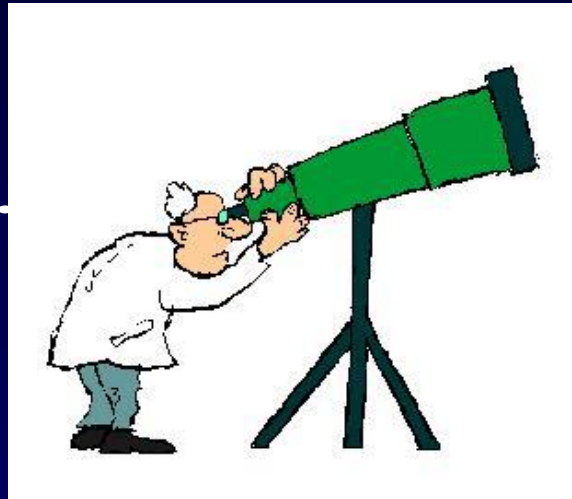


What's Up!

For October 2017



BROOKLANDS**RADIO**

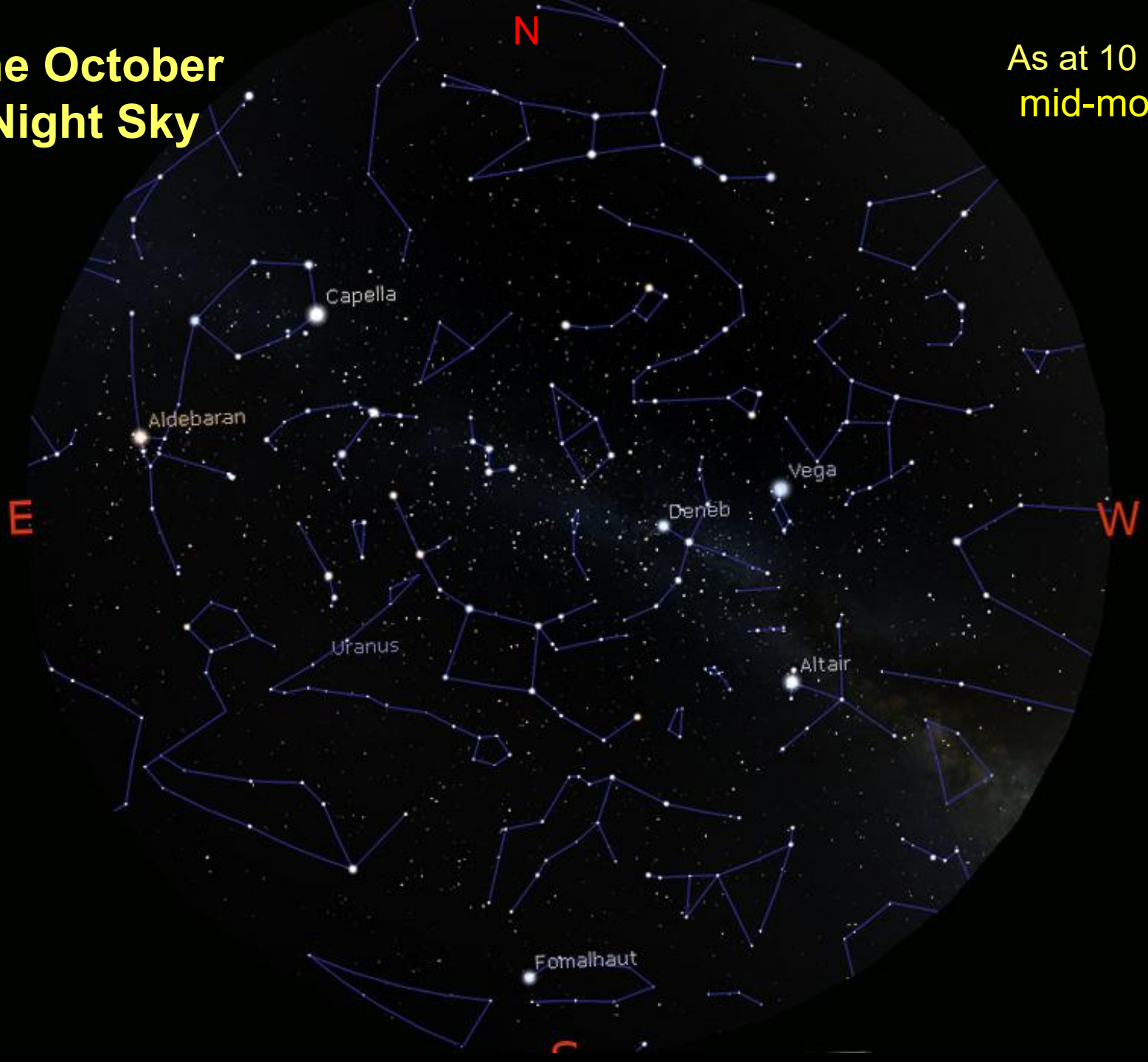
ONLINE

The Sound of Surrey



The October Night Sky

As at 10 p.m.
mid-month



The Moon in October

MON	TUES	WED	THUR	FRI	SAT	SUN
						1  Waxing Gibbous
2 	3 	4 	5  Full Moon	6 	7  Waning Gibbous	8 
9 	10 	11 	12  Third Quarter	13  Waning Crescent	14 	15 
16 	17 	18 	19  New Moon	20 	21  Waxing Crescent	22 
23 	24 	25 	26 	27  First Quarter	28 	29  Waxing Gibbous

What's Up - Planets

- **Mercury**

- emerges into evening sky late in the month, but poorly placed.

- **Venus**

- Still a brilliant morning object at Mag -3.8 low in the East, but fading as month wears on

- **Mars**

- Improving as a morning object

What's Up - Planets

- Jupiter

- Not visible this month

- Saturn

- Still on show as an early evening object, low in South Western sky.






- Uranus

- Visible all night at Mag +5.8 in Pisces

- Neptune

- Telescopic object at Mag +7.8 in Aquarius, best around midnight

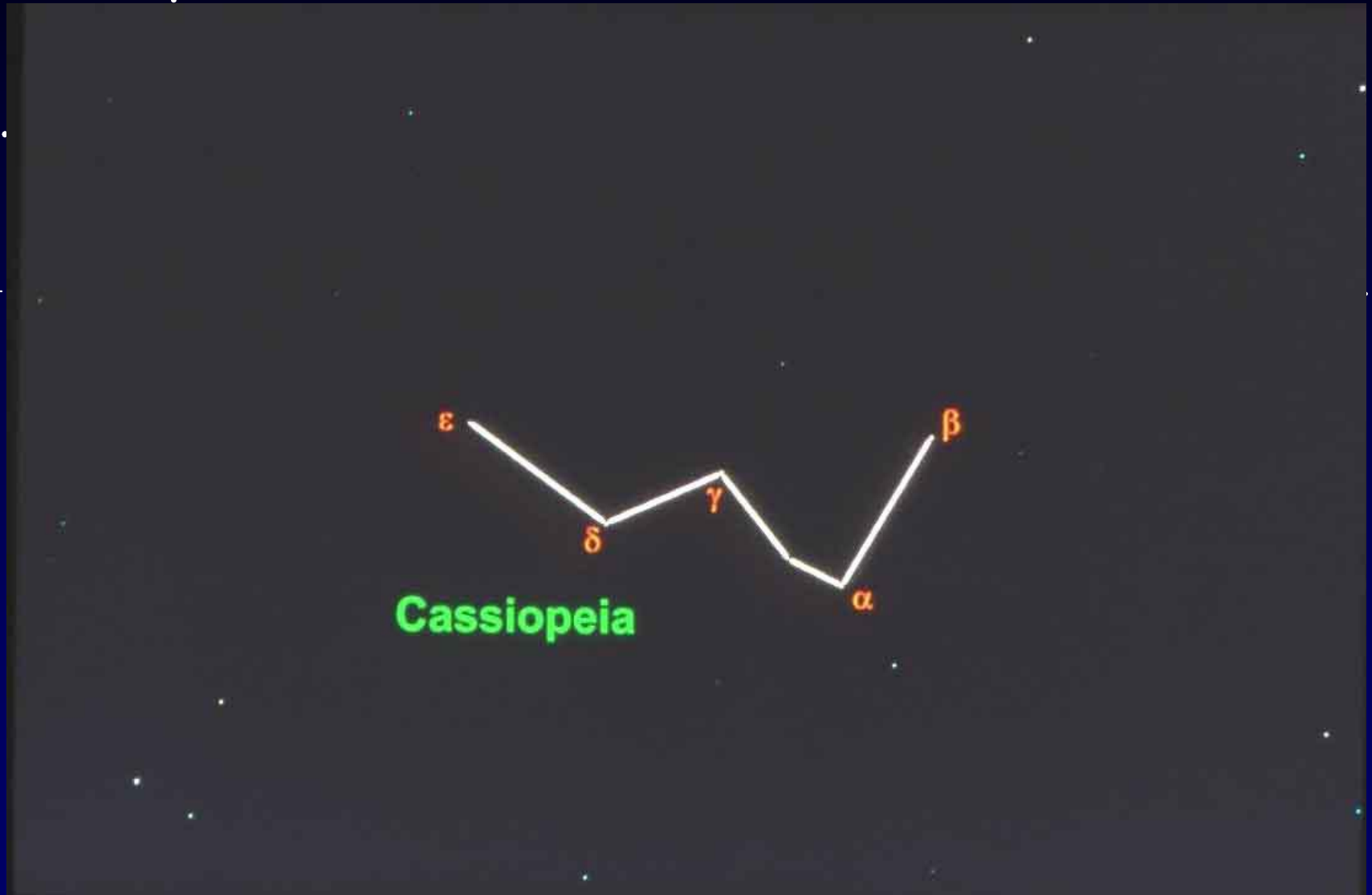
Events of Interest in October

- **5th** Venus, Mars and Sigma Leonis form tight triangle
- **7th** Venus and Mars less than half degree apart 
- **14th** Waning crescent Moon will be 5° from M44 
Beehive Cluster, low in North East, best at 2 a.m.
- **18th** Brilliant Venus will be just 3° from thin (2%) crescent Moon. 
- **21st** Peak of Orionids Meteor Shower: 
 - dust particles left over from Comet Halley
 - fast meteors, some with persistent train
 - theoretical (ZHR) 25, reality maybe 10 per hour
 - favourable Moon
 - best in early hours, but can look East on evenings of 20th/21st/22nd
- **24th** Saturn just 3.5° from waxing crescent Moon 

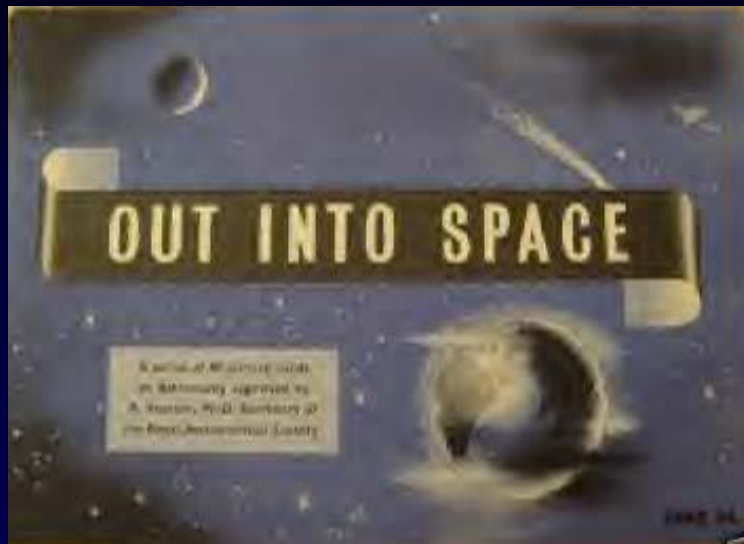
October's Suggested Constellation - but which?



October's Suggested Constellation - but which?



October's Suggested Constellation



A SERIES OF 50 No. 44

OUT INTO SPACE

*Approved by A. Hunter, Ph.D.,
Sec. Royal Astronomical Society*

CASSIOPEIA

Cassiopeia is on the opposite side of the Pole Star from The Plough. It consists notably of a group of five very bright stars forming a W. Two of these, Ruchbah and Caph, are navigation stars. This constellation contains about 60 stars visible without the aid of a telescope. It is named after Cassiopeia, wife of Cepheus, King of Ethiopia, and mother of Andromeda who was saved from a sea monster by Perseus (Greek Mythology).

**GET A PICTURE CARD ALBUM
FROM YOUR GROCER-Price 6d**

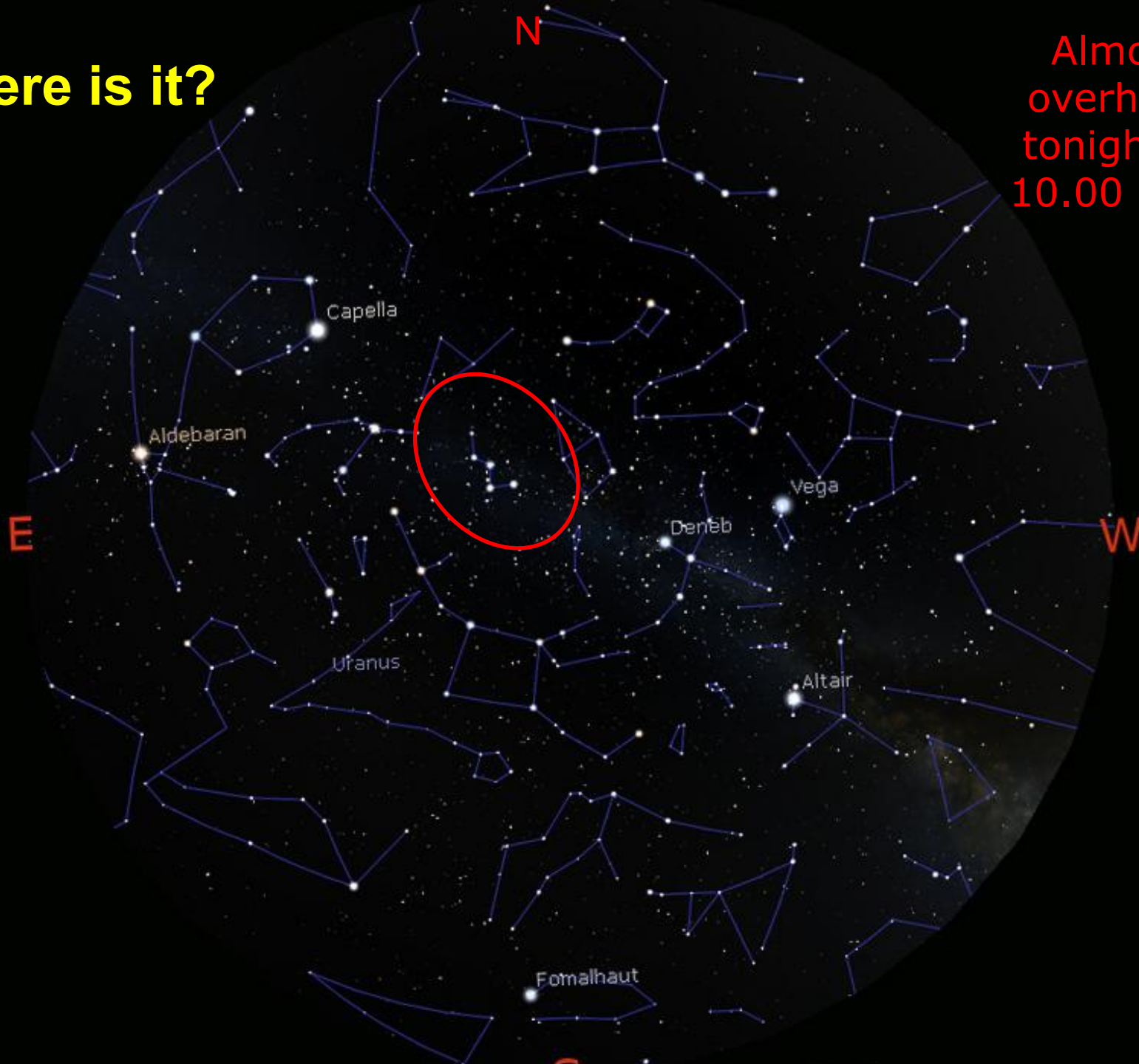
**ISSUED IN PACKETS OF BROOKE BOND
'CHOICEST', 'P.G. TIPS' & 'EDGLETS' TEAS**

Brooke Bond & Co. Ltd.



Where is it?

Almost
overhead
tonight at
10.00 p.m.



5^h 4^h 3^h 2^h 1^h 0^h 23^h 22^h 21^h

+70°
+60°
+50°

Cassiopeia

Triple Star

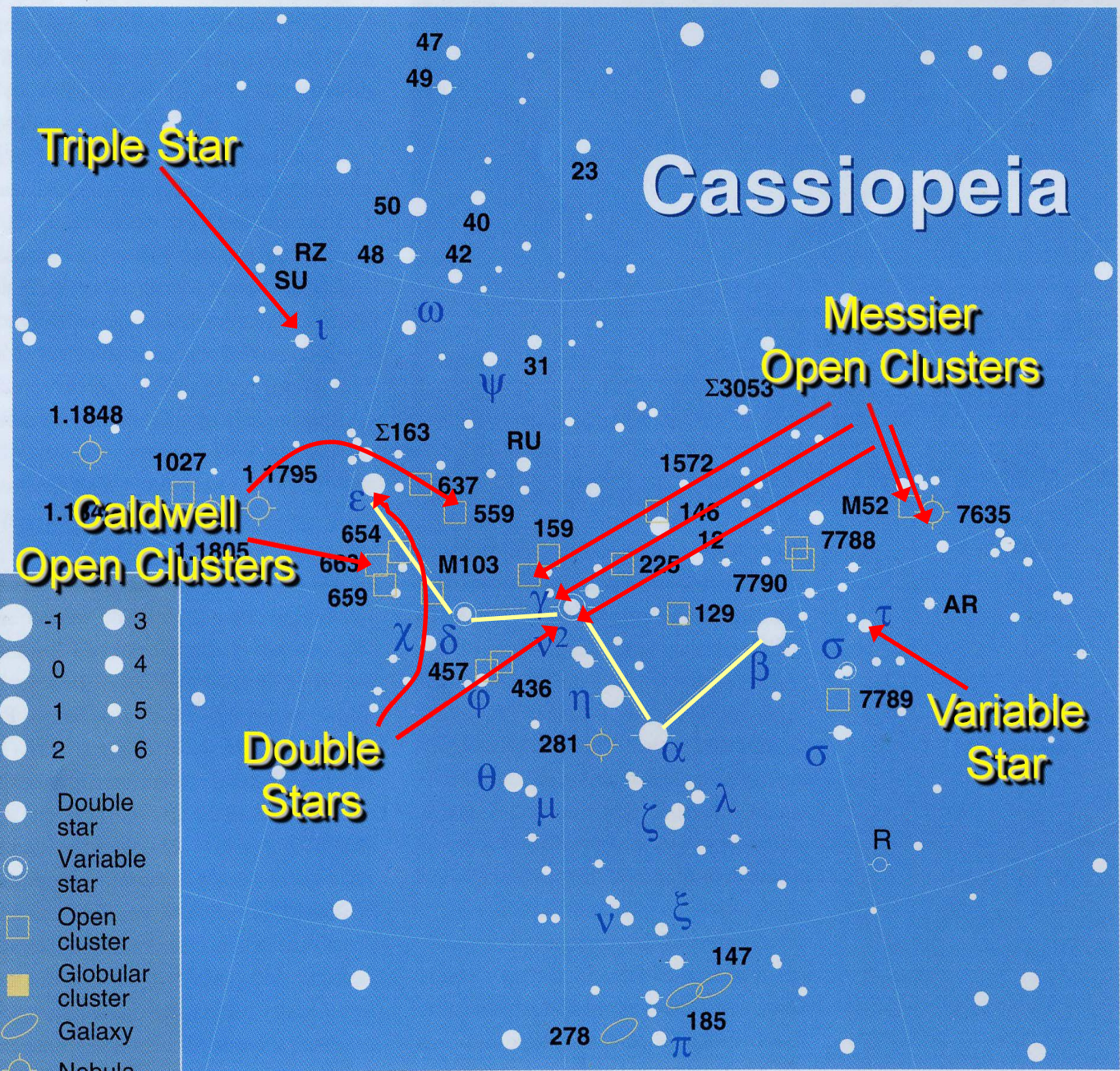
Messier Open Clusters

Caldwell Open Clusters

Double Stars

Variable Star

- -1
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- Double star
- Variable star
- Open cluster
- Globular cluster
- Galaxy
- Nebula



Messier Objects in Cassiopeia



M52

Distance 5000 light years
Visual Brightness Magnitude 7.3
Apparent Dimension 13.0 arc
minutes
Discovered 1774 by Charles
Messier



M103

Distance 8500 light years
Visual Brightness Magnitude 7.4
Apparent Dimension 6.0 arc
minutes
Discovered 1781 by Pierre
Méchain

Using Cassiopeia



- **Finding North**

- Cassiopeia is circumpolar, so will always be above the horizon
- If Ursa Major & Minor are obscured by clouds then you can make a rough judgement using Cassiopeia

Using Cassiopeia



- You can find your way to the Andromeda Galaxy (M31) using Cassiopeia
- And also to the Double Cluster in Perseus

Meetings at Local Societies

- **Guildford AS** *Griffiths Lecture Theatre , Uni of Surrey*
 - Thursday 5th October, 7.30 p.m.
 - From Quark to Cosmos
 - » Prof Ian Shipsey, Oxford Uni
 - Sputnik in Context (abridged)
 - » John Axtell

Meetings at Local Societies

- **Farnham AS Aldershot Cricket Club**
 - Tuesday 10th October, 7.45 p.m.
 - Newtonian Cosmology
 - Dr David Lewis
 - » Farnham AS

Talks at Local Astro Societies

- **Croydon AS** *Royal Russell School, Coombe Lane, Croydon*
 - Friday 13th October, 7.45 p.m.
 - "High Resolution Astro Imaging"
 - Damien Peach
 - Friday 27th October, 7.45 p.m. -
 - "Space Dogs"
 - Caroline Bevis, Croydon AS
- **Ewell AS** *Nonsuch High School for Girls, Cheam*
 - Friday 13th October, 8.00 p.m.
 - "Journey to the Centre of the Earth"
 - Dr. David Whitehouse

Other Talks/Events in the Area

- **University of Surrey, Department of Physics**

Austin Pearce 3, Uni of Surrey, Guildford

- Friday 4th October, 6.30 - 8.00 p.m.

- "Sci-Fi Public Talk"

- Dr. Annika Lohstroh, Prof Ben Murdin

- Tuesday 31st October, 5.30 - 9.00 p.m.

- "Seeing the Unseen" (Dark Matter Day)

- Talks, Stalls, Mobile Planetarium & Stargazing

Astronomy on TV

- **The Sky at Night**

- *Something Is Wrong With The Moon!*

- The team explores some of the latest discoveries about our lunar neighbour that are helping us learn more about its origins and history. Plus they meet a research team that may have made a unique discovery - a Moon orbiting an exoplanet

Sunday 8th October BBC 4, 10.00 pm

Thursday 13th October BBC 4, 7.30 pm

*for exact times please check www.radiotimes.com
or www.bbc.co.uk/skyatnight*