

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND  
(GREENBELT DIVISION)

UNITED STATES OF AMERICA \*

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v. \*

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Crim. No. 8:09-cr-00505-PJM

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MARK SCHOEBERL, \*

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*Defendant.* \*

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SENTENCING MEMORANDUM OF DR. MARK SCHOEBERL

Dr. Mark Schoeberl, by and through his counsel, Jacob S. Frenkel, Esq., respectfully submits this Memorandum in aid of and in connection with sentencing of Dr. Schoeberl in the captioned matter. More than 50 distinguished scientists, including one Nobel Prize winner, have submitted to this Court sterling references about the outstanding work of, contributions and commitment to our country, the National Aeronautics and Space Administration (“NASA”), NASA’s Goddard Space Flight Center (“Goddard”), and atmospheric sciences projects for which Dr. Schoeberl was responsible during his dedicated near 30 year NASA career. Regrettably, an error in judgment motivated not by personal financial gain but by his unequalled and heartfelt commitment and dedication to earth sciences and earth sciences education has resulted in Dr. Schoeberl’s presence before this Court for sentencing. Dr. Schoeberl submits, as discussed more fully below, that he already has been punished fully, the NASA scientific community has heard clearly the message of Dr. Schoeberl’s case and a sentence consistent with the joint recommendation of the Department of Justice and undersigned counsel is most appropriate.

## I. INTRODUCTION

Before the Court for sentencing is Dr. Mark Schoeberl, a world-renowned and world-revered 60 year-old atmospheric scientist with an unparalleled reputation and a life noted for his contributions to earth sciences, education and community service. Dr. Schoeberl, as did others throughout NASA and Goddard, recognized that the proprietary Animated Earth LLC (“Animated Earth”) software “Earth Today” that his wife had developed, and shows near-real time data regarding the earth’s atmosphere, was the highest quality available and exemplary product for earth science education. Unfortunately, his appreciation of the efficacy and value of the product, and his encouragement of its use, was inconsistent with his professional position at NASA, because Dr. Schoeberl’s job included responsibility for administering the educational function associated with the satellite program he supervised. Once a NASA lawyer instructed Dr. Schoeberl that he, in substance, should not even be communicating about Earth Today, it was too late; by then the incidents supporting use of the software already had occurred.

The Presentence Investigation Report (“PSIR”) furnishes the Court with a calculated Total Offense Level of 4 under the United States Sentencing Guidelines (“Guidelines”). PSIR ¶26. That calculation is consistent with the stipulated adjusted offense level of 4 as set forth in the September 16, 2009 Plea Agreement. ¶6(b). Further consistent with the Guidelines calculation proffered in the PSIR and the stipulated adjusted offense level, the Government wrote, in its November 20, 2009 sentencing correspondence, that:

The plea agreement calls for the government to recommend a sentence at the low end of the guidelines range, which at this time the parties believe to be 0-6 months. As the government will explain further at sentencing, the **government believes that a sentence at the low end of the guidelines range is appropriate** because: (1) the

defendant promptly accepted responsibility for the offense conduct in this case; (2) the investigation in this matter did not reveal any financial loss to the government, in that Animated Earth appears to have completed the work that it contracted with the federal government; and (3) the defendant has no criminal history and has a lengthy record of service to NASA.

Nov. 20, 2009 letter at 2 (emphasis added). Dr. Schoeberl, through undersigned counsel, concurs with this recommendation, and respectfully urges the court not to impose any term of imprisonment, limit the fine to \$10,000 (which is double the maximum fine suggested in the Guidelines) (PSIR ¶62; U.S.S.G. §5E1.2(c)(3)), and impose a minimal term of probation.

## **II. DR. MARK SCHOEBERL**

Frequently, counsel is “beating the bushes” for letters to the Court imparting the good works and deeds of a defendant. For Dr. Schoeberl, counsel did not need to make one request. Every letter on behalf of Dr. Schoeberl was a result of an inquiry from the writer as to “what can I do for Mark” or was entirely unsolicited. The letters convey to the Court a clear picture as to Dr. Schoeberl’s accomplishments and commitment, as well as the high regard in which his peers and colleagues in the world atmospheric sciences community hold him. Notwithstanding these words of praise, admiration and support, the Court may find helpful a brief summary of Dr. Schoeberl’s background and achievements.

Dr. Schoeberl is an atmospheric scientist who specializes in stratospheric processes including wave dynamics, ozone depletion and trace gas transport. He has more than 200 publications and 6500 citations in atmospheric science journals. Since the early 1980s, he has worked at NASA Goddard Space Flight Center, and retired in September 2009 as Chief Scientist for the Earth Sciences Division as well as the Aura Project Scientist (“Aura”). Aura is NASA’s earth orbiting

satellite that measures ozone loss and air pollution. NASA describes Aura on its website as follows: “The Aura mission studies the Earth’s ozone, air quality and climate. It is designed exclusively to conduct research on the composition, chemistry and dynamics of the Earth’s atmosphere.”

Dr. Schoeberl is the past President of the Atmospheric Sciences Section of the American Geophysical Union, a worldwide scientific community formed to advance the understanding of the earth and space for the benefit of humanity. He is the former Upper Atmospheric Research Satellite (“UARS”) Project Scientist at NASA.<sup>1</sup> He is also a past member of the National Academy of Science Board of Atmospheric Sciences and Climate and was part of its recent Decadal Survey for Earth Science.

Dr. Schoeberl is a Fellow of the American Geophysical Union (1996), the American Association for the Advancement of Science (1996), and the American Meteorological Society (1996). He was awarded Goddard’s William Nordberg Memorial Award for Earth Sciences (1998), NASA’s Exceptional Scientific Achievement Medal (1991), NASA’s Outstanding Leadership Medal (1996) and Distinguished Service Award (2000). He shared the William T. Pecora award for his work with the Upper Atmosphere Research Satellite and the Total Ozone Mapping Spectrometer. He is a Presidential Meritorious Senior Rank Professional (2005). He is a member of Sigma Xi, a non-profit membership society of almost 60,000 scientists and engineers, and was the American Meteorological Society’s Sigma Xi Distinguished Lecturer for 2005.

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<sup>1</sup> In 1991, the Space Shuttle Discovery launched the UARS satellite to measure ozone and chemical compounds found in the ozone layer which affected ozone chemistry and processes. UARS also measures winds and temperatures in the stratosphere as well as the energy input from the Sun. Together, these help define the role of the upper atmosphere in climate and climate variability. On December 14, 2005, NASA officially decommissioned UARS. Aura now performs these functions. (available at <http://umpgal.gsfc.nasa.gov/>).

Dr. Schoeberl grew up in Davenport, Iowa, received a B.S. in Physics from Iowa State University in 1970 and received his Ph.D. in Physics at the University of Illinois in 1976. His service to the United States also included the Iowa and Illinois Army National Guard and the Naval Reserve.

### III. ADDITIONAL RELEVANT FACTS FOR CONTEXT AT SENTENCING

Undisputed is that “Dr. Schoeberl has been the driving force behind the NASA UARS and Aura satellite projects....” Letter of Prof. Owen Toon, Chair, Dept. of Atmospheric and Oceanic Sciences, Univ. of Colorado at Boulder. Dr. Schoeberl “has used his many talents not only for science, but also for science communication. Such communication is required in NASA programs, and is important to educate the public and to inform them about how NASA uses their hard earned dollars.” *Id.* It is this confluence of the NASA educational function and imperative with the dynamic and advanced proprietary Animated Earth software Earth Today that made possible the judgment errors giving rise to the violations at issue. One of the references describes well the program importance of Animated Earth’s proprietary software to NASA:

This exemplary product was developed by [Dr. Schoeberl’s wife] to fulfill her own vision of the kind of scientific outreach that could be accomplished with NASA data. Given the high quality of the product and its potential to be used not only by Earth Science educators and the general public, but also by researchers, it is not surprising that Mark endorsed the product and that NASA’s Earth Sciences Division provided some funding support. Knowing Mark well, I am confident that were the Earth Today product any less outstanding, it would not have earned his endorsement, regardless of the source.

Letter of Prof. Gary Morris, Associate Professor, Dept. of Physics & Astronomy, Valparaiso Univ.

Dr. Schoeberl and his wife have a history of working together on public outreach projects, including museum exhibits, movies, and posters. The Chief of one of NASA’s Earth Science

Divisions described this program synergy in his letter of reference for Dr. Schoeberl:

In 2003 while on a detail to NASA [headquarters], I was tasked with providing the visual material for the NASA Administrator, Mr. Sean O'Keefe, to present to the initial Global Earth Observation System of Systems (GEOSS) summit. This White House driven summit, convened by the United States and hosted by the U.S. State Department, brought together science ministers from 33 countries around the world and included the heads of the U.S. departments and agencies. Colin Powell, then Secretary of State, chaired the summit. The multi-agency planning group, of which I was a part, decided to use a modified version of a movie that Dr. Schoeberl had created for Mr. O'Keefe's presentation to the summit. The original movie, created in collaboration with his wife [] and many others at NASA Goddard and across other NASA centers and other agencies, was funded by NASA and portrayed a vision for the future of global Earth observations, scientific understanding and application of newly gained knowledge to real world problems and decision making. Dr. Schoeberl was asked to work with me and other agency representatives to update the movie for the summit. His wife [] was tasked by NASA Headquarters to assist in the update. It was only through the combined creative vision, scientific knowledge and technical expertise of Dr. Schoeberl and his wife [] that the movie was completed in the very short amount of time available. It was presented at the summit by Mr. O'Keefe to extremely positive acclaim, as the vision for what the nations of the world could accomplish together.

Letter of Steve Hipskind, Chief, Earth Science Division, NASA Ames Research Center. The Court received a DVD copy of this movie in the materials provided by Dr. Schoeberl to the United States Probation Office in connection with the PSIR. Additionally, NASA has given several awards to Dr. Schoeberl and his wife for their collaborative projects on behalf of NASA.

For years, Goddard management encouraged Dr. Schoeberl and his wife to work together. They made joint presentations at meetings, and NASA headquarters management was aware of their working relationship. The Earth Today project began at NASA under Dr. Schoeberl's wife's direction when she worked for a NASA contractor. During that period, the direct recipient of

funding was the NASA contractor, in which Dr. Schoeberl's wife had no financial interest. When she left the employ of the contractor and formed Animated Earth, Dr. Schoeberl's wife continued to develop the Earth Today concept with funding from sources both inside and outside NASA. As noted previously, the Earth Today system uses proprietary software of Animated Earth and a specialized server.

The Aura Project, which Dr. Schoeberl supervised, was a funding source for the purchase from Animated Earth of kiosks which access and display Aura data for NASA. Dr. Schoeberl genuinely believed that the deployment of Animated Earth's software advanced substantially NASA's program objectives and educationally enriched the Nation. Dr. Schoeberl, and others, felt that Animated Earth had the only software that both could perform the functionality and, more importantly, already had shown the capability of displaying the Aura data as an outreach and research tool. Dr. Schoeberl's enthusiasm for Animated Earth contributed to the errors in judgment that framed the violations in this case, and, in turn, precipitated his departure from NASA. A Research Physicist at the National Oceanic & Atmospheric Administration ("NOAA") in his reference for Dr. Schoeberl, characterized the effect as follows:

[t]he events that have recently transpired in Dr. Schoeberl's life to relieve him of his responsibilities at NASA are unfortunate because they remove him from his day-to-day scientific life that engaged so many others. This sudden tragic loss to our small atmospheric sciences community will have far reaching consequences for NASA's programs and many other activities in the community.

Letter of Dr. David W. Fahey, Research Physicist, Atmospheric Composition & Chemical Processes, Earth System Research Laboratory, Chemical Sciences Division, NOAA.

#### IV. SENTENCING GUIDELINES COMPUTATION

In the Plea Agreement, the Government and Dr. Schoeberl, concurred that U.S.S.G. §2C1.3(a) provides the base offense level governing the charge to which Dr. Schoeberl pleaded guilty. The base offense level is 6. Plea Agreement ¶6(a); PSIR ¶19. The Government does not oppose a two-level reduction in the offense level because of Dr. Schoeberl's prompt recognition and affirmative acceptance of responsibility for his conduct. Plea Agreement ¶6(b). The PSIR is in accord, providing a two-level reduction for acceptance of responsibility. PSIR ¶25. Specifically, the PSIR provides that Dr. Schoeberl "admits involvement in the instant offense and accepts responsibility for his actions. Pursuant to U.S.S.G. §3E1.1(a), the offense is reduced two levels." PSIR ¶25. The Total Offense Level is 4. PSIR ¶26. Given the absence of any criminal history, there is no assessment of points for criminal history. Pursuant to U.S.S.G. Chapter 5, Part A, based on a total offense level of 4 and a criminal history category of I, the guideline range for imprisonment is 0 to 6 months." PSIR ¶36. Moreover, "[p]ursuant to U.S.S.G. §5C1.1(b), because the applicable guideline range is in Zone A of the Sentencing Table, a sentence of imprisonment is not required...." PSIR ¶37. And, as discussed above, the "government believes that a sentence at the low end of the guidelines range is appropriate...." Nov. 20, 2009 letter at 2. Dr. Schoeberl respectfully submits that the correct Offense Level is 4 and that a sentence, with no term of imprisonment, is consistent with the sentencing guidelines computation and the Plea Agreement.

The Plea Agreement further provides, with respect to consideration of a fine, that

[t]he parties will also jointly recommend a fine of at least \$10,000, to be payable on the date of sentencing. The parties agree that, should the Court impose a fine greater than \$10,000, the defendant shall pay at least \$10,000 on the date of sentencing, and the timing of any payment of fine in excess of \$10,000 shall be determined by the Court.



Plea Agreement ¶9. The PSIR provides that “[t]he fine range for the instant offense is from \$250.00 to \$5,000.00 pursuant to U.S.S.G. §5E1.2(c)(3).” PSIR ¶62. Dr. Schoeberl respectfully urges the Court to limit the fine to \$10,000, which is double the maximum fine suggested in the Guidelines, because of the substantial financial “hit” that he and his wife already have sustained. Dr. Schoeberl has lost the job -- the professional love -- of his life. In searching for a new job, notwithstanding his stellar credentials and reputation, he has been unable, so far, to find employment. Although Dr. Schoeberl receives endorsements and encouragement from faculty members in various university Earth Sciences Departments, the Deans of those Universities have considered Dr. Schoeberl “radioactive” and will not hire him. Additionally, NASA has refused to pay Dr. Schoeberl’s wife’s business for products delivered and services performed in good faith because of this case. She has also lost her contract with Discovery Communications, in part because of a significant interruption to service created by the NASA Inspector General’s seizure of Earth Today’s data server during execution of a search warrant in the investigation. The Schoeberls are rebuilding their lives financially, and request that the Court accept a \$10,000 fine as consistent with the agreement of “at least \$10,000” as set forth in the Plea Agreement.

**V. ANALYSIS OF 18 U.S.C. 3553 CONSIDERATIONS AND PROBATION**

The voluntary Sentencing Guidelines do not consider fully or take into account a number of traditional sentencing factors that, in the post-*Booker* era, a Court may consider and, if fact, is directed to consider in or reaching the appropriate sentence. The Supreme Court in *United States v. Booker*, 125 S.Ct. 738 (2005), in holding that the mandatory application of the Sentencing Guidelines violated the Sixth Amendment, directed that the courts sentence defendants under the

statutory factors set forth in 18 U.S.C. 3553(a), using the now-advisory Guidelines as only one of several factors to be considering in sentencing. *See, United States v. Hughes*, 401 F.3d 540, 546 (4th Cir. 2005). Sentencing courts are now entitled to consider any relevant characteristic of an offense or of the particular defendant and to decide upon an appropriate punishment, most importantly, impose a sentence that ensures that punishment is sufficient but not greater than necessary to comply with federal sentencing laws. The primary directive under 18 U.S.C. 3553(a) is that “the court shall impose a sentence sufficient, but not greater than necessary, to comply with the purposes set forth...[in 3553(a)(2)].” (emphasis added). Dr. Schoeberl submits that, in the instant case, consideration of all the appropriate sentencing factors compels the conclusion that a sentence of imprisonment is not necessary, appropriate or warranted to comply with the sentencing objectives of 18 U.S.C. 3553(a), which also is consistent fully with the “low end” of the applicable Guidelines range.

**A. Section 3553(a)(1)**

Section 3553(a)(1) of Title 18 directs the Court to consider, first and foremost, “the nature and circumstances of the offense” and “the history and characteristics of the defendant.” These primary considerations require the utmost leniency in the present case.

**1. Nature and Circumstances of the Offense**

Without derogating in any manner from the government’s charge and Dr. Schoeberl’s guilty plea, there are many ameliorating factors relating to the offense. The Information to which Dr. Schoeberl pleaded did not allege that he acted with any fraudulent intent and it does not suggest fraud in any fashion. Nor do the elements of 18 U.S.C. §208(a), or the corresponding penalty provision of 18 U.S.C. §216(a)(2) include fraud or fraudulent intent. The elements of a charge under

18 U.S.C. §208(a) make possible that a serious error in judgment, as occurred here, may implicate a violation of the statute. It would be easy to conceive of ways that Dr. Schoeberl, based on his position, could have steered substantial funds to his wife's business and concealed doing so. That was never his intent, and he did not do so. And his colleagues recognize that he would not do so:

I have known Mark almost 40 years now, and I consider myself a pretty good judge of character. During that time, I have not witnessed even one small behavior of Mark's that would make me suspicious that he would use his position for personal gain. I simply don't believe that this is in his DNA.

Letter of Dr. Marvin A. Geller, Professor, Institute for Terrestrial & Planetary Atmosphere, School of Marine & Atmospheric Sciences, Stony Brook Univ. As further and well characterized in the reference letter of another colleague, one who flew on NASA and National Science Foundation projects with Dr. Schoeberl, "I would be very surprised if Mark's choosing to purchase software from a company his wife was affiliated with wasn't totally driven by the product, not his wife's possible financial gain." Letter of Dr. Donald R. Blake, Chair, Dept. of Chemistry, Univ. of California, Irvine.

The unique capabilities of Earth Today as an outreach and research tool motivated Dr. Schoeberl's support. If Dr. Schoeberl had believed, even remotely, that he was engaged in unlawful conduct of any kind, he would not have communicated so readily by e-mail, with rather loose, and at times, flip language that easily resulted in the misinterpretation of his objectives. Moreover, when Dr. Schoeberl was asked earlier this year about his advocacy for funding for Animated Earth and told that his communications may violate ethics laws, his reaction was disbelief; that is because he could not fathom that he had crossed a line and acted improperly. He immediately inquired and learned that his support for Earth Today was inappropriate; but by then, it was too late. Reference after

reference reflected the disbelief that Dr. Schoeberl would have committed such an error in judgment, particularly one that could have jeopardized – and in fact caused the end – of his NASA career.

## 2. Dr. Schoeberl – Characteristics of the Defendant

The letters of reference provided to the Court by professional colleagues from within NASA and from renowned scientists, including scientists from as far away as Japan, demonstrate that Dr. Schoeberl deserves maximum consideration for his life of contribution to humanity. (United States Probation has furnished the letters to the Court, and, so as not to burden the Court with duplicate letters, they do not accompany this Memorandum.) The letters emphasize repeatedly that Dr. Schoeberl has acted throughout his career with the highest standards of honesty and integrity. Here are some poignant examples from the more than 50 letters submitted on Dr. Schoeberl's behalf:

- I am a professor at Harvard University...I have known Dr. Schoeberl since 1985....[W]e have jointly had the responsibility for the safety of dozens of scientists and support personnel....Dr. Schoeberl has always acted and spoken with integrity, conforming to the highest ethical standards without exception....I can therefore attest to the unblemished character and high ethical and personal standards on the part of Dr. Schoeberl. – Dr. Steven C. Wofsy, Abbott Lawrence Rotch Professor of Atmospheric and Environmental Chemistry, School of Engineering and Applied Science, Department of Earth and Planetary Science, Harvard Univ.
- I have known Mark Schoeberl as a colleague and scientist since he began his career at [Goddard]....This respect, usually given grudgingly by fellow scientists, is only earned by acknowledged scientific ability, dedication to the success of the mission, and integrity, both scientific and personal....I believe this to be who Mark Schoeberl truly is – a man of honor, integrity and good moral character. – Dr. Thomas J. McGee, Atmospheric Chemistry and Dynamics Branch, Goddard
- I am writing to express my strongest support possible for the character and scientific leadership of NASA scientist Mark Schoeberl....Mark's work helped to unravel the causes of ozone loss, eventually leading to the controls on CFCs that are now in place worldwide. Mark's work on stratospheric dynamics was essential to solving his problem, and the importance of his efforts to NASA and the country cannot be overstated....Most recently, Mark has been at the forefront of generating new missions for NASA, such as the Aerosol Clouds and Ecosystem Mission (ACE),

which will characterize how aerosols affect climate, and ocean biology. Mark is one of the main scientific advisors to NASA in terms of future directions. He is a leader and valued colleague. – Dr. Margaret A. Tolbert, Dept. of Chemistry, University of Colorado

- While I know nothing about the circumstances surrounding this charge, I can attest to the fact that Mark is a man of very high integrity and great stature in the community....His commitment to NASA and his service to the government and the scientific and educational community have been outstanding. I and his colleagues respect him greatly. If he made a mistake, I am sure it was not intentionally done. – Dr. Richard A. Anthes, President, Univ. Corp. for Atmospheric Research

Dr. Schoeberl's credentials, as stated previously, include more than 200 peer reviewed publications. In some respects, his most noteworthy article may have been one entirely unrelated to atmospheric sciences. Instead, it was an article published in a medical journal about cancer and advanced cancer research. Two of his colleagues, who provided references, included a discussion of this article and the surrounding circumstances:

- I still remember when his wife [] was being treated for cancer. Despite his extensive work responsibilities, Mark was always first and foremost an extraordinarily concerned and dedicated husband. He works closely with the doctors and even used his extensive knowledge of modeling to develop an accurate prediction of the treatment progress. He eventually wrote and submitted a paper to a medical journal so that others might learn and benefit from their unfortunate situation. – Dr. Robert M. Connerton, Chief Engineer, Goddard Earth Sciences Division

- He has shown dedication and the kind of unselfish devotion that others appreciate so much in a scientist of his stature....His publication record of over 200 scientific papers in the field of atmospheric sciences attests to his value to us at NASA as a scientist and a leader. But the one paper that speaks to his unique and unselfish nature is the one he published in a medical journal. It is the paper he wrote about his wife's cancer in 2006 (*Schoeberl, Gyn. Oncology, 2007*). When he told me of this paper, I was initially impressed with his breadth of knowledge, but upon reflection it says more about his devotion and his willingness to act on matters that he feels strongly. In this, like in so much of his scientific career, his motivation has always been well intentioned and geared towards the success of his team. This is what makes him more than just a great scientist, but a great person. – Dr. Thomas F. Hanisco, Atmospheric Chemistry and Dynamics Branch, Goddard

The Court received a copy of this article in Dr. Schoeberl's submission to the Probation Department. This article exemplifies Dr. Schoeberl's performance of significant deeds with no anticipation of reward or recognition.

All these strands combine to produce the very highly respected individual who stands before the Court for sentencing. And, the obvious almost need not be stated, that Dr. Schoeberl, at age 60, has no prior criminal record and never has never been arrested for any criminal offense. Dr. Schoeberl plainly deserves the leniency of this Court.

**B. Section 3553(a)(2)**

Section 3553(a)(2) of Title 18 directs the Court to consider "the need for the sentence imposed" in light of four factors, all of which favor leniency for Dr. Schoeberl.

**1. Seriousness of the Offense, Respect for the Law and Just Punishment**

The offense before the Court, albeit a felony, grows out of unusual and unique circumstances described above. These circumstances demonstrate not only that Dr. Schoeberl's violation was not committed with an intent to defraud the government but also that he was acting in the best interests of NASA's earth sciences educational program. The fact that Dr. Schoeberl has been subjected to the criminal process and will, for the remainder of his life, have to acknowledge commission of a federal criminal offense is very substantial punishment to him. So wrote a colleague from the University of Maryland, that "[f]or Mark, the stigma associated with entering a guilty plea to a federal charge must be deeply troubling. I hope that, upon sentencing, the court will have mercy on this good man." Letter of Dr. Ross J. Salawitch, College of Chemical & Life Sciences, Univ. of Maryland. The shame he has been subjected to before friends, family, and professional associates more than adequately meets these criteria without any other punishment.

**2. Affording Adequate Deterrence to Criminal Conduct**

For Dr. Schoeberl personally, as well as for atmospheric scientists doing business with NASA and for scientists at and other senior employees of NASA, the criminal charge to which Dr. Schoeberl has pleaded constitutes more than adequate deterrence that will prevent recurrence of such an offense. Dr. Schoeberl understands from colleagues at Goddard that NASA lawyers at Goddard sent out a long memo regarding ethics rules and post-employment restrictions, near enough in time to the plea to suggest that the charges prompted issuance of the memorandum. Moreover, the charges triggered other employees of NASA to come forward to lawyers within the agency raising possible ethics and conflicts issues to ensure compliance with the law and ethics rules. Dr. Schoeberl is aware of one NASA senior scientist who, after publication of the charges against Dr. Schoeberl, came forward directly to a lawyer at Goddard to discuss the issues surrounding her husband's work for a company on a grant awarded to that senior scientist; and, the senior scientist shares an office with her husband. No different than the Schoeberls having worked together, and not as closely, it was common knowledge within Goddard about this senior scientist at Goddard working with her husband on her funding grant. And, there are other ongoing ethics investigations at Goddard, such that it is clear the charges against Dr. Schoeberl delivered a deterrent message at Goddard and beyond. Drastic punishment, including incarceration, is not required for this purpose.

**3. Protecting the Public from Further Crimes of the Defendant**

This factor is wholly inapplicable. There is no basis for any claim that Dr. Schoeberl presents or poses any danger to the public or would commit another ethical offense, let alone a criminal act.

**4. Effective Correctional Treatment for the Defendant**

This factor also is totally inapplicable because Dr. Schoeberl does not require rehabilitation.

Moreover, the expenditure of federal resources for correctional treatment and administration of incarceration would serve no purpose.

**C. Section 3553(a)(3) through (7)**

Sections 3553(a)(3), 3553(a)(4), and 3553(a)(5) require the Court to look to sentences “available” and those specified by the Sentencing Guidelines and by Sentencing Commission policy statements. These considerations are, of course, and as discussed above, only advisory since the Supreme Court’s decision in *Booker*. The government has represented to the Court its belief that “a sentence at the low end of the guidelines range” of 0-6 months “is appropriate.” Nov. 20, 2009 letter at 2. And, Dr. Schoeberl respectfully submits and requests that no imprisonment, which is at the low end of the guidelines range, is most appropriate.

Section 3553(a)(6) directs the Court to avoid “unwarranted sentence disparities among defendants with similar records who have been found guilty of similar conduct.” Dr. Schoeberl submits that imposing any term of imprisonment would constitute a disparity, given that an undisputed Offense Level calculation of 4, prompt acceptance of responsibility, no financial loss to the government or any party, and absence of criminal history, coupled with tremendous contributions to society are factors warranting a decision not to impose any form of detention on the defendant.

Section 3553(a)(7) directs the Court to consider the “need to provide restitution to any victims of the offense.” It is noteworthy that the concept of “restitution” suggests financial injury to another party who then must be made whole financially. Here, the government received all services contracted for with Animated Earth. Ironically, and not at issue for this Court, it is NASA that still owes Animated Earth for services provided, and NASA is withholding payment, such that the Schoeberls are being harmed, not NASA. Further, as the government wrote in its sentencing



submission, “the investigation in this matter did not reveal any financial loss to the government, in that Animated Earth appears to have completed the work that it contracted with the federal government....” Nov. 20, 2009 letter at 2. Thus, this case does not implicate or require restitution.

**D. Sections 3561 through 3563: Probation Considerations**

Section 3561(a) of Title 18 declares that a defendant “**may** be sentenced to a term of probation.” (emphasis added) The statute does not require probation as a component of a sentence, and there are occasions when probation is not productive and the expenditure of resources for administering probation substantially outweigh any possible benefits. This is, we submit for the reasons stated above, why the Court may consider the instant circumstances such an occasion.

Section 3562(a) directs the sentencing court “in determining whether to impose a term of probation ... [to] consider the factors set forth in section 3553(a) to the extent that they are applicable.” Application of those factors to Dr. Schoeberl, already discussed, suggests that probation would be an unnecessary burden on both the government and the defendant.

The offense that Dr. Schoeberl committed is not one that creates any possibility that he, more than any individual who has not committed a criminal offense, needs imposition of the “mandatory conditions” of probation specified in Section 3563(a). Nor should there be any need to subject Dr. Schoeberl to requirements that he report to a probation officer or that he comply with any of the “discretionary conditions” enumerated in Section 3563(b). Any form of supervision by a probation officer will expend federal resources in record-keeping and in the time required to administer the probation for no useful purpose. Consequently, we urge the Court to consider strongly not to include – given the absence of a need to include – probation in any sentence that is to be imposed on Dr. Schoeberl.

## VI. CONCLUSION

An unfortunate reality of enforcement proceedings is the focus on the acts and the disposition do not permit the parties to get to know the person charged. That is even more true in the case of a defendant such as Dr. Schoeberl whose brilliance and love of science is, to say the least, captivating. It is difficult to choose from the genuine expressions of respect and praise shared with the Court by the distinguished scientists who wrote references on behalf of Dr. Schoeberl those few statements that best summarize or characterize succinctly Dr. Schoeberl, who he is and his contributions. When we think about what it means to make a difference and contribute to society, one of the most striking references, from a colleague who has known Dr. Schoeberl for more than 20 years, describes how Dr. Schoeberl has made such a difference and contribution:

I think that it's a fair statement to make that his tireless promotion of good science through his service at NASA and to organizations such as the American Geophysical Union and American Meteorological Society has changed our world by improving our understanding of atmospheric sciences (ozone depletion and climate change) and by influencing public policies that protect our planet. **There aren't many people in the world who can legitimately claim to have saved the planet. In my opinion, Dr. Schoeberl can,** yet, being a team player, he would share the credit equally with his colleagues.

Letter of Dr. Darin Toohey, Dept. of Atmospheric and Oceanic Sciences, Univ. of Colorado at Boulder. (emphasis added)

Dr. Schoeberl has admitted to and accepted full responsibility for the violation attendant to supporting funding to Animated Earth. The consequences to him and his wife already have been severe, as they have been for NASA to lose one of the world's preeminent scientists. Dr. Schoeberl has lost the job he loved and the position of heading a mission (Aura) that he developed from the beginning. Dr. Schoeberl also has had to stop the various research activities and data product

production that he uniquely developed for NASA. America now no longer benefits from Dr. Schoeberl working on new mission concepts, which was one of his specialities. The letters of reference speak to how the judgment error by someone of great integrity and amazing scientific capabilities has sent shockwaves through NASA.

Typically, upon disposition of an ethics violation or criminal case, an agency accepts moving beyond that person; in the case of Dr. Schoeberl, scientists feel otherwise. Scientists and administrators at Goddard would love for Dr. Schoeberl to return to work in whatever capacity the legal system would fashion or permit. Dr. Schoeberl realizes that ultimately is a decision for NASA rather than the Court. Goddard management and staff have received, from this case, a loud and clear message that Goddard needs to change its procurement policies and improve significantly its ethics training. But that lesson makes it no less tragic for NASA and the nation to lose Dr. Schoeberl's services. Dr. Schoeberl is one of the few scientists at NASA who knew how to put together missions that met the needs of science; in that respect, he likely is one of a handful of such unique and elite scientists in the world.

Eleven Japanese scientists – seven Professors, three Associate Professors and one Senior Researcher – from the University of Tokyo sent a powerful unsolicited reference on behalf of Dr. Schoeberl. They wrote, in part,

The purpose of this letter is to express the deep respect and gratitude of the Japanese community of atmospheric science for his brilliance in science and great contributions to the world science community for long periods of time....His achievements belong to the glory of human beings, which heaven loves. Any unjustifiable burden on him is humiliation on our arts. We believe reasonable judgments should be made for the sake of demonstration of the good will of human beings.

Letter of Faculty Members (lead signatory Dr. Yutaka Kondo) of Research Center for Advanced

Science and Technology, Univ. of Tokyo. The strong message of this case already has been delivered to Dr. Schoeberl and the scientific community. Dr. Schoeberl respectfully submits that any sentence that would include imprisonment, a fine in excess of \$10,000 and probation would be unnecessarily punitive and unjustified given the nature of the offense, his motives, and the already significant consequences to and experienced by Dr. Schoeberl, his wife and the atmospheric science community.

Respectfully submitted,

*/s/ Jacob S. Frenkel*

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Jacob S. Frenkel, Esq.

Shulman, Rogers, Gandal, Pordy & Ecker, P.A.

12505 Park Potomac Avenue, Sixth Floor

Potomac, MD 20854

Telephone: (301) 230-5214

Facsimile: (301) 230-2891

E-mail: [jfrenkel@srgpe.com](mailto:jfrenkel@srgpe.com)

**CERTIFICATE OF SERVICE**

**I HEREBY CERTIFY** that I caused to be filed this 25<sup>th</sup> day of November, 2009 the foregoing Sentencing Memorandum of Dr. Mark Schoeberl electronically with the Clerk of the Court via ECF. I also certify that I sent as a PDF via e-mail this 25<sup>th</sup> day of November, 2009 and will cause to be sent via FedEx, postage pre-paid, on or before the 27<sup>th</sup> day of November, 2009 the foregoing document to:

Jonathan Su, Esq., Assistant United States Attorney  
Office of the United States Attorney for the District of Maryland  
6500 Cherrywood Lane, Suite 400  
Greenbelt, MD 20770  
e-mail: jonathan.su@usdoj.gov

/s/ Jacob S. Frenkel  
Jacob S. Frenkel, Esq.