

New Astronomers' Group - Observing Programme

Everyone has their own level of observing experience/skill. Some will have none at all (yet). The New Astronomers' Group has established an observing programme to help new members get started.

There are two levels:

Novice: 36 brightest stars in our night sky.

Rookie: 60 First time telescope objects.



Novice - 36 Brightest Stars

The aim of the Novice programme is to teach you the basics skills of naked eye and binocular observing. Such as how to read an all-sky map, horizon chart, use a planisphere, and red torch. By actively seeking out these 36 brightest beacons you will be introduced to vast tracts of the night sky. Along the way you will witness the procession of constellations through the Seasons. Except for a few clustering, these 36 brightest stars are spread all over the sky. To be found high in the sky, low to the horizon, rising & setting, and circumpolar. Some 15-20 are always above the local horizon. By taking note of the surrounding star patterns (constellations) the night sky will start appearing more familiar after just a few months. These are essential skills to kick start any budding amateur astronomer.

I find it truly fascinating in this age of high technology that everyone from Novice to Professional still refer to the most ancient descriptions of the night sky, the Constellations. So take some time to master this Novice task as it will make the Rookie task much easier. Once you start recognising and finding constellations I recommend you start working on the Rookie programme at the same time. You can apply for an ASV loan telescope if you don't have your own yet.



Red Torch for night vision

To truly learn your way around the brightest stars you must abide by a few golden rules. Setting circles, hand-held phone apps, computerised telescopes are not allowed. The only equipment required should be a red torch, chart, & planisphere. Adding a simple pair of binoculars will show you some stars are actually double, their often subtle colours are enhanced, and reveal some easy Deep Sky Objects (DSOs)

nearby. The goal of an amateur observer is not to remember where every night sky object is (impossible). What you need to learn is how to find that bright Star, Constellation, or nearby easy DSO by consulting the planisphere, chart, or whatever you're using. Everyone in NAG should be able to complete this task with a tea spoon of effort and a cup-full of persistence.

Monthly NAG hand-outs will review each star (3 per month), constellations, nearby planisphere and binocular objects. Included is a Tip Of The Month (TOTM) to help you learn the naked eye, binocular, all sky/horizon chart reading skills.

Use the task sheet on the next page to keep track of you progress, and mark them off one by one. There is no certificate for this first level task. NAG members have said themselves the task is too simple. You will soon discover this generate it's own rewards.

The Rookie level programme is currently in the early stages of development and we plan to have a certificate for this level.

Many thanks go out to my helpers Stephen Howell and Greg Whelan who helped make my ideas happen... Ken, Nag Section Director



Chandler Planisphere two sided

New Astronomers' Group

36 of the Brightest Stars

Novice Observing Programme

Your Name:-

Date started:- / /

Date Finished:- / /

S T A R	Mag	Type	Designation	Review	RA	Dec	Date Obs	Your Notes
1	Sirius	-1.44	**	Alpha Canis Major	Nov-Apr	06 45 09.0	-16 42 54.0	/ /
2	Canopus	-0.74	*	Alpha Carina	Nov-Apr	06 23 54.0	-52 41 30.0	/ /
3	Alpha Centauri	-0.28	***	Alpha Centaurus	Mar-Aug	14 39 36.0	-60 50 00.0	/ /
4	Arcturus	-0.05	*	Alpha Bootes	Mar-Jul	14 15 39.6	+19 11 00.0	/ /
5	Vega	0.03	*	Alpha Lyra	Jun-Sep	18 36 56.2	+38 47 00.0	/ /
6	Capella	0.08	*	Alpha Auriga	Dec-Feb	05 16 40.8	+45 59 30.0	/ /
7	Rigel	0.15	**	Beta Orion	Nov-Mar	05 14 32.2	-08 12 00.0	/ /
8	Procyon	0.38	**	Alpha Canis Minor	Dec-Apr	07 39 18.0	+05 13 00.0	/ /
9	Achernar	0.45	*	Alpha Eridanus	Aug-Feb	01 37 42.9	-57 14 00.0	/ /
10	Betelgeuse	0.50	*	Alpha Orion	Nov-Mar	05 55 09.6	+07 24 30.0	/ /
11	Hadar	0.61	**	Beta Centaurus	Mar-Sep	14 03 49.4	-60 22 22.0	/ /
12	Acrux	0.74	**	Alpha Crucis	Feb-Jul	12 26 35.9	-63 05 56.0	/ /
13	Altair	0.76	*	Alpha Aquilas	Oct-Jun	19 50 46.8	+08 52 00.0	/ /
14	Aldebaran	0.87	*	Alpha Taurus	Oct-Feb	04 35 55.2	+16 30 33.0	/ /
15	Antares	0.96	**	Alpha Scopiuis	Apr-Sep	16 29 30.0	-26 25 00.0	/ /
16	Spica	0.98	*	Alpha Virgo	Feb-Jul	13 25 10.8	-11 09 30.0	/ /
17	Pollux	1.15	*	Beta Gemini	Dec-Apr	07 45 18.9	+28 01 34.0	/ /
18	Fomalhaut	1.16	*	Alpha Picis Austrinus	Jul-Dec	22 57 39.0	-29 37 00.0	/ /
19	Deneb	1.25	*	Alpha Cygnus	Aug-Oct	20 41 25.8	+45 16 48.0	/ /
20	Mimosa	1.26	*	Beta Crucis	Feb-Jul	12 47 43.3	-59 41 19.0	/ /
21	Regulus	1.36	**	Alpha Leo	Jan-May	10 08 22.0	+11 58 00.0	/ /
22	Adhara	1.50	**	Epsilon Canis Major	Nov-Apr	06 58 37.5	-28 58 20.0	/ /
23	Castor	1.58	**	Alpha Gemini	Dec-Apr	07 34 36.0	+31 53 00.0	/ /
24	Shaula	1.62	*	Lambda Scorpius	Apr-Oct	17 33 36.4	-37 06 13.0	/ /
25	Gacrux	1.63	*	Gamma Crucis	Feb-Jul	12 31 09.0	-57 06 47.0	/ /
26	Bellatrix	1.64	*	Gamma Orion	Oct-Mar	05 25 07.8	+06 20 59.0	/ /
27	El Nath	1.65	*	Beta Taurus	Oct-Mar	05 26 17.5	+28 36 27.0	/ /
28	Miaplacidus	1.67	*	Beta Carina	Dec-Jun	09 13 12.1	-69 42 02.0	/ /
29	Alnilam	1.69	*	Epsilon Orion	Nov-Mar	05 36 12.7	-01 12 07.0	/ /
30	Regor	1.78	*	Gamma Vela	Nov-May	08 09 50.0	-47 20 00.0	/ /
31	Kaus Australis	1.85	*	Epsilon Sagittarius	May-Oct	18 24 03.6	-34 23 03.0	/ /
32	Atria	1.92	*	Alpha Triangulus	May-Sep	16 48 39.9	-69 01 40.0	/ /
33	Alphard	2.00	**	Alpha Hydra	Feb-May	09 27 35.0	-08 39 30.0	/ /
34	Alpheratz	2.10	**	Alpha Andromeda	Sep-Dec	00 08 22.8	+29 05 25.8	/ /
35	Rasalhague	2.10	*	Alpha Ophiuchus	May-Sep	17 34 55.8	+12 33 30.0	/ /
36	Markab	2.49	*	Alpha Pegasus	Aug-Dec	23 04 45.0	+15 12 19.0	/ /

* Single, ** Double, or *** Triple star

Data extracted using Deep Sky software

Prepared by Ken LeMarquand, Section Director, NAG

NAG hand-outs review each star, constellation, nearby objects.

[Printing tip:- Set page to Landscape]

Find out more at:- <http://www.asvnag.info>

Space will be provided for detailed observation notes in the handouts.

Astronomical Society of Victoria Inc

Columns for seeing conditions, equipment used, magnification, sky conditions have been purposely omitted as naked eye 1st and 2nd magnitude star observations don't need this info.