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RE: SUBMISSION: Public Response to OMB Bulletin on Peer Review

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Public Comment Response also POSTED at this LINK (will be properly formatted soon):

PUBLIC RESPONSE TO OMB/NASA PEER REVIEW BULLETIN - Forums powered by UBBThreadsTM

http://uplink.space.com/showflat.php?Cat=&Board=seti&Number=716439&page=0&view=collapsed&sb=5&o=0&fpart=

Response from Federal Register Posting:

[Federal Register: April 28, 2004 (Volume 69, Number 82)] [Notices] [Page 23230-23242] From the

Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr28ap04-92]

Reverence: Revised Information Quality Bulletin on Peer Review.

May 28, 2004 PUBLIC COMMENT CONCERNING NASA Author; Francis C. P. Knize; Producer, Public Outreach Organizer

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Dr. Margo Schwab or any other please inform if Download was unsuccessful.

Sincerely,

Francis C. P. Knize

- OMB PEER DQA FINAL ATTACH.wpd



Public Response to OMB Bulletin on Peer Review

[Federal Register: April 28, 2004 (Volume 69, Number 82)] [Notices] [Page 23230-23242] From

the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr28ap04-92]

Reverence: Revised Information Quality Bulletin on Peer Review.

May 28, 2004

Author; Francis C. P. Knize; Producer, Public Outreach Organizer

INTRODUCTION.

As a Public Outreach Organizer, who has approached NASA with educational media projects involving debates on some of the most compelling aspects of Space Science, I much appreciate this opportunity to express some of my experiences over the years concerning Peer Review at the agency. I offer a well-developed historical analysis concerning Peer Review, which I believe this panel will find most interesting; included is the story of the first Data Quality Act inquiry at NASA. A link is provided. This report is similar to the FACETS submission, but goes into areas and explanations that FACETS did not discuss which are equally important.

I thank the Office for Management and Budget for these proceedings to cite public experiences and offer recommendations to this panel on Peer Review; with respect to Information Quality Act directives. With the independent research cited below, the people I associate are collectively qualified for such recommendations because of their public input over the years into matters about dissemination concerning NASA space exploration programs. Unfortunately, this has often turned out for some to be more of a challenging role; encountered has been space agency resistance to foster a broad scope of critical thinking, and for using outside-agency expertise in assessments before release to the public, or after the event of release, there exist resistance to accept "fair responses" to arguments presented by NASA assessments.

Many of NASA's assessments regarding anomalous and unexplainable surface features shown in probe photos have not been peer reviewed, and further, NASA scientists report to Internet Space News agencies such as Space.com, without being peer reviewed and without providing any subsequent forum for rebuttal. The Information Quality Act has defined *any* report or assessment shown at NASA's Internet site, or *any* statements made by NASA scientists using agency information, as considered a form of public dissemination, and are subject to IQA jurisdiction. Regulations need to be formed to ensure that outside reviewers are incorporated fairly in the process before and after any given federal assessment, especially when involving "Highly Influential Data." In this way, our system for scientific investigation will incorporate the necessary checks and balances akin to the vision our nation has for an open, honest, and Democratic science.

Another observation is that NASA needs to create a record of responses to their assessments that can be displayed online at their official site. The Internet can provide an expedited means to eliminate false conclusions. But with NASA simply posting uncontested theories for which there is no access for any scientific or public discourse, we believe is improper according to the guidance of The National Academy of Sciences and The National Science Foundation. The science community should work together, test theories, and engage in lively debates. NASA

seems to resist this premise when it comes to anomalous phenomena that doesn't seem to fit into their geologic criteria. Yet, the wonders of our new century demand scientists to consider wider and more compelling viewpoints.

Peer Review and dissemination standards also manifest through Public Outreach programs with teachers and students. Of course, the definition of peer review extends to the classroom. I am sorry to report that even these programs have been stifled for "independent thinking." We will show cases where Educational Outreach projects have been denied by officials because they did not fit into ASU/JPL's controlled curriculum, which predominantly observes on a geologic level, and is deficient to analyze on an Astrobiological or SETI level. What ASU/JPL seems to be doing is dictate the curriculum for even school students; so as to suspiciously protect the NASA contractor's own interests, (disputably, a conflict of interest). Students and teachers should be allowed to examine the data as they wish. The public has absolute rights to the data by law, and scientific "Free Speech" should be embellished.. Our Educational Outreach group was recently refused access to JPL/ASU's Public Outreach program known as MSIP, which involves students and teachers working with THEMIS probe data. As well, we received a refusal by the Ames Research Center's MARSOWEB Outreach program. Yet, Inquiry Teaching is one of the progressive areas of education and is sanctioned by NASA, so why the refusals? This story will be further explained later in this report.

Overall, American science is being robbed of the richness of diverse opinion in space exploration matters. The controversy surrounding NASA dissemination issues is highlighted as far as the Information Quality Act goes; the data concerns a most profound area of human endeavor; the search for life and origins in our solar system and galaxy. The public has notably a great interest for the topic today, and depends on NASA to appropriately investigate the question. Significant Independent researchers and scientists have found that they are left out of the loop of official investigations. Some of their testimonies are presented later in this memorandum.

We believe we will present this distinguished panel with evidence of how the inability to collaborate in the space science community has led to failures in scientific assessments; failures so poignant as to totally ignore completely relevant new discoveries about the formation of Mars and about our solar system in general. These discoveries would be important enough to swing science toward a new paradigm for life in the solar system.

Examples of questionable publicly posted assessments made by NASA contractors, that needed opportunity for outside-agency response and debate:

- 1) Michael Malin; of Malin Space Science Systems released his well-noted review which showed a "Smiley face" in a crater which was clearly non-anomalous. The suggestion of this assessment was to debunk the potential to incorporate SETI Science into space probe photoanalysis in general. Since tax dollars were used to put forth Dr. Mailin's opinion, tax dollars should also be used to allow for response from differing reputable researchers. The NASA sanctioned SETI Institute recently posted an article at the Space.com web site which explained the use of critical SETI thinking for planetary photo data, contradicting Dr. Malin's overstated conclusion that all photographic evidence for pattern recognition ends as merely an optical illusions.
- 2) JPL's assessments concerning the Cydonia Region of Mars, in particular; the

assessment of MGS Team Leader; Dr. Stephen Saunders in $July \ of \ 2002$, concerning the area's topographic features being explained solely by geologic processes, did not allow for counter-assessments from other reputable geologists as Dr. Bruce Cornet, who had written one for Saunders' analysis, explaining that the evidence leaves the doors open for debate. "Unmasking the Face" is another NASA article shown at JPL/NASA's website which draws conclusions before entry of other expert points of view.

- 3) JPL's assessments concerning the recently discovered anomalous feature, found planet-wide, known as "Tubes." This is a highly debated issue involving needed scientific conversations such as whether the features are convex our concave. However, NASA is not permitting discussion after a JPL representative delivered an initial assessment which explain away these highly anomalous phenomena as "Dune Trains" (Dr. David Peri NASA scientist), Subsequent image analysis by independent researchers provides good evidence that refutes the "Dune Train" Theory. Yet, there exists no forum for public discussion. See below.
- 4) Concerning NASA's recent assessments concerning newly discovered spherules found in the trillions across an ancient Mars dry seabed. NASA's conclusion is that these spherules are Hemitite based. But, independent researchers who followed NASA's procedure for analysis, recognized the potential that readings for Nickel were missed. This would lead to a monumental discovery concerning the past presence and influence of another celestial body upon Mars. Such interesting theories should not be suppressed, and that NASA scientists, when recognizing such theories, should provide proper credit to those who laid the groundwork. See below.
- 5) Correct Color Calibration concerning data received from a variety of probes is another issue described below.
- 6) Important data about Methane detected in the Martian atmosphere was dismissed since 1969 simply because of an error in the analysis, and it has taken all these years for NASA to re-examine the data. It is now believed Methane and Ammonia were detected by IR-spectra in Mars atmosphere in 1969 after the Mariner 6 und 7 missions; Methane would indicate life, since it is a byproduct of life processes. Corrections in the old assessments must be made, and the science community outside of the agency must engage in new discussions about the Mars Methane question directly with NASA.

LINK: Infrared Imaging Spectroscopy of Martian Volatiles

http://elvis.rowan.edu/~klassen/papers/dissertation/chapter1.htm

More interesting data will be found on the recently rediscovered calibrated raw data:

LINK: 1969 Mariner 7 IRS: Data Set Recovery and Calibration

http://www.lpi.usra.edu/science/kirkland/IRS/Recovery1/handout.html

This memorandum includes submissions, by way of Internet Links, from independent researchers involved in the above cases, and who honor the tradition of scientific inquiry. Despite their belief in open-science, they have been stymied by our space agency in the presentation of reasonable scientific opinion within the consideration of NASA disseminations to the public.

DETAIL OF SPECIFIC CASES:

1. The Case for Correction of Color Calibrations for Mars Probe Instrumentation.

Color Calibration of space probe instrumentation has become an international issue for Space Science; explain researchers not connected with NASA. The claim has been made for some time that NASA needs

to conduct better collaborations with proficient independent image analysts to ensure the proper color settings for various sensing instruments. THEMIS Space Probe data True Color renditions are among those questioned for color accuracy. Certainly a discussion is warranted about proper calibrations of space probe data in a more open fashion then has been existing. The world sees for the first time color interpretations from the *European Space Agency* probes which depict far greater color ranges, including blue and green hues, which NASA probes seem to have been missing. The Hubble telescope also contradicts the conclusions of JPL's readings, showing blues and greens. This is important because blue and green hues could indicate algae growth, bluer skies, and water. We believe this would be an item of substantial interest for any federal panel on peer review and is quite significant in relation to the Information Quality Act directives? A nation waits for this panel's response to eradicate what are clearly peer review deficiencies concerning color calibrations over the years at the space agency, which ultimately help unravel the mystery of life in our solar system.

ESA Probe Photos:showing bluer and greener hues, LINK: http://www.dlr.de/mars-express/images/230104/gusev 3 ColorComplete 900.jpg

Also; http://photojournal.jpl.nasa.gov/catalog/PIA05864 is a link that shows newly released THEMIS True Color renditions out of NASA which do depict blues and greens. Yet, the public awaits a properly peer reviewed assessment as to the reason NASA gives for these colors. For 30 years NASA has been showing a predominantly red planet for Mars, both in the surface colors, and mostly as the atmospheric color. NASA has the responsibility to modify to the modern scientific view, their past evidence has been indicative of a hostile environment, yet all the recent evidence is pointing to a life paradigm on Mars, which existed in its past and maybe even still apparent presently?.

An Ames Research Center image analyst's independent viewpoint about the problems of NASA's colorations, which may miss indications for life.

From http://www.keithlaney.com/spirit_color_images_calibration.htm Keith Laney writes: "The NASA/JPL color images (PanCam- Rover) we've been seeing and the one linked here have been made with the "wrong" red filters, the near infrared, reportedly done so in order to better identify surface compositions. I would prefer to see the sights as they really appear.. so would many others. Use of any other than actual red green and blue filters will not produce an accurate color image. Use of any other filters, and then calling the result "true color" is inaccurate and misleading. IR IS NOT visible red. Use of an IR filter for red is not accurate in close or "true color" imaging, PERIOD."

Dr. Ron Levin; MIT, also has responded with a paper concerning the PanCam which questions the settings NASA uses when it calibrated for true Martian color as the human eye would see it; found at the following link:

http://www.biospherics.com/mars/spie2003/SPIE 2003 Color Paper.htm

With such wide expert discrepancies within the field of spectral analysis, it is clear we need better mechanisms for peer review at NASA concerning image processing and image enhancement.

At his independent website, Image Analyst, Keith Laney, shows alternative conclusions and possible color corrections for THEMIS image data. Keith is also a well-respected image processing volunteer at *Ames Research Center*. He is one of the most well-qualified independent interpreters of THEMIS data in the world. But never have his independent color assessments been allowed to be posted at the NASA websites to show differing expert opinion about color schemes for THEMIS. Obviously, the work Keith has done is respectable and would go far to contribute to the discussion about correct color calibrations.

Keith Laney has been providing good analysis for making the correct settings for THEMIS true color:and IR interpretations, and for using different image enhancement software (ISIS) which is able to interpret the data from THEMIS with far better results. These new strides in image interpretation should be recognized and heralded in the NASA peer review process, and collaboration should be celebrated at NASA with outstanding image processing talent as Keith represents.

Holger Isenberg is an independent researcher from Germany with substantial accreditation in image processing. He has come to the same conclusions that the color schemes for NASA photographs need explanation, that correct adjustments of color have yet to be fully achieved by Jet Propulsion Laboratories, or Arizona State University's THEMIS program. Holger has taken the task to reassess some of the old Viking data, and other Mars space probe data, to doublecheck NASA's conclusions for image calibration. He has come up with some very real questions about NASA's overuse of red filters, or over-calibration of the red settings, which he would like to present to the appropriate assessment committee to help ensure the quality of this important planetary information.

Albert Yen, one of NASA's own team of researchers that field tested the MER Rover instrumentation writes, "I have long since concluded the eye is a better spectrometer than certain lab instruments." Yen goes into great detail on how difficult and almost completely impossible it can be to judge geologically or research an area on Earth remotely using a MER-like rover with its camera equipment. One can read this personal report of scientists having participated in the MER field test (FIDO) before launch to Mars. To read the report, go to "Post-test Field Site Write-up" in the additional documentation column:

http://wufs.wustl.edu/fido/tests/aug02/an/default.htm

Yen emphasizes how a good True Color picture can say much more about geological features than any specialized spectrograph data.

Contrary to Yen's expert opinion, JPL continues to disseminate color images which inaccurately depict actual true color; by processing them with a series of filters biased toward the red spectrum. By creating better Peer Review standards and a better platform for interaction with the public, NASA will be able to achieve image disseminations which are worthy of true critical thinking. Observing the information in a dialectical manner to center upon the best of theories will achieve profound new visions about our neighboring planetary environments.

ENDING COMMENT CONCERNING USE OF PROFICIENTLY SKILLED, AND PUBLICLY RECOGNIZED INDEPENDENTS:

What and who determine which researchers are "Proficient", is a good question for this panel on peer review? Hopefully, this panel can provide guidelines for federal agencies to incorporate the unique abilities of independent image analysts, who have over the years developed substantial credibility through their associations with NASA, or by having had published on the Internet and by other means a brief of substantial scientific merit concerning planetary imaging data analysis.

2. The investigation about the Cydonia area is still open for debate despite NASA's present standpoint. From NASA/MSSS's site-disseminated assessment "Unmasking the Face". this assessment was not peer reviewed, nor did Malin Space Science Systems offer a chance for scientific rebuttal or input:

http://science.nasa.gov/headlines/y2001/ast24may_1.htm

"And so on April 5, 1998, when Mars Global Surveyor flew over Cydonia for the first time, <u>Michael Malin < http://www.msss.com/></u> and his Mars Orbiter Camera (MOC) team snapped a picture ten times sharper than the original Viking photos. Thousands of anxious web surfers were waiting when <u>the image < http://apod.gsfc.nasa.gov/apod/ap980407.html></u> first appeared on a JPL web site, revealing ... a natural landform. There was no alien monument after all.

What the picture actually shows is the Martian equivalent of a butte or mesa -- landforms common around the American West. "It reminds me most of Middle Butte in the Snake River Plain of Idaho," says Garvin. "That's a lava dome that takes the form of an isolated mesa about the same height as the Face on Mars." END

On the level of SETI Science, there are established protocols which are empirical and can be incorporated in analysis of photographic evidence. The debate is far from over within the scientific community whether or not a premise for "Artificiality "can be fairly established. Peer Review concerning SETI Science, and even Astrobiology, has been hard to come by, as the historic record shows. I urge this panel to read my pertinent two part brief:

<u>"A Review of Scientific Ethics at NASA concerning Public Outreach and the SETI Issue</u>", found at the following link;

http://uplink.space.com/showflat.php?Cat=&Board=seti&Number=668622&page=0&view =collapsed&sb=5&o=0&fpart=

I offer this as a significant brief defining the historical prospective of Peer Review policy in Planetary Science, including personal experiences as an educational producer and Public Outreach Organizer to create a series of international debates concerning the precise topic of photographic anomalies seen in Martian terrain. I hope this panel on peer review will read this review in its entirety, with particular interest to an account explained of the <u>first Data</u> Quality Act inquiry at NASA instituted the very month the act came into effect.

Excerpt from that memorandum concerning Peer Review and NASA:

"Mr. Joseph Alexander, NAS Director, corresponded with me a few years back expressing that The National Academies has always adhered to the philosophy of open debates, where diversity of opinion can best be heard; he just came short of reprimanding NASA for not having done so concerning the need to address SETI scientific endeavors. He writes:

'{Y}ou noted your interest in producing a television event that would cover the question of the Martian Photo anomalies, and you described your efforts to secure participation by NASA

officials in such a program.

The National Academies have always advocated that evaluation and communication of scientific findings should proceed openly and through the use of scientific peer review.' Joseph K. Alexander

No new paradigm could easily arise unless science abides by these NAS/NSF guidelines. If our nation wants to be honest with itself, it will open the doors to various scientific endeavors and opinion. The United States has always held closely to a manifest destiny of free and open discourse in matters of exploration. Yet, what I have found after communicating with many NASA officials and scientists is that there is inherent prejudice surrounding SETI Research in general, and as well, there exists a genuine fear of ridicule among peers. Something is terribly wrong with a system that lies at the mercy of funding. Unpopular theories from within the establishment of science are often obscured by lack of support and funding. Who really should decide what gets funding of what does not? NASA is supposed to be an agency representing the wishes of the people. The majority of citizens in this country are shown by polls to possess a significant interest for aerial and space mysteries. Yet, those who control science from within will ignore this public yearning." Excerpt END

The SETI Institute, in a recent article released on Space.com called "Mars and the Teachable Moment," has said it supports critical thinking concerning unidentified and anomalous features found in space probe photographs; (they cited a famous formation in the Cydonia Region as an example). Edna DeVore, SETI Institute Education Director, calls for the public and for students and teachers to decide for themselves through critical thinking.

LINK: http://www.space.com/searchforlife/seti_devore_face_040506.html

3. The case of NASA's Public Outreach denial to students and teachers who want to exercise Inquiry Teaching, and critical thinking.

Clearly, Public Outreach is a form of dissemination and Peer Review. We, as independent researchers, support the view about critical thinking expounded from the SETI Institute. Critical thinking encompasses the introduction of fresh scientific ideas, and Inquiry Teaching protocols. We welcome new ways to look at the evidence, and to allow researchers, scientists, teachers and students the ability to create new approaches to use probe data for purposes of distinguishing for water and life in the solar system. In addition, we need to **create a record of responses to the various research projects**, probe imagery interpretations, and Inquiry Teaching experiments. Questions should be asked online at the NASA Internet Website, supported by postings and a record of responses. This would do much to streamline scientific procedure, eliminate unscientific inquiry, and emphasize the pertinent project issues on a daily basis. It would be a good thing if NASA scientists were mandated by the OMB to reasonably respond and defend their assessments. Their assessments will be subject to the review of other scientists and even students and teachers. That is critical thinking and its best.

Unfortunately, as a coordinator for Public Outreach, I have encountered problems coaxing JPL/ASU to allow for Inquiry Teaching protocols to be exercised with the THEMIS data

through their public outreach programs such as The Mars Student Imaging Project (MSIP). The following are portions of an e-mail history concerning a response of denial from JPL's Public Engagement Director; Michelle Viott, for our student project to be a part of their program. The evidence speaks for itself, first is the response from the NASA General Counsel, who's responsible for ethics at the agency. He chose to approach our problem in the following unprofessional manner rather than do his job and try to mediate the situation, and see that this was a problem of dissemination and Peer Review.

In a message dated 5/11/2004 8:49:57 PM Eastern Daylight Time, Paul Pastore, The NASA General Counsel, PPastore@hq.nasa.gov publically responds as an official:

I have been the recipient of many of your diatribes, ranting and railing against the government, and personal and mindless attacks.

But I must say that when you stoop to the level of the gutter and you attack civil servants like you have done here, I find it particularly revolting. Have you no shame? You obviously must not have much of a life, if you spend as much of your time picking on public servants on such a frequent basis.

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How about giving it a rest?

Paul Pastorek END

..and the RESPONSE (Francis C. P. Knize)
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To: Paul Pastorek, Esquire; NASA Legal Office and various NSF/NAS NASA Oficials

What Paul's letter shows:

I think we can all see the true colors of NASA by the character of NASA legal counsel's (Paul Pastorek) email above. For some reason, with all his experience in Matters of Law, Paul misses the essential point that NASA cannot continue a pattern of denial for scientific exchange, which clearly shows on their record.

To simply label the efforts of citizens who wish NASA to honor scientific mandates drawn by our highest educational institutions, as acts of petty rabble-rousing; is a depiction of the essence of the problem at NASA.

I do not stand-alone in the beliefs that NASA has been rather deficient over the years to allow independent evaluation of their data. This is shown by example of my recent e-mail; where EVEN STUDENTS are being denied the right to instigate their own observations within ASU's MSIP Public Outreach programand, importantly, it is also shown by the White House's own inquiry about Peer Review, through Information Quality Act procedure delegated by The Office of Management and Budget, that federal agencies such as NASA need improvement for peer review and dissemination of "highly influential" information. They have specifically called for a response from the public. The evidence speaks for itself: FR Doc 04-9572

http://a257.g.akamaitech.net/7/257/2422/14mar20010800/edocket.access.gpo.gov/2004/04-9572.htm

Paul, the public would appreciate it if we could establish better lines of communication with the NASA legal office. There are real issues that need attending at our beloved space agency. I'm hoping you'll begin to approach these issues with the acumen required of your position. For instance, legality could come to play with problems the public are now having with the ASU outreach programs; you would be of great service to NASA if you could contact Michelle Viotti, JPL Public Engagement Director, after researching NASA protocols for Inquiry Teaching, and at least have a discussion with her about how to avoid unnecessary public challenges to the black-letter of OSS mandates that NASA must abide.

All we are asking for concerning the MSIP program is that students and teachers may have the right to instigate their own inquiry as mandated by the MSIP Archives-data Section. We simply don't understand why Michelle is denying our well conceived project when the curriculum dictates we have a right to pursue on the basis of self-motivation learning practices. I don't understand why you did not address any of the evidence I presented about this, and that is on the record concerning our case?

Please Paul, we must establish better communication. Help us resolve this matter together, and work toward promoting the agency, as a wonderful future in space stands before us.

Very truly yours,

Francis C. P. Knize Public Outreach Organizer Open-science Advocate Producer

REFERENCE:

To Whom It May Concern: Sent to Education Officials across the Nation with the NSF, NAS, NASA, OSTP, etc.

If any of the parties to this e-mail would like to respond concerning the usefulness of the "Inquiry Teaching "method within NASA space science, you are welcome to do so. Michelle Viotti; JPL Public Engagement, does not want to allow students and teachers to engage in such motivating practices within the ASU MSIP agenda, yet the Archived-data Section of that program does indeed define an ability to conduct inquiry teaching protocols.

It would be constructive to hear input from the American educational community at this point concerning this Public Outreach issue. Please respond to Michelle:

michelle.a.viotti@jpl.nasa.gov (please CC me, as well; frankknee@aol.com)

...and inquire why she would resist the premise for inquiring teaching that NASA has long sanctioned. She would like to tell you that the technology behind THEMIS is not capable of producing assessments concerning life detection on Mars. Our students, teachers, and national team leaders beg to differ. We have offered her a synopsis of plausible methodology which could use THEMIS True Color renditions, and THEMIS VIS or visible light renditions toward the goal of interpreting for water and life.

Please read the following e-mail history; a nation counts on you to help better educational outreach mandates at NASA. Please offer your suggestions.

Very truly yours,

Francis C. P. Knize

Public Outreach Organizer Open-science Advocate Producer

Subj: IMPORTANT: Problems with Public Outreach at ASU and JPL

Date: 5/10/2004 1:46:53 PM Eastern Daylight Time

From: Frankknee <mailto:Frankknee>

To: edevore@seti.org <mailto:edevore@seti.org>, michelle.a.viotti@jpl.nasa.gov <mailto:michelle.a.viotti@jpl.nasa.gov>, sklug@asu.edu <mailto:sklug@asu.edu>, bullitt@carolina.rr.com>, public-inquiries@hq.nasa.gov

<mailto:public-inquiries@hq.nasa.gov>, comments@hq.nasa.gov<mailto:comments@hq.nasa.gov>, kathv.dakon@hq.nasa.gov

<mailto:kathy.dakon@hq.nasa.gov>, william.harvey@hq.nasa.gov
<mailto:william.harvey@hq.nasa.gov>, education@nasa.gov <mailto:education@nasa.gov>, photon9999@yahoo.com <mailto:photon9999@yahoo.com>, njlevass@nmtc.net
<mailto:njlevass@nmtc.net>, donald.savage@hq.nasa.gov
<mailto:donald.savage@hq.nasa.gov>

To: Edna DeVore; Director of Educational Outreach at SETI Institute. CC: Public Outreach Directors at Arizona State University, JPL, NASA HQ

Dear Edna,

A Teacher/Student Outreach Program needs your help in convincing Michelle Viotti; JPL Public Engagement, about the relevance of "Inquiry Teaching" concerning Space Science today as the significance of Astrobiology is growing. Would you be so kind to please explain to Michelle why NASA should embellish educational programs by allowing students to create their own science programs?

I read your article with great interest on Space.com. I am defending your standpoint that students should be allowed to conduct real science, as they would see fit, concerning the wonderful mysteries of Mars. I hope that Michelle will read your pertinent article, released just last week:

<u>Mars and the Teachable Moment</u> http://www.space.com/searchforlife/seti_devore_face_040506.html <

Please return notice of any communications you have made to the JPL Public Engagement Director. Educational Outreach will much appreciate your efforts. If Donald Savage; Public Relations Officer, NASA HQ, has also read this message, we would also appreciate his input into this matter, also to be CC'ed to all essential parties.

Very truly yours,

Francis C. P. Knize

Public Outreach Organizer Open-science Advocate Producer

END of the e-mail history exerpt

My CONCLUSION ABOUT JPL, ASU, MSSS; NASA and Public and Educational Outreach:

Jet Propulsion Laboratories doesn't seem to want investigations to extend past geologic study, they keep a lid on scrutiny concerning their data, image library, and assessments. Of course, science should be cautious to quickly proclaim there is life out there. However, the issue is critical thinking. Are we a democracy or do we approach new heights in controlling science? Think what is going on here with the students; JPL says they should protect against the conclusions of students by dictating the curriculum, and not allowing for fresh perspectives in space science. **This is unconscionable as NASA Inquiry Teaching protocols give guidance to the opposite educational philosophy.**

4. Compelling new therories not heard, and/or NASA not giving academic credit to ground layers:

a) NASA scientists and contractors have followed the theories and models developed by independent researchers, but have failed to give appropriate reference and credit. .Dr Tom Van Flarndern, Former

Chief Astronomer at the Naval Observatory, as for years building on a theory concerning the past existence of a fifth planet that exploded near Mars. Yet NASA scientists Chambers and Lissauer, never mentioned Dr. Van Flarndern's recent research. Article in Evidence: "Long-Destroyed Fifth Planet May Have Caused Lunar Cataclysm, Researchers Say" LINK:

http://www.space.com/scienceastronomy/solarsystem/fifth_planet_020318.html

The recent Martian Spherule discovery and ensuing arguments persist: NASA continues to deny inspection and input by respectable researchers and scientist concerning a very important area of federal information of great concern to the public: the exploration of life on Mars. If the recent find of the Spherules indicates nickel counts originally missed by NASA, then of course there are perceived problems with the dissemination of information. These purported nickel counts may be evidence of planetary core material which could prop up Dr.Tom Van Flandern's Exploding Planet Hypothesis and the previous existence of a Planet V.

b) The Martian Methane argument; how NASA has denied inspection and input over the years which it would have long ago brought to Mars methane question to light. Methane is a byproduct of life processes and would indicate continuing life processes on Mars. Science writer, Richard Hoagland, presents the following report on the methane controversy:

http://www.enterprisemission.com/_articles/04-13-2004/Methane_on_Mars.htm

c) The Martian surface water argument persist, NASA refuses dialectical discussion about possible water signatures, and when NASA proclaimed discovery about the Mars water streaks emanating out of Martian cliffs, they denied giving due credit to Efrain Palermo and Richard Hoagland for their previous research which was submitted as peer reviewed material concerning the feature of water streaks on Mars and the possibility of water actually being able to collect on the surface. Recently, some students working through the MSIP Outreach program came upon what looks to be water collection in a crater as a result of cliff seepage. They did not know what to make a it which proves the point that we need better photoanalysis determined for water in life. They report: "This image is causing us considerable difficulty due to the presence of a structure that resembles a lake located in the center of the crater." LINK: Martain crater lake:http://themis.la.asu.edu/zoom-20040422a.html

CONCLUSIONS:

The issue exactly is that NASA has a long history of not dispelling its data in a proper fashion, within a comprehensive Peer Review standard which allows for reviewers from outside the agency to question the integrity and quality of the data. Since NASA's data deals with the discovery of life in our solar system beyond our own planet, this is rather a significant issue and a great concern to the public.

Cases are made for NASA's incorrect color calibrations, which invariably create implications that The Red Planet is too hostile a place to accommodate life. However, it is now noted that NASA's top planetary geologists admit to a paradigm change, after 30 years, where the evidence is surely pointing to life. A showing of blue sky on Mars would indicate a denser, more complicated atmosphere than previously thought. As well, signatures for algae may show up when color is corrected, as the images from the European Space Agency probes appear to be indicating. There is a huge difference between the color scheme of ESA's probe images and that of NASA's. As well, astronomers using earth observations (and the Hubble telescope) have interpreted more green and blue hues for Mars. The scientific community at large is directly contesting JPL./MSSS/ASU color interpretations and provide some of the best counter-expertise.

The National Academy of Sciences, and the federal government through the Data Quality Act; The Office of Management and Budget, have stated that what has been deficient, and is distinctly needed is peer review conducted by groups not directly associated with the federal agencies. The sole purpose for this action is to ensure that honest science is conducted, that review can be instigated throughout a variety of scientific disciplines, and that "conflicts of interest "caused when contractors have a stake in data results,"

can be offset by agency-detached scientific expertise and entities who also can examine the data and help draw the inherent conclusions. This creates a much-needed system of checks and balances.

Cases described indicate that NASA, when disseminating information about chemical composition of Mars' atmosphere and rocks, needed appropriate peer review, and because they didn't have it in place, have prematurely published non-peer reviewed reports. Not only is this unethical of NASA, but it may be against mandates. There are scientists who would debate that NASA has missed essential components of space probe data analysis.

The issue of the presence of Methane in the atmosphere of Mars is one such example of hotly contested data which demands debate. Richard Hoagland; renowned science writer and researcher, has patiently laid out the case that NASA has not appropriately tested for Methane over the years, and shows improprieties in the readings of NASA's own charts. This is very good evidence we present to OMB's panel on peer review.

The most compelling of cases to be presented within this "Public Response to Bulletin on Peer Review ", would be the recent mystery of the purple spherules found in great quantity spewed across an ancient Martian seabed. NASA, without any peer review, has disseminated their results with a finding that these formations are composed of Hematite. Yet other scientists are begging for input; they believe NASA has missed the essential component of Nickel, and this changes everything. Nickel predominantly is a product of a planetary core material, which leads to a profound implication of how it got there if it didn't come from Mars' own core.

Data from NASA's space probes is to be considered the highest on the ladder; labeled as being "influential data ." That means this form of data disseminated by a federal agency is to undergo the highest level of scrutiny through DQA mandates. It is time that NASA comply with the scrutiny demanded of space probe data.

Cases can be presented to this council on peer review that NASA owes the public an answer to, and also JPL/ASU/MSSS may have been violating their contractual obligations concerning:

- 1) That MGS MOC imagery, THEMIS probe data, and transmissions of Raw Data from a variety of probes do not meet the standard of integrity demanded of scientific inquiry. Images presented on the Internet by NASA are missing segments, outright missing frames from within a series, do not incorporate consistent processing techniques throughout a series of images, are not disseminated in a timely fashion according to contract, contain unexplained photographic manipulations and unexplained out-of-sequence data placements within a frame. This all points to an informational delivery system in Space Science which has seriously gone wrong.
- 2) NASA refuses to even have discussion about extremely compelling formations that are seen in space probe photos, especially those of Mars. They explain away some highly anomalous structures known as "Glass Tunnels" as being "Dune Trains", and published this analysis without going through appropriate channels of peer review, and did not allow discussion by researchers who have presented clear evidence against the Train Dune theory.
- 3) NASA also attempts to take credit away from scientists who have developed compelling theories in Astronomy and Planetary Science. When NASA presents its scientific reports to the public concerning theories which outside independent researchers have laid the groundwork for, NASA does not give due credit to those researchers.

These facts defy the very principal of peer review and are considerably unethical. At the same time, NASA scientists will turn away from peer review these same independent scientists.

There is no inherent mechanism for proper Peer Review at the agency., we agree with OMB's own conclusions; that outside independent inspection of the NASA data should be required. We agree with all

the recommendations by other subsequent independent public submitter's that there is a dire need for independent inspection of federal "Influential Data." We agree with the OMB that scrutiny should be at the highest level for Influential data, which includes all space probe data and disseminations

- 1) What is desperately needed in the process of Peer Review is the establishment of a record of responses to given research published in the peer review journals, or wherever published and/or images displayed with assessments, like at NASA's Internet site. The Information Quality Act stipulates that any data that NASA might publish or display in any media form would come under DQA jurisdiction, whether or not that data contained a disclaimer expressing that the data was not of scientific analytical quality. NASA often attempts to downgrade the validity of the data with these disclaimers captioned under their photograph data, which we believe is inappropriate.
- 2) We consider non-peer reviewed NASA assessments to be deemed "not acceptable" according to the principles in character of American science; and therefore should not be published before cross-examination by outside parties. The public can no longer accept NASA's publishing of non-peer reviewed reports and assessments without the opportunity for counter response by reputable scientists and researchers at the same Internet site location, or during critical review of data before NASA disseminates to the American public..
- 3) The rules for selection of outside peer reviewers by federal agencies should allow for scientists who have an interest in a particular scientific topic to come forth for the involved Committee to take notice of their unique and relevant expertise to the issues presented. Qualified scientists should be permitted to make themselves known to an issue rather than a federal agency having absolute power to choose as they wish among independents and therefore fixing the jury. Look what happened with the space shuttle investigation, when NASA chose an independent board, there were predominant military connections attributed to those chosen reviewers..
- 4) That the peer review process should include all federal associations with Public Outreach and Educational Outreach projects by students, teachers, and the public at large. We agree with The SETI Institutes' own conclusions that critical thinking is necessary for the classroom environment, and that all proposals for Inquiry Teaching be treated seriously by federal agencies such as NASA.

Those interested in this presentation:

Dr. Tom Van Flandern (META RESEARCH) Astronomer/researcher
Richard Hoagland (ENTERPRISE MISSION) Science Journalist/researcher
Stephen Bassett (PARADIGM RESEARCH GROUP) Opens--science Advocate
John P. Levasseur (COLLEGE PROFESSOR/ SPSR Member) Researcher/image analyst
David Jinks (FACETS) Open-science Advocate
Eric Lausch (FACETS)
Keith Laney (AMES RESEARCH CENTER) Independent Researcher/Image Analyst

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