



NMSR Reports

The Newsletter of the
New Mexicans for Science and Reason

NMSR Reports, David E. Thomas, Editor, 801 Fitch Ave., Socorro, NM 87801 © 2018

DECEMBER MEETING:

NEW MEXICANS FOR SCIENCE
AND REASON will hear

Bruce Lacey

on "A Flat Earther's Journey
and Perspective"

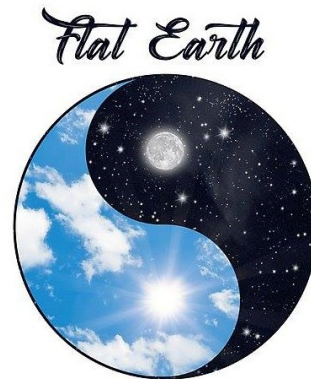
7:00 PM Dec. 12th, 2018

==> **CNM MAIN CAMPUS,**
Student Resource Center <==

==> **Room 204** <==

Bring a friend!

and stationary, and that the moon landings are a hoax

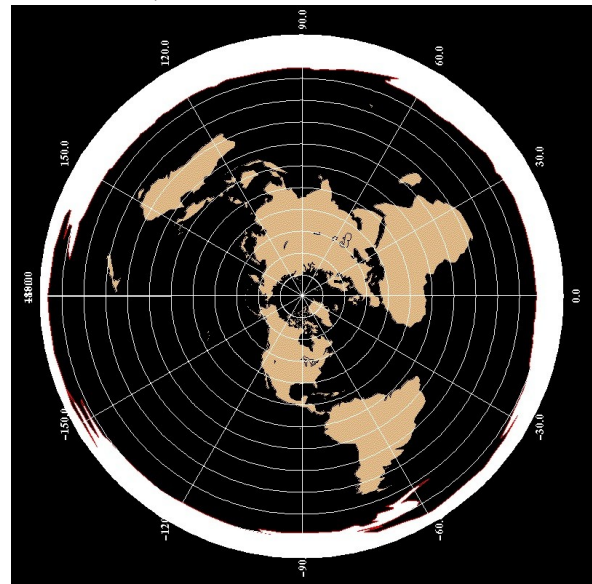


Join us at 7:00 PM October 10th, 2018,
CNM MAIN CAMPUS, Student Resource
Center, Room 204.

FUTURE MEETINGS ANNOUNCED

December 12th 2018 NMSR Meeting:
Bruce Lacey on "A Flat Earther's
Journey and Perspective."

I've argued with several Flat Earthers online, but have never met one in person. Some folks wonder if all the Flat Earthers online are simply trolls, yanking on other people's chains for their own amusement. Our December 12th speaker, Bruce Lacey, assures me that he is the real deal, a genuine Flat Earther, and does not think the Earth is spherical (or that it spins daily, or orbits the sun yearly). He also thinks the Apollo missions never happened, and that 9/11 was an Inside Job. Lacey will discuss how he became a Flat Earth proponent, and will present some of the evidence that has convinced him that the earth is flat



New Mexicans for Science & Reason (NMSR)

NMSR is a non-profit group with the goals of promoting science, the scientific method, rational thinking, and critical examination of dubious or extraordinary claims. NMSR meets at 7 PM on the second Wednesday of each month, in Albuquerque, New Mexico, at CNM's Student Resource Center, room 204 (@ Richard Barr Boardroom). NMSR Reports is its official newsletter.

NMSR officers:

Dave Thomas, President

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Marilyn Savitt-Kring, Science Mom

Membership: **\$25/year** (hardcopy newsletter), or **\$15/year** (downloadable PDF), make your check **payable to NMSR**, send to treasurer (Debbie Thomas).

NMSR Advisors:

- **Mark Boslough**,
Physicist (Impacts, Climate Change,
Global Warming). Sandia National Labs.
- **Kendrick Frazier**
Editor, Skeptical Inquirer
- **John Geissman**
Professor of Paleomagnetism, UNM
- **Alan Hale**
Southwest Institute for Space Research
- **Randy Thornhill**
Professor of Biology, UNM

Cyber-Cypher Clue: Z = L, W = K.

Bonus Puzzle Clue: Reflect on the puzzle.

WANTED: READER ARTICLES & COMMENTARY

Got something to share with NMSR members? Send it in! ATTN: Dave Thomas, Editor, NMSR Reports.

REMEMBER, our next NMSR meeting is at 7 PM on **WEDS., DECEMBER 12th, 2018**, at Student Resource Center, room 204 at CNM!

PUZZLE TIME!

[Please send solutions to Dave Thomas at: nmsrdave@swcp.com, or at 801 Fitch Ave., Socorro NM 87801.]

Cyber-Cypher: DECEMBER PUZZLE

(Submitted by Dave Thomas)

The following letters are a simple substitution cypher. If R stands for L, R will stand for L everywhere. Your Cyber-Cypher Clue: Clue? Oh, well - if you must, see p. 2.

" H D L B N C K N I M E F Y D K C F K J H
E N M D J N D B A C V J J M J X F Y D
N M C N V E A C B L F Y D L B J W D I
N K X D . " - E K F M C M E F Y D J C I
Z B V M E L D J N W D J

SUPER SECRET WORD!

However you prefer to do the cypher itself (above or below), simply duplicate those actions on the alphabetized row of cypher letters below. You'll build an answer key, and you'll also reveal - the Super Secret Word!

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

NOVEMBER CYPHER SOLUTION

"SCIENCE MAKES PEOPLE REACH FOR TRUTH AND OBJECTIVITY; IT TEACHES PEOPLE TO ACCEPT REALITY, WITH WONDER AND ADMIRATION." - LISE MEITNER

Esteemed November Code Crackers: George Egert*, Mike Arms*, Austin Moede*, and Terry Lauritsen*.

*Secret Word: "NUCLEAR JOBSMITH"

SOCORRO STUMPER

Need more Secret Word Cryptograms?

New puzzles every week at

www.nmsr.org/SocorroStumper.htm



December Bonus: “What’s the Rule?”

Submitted by Dave Thomas

The following words can be clearly and unambiguously separated into two distinct groups.

ATOM, BOXED, CHECKBOOK, CHOICE, COCKED, DECKED, DECODE, DOCK, HOOCH, HOOKED, ICEBOX, MAXIMUM, MOUTH, OXIDE, TAXI, TIMOTHY, TOOTHY, TOYOTA, VOMIT, WAXY, WHAT, WITHOUT.

The December Bonus: What are the two groups?

November Bonus : A Stimulus / Response Enigma

Submitted by Dave Thomas

170 210

A common device with a digital keypad for data entry has a certain response for an input of 170, and twice that response for an input of 420. The first response is also the result of inputting 210, and the response is likewise doubled when 380 is used as input.

The November Bonus: What is the device? And what are the two actual responses?

ANSWER: The device is a microwave oven. 170 = 1 minute 70 seconds = 2 minutes 10 seconds = 130 seconds. 380 = 3 minutes 80 seconds = 4 minutes 20 seconds = 260 seconds. The two responses are 130 seconds and 260 seconds. (It also works with hours/minutes instead of minutes/seconds.)

Congrats:

Earl Dombroski (NM), Allen Robnett (NM), Harold H. Gaines (KS), Rocky S. Stone (NM)!

November 14th, 2018 NMSR Meeting: Dave Thomas, on “Scientific Animation”

At our November 14th meeting, Dave Thomas presented several examples of Scientific Animation, e.g. using computer-generated movies to illustrate complex phenomena, optical illusions, and more. Dave showed his home-

brewed animations for:

- **Special Relativity and the Twin Paradox**
- **Seismic Refraction - “Seeing” Underground**
- **Optical Illusions – Peripheral Vision**
- **Isochron and Concordia Dating Methods**
- **Map Projections, Day vs Night, Seasons**
- **Path of the Sun: Globe vs. Flat Earth**
- **3D Shape Visualizations**
- **9/11 Collapse Simulation**
- **Curved Mirror Reflections**
- **Dancing Anagrams**

Several of these animations can be seen at the NMSR website.

<http://www.nmsr.org/refraction.gif>

<http://www.nmsr.org/astronomer.gif>

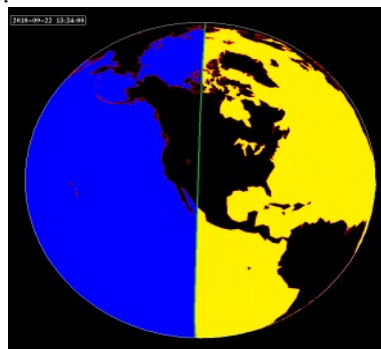
<http://www.nmsr.org/Wicked-anim.gif>

Winter Skeptiverse Haiku!– by Keith Thomas

Do your kids attend A non-toxic, gluten-free, Anti-vaccine school?	At Dress Your Pet shows, You’ll see how jeans are jumping From humans to dogs!
Is it possible Santa Claus was modeled on Ancient aliens?	Climatologists, In these times, may encounter A lot of hot air.
Among horse owners, You might sight some genuine Stable geniuses.	Expert sportscasters Have expertly utilized Useless statistics.

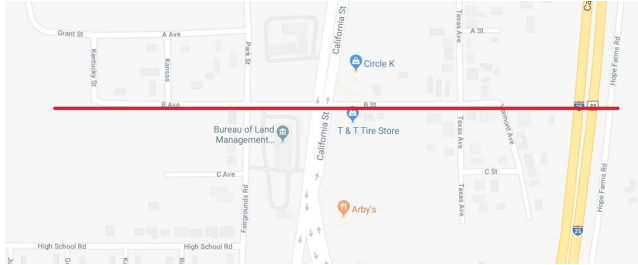
Equinox Experiment Supports Globe Theory

by Dave Thomas On the Autumnal Equinox, the terminator separating day from night runs right through both North and South poles, and the sun rises due east for any position on the Earth. I observed this phenomenon during the last equinox, September 22nd, 2018.

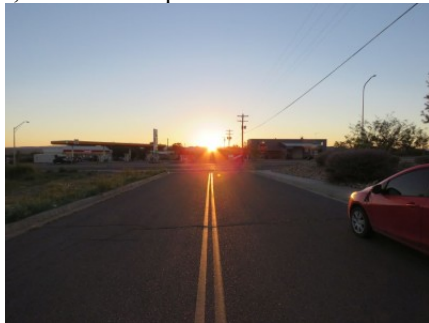


Using Google Maps, I found a road in

Socorro that runs due East-to-West. “B” Street is toward the south end of town.

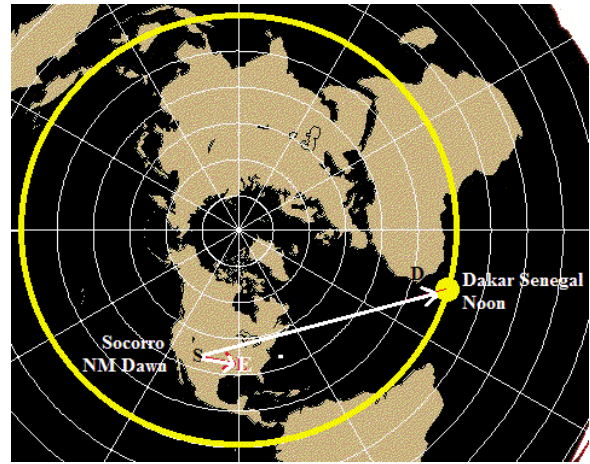


On the morning of the equinox, I went to B Street, and waited for the sun to rise. Sure enough, it rose directly to the East, and the road pointed to it like an arrow.



One of the 20th century’s best scientists, Richard Feynman, said that science is simply the testing of explanations. It doesn’t matter how famous or popular the creator of a hypothesis is, or how elegant the formulation; if it can’t be validated with real experiments, it has to be tossed out. Feynmann said that a *vague* theory – one that predicts any conceivable outcome – is worthless in science.

It’s hard to pin Flat Earthers down on a specific theory, but this seems to be the prevailing explanation: the sun moves in a circle, some 3,000 miles above the disc of the Earth, and on the Equinox, the sun is directly above the equator (0° North latitude). At dawn in Socorro on Sept. 22nd, the sun itself will be above longitude 17° West, 90° east of Socorro’s longitude of 107°, and some 6 hours later.



That means it will be close to noon for residents of Dakar, Senegal. Calculating the position of the Flat Earth sun on the Azimuthal Equidistant Projection (often accepted as the Flat Earth map) at dawn on the Equinox in Socorro, it turns out that the sun is *not* due east, but actually some 30° *north* of east. That’s not what was seen.

If we follow Feynman’s advice, we must discard the Flat Earth hypothesis.

DUES - check the date on your mailing label. If it's time for you to renew, or to make a contribution, please make your check **payable to NMSR**, and send it to Debbie Thomas, NMSR Treasurer, 3205 Alcazar NE, Albuquerque., NM 87110
 Name _____
 Address _____
Membership \$25 per annum (hard copy newsletter), or \$15 per annum (online newsletter).

The NMSR e-mail list is fun! It’s an e-mail list with news announcements of interest to NMSR members, discussions about news of the times, and more. To join, send a request to nmsrdave@swcp.com.

Thanks to: John Covan, Eddy Jacobs, Debbie Thomas, Keith Thomas, and all our Puzzlers!

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 Supports Globe Theory

December Meeting
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 7:00 PM

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