

STAR GAZERS

SG 1833 - 5M

AUGUST 13-19,
2018

LOOKING NORTH
AND SOUTH THIS
SUMMER (REPEAT
OF 1431)

DEAN:
HEY THERE STAR
GAZERS. I'M DEAN
REGAS,
ASTRONOMER
FOR THE
CINCINNATI
OBSERVATORY.

JAMES:
AND I'M JAMES

ALBURY,
DIRECTOR OF THE
KIKA SILVA PLA
PLANETAR-IUM IN
GAINESVILLE,
FLORIDA. WE'RE
HERE TO HELP
YOU FIND YOUR
WAY
AROUND THE SKY
TONIGHT.

THE SUN RISES
IN THE EAST AND
SETS IN THE WEST
RIGHT?

DEAN:
FOR THE MOST
PART.

JAMES:
AND THE MOON,

PLANETS, AND
STARS RISE IN
THE EAST AND
SET
IN THE WEST
TOO?

DEAN:
UH HUH.

JAMES:

SO HOW DO THE
STARS MOVE IN
THE NORTH AND
SOUTH?

DEAN:

OH, I SEE WHERE
THIS IS GOING.

WE'RE GONNA DO
SOME SPINNING IN
THIS EPISODE

AREN'T WE?

JAMES:

YEP. FIRST,
WE'RE GOING TO
SHOW YOU THE
STARS AND
CONSTEL-LATIONS
YOU CAN FIND
WHEN YOU FACE
NORTH AND

SOUTH
AFTER DARK.

DEAN:
AND THEN WE'LL
DEMONSTRATE
HOW THE SKY
SEEMS TO MOVE
OVER THE
COURSE OF THE
NIGHT IN EACH

DIRECTION. HOLD
ON TIGHT,
LET'S GET
SPINNING!

(STOP)

JAMES:
OKAY WE HAVE
OUR SKY SET TO
10PM FACING

NORTH ANY NIGHT
THIS WEEK.
WHAT'S THE FIRST
THING YOU
NOTICE?

DEAN:
THE BIG DIPPER,
OF COURSE!
IT'S ABOUT
HALFWAY UP IN

THE
NORTHWESTERN
SKY. FOUR
BRIGHTER STARS
MAKE A CUP AND
THREE MORE
MAKE A
CURVED HANDLE.

JAMES:
AND SINCE WE'RE

FACING NORTH,
THE NORTH STAR,
OR POLARIS
SHOULD BE HERE
TOO.

IT'S NOT TERRIBLY
BRIGHT BUT IT
SHOULD BE AS
BRIGHT AS THE
BIG
DIPPER STARS.

THERE IT IS,
ABOUT HALFWAY
UP IN THE SKY.

DEAN:
THE NORTH STAR
IS PART OF THE
LITTLE DIPPER,
BUT GOOD LUCK
TRYING TO FIND
THAT.

FOUR OF ITS
SEVEN STARS ARE
TOO FAINT TO SEE
IN MOST CITIES.

JAMES:
BUT FINDING THE
NORTH STAR IS
SIMPLE WHEN
YOU HAVE THE
BIG DIPPER

AROUND.
SIMPLY CONNECT
THE DOTS ON THE
TWO
SPOON-STARS,
CONTINUE THAT
LINE OVER TO THE
RIGHT, AND YOU
WILL RUN SMACK-
DAB INTO THE
NORTH STAR.

DEAN:
AND IF YOU
CONTINUE THAT
LINE,
HOP OVER TO
ANOTHER RECOG-
NIZABLE GROUP
OF STARS.

JAMES:

THEY LOOK LIKE
THE LETTER W.

DEAN:

YEP AND THIS IS
THE

CONSTELLATION
CASSIOPEIA THE
QUEEN.

I KNOW IT
DOESN'T LOOK

MUCH LIKE A
QUEEN BUT THE W
CAN BE HER
CROWN.

JAMES:
OOH, I CAN
PICTURE THAT.
BUT THE CROWN
LOOKS BENT ON
ONE SIDE.

DEAN:

AH, I'LL SHOW YOU
WHY AS WE GO
FOR A SPIN.

(STOP)

DEAN:

AS THE NIGHT
MOVES ON THE

STARS IN THE
NORTH MOVE LIKE
THIS.

NOTICE THEY
SEEM TO ROTATE
AROUND A
CENTRAL POINT -
THE NORTH STAR.
IT'S ALSO CALLED
POLARIS
BECAUSE IT'S OUR

POLE STAR,
THE STAR THAT
JUST HAPPENS TO
BE ABOVE OUR
NORTH POLE.

JAMES:
YEAH, LIKE 432
LIGHT YEARS
ABOVE OUR
NORTH POLE.

BUT AS THE
EARTH SPINS, THE
STARS SEEM TO
MAKE A COUNTER-
CLOCKWISE
CIRCLE AROUND
THIS SPOT.

AS THE NIGHT
ROLLS ON, THE
BIG DIPPER GETS
LOWER WHILE

CASSIOPEIA RISES
UP HIGHER.

DEAN:
AS DAYTIME
COMES ON, THE
STARS ARE STILL
THERE.

WE JUST CAN'T
SEE THEM WITH
ALL THE

SUNLIGHT. BUT
THEY CONTINUE
TO MOVE AROUND
POLARIS AND AS
WE MOVE
TOWARD
AFTERNOON,
THE BIG DIPPER IS
HIGH IN THE SKY
AND
CASSIOPEIA...

BONK!

JAMES:

**BONKS HER HEAD
ON THE GROUND.**

**AAAAAH, THAT'S
WHY HER CROWN
IS BENT.**

DEAN:

EXACTLY!

(STOP)

JAMES:
NOW LET'S FACE
SOUTH. IT'S 10PM
AND WE HAVE
TWO GREAT SUM-
MER
CONSTELLATIONS
JUST ABOVE THE

HORIZON.
SCORPIUS IS ON
THE RIGHT AND
SAGITTARIUS IS
ON THE LEFT.

DEAN:
YOU CAN
RECOGNIZE
SCORPIUS BY THE
BRIGHT RED,

SUPERGIANT
STAR CALLED
ANTARES.

ANTARES CAN BE
REALLY TWINKLY
WHEN IT'S LOW IN
THE SKY AND
THUS STANDS IN
FOR THE
SCORPION'S
BEATING HEART.

JAMES:
CHASING THE
SCORPION IS THE
CONSTELLATION
SAGITTARIUS THE
ARCHER. HE'S A
CENTAUR,
HALF MAN, HALF
HORSE, WITH AN
ARROW NOTCHED

IN HIS BOW.
IN REALITY, THE
STARS YOU CAN
SEE LOOK MORE
LIKE A TEA POT
THAN A CENTAUR.

DEAN:
YOU SHOULD
ALSO SEE TWO
OTHER BRIGHT,

NIGHT LIGHTS
AROUND THE
CENTAUR.

THOSE ARE THE
PLANETS SATURN
(TO THE RIGHT)
AND MARS (TO
THE LEFT).

JAMES:
COOL!

AND DON'T BE
SURPRISED TO
SEE THE MOON
PASSING
THROUGH.
IT'LL BE NEAR
SATURN ON THE
NIGHT OF THE
20TH AND OVER
BY MARS ON THE
22ND.

(STOP)

JAMES:
SO IN THE SOUTH
LOOK FOR
SCORPIUS AND
SAGITTARIUS
WITH THE
PLANETS SATURN
AND MARS

HANGING AROUND
THE CENTAUR.

DEAN:

AND IN THE
NORTH LOOK FOR
THE BIG DIPPER,
POLARIS, AND
CASSIO-PEIA.

HEY JAMES, CAN
WE SPIN THE

EARTH REALLY
FAST JUST FOR
FUN?

JAMES:
AND SHOW DAYS
AND NIGHTS FLY
BY?

DEAN:
UH HUH.

**JAMES:
OKAY, HOLD ON...**

BOTH: AAAAH!

**BOTH:
KEEP LOOKING
UP!**
