

Minutes of the Ordinary Meeting of the Cape Centre held on 12/9/1979. at SFAO at 8 pm.

Present were the Chairman Mrs K Burke, 34 members, 3 visitors and one black cat

The Financial statement (see previous page) was read by Mrs Sammut.

The formation of a gift club was discussed. Pat Booth would compile the lists.

There was an invitation to members to submit their own astro photos for exhibition at the November meet which would be an observers meeting.

Prof Warner's book "Astronomy at the Kolfal Observatory, Cape of Good Hope" was on sale at R 7,10 a copy.

Talk by Bill Herst: "Recent Advances in Astronomy due to Space Exploration".

Earthbound observations by telescopes very limited because of atmospheric refraction. A great deal of the spectrum is blocked out by atmospheric absorption leaving a few windows eg the optical and Radio windows. First balloons, then rockets and then an Orbital Astronomical Observatory (O.A.O.) were used to get beyond the atmosphere. A great new world opened up when celestial objects could

be examined in the X-Ray and gamma ray regions. X Rays don't penetrate air.

We also learned more about the earth's upper atmosphere. Sputnik I ~~was~~ slowed down 5 times faster than expected and crashed to earth prematurely. We also know more about the shape and size of the earth: The "old" equatorial radius of the earth = 6378, 338 Kilometres, the "new" value = 6378, 166 Kilometres.

Also the Van Allen belts were discovered. The upper atmosphere is far more turbulent than the lower and solar radiation has a direct effect on it. Its effect can be seen on ~~sat~~ man made satellites which are found paradoxically to come ~~down~~ ^{round} ahead of time.

On to the Moon. The Russians produced the first photographs of the far side of the moon - very poor by today's standards.

Next: Ranger satellites programmed to send back pictures of the moon before impact. Phenomenal resolution was obtained. There is no smallest crater on the moon.

Lunar landings complicated by ^{causing localized} magnetic variations in the moon's gravity. Moon much smoother than expected - no sharp edges or steep slopes.

Specimens brought back revealed high concentration of Titanium in lunar basalt, the lunar surface ^{virtually} unchanged for 4.5 billion years. The [^]greatest

living fossil" in the universe.

On to the planets, unmanned as yet with trips past Mercury, Jupiter and Saturn and ~~two~~ soft landings on Mars and Venus.

No life found on Mars

A great wealth of information brought in creating more new questions to be answered maybe by a ~~new~~ future generation

A word of thanks was given by Mr Rupert Hurdy.

Signed as correct.

NB