

Object	Const	Date	Time	Seeing	Location	Equipment	Description
$\rho$	Ophiuchus	8/23/2011	8:20 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Small triangle of stars. Brightest blue white star to lower left. Other 2 much dimmer. Lower right bit brighter than upper right. All 3 stars are blue white in color.
$\omega$ 1 & 2	Scorpius	8/23/2011	8:26 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Two almost equally bright blue white stars. Upper right is a hare brighter. Bit of separation between them.
$\nu$	Scorpius	8/23/2011	8:28 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A bright blue white star and very near is a much dimmer blue white companion to upper left of brighter star.
$\mu$ 1 & 2	Scorpius	8/23/2011	8:30 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars. Brighter one is lower right and a dimmer star is a bit above and to left. A bit apart.
$\zeta$ 2 & 1	Scorpius	8/23/2011	8:33 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars. Much brighter on left and a bit away and right star is a much dimmer star. Open cluster NGC 6231 is above it and fairly near it.
36	Ophiuchus	8/23/2011	8:39 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	3 blue white stars. Bottom fairly bright and is brightest. Upper left a bit dimmer and upper right pretty dim compared to other 2.
$\Sigma$ 1850	Boötes	8/23/2011	8:43 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Two dim, very close together blue white stars. Upper left one is a hare brighter than lower right one.
$\delta$	Boötes	8/23/2011	8:46 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A bright blue white star and to its upper left is a very dim blue white companion.
$\mu$ 1 & 2	Boötes	8/23/2011	8:48 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Very similar to delta Bootes. A much brighter blue white star and to lower left a much dimmer blue white companion.
$\nu$ 1 & 2	Corona Borealis	8/23/2011	8:53 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright, yellow stars a bit apart from each other.
$\kappa$	Hercules	8/23/2011	8:57 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars very close together. Lower one much brighter than upper much dimmer companion.
$\Sigma$ I 33	Hercules	8/23/2011	8:50 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	3 dimmer stars. Middle is brightest, upper left is 2nd brightest and lower right is dimmest.
65	Ursa Major	8/23/2011	9:08 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars, very close together. Lower left one is a bit brighter than upper right one.
67	Ursa Major	8/23/2011	9:11 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars a bit apart. Lower left one much brighter than upper right one.

ι	Boötes	8/23/2011	9:13 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A brighter blue white star very close and to lower left of a very dim blue white star.
ζ (79) & 80	Ursa Major	8/23/2011	9:17 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	3 blue white stars. 2 very bright and have a good separation between them. Both approximately the same brightness. Lower right of bottom bright star is a very dim companion very near it.
κ & 6	Draco	8/23/2011	9:21 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 bright blue white stars and a good distance apart. Lower left is noticeably brighter than upper right.
α	Ursa Major	8/23/2011	9:24 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A very bright blue white stars and a bit away and below is a much dimmer blue white companion.
53	Ophiuchus	8/23/2011	9:29 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A brighter blue white star above and very near a much dimmer blue white star.
37 & 36	Hercules	8/23/2011	9:32 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars, very close to each other. Upper left is much brighter than lower right.
Sh 251	Ophiuchus	8/23/2011	9:35 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 dimmer blue white stars a bit apart. Lower left is much brighter than upper right.
67	Ophiuchus	8/23/2011	9:39 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A very bright blue white star and very near and to lower left is a very dim, blue white companion.
θ	Serpens	8/23/2011	9:45 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally fairly bright blue white stars very near each other. Upper right is a hare brighter than lower left.
54	Sagittarius	8/23/2011	9:52 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A brighter blue white star and near it and to upper right is a much dimmer blue white companion.
α 1 & 2	Capricornus	8/23/2011	9:53 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 bright blue white stars. Lower left is noticeably brighter than upper right.
β 1 & 2	Capricornus	8/23/2011	9:55 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A brighter blue white star a bit apart from dimmer blue white star to lower left.
ρ	Capricornus	8/23/2011	9:57 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Has a bright blue white star above and a bit away from a much dimmer blue white star.
O	Capricornus	8/23/2011	9:57 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars very close with left star noticeably brighter than right.
15	Aquila	8/23/2011	10:05 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars very close together. Upper left is much brighter than lower right.

OΣΣ 178	Aquila	8/23/2011	10:08 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 dimmer blue white stars. Right one bit brighter than left one.
28	Aquila	8/23/2011	10:12 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A brighter blue white stars then below and very near is this very faint companion. Missed companion the first time I looked at it.
57	Aquila	8/23/2011	10:17 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 dimmer blue white stars, very near each other. Upper star is brighter than lower star.
β	Cygnus	8/23/2011	10:21 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Right star is a yellow colored star and much brighter than left star, a dimmer, vividly blue colored star.
ε	Sagitta	8/23/2011	10:23 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Right star is a yellow colored star and is much brighter than very faint left blue white star.
15	Sagitta	8/23/2011	10:28 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars. Lower one is brighter than upper one. Star a bit apart from each other.
θ	Sagitta	8/23/2011	10:30 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars very near each other. Left star brighter than right.
α (6) & 8	Vulpecula	8/23/2011	10:34 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 off white, maybe yellow colored stars a bit apart. Right star is much brighter than left.
γ (5) & 6	Equuleus	8/23/2011	10:35 PM	Seeing OK. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars a bit apart. Top star is a bit brighter than bottom star.
ε 1 & 2	Lyra	8/23/2011	10:39 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright blue white stars a bit apart from each other.
ζ 1 & 2	Lyra	8/23/2011	10:41 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars, very near each other. Upper right is much brighter than lower left one.
δ 2 & 1	Lyra	8/23/2011	10:43 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A much brighter yellow star to lower left and a bit away from a dimmer blue white star.
β	Lyra	8/23/2011	10:47 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A bright blue white star and very close and to lower left is a very dim blue white star.
S 752	Delphinus	8/23/2011	10:53 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 dim, equally bright stars.
ε	Pegasus	8/23/2011	10:55 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A very bright off white colored star. Then straight above it and a bit away is this very dim blue white star.

35	Pegasus	8/23/2011	10:58 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A bright blue white star and every once in a while, see a fainter star near it and at 2 o'clock from it.
$\psi$ 1 & 2	Draco	8/23/2011	11:06 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars very close together. Left star noticeably brighter than right.
41, 40	Draco	8/23/2011	11:09 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars, very close together with right star here brighter than left.
75	Draco	8/23/2011	11:13 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars a bit apart. Upper right is much brighter than lower left.
$\nu$ 1 & 2	Draco	8/23/2011	11:18 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright blue white stars very close together.
17 & 16	Draco	8/23/2011	11:22 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright blue white stars very close to each other.
39	Draco	8/23/2011	11:25 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars close together. Lower left much brighter than upper right.
$\Sigma$ 2273	Draco	8/23/2011	11:29 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 very dim, equally bright stars very close together.
$\delta$	Cepheus	8/23/2011	11:32 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars. Bottom star bit brighter than upper star. Very close together.
16	Cygnus	8/23/2011	11:38 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright, dimmer blue white stars very close together.
$\alpha$	Cassiopeia	8/23/2011	11:40 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Very bright blue star and very near and at 10 o'clock from it is a very faint companion.
$\phi$	Cassiopeia	8/23/2011	11:42 PM	Seeing Good. Transparency Good.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Bright, off white star and near it and to upper right is a much dimmer blue white star. To left and very near is open cluster NGC 457.
$\pi$ 2 & 1	Pegasus	8/24/2011	12:09 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars a bit apart. Bottom right is much brighter than upper left.
$\rho$ (93) & 94	Pisces	8/24/2011	12:12 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright blue white stars a bit apart.
$\psi$ 1	Pisces	8/24/2011	12:14 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 brighter, equally bright, very close blue white stars.

33	Pegasus	8/24/2011	12:17 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A much brighter blue white star, a bit away and to upper right of a much dimmer companion.
56	Andromeda	8/24/2011	12:20 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright blue white stars a bit apart. To left is a large open cluster NGC 752.
59	Andromeda	8/24/2011	12:26 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars very close together. Right star noticeably brighter than left one.
15	Triangulum	8/24/2011	12:29 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A much brighter off white colored star to right of a dimmer blue white star.
14	Aries	8/24/2011	12:37 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 blue white stars, very close. Bottom star much brighter than upper.
33	Aries	8/24/2011	12:42 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	A blue white star seen and every once in a while, at 9 o'clock from it see a <u>very</u> faint star pop into view very near this bright star.
O 1 (30 & 31)	Cygnus	8/24/2011	12:46 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	Brightest star is orangish in color and other 2 stars are blue white. Lower left is dimmest. Right one is 2nd brightest and center star very bright.
29	Cygnus	8/24/2011	12:53 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright, off white colored stars by themselves in a star right area. A bit apart. Open clusters M29 and IC 4996 are nearby and above these stars.
48	Cygnus	8/24/2011	12:56 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 equally bright, dimmer blue white stars a bit apart.
61	Cygnus	8/24/2011	12:58 AM	Seeing OK. Transparency OK.	Keota, CO - Moderately Dark Skies	Mounted 20x80 Binoculars	2 stars very near each other. Upper right is an orangish colored star. Brighter than lower left which is blue in color.

**Observational Statistics:**

Observed

69 of 50 Seen