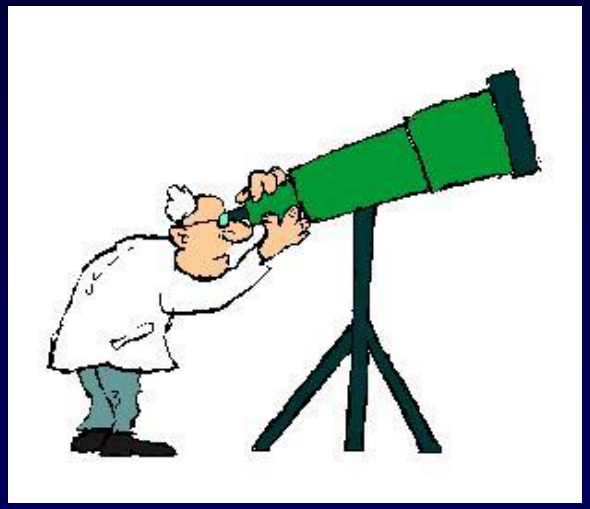
What's Up!

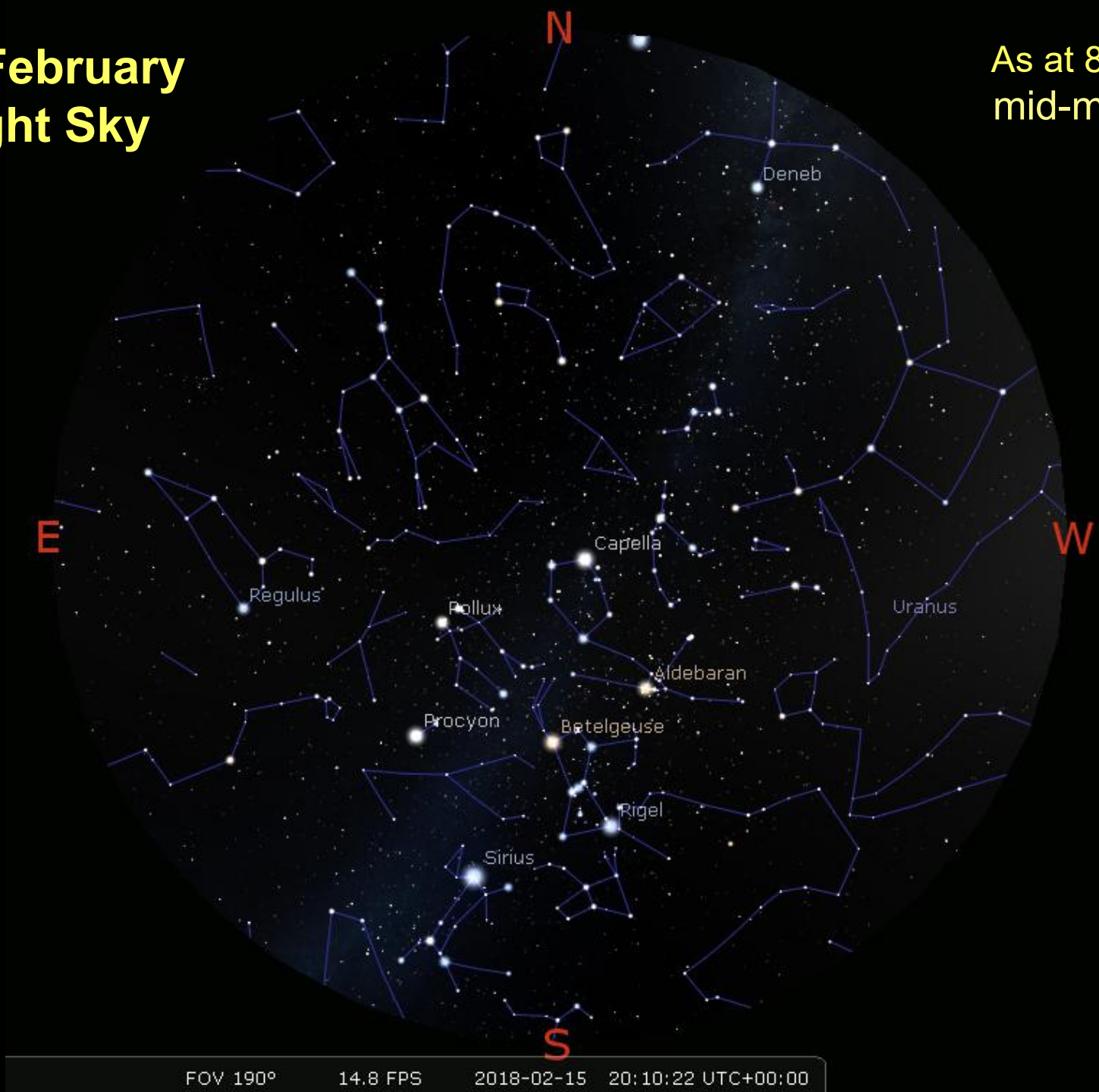
For February 2018



BROOKLANDSRADIO
ONLINE The Sound of Surrey

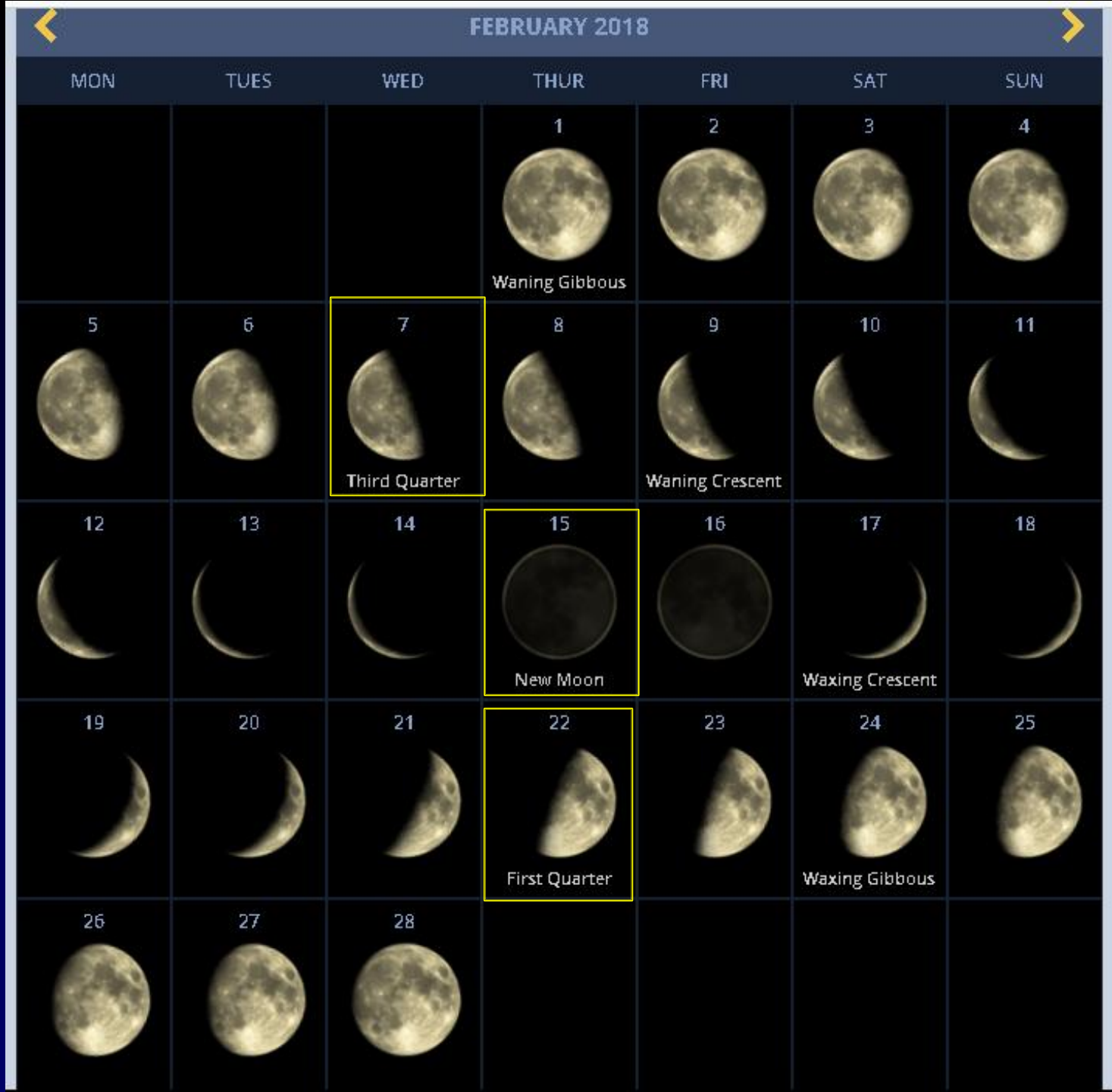
The February Night Sky

As at 8 p.m. mid-month



The Moon in January

The Moon in February



What's Up - February's Planets

- **Mercury**
  - An evening object, very low in West just 30 mins after sunset at end of month, Mag -1.3.
- **Venus**
  - A brilliant evening object, low in West just 30 mins after sunset from mid-month, Mag -3.8
- **Mars**
  - Another morning object, relatively dim at Mag +1.5 in E-SE, visible from around 5 a.m.

What's Up - February's Planets

- **Jupiter**
  - A morning object; easily visible at Mag -2.0 in South East to South before sunrise.
- **Saturn**
  - A difficult early morning object, improving as month progresses, very low in South Eastern sky, before sunrise.
- **Uranus**
  - Still visible, binocular object visible all night at Mag +5.9 in South West
- **Neptune**
  - Not visible this month

Events of Interest in February

- **11th** 6 a.m. waning crescent Moon just 4° from Saturn 
- **12th** Mars and Antares just 5° apart, (interesting comparison), Moon near too. 
- **22nd** Lunar X visible (on terminator) from just after 4pm for another 4½ hours
- **23rd** Aldeberan (α Tauri) occulted by dark leading edge of Moon at 16.33 hrs, emerging from bright edge at 17.42 hrs
- **28th** Venus and Mercury just 2.5° apart, just after sunset.

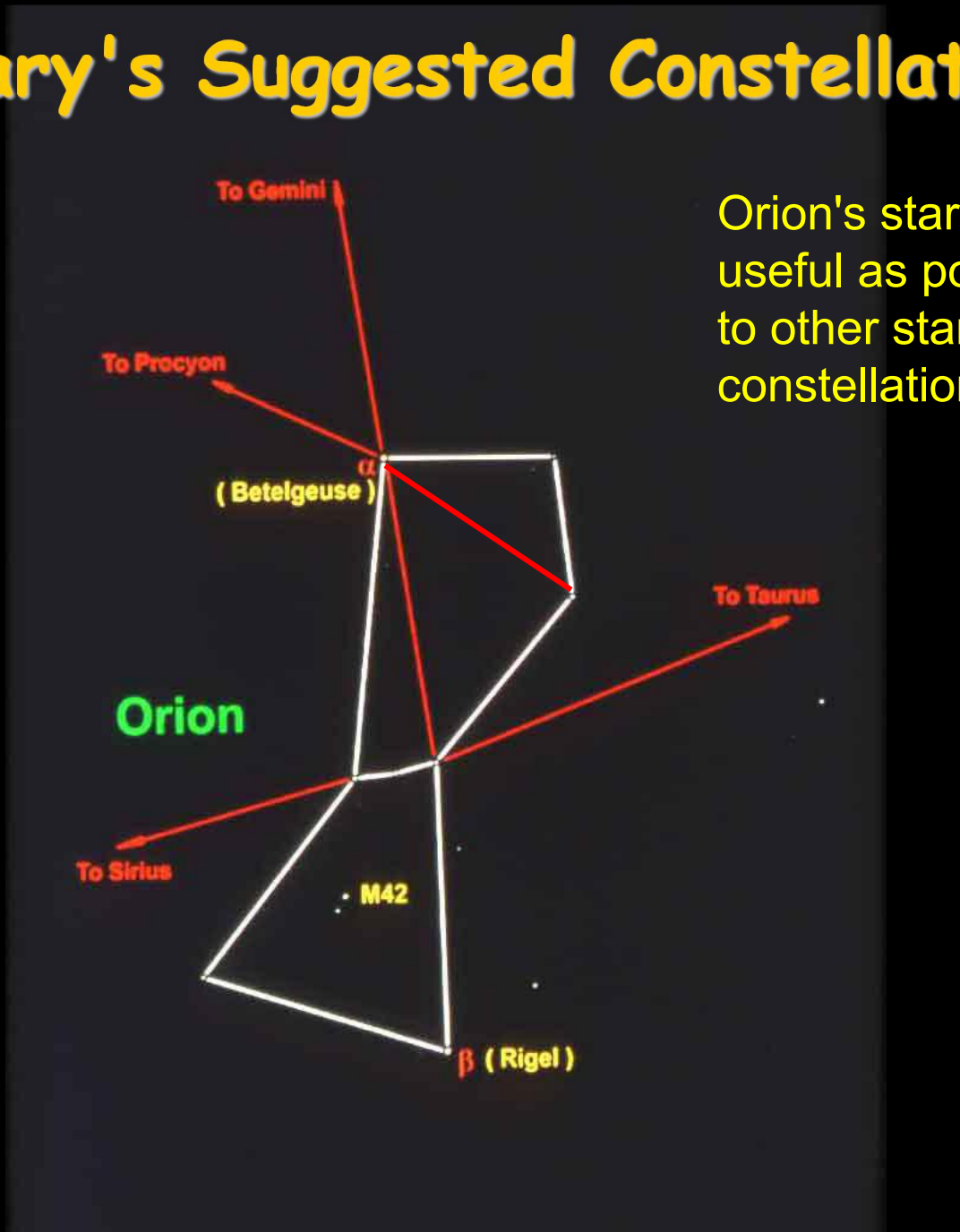
February's Suggested Constellation - but which one?

Have you got it yet?

February's Suggested Constellation - but which one?

That's right - Orion

February's Suggested Constellation



Orion's stars are useful as pointers to other stars and constellations

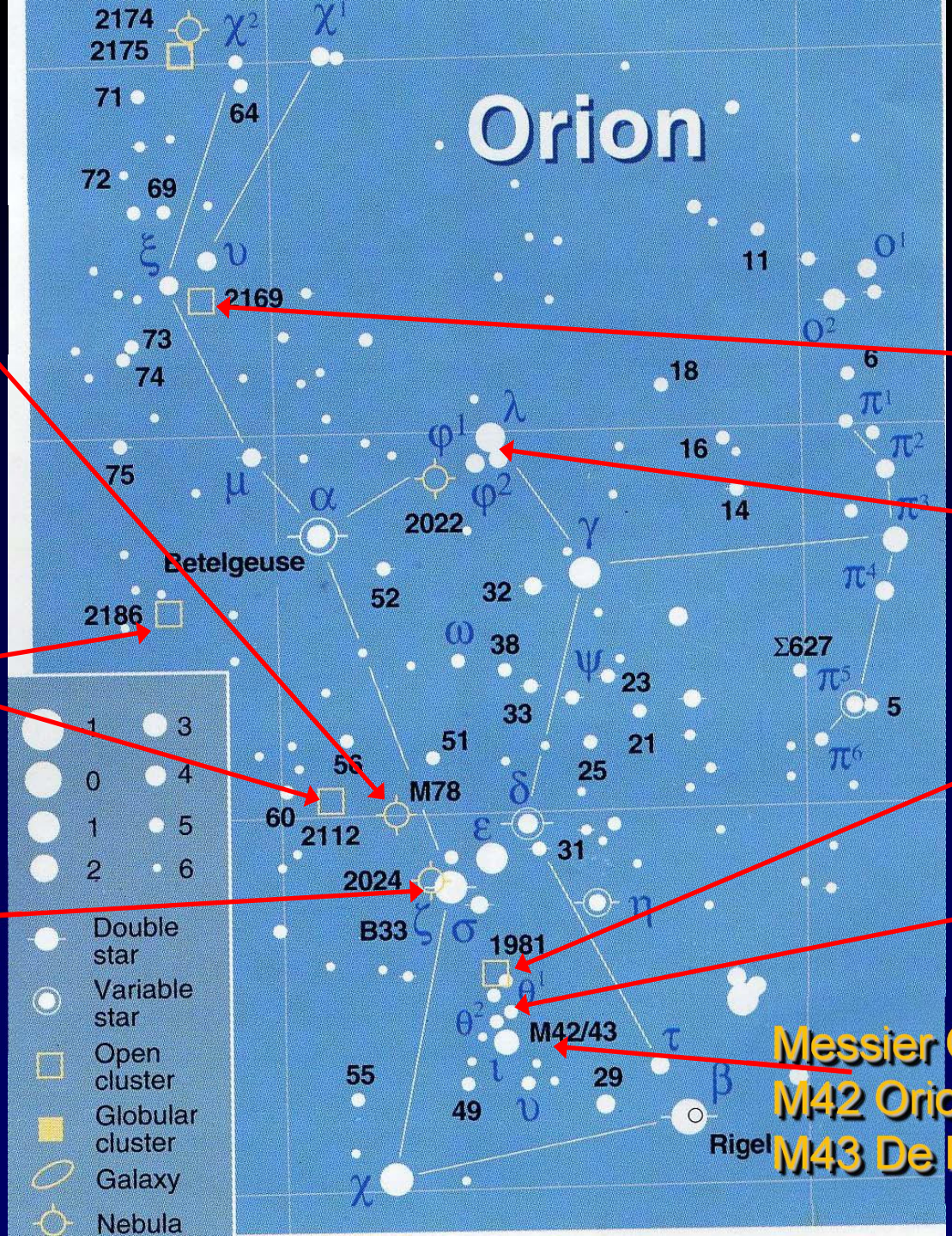
February's Suggested Constellation

Orion –The Great Hunter

There are many different legends about Orion. Some say that he was the lover of Artemis, some that he was the lover of Aurora. Many stories agree that he was killed by a scorpion sent by a jealous, godly rival. To honour him he was put into the sky, but to protect him he was placed well away from Scorpius.

Where is it?

As at about 10.00 p.m. tonight



Messier Object: M78, Nebula

Open Clusters

Flame Nebula & Horsehead Nebula

Open Cluster

Multiple Star

Open Cluster

Multiple Star

Messier Objects: M42 Orion Nebula M43 De Mairan's Nebula

Messier Objects in Orion

M42 (NGC 1976)
Great Orion Nebula

Distance 1,500 light years
Visual Brightness Magnitude 3.7
Apparent Dimension 1°
Discovered 1611 Nicholas Peiresc

M43 (NGC 1982)
De Mairan's Nebula

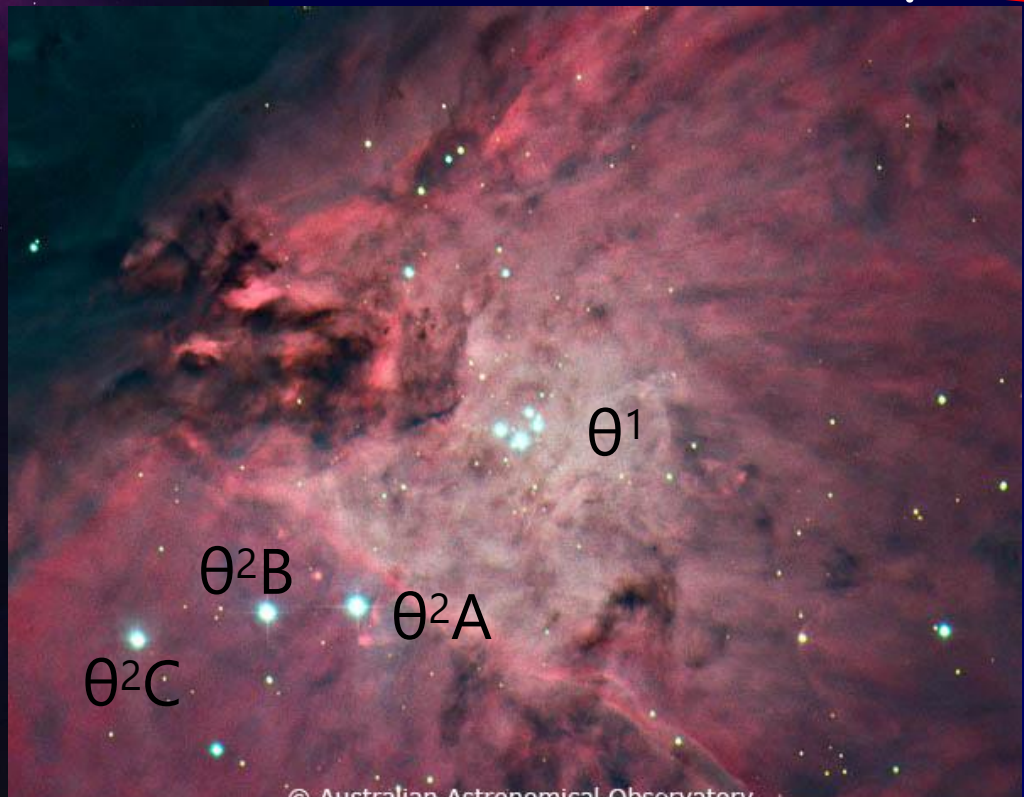
Distance 1,500 light years
Visual Brightness Magnitude 6.8
Apparent Dimension 20 arc minutes

Messier Objects in Orion

M78 (NGC 2067/8)

Distance 1,630 light years
Visual Brightness Magnitude 8
Apparent Dimension 8 arc minutes
Discovered 1780 Pierre Méchain

θ Orionis,
the bright 'star'
within the nebula,
is actually a
multiple star



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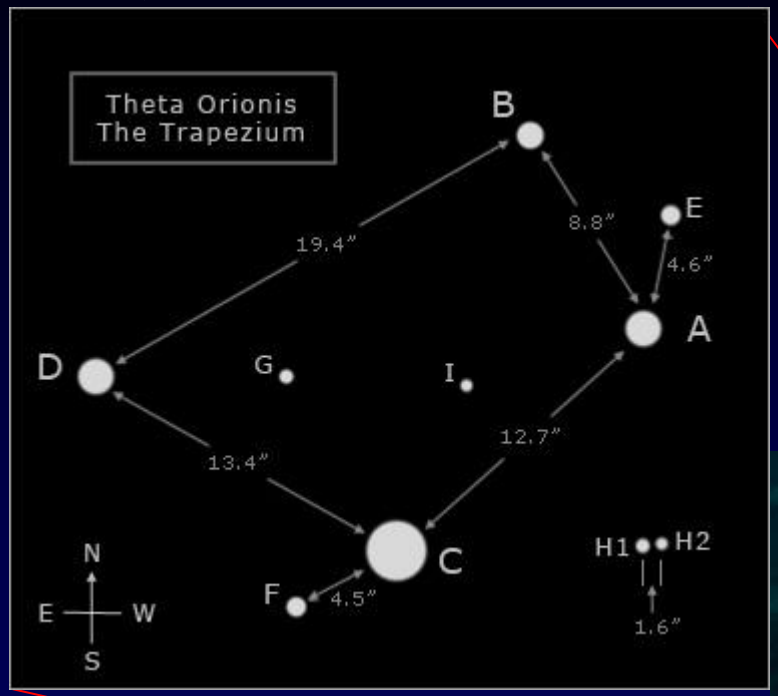
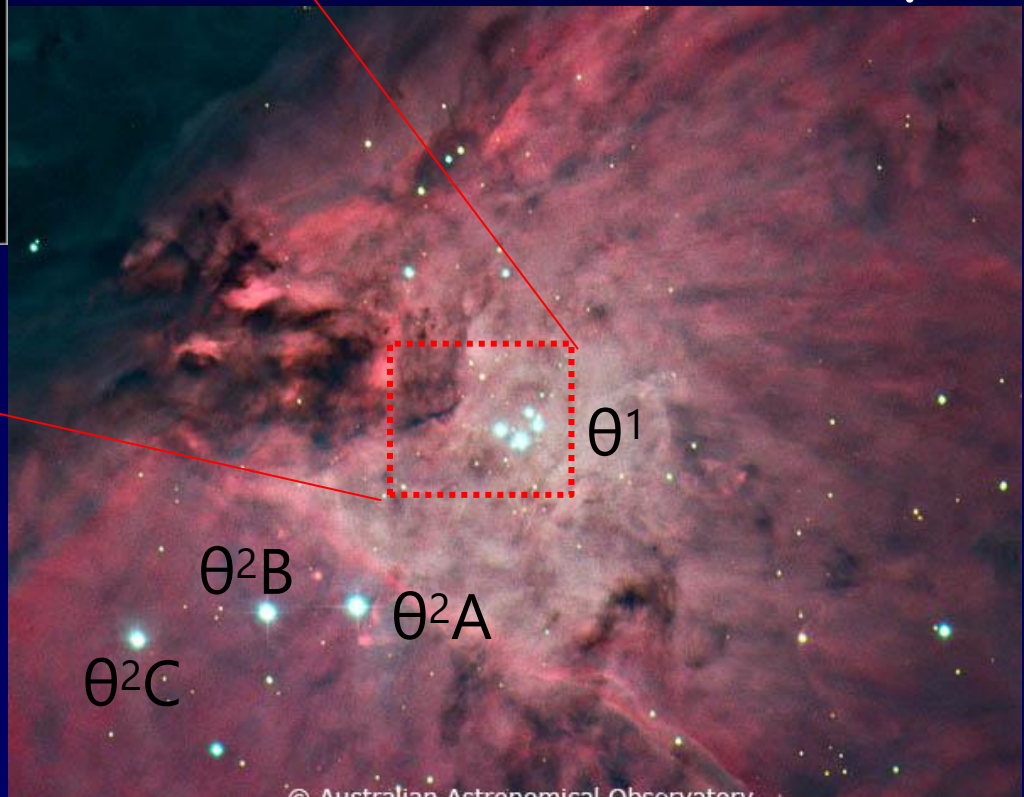
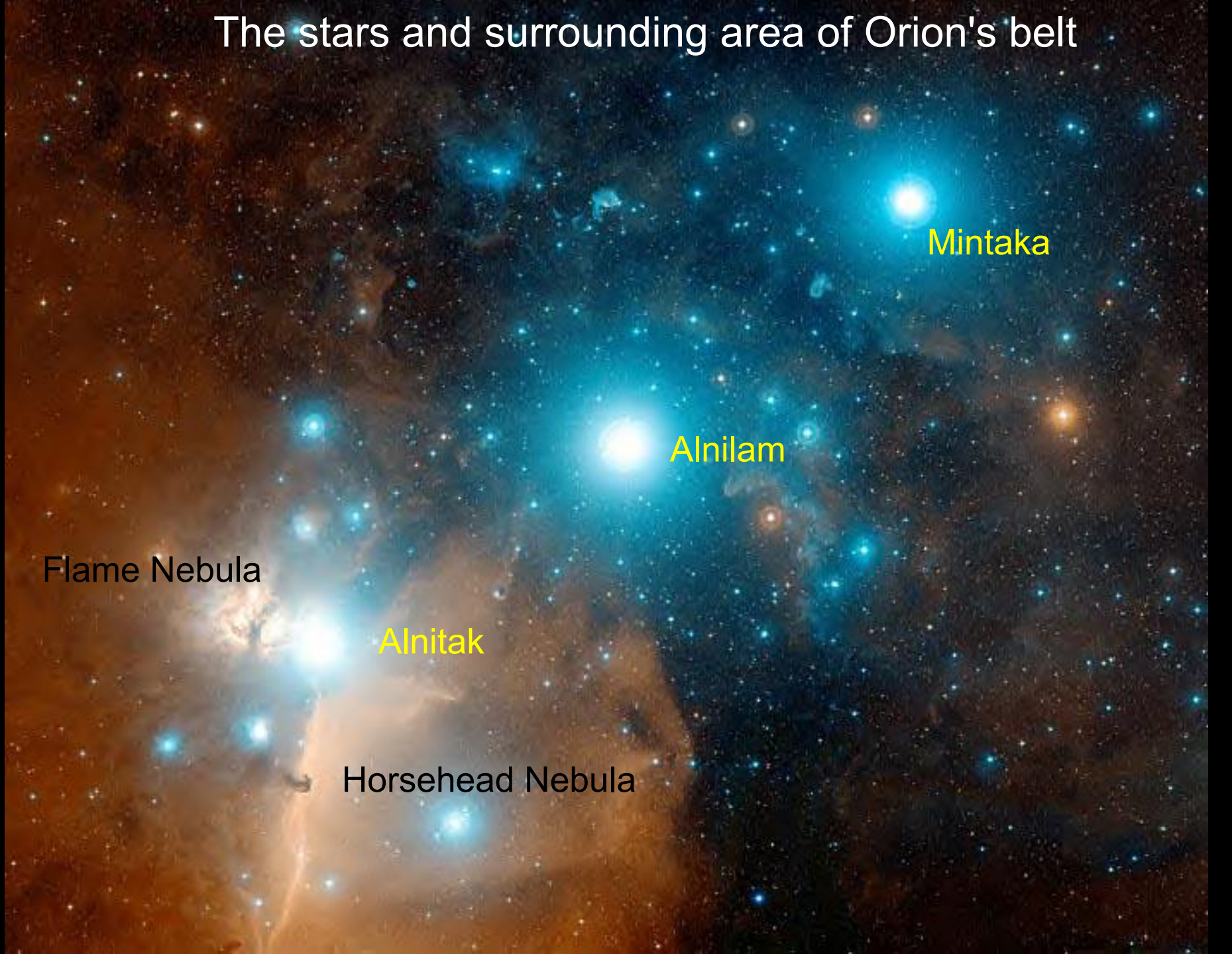


θ¹ 'The Trapezium',
is itself a multiple
star




The stars and surrounding area of Orion's belt
Mintaka
Alnilam
Flame Nebula
Alnitak
Horsehead Nebula

Here's an image from my friend John Evans FRAS showing the star fields around and including Orion. The red has been exaggerated in order to highlight 'Barnard's Loop' – the remains of a Supernova

Meetings at Local Societies

- **Guildford AS** *Lecture Theatre L, Uni of Surrey*
  - Thursday 1st February, 7.30 p.m.
    - **Dark Future**
    - *(A talk about the effect on the night sky caused by light pollution, and how that effect could be reduced)*
      - **Bob Mizon**
        - **Chair, Commission for Dark Skies**

Meetings at Local Societies

- **Farnham AS** *Aldershot Cricket Club*
  - Tuesday 13th February, 7.45 p.m.
    - **Latest Results from Cassini**
    - *(NASA space probe to Saturn, which recently completed its mission)*
      - **Prof. Andrew Coates**
        - » **Mullard Space Science Laboratory - UCL**

Talks at Local Astro Societies

- **Croydon AS** *Royal Russell School, Coombe Lane, Croydon*
  - Friday 9th February, 7.45 p.m.
    - tba
  - Friday 23trd February, 7.45 p.m.
    - tba

- **Ewell AS** *Nonsuch High School for Girls, Cheam*
  - Friday 9th February, 8.00 p.m.
    - Moon Hoaxes
      - » Graham Bryant (Hampshire AG)

Astronomy Evening - 12th February

- Monday 12th Feb, 6 p.m. till 9.30 p.m.
- University of Surrey, Dept of Physics
- No talk this time, just star gazing
  - their observatory and with Guildford AS volunteers
- Free, but book via Eventbrite on Uni's website
  - Department-Physics/events

Astronomy on TV

- **Wonders Of The Moon**
  - Documentary which uses the latest, most detailed imagery to reveal the monthly life cycle of the moon. From Wales to Wyoming, Hong Kong to Croydon, the programme finds out how the Moon shapes life on Earth, as well as exploring its mysterious far side and discovering how the moon's journey around Earth delivers one of nature's most awe-inspiring events - a total solar eclipse. At the end of a remarkable year of lunar activity, we find out why so many supermoons have been lighting up the night sky
  - **Sunday 31st January BBC 1, 9.00 p.m.**

Astronomy on TV

- **The Sky at Night**
  - *– It Came From Outer Space*
    - The programme discusses what we know about 'Oumuamua (the recently discovered interstellar asteroid), and how it is changing our view of the Universe

Sunday	11th February	BBC 4, 10.00 pm
Thursday	15th February	BBC 4, 7.30 pm

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