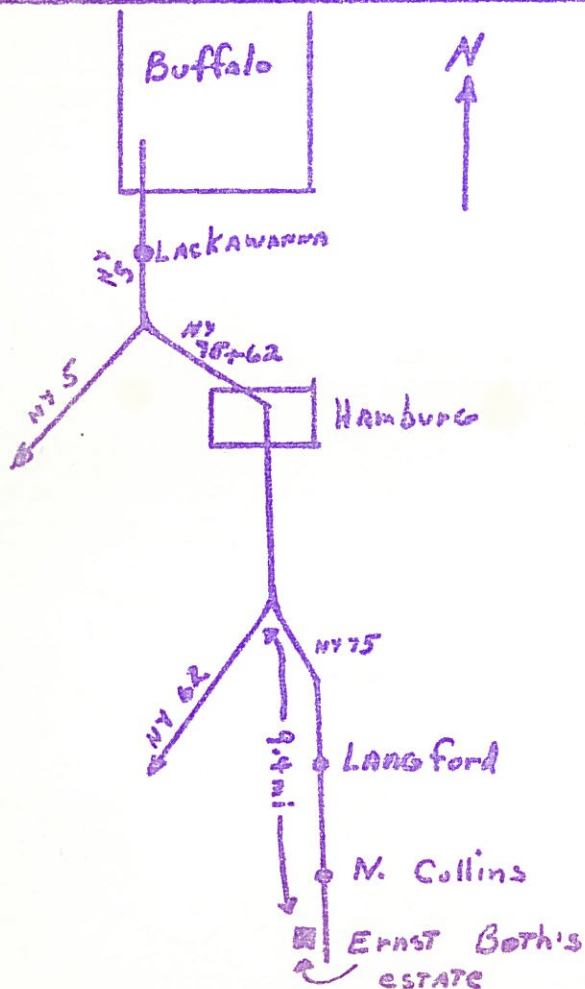




July 16 or 17  
and

Aug. 13 or 14

Time: 7:00PM until?  
Come early and hike the nature trail.



Star night at  
Ernst Both's home  
North Collins

August 6 or 7 1965.

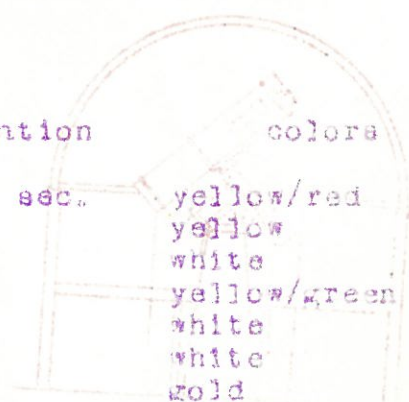
Time: 7:30 PM

RZ  
1965

# THE STARS WITHIN SIXTEEN LIGHT YEARS OF THE SUN

name	visual mag.	spectrum	absol. mag.	luminosity	distance
1. Sun	-26.7	G0	5	1.0	
2. Al. Centauri A	0.3	G4	4.7	1.3	4.28
3. Al. Centauri B	1.7	K1	6.1	0.36	4.28
4 Al. Centauri C	11	M	15.4	0.000069	4.28
5 Barnard's Star	9.7	M6	13.4	0.00044	6.05
6 Wolf 359	13.5	M8	16.6	0.000023	8.0
7 Lalande 21185	7.6	M2	10.6	0.0058	3.4
8 Sirius A	-1.6	A0	1.3	30.0	8.6
9 Sirius B	7.1	A5	10.0	0.01	8.6
10 Ross 154	11	M6	13.8	0.00030	9.1
11 L 789 6	12.3	M	14.9	0.0001	9.8
12 Ross 248	12	M6	14.5	0.00016	10.5
13 Ep Eridani	3.8	K0	6.2	0.33	10.8
14 Ta Ceti	3.6	K0	6.0	0.42	10.9
15 Procyon A	0.5	F3	2.9	6.9	11.1
16 Procyon B	10.8	...	13.2	0.00052	11.1
17 61 Cygni A	5.6	K5	7.9	0.069	11.1
18 61 Cygni B	6.3	K6	8.6	0.036	11.1
19 Ep Indi	4.7	K5	7.0	0.16	11.2
20 Si 2398 A	8.9	M4	11.2	0.0033	11.5
21 Si 2398 B	9.7	M5	12.0	0.0016	11.5
22 Groomb 34A	8.1	M1	10.3	0/0076	11.7
23 Groomb 34 B	10.9	M6	13.1	0.00058	11.7
24 BD -12 4523	9.7	M4	11.9	0.0017	11.9
25 Lacaille 9352	7.4	M2	9.6	0.014	12.0
26 Ross 614 A	11.	...	13.1	0.00058	12.4
27 Ross 614 B	13	...	15	0.0001	12.4
28 Luyten's Star	10.1	M4	12.2	0.0013	12.5
29 Lacaille 8760	6.6	M1	8.7	0.033	12.5
30 Kruger 60 A	9.8	M4	11.8	0.0019	12.7
31 Kruger 60 B	11.3	M6	13.3	0.00048	12.7
32 Kapteyn's Star	8.8	M0	10.8	0.0048	12.7
33 Groomb 1618	6.8	K6	8.8	0.030	13.0
34 Van Maanen's Star	12.3	F0	14.3	0.00019	13.3
35 Ross 780	9.5	...	11.3	0.0030	14.3
36 CD -46 11540	9.4	...	11.2	0.0033	14.5
37 AOe 17415-6	9.1	M4	10.8	0.0048	14.7
38 Wolf 424 A	12.6	M8	14.2	0.00021	15.2
39 Wolf 424 B	12.6	M8	14.2	0.00021	15.2
40 CD -44 11909	10.0	...	11.6	0.0023	15.4
41 BD 43 1305	10.2	M5e	11.8	0.0033	15.5
42 CD -37 15492	8.3	M3	9.9	0.011	15.5
43 CD -49 13515	8.6	Ma	10.2	0.0083	15.6
44 Altair	0.9	A5	2.5	10.	15.7
45 o2 Eridani A	4.5	G5	6.1	0.36	15.9
46 o2 Eridani B	9.2	B9	10.8	0.0048	15.9
47 o2 Eridani C	10.7	M5e	12.3	0.0012	15.9

# DOUBLE STARS



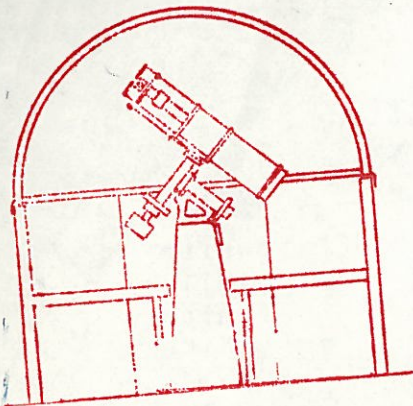
name	magnitudes		separation	colors
Eta Cassiopeia	3.7	7.4	9.6 sec.	yellow/red
Gamma Arietis	4.2	4.4	8.0	yellow
Alpha Piscium	4.3	5.2	2.2	white
Gamma Andromedae	2.3	5.1	9.8	yellow/green
Zeta Orionis	2.0	5.7	2.1	white
Alpha Geminorum	2.7	3.7	2.7	white
Gamma Leonis	2.0	3.5	3.9	gold
Xi Ursa majoris	4.4	4.9	1.5	gold
Alpha Crucis	1.4	1.9	4.7	white
Gamma Virginis	3.7	3.7	5.5	yellow
Alpha Canum Venatic.	2.9	5.4	19.8	white
Zeta Ursa majoris	2.1	4.2	14.3	white
Alpha Centauri	0.3	1.7	9.9	gold
Epsilon Bootes	3.0	6.3	2.8	yellow/green
Delta Serpentis	4.2	5.2	3.7	blue
Beta Scorpii	2.9	5.5	13.3	white
Alpha Scorpii	1.2	6.5	2.9	orange/green
Alpha Herculis	3.5	5.4	4.7	orange/green
Rho Herculis	4.5	5.5	4.0	white
70 Ophiuchi	4.1	6.1	6.0	pink
Theta Serpentis	1.5	5.7	22.2	white
Beta Cygni	3.2	5.1	34.5	yellow/blue
Gamma Delphini	4.5	5.5	10.4	yellow/green
Zeta Aquarii	4.4	4.6	2.3	yellow
Delta Cephei	3.9*	5.3	41.0	yellow/blue

\* variable.

Ref: The Flammarion Book of Astronomy.  
Book VI.

# THE TWENTY BRIGHTEST STARS

name	visual magnit.	spectrum	abs. magnit.	luminosity sun=1	distance l.y.
1. Sirius	-1.6	A0	1.3	30	8.6
2. Canopus	-0.9	F0	-3.2	1900	100
3. Al Centauri	0.3	G4	4.7	1.3	4.3
4. Vega	0.1	A0	0.5	63	27
5. Capella	0.2	G0	-0.4	150	42
6. Arcturus	0.2	K0	0.2	83	33
7. Rigel	0.3	B8	-5.8	21000	540
8. Procyon	0.5	F3	2.9	6.9	11.1
9. Achernar	0.6	B5	-1.1	280	70
10. Be Centauri	0.9	B1	-2.9	1400	190
11. Altair	0.9	A5	2.5	10	15.7
12. Betelgeuse	0.9 var.	M2	-3.9	3600	300
13. Al Crucis	1.4	B1	-2.7	1200	220
14. Aldebaran	1.1	K5	0.1	91	53
15. Pollux	1.2	K0	1.5	25	29
16. Spica	1.2	B2	-1.6	440	120
17. Antares	1.2	M1	-3.2	1900	250
18. Fomalhaut	1.3	A3	2.0	16	23
19. Deneb	1.3	A2	-4.2	4800	400
20. Regulus	1.3	B8	-0.3	130	67



Bruce Cook  
33 Burbank Dr.  
Snyder, 14226  
839-1396



P  
F  
PE