

# NMSR Reports

# The Newsletter of the New Mexicans for Science and Reason

Vol. 18, No. 11

Copyright 2012

November, 2012

NMSR Reports, David E. Thomas, Editor, P.O. Box 1017, Peralta, NM 87042

### **NOVEMBER MEETING:**

NEW MEXICANS FOR SCIENCE AND REASON WILL HEAR

Ted Spitzmiller on
Prospects for Space
WEDS., November 14th, 2012, 7 PM
==>MUSEUM OF NATURAL

HISTORY AND SCIENCE <== => 1801 Mountain Road NW <==

==>1801 Mountain Road NW<== Multi-Purpose ROOM (left of Atrium) Bring a friend

### November Meeting: Space-Nov. 14th.

Our November meeting will be at 7PM on November 14<sup>th</sup>, 2012. Our Speaker is **Ted Spitzmiller**, author of "Astronautics Part 1 and Part 2." Ted will be speaking about the space program after the shuttle, and prospects for exploration of Mars and the Solar System. This presentation



will review the progress of 50 years of human space flight and update the current status of NASA's plans for the future. Perhaps of more significance, the prospects and challenges for expeditions to return to the Moon or on to Mars will be examined. For those who would like to venture further, the question of if it is possible for humans to travel beyond the Solar System will be discussed

Noted author Ted Spitzmiller, presents this informative 50-minute talk followed by a Q&A session and book signing for those purchasing his two volume series "Astronautics" at 50% off the Amazon list price. An aerospace historian, pilot, and flight Instructor—Ted has logged over 4,500 hours in more than 60 different types of aircraft. His articles have appeared in all major aviation magazines and he has published five books. He currently serves as editor of IFR Refresher Magazine.

Information: John Geohegan, 268-3772

# December Meeting – Censored In Chicago





Our December meeting will be at 7PM on December 12<sup>th</sup>, 2012. Our Speaker is Mark Boslough, who will speak on "Censored in Chicago: The Talk that was Too Hot for Heartland."

January Meeting – James Gover, "UNM: A Force for Changing the World?". The topic: "The state of NM, Albuquerque and UNM have waited 25 years since the end of the Cold War to recognize the obvious – Senators Domenici and Bingaman cannot carry the NM economy on their backs forever."

#### **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 the UNM Law Building (1117 Stanford NE, Room 2402, toward the west [golf course] side of the building). *NMSR Reports* is its official newsletter.

#### **NMSR officers:**

Dave Thomas, President P.O. Box 1017, Peralta, NM 87042 nmsrdave@swcp.com

John Geohegan, Vice-President jgeoh@swcp.com

Nancy Shelton, Treasurer

11617 Snowheights NE, Albuq., NM 87112

nshelton10@comcast.net

Kim Johnson, Industrial Physicist

kimber@comcast.net

Marilyn Savitt-Kring, Science Mom

Harry Murphy, Physicist, Medical Quackery
Membership: \$25/year, includes newsletter, check

payable to NMSR, send to treasurer (Shelton).

Newsletter subscription: \$15/year (12 issues)

#### **NMSR Advisors:**

Mark Boslough,
 Physicist (Impacts, Climate Change,
 Global Warming). Sandia National Labs.

Robert Cormack
 Professor of Psychology, NMIMT

• 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: Y = V

Bonus Puzzle Clue: You are on your own for this one!

#### WANTED: READER ARTICLES AND COMMENTARY

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

**REMEMBER**, our next regular NMSR meeting is at 7 PM on **WEDNESDAY**, **November 14th**, **2012**, at the NEW MEXICO MUSEUM OF NATURAL HISTORY AND SCIENCE!

## **PUZZLE TIME!**

[Please send solutions to Dave Thomas at: nmsrdave@swcp.com, or at P.O. Box 1017, Peralta NM 87042.]

### Cyber-Cypher NOVEMBER 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.

"IVG CHMN BLQQGKGHDG
UGIXGGH WDLGHDG JHB
WDKGXLHT JKCEHB, LW
XKLILHT LI BCXH."JBJF WJYJTG

#### **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*!

ABCDEFGHIJKLMNOPQRSTUVWXYZ

#### OCTOBER CYPHER SOLUTION

"FACED WITH THE CHOICE BETWEEN CHANGING ONE'S MIND AND PROVING THERE IS NO NEED TO DO SO, ALMOST EVERYONE GETS BUSY ON THE PROOF." - JOHN KENNETH GALBRAITH

Esteemed October Code Crackers: Mike Arms\*, Terry Lauritsen\*, Austin Moede\*. \*Secret Word: STARCHLIKE

#### November Bonus: "Langford's Problem" Submitted by John Geohegan

The November Bonus: In Martin Gardner's Magic Show, he describes Langford's Problem, which is to arrange four pairs of cards: two aces, two deuces, two threes, and two fours side by side in a row so that one card separates the aces, two

cards separate the deuces and so on. What is the solution? Apparently there are no solutions with five or six pairs of cards, but there are 26 solutions with seven pairs.

# October Bonus Solution: "Repeating Decimal"

Submitted by Dave Thomas

**The October Bonus**: Find the reduced fraction that is equal to 0.967032967032967032....

#### **ANSWER: 88/91**

OCTOBER BONUS SOLUTION SOLVERS: John Geohegan (NM), Keith Gilbert (NM), Eric Hanczyc (WA), Mike Arms (NM), Harold H. Gaines (KS), Austin Moede\* (NM), Roy Thearle (UK). Congrats!!

# Mathis Shows Movie at NM Tech

by Dave Thomas

Mark Mathis, who produced the 2008 pro-



creationist documentary "Expelled: No Intelligence Allowed" starring Ben Stein, is touring with his latest movie, about America's

dependence on oil. He showed the film, which has been out for several months, at New Mexico Tech in Socorro on the evening of October 25<sup>th</sup>. The showing was sponsored by the student chapter of the Society of Petroleum Engineers. I gave my psychology students the assignment of attending, and assessing if the film was science or pseudoscience. It turned out to be a splendid field exercise for the students.



One of the main points of the movie was that it's wrong to say we as a society are "addicted to oil," and that it would be better to just admit we are "spOILed." The movie, which features Mathis himself touring and interviewing talking heads and political figures, does make a few reasonable points along the way. For example, Mathis points out that oil is the starting point for most plastics, cleansers, and more, and is used for much more than just transportation and heating. Also, some of the

comments about the over-hyping of oil alternatives (solar, wind) at the present time were not too far off the mark.

However, many scenes in the film presented obvious pseudoscience, such as a montage with Bill Richardson, Jeff Bingaman and Tom Udall, which culminated with their clothes being replaced by gaudy Mexican cowboy outfits to accompany the mocking they received about being the "Three Amigos." (Logical Fallacy: *Appeal to Ridicule*)

In another scene, Mathis dismissed the entirety of climate change research as meaningless by referring to the (non) scandal "ClimateGate." No matter that the scientists supposedly caught "fudging data" were all exonerated after many academic and federal investigations, Mathis adopted the Denier mantra that a few rude emails from one college invalidate an entire body of data, and prove that "global warming" is just a scam. Mathis also gave screen time to Heartland Institute favorite "Lord" Monckton, who pooh-poohed climate change. Our upcoming (December 12<sup>th</sup>) speaker, Mark Boslough, has debated Monckton, and found his actual science comprehension to be *minimal*.

One scene in the film got me to do a little additional fact-checking, as the claims in the film directly contradicted statements made recently by our August speaker, JW Madison, on trains and rail travel. (See the September NMSR Reports for a summary of the Rails Inc. presentation.) In "spOILed," Randal O'Toole, author of "Gridlock: Why We're Stuck in Traffic": is put on-screen to disparage light rail, saying "Americans ride rail transit 88 miles a year; an average western European rides rail transit 96 miles a year. 10% more, for having four times the investment. So they're very energy wasteful; and financially, enormously expensive to move people around."



That struck me as just wrong, so I checked into the figures further. When I was in Germany in 1998 to speak on Bible Codes at the University of Heidelberg, I was impressed by the rail system, which allowed me to get all around the country quite easily. The DC area Metro is another marvel of car-less transportation. I checked around for imformation on several websites, such as en.wikipedia.org/wiki/Rail usage statistics by country, and found that, contrary to Mathis's expert, German rail travel exceeds US rates by many times. Specifically, Germany had 1.95 Billion passengers in 2010; had 910 passenger km per head; and racked up 78.58 B passenger-km in that year. The USA, on the other hand, had less than half a billion passengers in a year (25% of Germany), along with only 80 passenger km per head (9% of Germany), and a total of 17.21 B passenger-km (22% of Germany). Germans don't ride the rails a mere "10% more than Americans," per person, they ride more than 10 times what the average American travels by rail in a single year. One wonders what other facts were slaughtered in the making of this film.

(JW Madison, our train expert, suggests the following websites as sources of reliable information: his group's website, <a href="www.nmrails.org">www.nmrails.org</a>, and also <a href="www.lightrailnow.org/mythbusters">www.lightrailnow.org/mythbusters</a>)



Mathis's vanity film is misleading on many levels. Its purpose is evidently to praise and demand more oil drilling, right now! Screw the environmentalists, damn the climate change scientists, bypass the politicians, and get that oil flowing! But we're just *spoiled*, not *addicted*. Or something like that.

Considering the other work of its producer, perhaps this film should be re-named "spOILed: No Facts Allowed."

### Guess Who's Ba-a-a-ack?

John Weckerle of the ,New Mexico Central blog (nm-central.com/blog) writes on Nov.  $3^{rd}$  that

"We found ourselves not-too-terribly surprised to read recent articles ("Charter School Warned," "PED warns charter school against religious teachings") regarding accusations by the New Mexico Public Education Department (PED) that the Estancia Valley Classical Academy (ECVA) may have strayed over the line between religious and secular education. Our lack of surprise — and, to some extent, our amusement — stems from the fact that both articles mention an individual who was featured in the context of his views on 'science' (including an apparent bent toward creationism or, at least, anti-evolutionism) in one of our previous articles...



That individual, Roger Lenard, is variously described as 'one of the school's founders' and the president of the school's governing council. Given the subject of these stories and the concerns reportedly expressed by parents regarding what their children are being taught

about science, we find ourselves perplexed that Mr. Lenard's fame in the creationist universe has thus far been ignored by the journalistic community. In addition to our article and the New Mexicans for Science and Reason (NMSR) article cited therein, we find [several] references to Mr. Lenard as a 'creation scientist'...'

Lenard was the Sandia scientist who persuaded fellow NM State Board of Education members to strike evolution and the age of the earth from NM standards back in 1996. I guess the old saying is true -- you *can't* teach an old dog new tricks.

#### Where's Marshall Berman?

Stalwart NMSR supporter Dr. Marshall Berman has relocated to Louisville, Colorado to be closer to his family. We wish Marshall the best!



Ask Dave Thomas for contact information if needed.

## Siccar Point Development Approved

A followup from previous articles in NMSR

Reports: the "Save Siccar Point" Facebook page reports on November 7<sup>th</sup> that "Unfortunately, the planning application has been approved by the Council Planning Committee. … They have added a few constraints to the application, but nothing that will now stop the pipeline being built and the effluent being pumped out into the sea just 150m from Siccar Point. .."

# October Meeting – Radford on Crystal Skulls

Our October meeting was held on October 10<sup>th</sup>, 2012. The Speaker, **Benjamin Radford** of the Skeptical Inquirer, discussed "Crystal Skulls." Ben said



that "Crystal skulls are among the strangest and most mysterious artifacts in the world. They have been seen in the world's finest museums, inspired Indiana Jones, and, according to legend, have even been used to see



the future—or kill with terrible supernatural power." He added that "Crystal skulls are at the center of a large cottage industry within New Age circles, including books, seminars, newsletters,

videos, etc. People pay \$100 or more per hour to be in the same room with crystal skulls and meditate."

Why do skulls made of crystal attract interest? Well, skulls are a symbol of death and life, and are inherently more interesting than other bones such as femurs. (However, a Google search does get hits for a "crystal femur," on sale for

\$164.90.) And why crystals? Radford mentioned the ongoing New Age fascination with crystals for healing, divination, chakra adjustments, and more.

A skull in the British Museum, which was acquired in the late 19<sup>th</sup> century, is made of a single quartz crystal. The British Museum found the skull's provenance as



found the skull's provenance as "probably European,

19th century AD" and declares it to be "not an authentic pre-Columbian artefact." The museum has established that this skull was made with modern tools, and that it is not "hand-made" by ancient Aztecs or Mayans, as is commonly believed.

The British Museum skull is similar to, but more primitive than, the "Skull of Doom," which was popularized by Arthur C. Clarke in his television series "Arthur C. Clarke's Mysterious Clarke described the skull as "the World." weirdest gem in the world... one of a handful of strange man-made objects that have challenged the ingenuity of the world's scientists." The Skull of Doom was popularized by British explorer F.A. 'Mike' Mitchell-Hedges, whose daughter Anna was alleged to have found the skull while in Belize in 1927, when she was just 17. The Skull of Doom is revered by believers: "A psychic named Sandra Bowen spent nearly a month communicating with the Mitchell-Hedges skull. With the help of two extraterrestrial alien friends named Akbar and Josephat, Bowen stated that the skull told her that its favorite color is purple and that it had other 'skull brothers and sisters' who it had not seen in a long time and it missed them."



British explorer F.A. 'Mike' Mitchell-Hedges

Radford said that Mitchell-Hedges wrote about the famous skull in his 1954 autobiography, Danger My Ally, stating that the skull was "at least 3,600 years old and according to legend was used by the high priest of the Maya when performing esoteric rites. It is said that when he willed death with the help of the skull, death invariably followed. It has been described as the embodiment of all evil." But, Ben found, "Mr. Mitchell-Hedges was not the brave adventurer he claimed to be; in fact writer Joe Nickell refers to Mitchell-Hedges as 'a habitual liar and faker' who was revealed to be a con man who had been caught

in a string of lies and scandals ranging from financial fraud to adultery. ... The truth is that Mitchell-Hedges bought the skull from a collector named Sydney Burney in 1933, which he later sold to pay a debt. It was later purchased by Anna, who made up a romantic and adventurous story about finding it on her seventeenth birthday in the jungle ruins of a lost city."

Radford also discussed the case of an

"American" crystal skull called the "San Luis Skull." It was found by rancher Donna Koch in 1995 in New Mexico's San Luis Valley. Koch said that the skull "mysteriously repelled dirt, as if a pulsing aura or energy kept contaminants at bay."



kept contaminants at bay." Radford said that "psychics and sensitives were especially drawn to the skull. More than one hundred people arrived to gather around the skull beneath a full moon at Colorado's White Eagle Village Inn, Retreat, and Conference Center, coming from as far away as St. Paul, Minnesota, and Sedona, Arizona, to meditate around the skull for hours and record their impressions."

Ben noted that "The skull was eventually taken to the Denver Museum of Natural History, where curators confirmed that the skull was actually crafted from glass, not crystal. This revelation somewhat diminished the gleaming skull's mystique, since of course if it was not made from crystal quartz then there would be no reason to believe it had any of the mystical healing or scrying properties attributed to that particular rock."

But the last nail in the coffin of the San Luis "Skull" turned out to be the discovery that it was just a rejected version of a glass paperweight made by local artisan Paul Chadez for sale at "Day of the

Dead" fairs. This particular specimen was declared defective, and tossed out by the artist.

Radford's conclusion: despite all the hoopla, the talk of space brothers Akbar and Josephat, the

fears of curses, and the exorbitant prices charged just to be with a "skull," all of these relics were either carved by 19th-century Europeans, or



produced by modern American glass artisans.

NMSR thanks Ben Radford for a splendid presentation.

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 Geohegan, Paul Braterman, Debbie Thomas and our Puzzlers!

DUES - check the date on your mailing label. If it's time for
you to renew, or to make a contribution, please check the box
and send a check to
NANCY SHELTON, NMSR Treas
11617 Snowheights NE, Albuq., NM 87112
Name
Address
Membership \$25 <i>Paperless</i> or Newsletter Only \$25

On the Net? Ask for the Paperless NMSR Reports! mailto:nmsrdave@swcp.com "Dave Thomas"

NMSR Reports Vol. 18, No. 11 November 2012		
David E. Thomas, Editor (505) 869-9250		
P.O. Box 1017, Peralta, NM 87042-1017		
IN THIS ISSUE:		
FUTURE in SPACE?	Upcoming Meetings	
Ted Spitzmiller	Puzzles	
WEDS. Nov. 14	Lenard Returns	
Museum of Nat.	Mathis Movie: "spOILed"	
History and Science	-	
	October Radford	
	Mtg: Crystal Skulls	