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A Code of Ethics for Martian and Off-Earth Commerce

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Abstract

Ethical issues have become increasingly important to the modern business community. Respected professional organizations, as well as successful companies, have already adopted formalized codes of ethics and standards. Within these professional organizations, all members and employees adhere to their respective corporate ethical codes. Similar to terrestrial businesses, the commercial space industry must develop its own code of ethics. Although advanced space commercialization, especially a possible economic development of Mars, may still be a few years away from economic reality, now is the time to establish guidelines for corporate ethics and business practices. This formative period provides a unique opportunity to ensure a future conduct that will facilitate ethical and profitable space commercialization. In addition, now is the time to help businesses understand that by adopting an ethical approach to space commercialization, they are enhancing their companies' profit potential.

A successful code of ethics should not only be voluntary, it must facilitate the work and expansion of individual businesses, rather than hinder their efforts toward providing products and services. A properly designed code of ethics ensures the development of space commerce unfettered by government created barriers. This code of ethics encourages and supports businesses oriented toward off-Earth development. Indeed, one of the inherent risks facing expansion of the commercial space industry is that, if the industry does not develop its own effective and supportive professional code of ethics, government imposed regulations or laws will fill the void. Should this occur, the creation of new barriers to space commerce is likely, making future development far more difficult. This code seeks to help businesses avoid the imposition of new barriers to space commerce as well as make new commercial business ventures easier to develop. The proposed code is also capable of evolving with input from those advocating and planning commercial space ventures. Consideration of this code should begin the process of critical thinking to move decision makers beyond the "bottom line" or shortsighted technical and engineering concerns. Though the bottom line is extremely important to all businesses and especially to those engaging in space development, it should not be the sole focus of the company. By paying attention to other equally important aspects of the business, including personnel, management, ethics, and strategy, the company helps to ensure a bottom line that draws strength from all of its business operations.

As acceptance and use of this proposed code of ethics grows within the industry, modifications will be necessary to accommodate the variety of businesses entering space commerce. Furthermore, the terminology used in this code is consistent with that which is widely used today within the terrestrial business community. This uniformity will help to assure that the code will not be perceived as foreign in

nature, potentially restrictive, or threatening. Companies adopting this code of ethics will find less resistance to their space development plans, not only in the United States, but also from non-space faring nations. Less resistance means the company can commit more of its resources to implementing its business plans rather than addressing political or regulatory issues. Commercial space companies accepting and refining this code demonstrate industry leadership and an understanding that will serve future generations living, working and playing in space. Space business companies following the ethical guidelines suggested here bring the development of an advanced space economy that much closer to reality.

Introduction

The exploration of outer-space has prepared the way for commercial development and opportunities off-Earth in low Earth orbit (LEO), on the moon, Mars, and beyond. The exploration of new realms calls for the adoption of new and more accurate terminology. Previous references to off-Earth development have included space, outer-space, off-world and off-planet. Each of these designations are lacking in conveying the scope of our new undertaking to the general public, whose support is essential in our proposed commercial development. References to “space” have less than creditable connotations for visionary industry endeavors. While space is the accepted term for the areas explored by NASA and other respected institutions, it is also associated with highly suspect beliefs, for example, UFOs, and with popular derogatory terms like “space-cadet” and “space-case,” which imply mental instability. The terms “off-world” and “off-planet” are inaccurate descriptors for the commercial expansion we propose because Mars is both a world and a planet. The term “off-Earth” provides the accuracy necessary for communicating our intentions without possible negative connotations.

Off-Earth economic expansion will come into existence faster, with far more acceptance from concerned people and with more profit potential when it follows successful ethical models prevalent in modern business. Aside from local businesses around the country, some well-known examples of national businesses that have grown and prospered as a result of their ethical approach to business include the retail giant Nordstrom, Ben and Jerry’s, Whole Foods Market, and The Men’s Wearhouse. Furthermore, there is no shortage of investment counselors and funds, whose job it is to ferret out ethical companies representing attractive investment opportunities, as there is demand for these services and investments. Companies, aware of the increasing demand for ethical business operations, even use such approaches in their advertising and marketing campaigns because they know that this approach to business attracts customers.

The idea of following an ethical approach to carrying out one’s business is no longer new or unique. In addition to the examples cited above showing the spread of commercial ethics guidelines, their acceptance is so well established they are currently taught in marketing classes and referenced in business text books. *Essentials of Marketing, 2nd Edition* points out that over the past five years the number of large companies appointing ethics officers has grown from none to about 25% of large corporations, that about 60% of companies surveyed had a code of ethics, and that a third of the companies offered ethics training and actually employed an ethics officer.¹ It is also worth noting that the text singles out companies involved in the aerospace industry as having a quality code of ethics, including Boeing, GTE, and Hewlett-Packard.² Among the advantages the authors cited for using ethical guidelines in the conduct of business were the following:

It helps employees identify what their firm recognizes as acceptable business practices.

A code of ethics can be an effective internal control on behavior which is more desirable than external controls like government regulation.

A written code helps employees avoid confusion when determining whether their decisions are ethical.

The process of formulating the code of ethics facilitates discussion among employees about what is right and wrong and ultimately creates better decisions.³

Thus, developing space commerce in an ethical manner can be a profitable ideal as evidenced by the examples provided above of successful companies which make ethics a priority in their business operations. It is indeed possible to employ this practical and necessary ideal leading to the creation of a code of ethics for business development off-Earth as presented in this paper.

One of the most important contributions we can make in this coming era of space industrialization is the establishment of ethical principles for industries conducting business off-Earth. The practices and values we take with us into this new frontier will form the foundation for ethics implemented in this new economy, as well as in the daily lives of individuals choosing to live off-Earth. Now is the time for companies choosing to operate off-Earth to publicly commit to the ethical development of business conducted in this new arena.

What is a Code of Ethics?

Professor William Birkett from the University of New South Wales in Sydney, Australia documents his view of three types of corporate codes addressing business practices. The first type is the Code of Ethics. His perspective of a Code of Ethics is that it is a “statement of the values and principles that define the purpose of an organization.” The second type, a Code of Practice, guides and directs decision-making. The third type, a Code of Conduct or Behavior, prescribes or proscribes certain behavior.”⁴ The first type, the Code of Ethics, is the subject of this paper, and this code relies upon using industry feedback and modifications to meet individual corporate requirements and needs.

It is important to understand that “ethics is about choice. Without the freedom to choose, it is not ethics but law.”⁵ Most ethics codes are voluntary statements detailing how organizations will conduct business and how associated individuals will behave in their performance of business activities. As such, a code of ethics describes in detail some of the more obvious and important ethical values to which business will adhere. Ethical behavior requires that individuals involved in a business articulate their ethical values. Creating and accepting a code of ethics helps a company and its employees to determine their ethical values and codify them within a set of established principles forming the guidelines for their business behavior.

The Necessity for a Code of Ethics for Off-Earth Economic Development and Settlement

Off-Earth economic development will soon undergo significant changes as Earth-based commerce spreads. As this new era of off-Earth commerce begins, business executives and advocates will decide on what to use as the model of choice for this development. Three choices exist with the first being to model off-Earth development and settlements upon the manner in which America settled its frontier. This type of model would include the boomtown or bust mentality resulting in a sometimes lawless and violent settlement. The second choice is to model off-Earth development after the imperialistic powers of

previous centuries wherein wealth was created by using colonies, war, sweat shops, and political control. Imperialism eventually produced riots, unions to protect the work force, and laws to bring order and decency to the growing communities. The third model calls for an entirely new twenty-first-century vision drawing upon the successes and failures of the past. This new model could guide us in using our experience and collective wisdom to develop off-Earth resources in a manner reflective of the tremendous advancements evident in today's society. This code of ethics supports the development and implementation of a twenty-first-century model for commercial space development and if followed, avoids the costly consequences that burdened businesses as a result of the thoughtless actions in both the American frontier and the imperialistic models.

An example illustrating an unethical terrestrial business practice gives cause for concern in expanding off-Earth commerce and can serve as an example of what not to do for these newly developing businesses. This particular example involves the tobacco industry as it targeted youths in marketing efforts, its cover-up of the addictive and harmful nature of its product, and its making sure that its product's formulation was as addictive as possible. These practices have hurt the profitability of the tobacco industry as it has paid billions in penalties and fines resulting from private party and government litigation. There seems to be no end in sight for costly legal claims against this industry demonstrating the true costs of pursuing unethical policies in search of quick profits.

Placing profits ahead of customer safety is yet another instance of a lack of ethical leadership in business. This has been demonstrated all too well by the Firestone and Ford organizations and recent tragedies associated with their products. Their actions also cost both of these companies extremely large amounts of money and customer goodwill. In addition, HMO's that place profits ahead of the health-care needs of members illustrate another example of short-sighted planning. This practice has resulted not only in extensive litigation costs for the HMO's, but restrictive legislation on both the federal and state level, which is sure to become more restrictive as HMO's continue their typical approach to business. Both the litigation and legislation is certainly raising the operating costs of the HMO's. While the HMO's will try to pass the increased costs on to their policy holders through rate increase and benefit reductions, it is likely that their overall profitability will be reduced from what it would have been had the HMO's been ethical in their approach to business from the beginning. In addition, if the HMO's had adopted ethical business practices early on, they would not be encountering the stiff legislative opposition and backlash to their industry that is now common place.

It is fitting that we question unethical business practices and make a clear delineation between the inappropriate conduct of business and the type of corporate leadership we desire in our future off-Earth commerce. Since we, as pioneers, carry the responsibility for building an ethical foundation for the future citizens of space, should we not demand the highest standards from ourselves now? Yes, we should demand these standards from our business leaders because short term thinking hurts both people and profits. In adopting a code of ethics, organizations concurrently demand more of themselves and publicly commit to advancing ethical business practices throughout all aspects of their business conduct.

Challenges and Current Trends

Lunar economic development is significantly closer to reality than that on Mars. As such, two areas in critical need of an ethical approach to development concern the lunar surface and the benefit-sharing of lunar resources. Millions of people are familiar with the NASA pictures of the footprints left by the astronauts in the Sea of Tranquility on the Moon. NASA's caption under the photo reads, "Footprints left by the astronauts in the Sea of Tranquility are more permanent than most solid structures

on Earth. Barring a chance meteorite impact, these impressions in the lunar soil will probably last millions of years.”⁶ In considering lunar economic development, some areas on the surface of the Moon may undergo change, depending upon the nature of the development project. To many critics, this is unacceptable. Furthermore, when lunar-development advocates mention setting aside portions of the Moon for public parks or protected areas, opponents are quick to point out that even those advocates are cognizant of the fact that their activities will forever damage the virgin surface of the Moon. While some critics are focused on the lunar development issues, others are focused on making sure that all nations and people have access to lunar resources, a concept which is strengthened by the United Nations Moon Treaty.

The United Nations Moon Treaty addresses the highly controversial concept of benefit-sharing for lunar resources. Only a handful of nations have accepted the Moon Treaty due to its controversial nature. Both the United States and the former Soviet Union rejected it. Still, the Moon Treaty remains enforceable among those that approved it and possibly among all United Nations members. The ramifications of the Moon Treaty, with its “common heritage of man” terminology and its requirement for benefit-sharing among all nations, strike at the very heart of all off-Earth commerce. A code of ethics, accepted and implemented by off-Earth development companies may not only help diffuse the fears and concerns surrounding these issues, but it may also facilitate careful and well-planned off-Earth development.

The March 2001 Space Law Conference in Singapore has provided a realistic indication of the magnitude of the future that awaits those seeking to commercially develop the Moon and other off-Earth resources. In his opening remarks, the Singapore Attorney General, Chan Sek Keong, stated, “All nations have a common stake in the resources found within the province of space. However, only a small number are in a position to exploit them. Outer space, like the high seas and the continent of Antarctica, is a common heritage of mankind.”⁷ Consequently, because of this attitude among many nations, costly legal challenges to lunar and other off-Earth development projects may be on the horizon as the development of space resources gradually evolves.

There is an ongoing trend toward pitting developed nations against those “coming of age.” Peter Capella provides a good example as he cites a report of the International Federation of Red Cross and Red Crescent Societies.⁸ The report predicts that poor countries would seek legal compensation from industrialized nations because of the contribution of the latter to global warming and climate change throughout the world. Further, the report recommended the establishment of an international tort climate court, claiming that “increasingly sophisticated analysis of climate change means that ignorance of the consequences of industrial consumption and pollution can be no defense for inaction.”⁹ While global warming is not usually associated with off-Earth development, the trend remains noteworthy. It behooves the commercial space industry to act now toward minimizing the risk of benefit sharing because ignoring it will likely build future barriers. If off-Earth commerce is to proceed as unfettered as possible by governmental barriers, regulatory requirements, and direct legal challenges, business practices must be established for operating off-Earth that engage the support of potential challengers and opponents.

Settlement Characteristics and Private-Property Rights

Another problematic aspect is born from within the commercial community itself. Characterizing off-Earth settlements as “colonies” or “boomtowns” encourages discomfort among those already concerned about space development. Many people resist, and even fear, such characterization of off-

Earth settlements. If off-Earth colonies or boomtowns are developed, opposition would be expected, giving rise to cries for protective legislation from any and all governments, as well as the United Nations.

Private-property rights are also an issue for off-Earth commerce. Space-commerce proponents commonly believe that because a venture has private financing, or a company manages to land on a planetary body the business has an automatic right to all resources found on the celestial body. Since private-property rights are fundamental to a capitalistic economic system, it is natural to assume that they must be equally fundamental to the development of an off-Earth capitalistic economy. Yet, the issue of private-property rights exacerbates existing problems with developing nations because they have no means of competing for the rights.

Adopting a code of ethics for conducting off-Earth commerce enables organizations seeking to conduct business in this arena to minimize the risks associated with the potential problems described. This code of ethics recognizes the challenges facing commercial development and compels participants to devote a high level of thought and analysis to these issues. The code also recognizes the unique nature of space in comparison to Earth which has been continually developed throughout the history of the world. Therefore, businesses must approach off-Earth development with caution, care, and concern. A well-designed code of ethics secures the commitment of employees and management alike to careful adherence to the spirit of the code. Recalling the unethical business examples cited earlier in this paper, most, if not all, of the companies mentioned had codes of ethics and behavior in place. Simply having a code is insufficient. Company leadership, all management levels, and all employees must share in the commitment to pursue ethical business operations. A well-designed code secures the necessary level of commitment from all company personnel.

The motivation for this paper was born from an initial concern for the type of management and leadership businesses would likely take with them into the off-Earth industrial arena. Knowing that off-Earth settlements, along with new business ventures were nearing reality, discovering ways of ensuring that the best of business practices and ethics became a passionate priority for me. At the end of the twentieth century and in the early part of the twenty-first century, the worst examples of a lack of human concern often proved to be the most successful, the most publicized, the most rewarded, and the most modeled. Companies such as Firestone and Ford, as mentioned earlier in this paper, are evidence for this worst case model. Pacific Gas & Electric Co. also qualifies as a worst case example given the use of their bankruptcy status to deny disability claims to a few hundred workers while at the same time winning approval from the bankruptcy judge to pay over \$17 million in bonuses to executives and key employees. Consequently, it became increasingly evident that establishing ethical standards for businesses in space was of great import, especially when the significance of building the foundation for future space explorers and settlers was thoughtfully considered.

As we bring economic development to space, awareness of potential problems resulting from casual development must be a priority at the onset to avoid the tremendous damage control we have been having here on earth after the fact. This code addresses these issues by ensuring that only those people offering the highest quality in business management and leadership will participate in building the foundation for the new space economy. With human nature's best qualities and characteristics represented in the management of the new space businesses, we increase the likelihood of proper care in sustainable commercialization. Fritjof Capra, in *The Turning Point: Science, Society, and the Rising Culture*, clearly illustrates this point when he states, "We live today in a globally interconnected world, in which biological, psychological, social, and environmental phenomena are all interdependent."¹⁰ As we move toward an expanded off-Earth economy, the greater awareness we bring to our interdependence and interconnectivity, the greater success we will reap in our efforts toward celestial development.

The Benefits of Instituting An Ethical Code

A code of ethics must produce benefits for businesses operating in space. In turn, there must be a genuine commitment to ethical business operations by all employees for the code to have true meaning and influence. Some of the major benefits available to all with acceptance of a code of ethics are the following:

1. A well-designed code of ethics facilitates off-Earth commerce. Ethically focused space business ventures reduce the risk of government interference and popular opposition to this new business development.
2. Citizen support for developing off-Earth commerce is important. Such support will be more forthcoming with public awareness that this new industry consistently adheres to ethical standards.
3. All commercial off-Earth development will be more carefully considered, planned, and implemented due to committed attention by individual businesses to issues addressed in a code of ethics.
4. Businesses will have a wider selection of competent potential employees. Currently, prospective employees inquire into the type of work offered, how the company will use its products and services, the goals and purposes of the business, and how the company plans to evolve successfully. An appropriate code of ethics will encourage potential space employees to also inquire into policies instituted to “push the ethical envelope.” Candidates will also be encouraged to express their own principles during employment interviews to ensure matched compatibility with those established by the organization. A business that has adopted an appropriate code of ethics can attract higher-level candidates who are genuinely concerned about the ethics incorporated in their work.
5. Developing an off-Earth economy carries with it awesome responsibilities as a foundation is set for the space explorers and eventual settlers that follow. By publicly subscribing to a voluntary code of ethics, everyone within the company declares their awareness and responsibility for ethical space development. The code of ethics is a pledge made by each person to consistently strive to achieve the highest ethical standards in their daily decisions and actions. The incorporation of a code of ethics is a dramatic business-enhancing strategy holding vast potential for success.
6. With an appropriate code of ethics in place, employees have a higher-level purpose to guide them in their work, bringing an added dimension and greater significance to their jobs. Reaching goals and a subsequent increase in professional satisfaction will follow.
7. Businesses, which accept and work with a code of ethics, will internally and externally demonstrate quality industry leadership.
8. Businesses, which consistently follow ethical guidelines, will bring the development of an advanced off-Earth to rapid reality.
9. Safe and thoughtful development of off-Earth resources will benefit the billions of people that live on Earth in a variety of ways. Examples of the types of benefits that can be realized include medical and other scientific advances. Also, we will be able to become a better steward for our own home, Earth.

10. Acceptance of an appropriate code of ethics will enable space companies to operate from a perspective that is more inclusive and balanced than simply a focus on the “bottom line.”

The Proposed Code of Ethics

A code of ethics developed for off-Earth development follows, introduced with a preamble and followed by the general principles of the code, each with a brief explanatory note. The principles are presented in order of their importance, beginning with the most critical; however, each is important in its own right and an integral part of the entire code of ethics. Note that this code addresses solely those issues pertinent to space development. A code of ethics for terrestrial business parallels those in practice today; hence, numerous models exist requiring only those added provisions necessary to ethically guide space organizations in terrestrial business affairs.

An important point to make about the code of ethics proposed in this paper is that it empowers businessmen and women by calling upon them to carefully consider sensitive issues without dictating how these issues are processed. Underlying this code of ethics is the assumption that creative, competent, and committed people will eventually find solutions to difficult problems. The code encourages the business community to adopt such a mind-set.

The Preamble

We the people, associated with the economic development taking place off-Earth, in order to profess our deep concern and care for outer-space and its resources, subscribe to the code of ethics for off-Earth economic development. We recognize the importance of outer-space to all people everywhere, and the equal importance of how we conduct business both in space and on Earth. To ensure the best, the highest, and the most careful and ethical economic development possible; to commit to consistent protection of outer-space and its celestial bodies; and to enable engagement in space commerce unfettered by government or other regulatory barriers, we hereby establish and accept this code of ethics and its following goals and/or provisions:

- We value and accept the unique nature of outer-space and pledge to respect its special qualities at all times.
- We agree to develop off-Earth resources in ways that provide maximum benefit to the greatest number of people.
- We agree to be responsible and accountable for how we develop and use the resources found off-Earth.
- We will conduct all business dealings with integrity, honesty, and fairness.
- We will consistently work to promote a positive work environment.
- We will strive to create an atmosphere that supports the spirit of this code.

Principles

1. We are committed to ensuring a free market economy off-Earth.

This principle demonstrates an understanding of the organizational role in ensuring a free market economy off-Earth.

2. We will consider the effects of all off-Earth development on future generations that will live and work in space and on Earth.

Caring for future generations is appropriate with all forms of foundational development. This principle compels participating businesses to carefully consider how their actions of today will influence future generations both on and off-Earth. It demonstrates an understanding of the magnitude of this influence. Our commitment to those that come after us is sacrosanct.

3. Our business dealings in space and on Earth will portray the highest level of integrity, honesty, fairness, and ethics.

This principle illustrates a commitment to serving as a leader within the commercial space industry by consistently demonstrating the qualities described in this code of ethics at all times. All employees will model these qualities in both their internal and external actions and behavior on behalf of the company.

4. We agree to treat outer-space with respect, concern, and thoughtful deliberation, regardless of the presence or absence of life forms.

While outer-space, to the best of our knowledge, represents a collection of nonliving natural objects, this principle requires caution in all business operations regardless of the presence of known life forms.

5. We will strive to be a good steward of space and all its economic resources.

This principle portrays a commitment to the cautious and best possible space-oriented business planning.

6. We support the environmental protection of certain areas on the Moon and other celestial bodies just as there are environmentally protected zones and designated areas on Earth.

On Earth, we have designated certain areas as national and state parks, wilderness areas, and other protected zones. This principle communicates the need for similarly designated areas on Mars, the Moon and other celestial bodies under the auspices of a celestial or other properly designated authority.

7. All the principles set forth in this code of ethics are valued equally with the goal of wealth maximization.

This principle demonstrates organizational commitment to the pursuit of ethical values.

8. All company employees, as well as other people working with the company, agree to be responsible and accountable for the ethical economic development we as a company undertake off-Earth.

Ethical business operations are more likely with individual assumption of responsibility and accountability by all people associated with the organization. This principle establishes that all indeed share in the responsibility of ensuring company compliance with the code of ethics at all times.

9. Employee acknowledgement and acceptance of the code of ethics endorsed by the company is required.

This principle communicates that each employee, regardless of organizational position, is responsible for an awareness, understanding, and compliance with the ethics policy adopted by the company. Each employee will sign a related acknowledgement upon hire. This acknowledgement is, in essence, a “receipt” indicating that the employee received a copy of the code of ethics and understands its importance and the requirement to comply with its terms. Each employee will have full access to the ethics committee or a supervisor should there be any questions regarding the ethics policy.

10. While we will always conduct our business in accordance with national and international laws, we will strive to adhere to higher ethical standards in all company operations.

This principle affirms that the company, while complying with the law, understands the need to follow the code of ethics because the law alone is insufficient for recognizing the unique nature and importance of building an ethical foundation for space commerce and individuals living off this planet.

11. We agree to manage the company with consumer and product safety as the highest priority.

This principle communicates utmost regard and responsibility for consumer safety.

12. Company executives agree to demonstrate ethical leadership and compliance with this code of ethics.

Organizational management serves as the role model for employees and others doing business with the company. With this in mind, this principle communicates a clear understanding among management personnel that it is imperative they conduct behavior consistent with this code of ethics at all times.

13. Our company will establish a corporate ethics committee to address issues of an ethical nature and to approve all off-Earth business ventures.

The creation of an ethics committee representing both executives and employees for the purpose of addressing issues of an ethical nature displays the intention of strong compliance with the accepted code of ethics.

14. Our company respects the rights of those people who advocate private-property rights or benefit sharing for off-Earth resources.

This principle demonstrates an understanding of the controversial nature of these two issues. The company can choose to be an advocate for either of these issues, while at the same time, respecting those people who differ from its position. The organizational approach to advocating the position of the company on either of these two matters shall be in full compliance with this code of ethics and approved by the company ethics committee.

15. Conflicts of interest are to be fully disclosed to the ethics committee.

As soon as an employee or the company becomes aware of a real or potential conflict of interest, the conflict must be fully disclosed to the ethics committee. If the conflict of interest contradicts any provisions of the ethics policy adopted by the company, the ethics committee will suggest possible remedies to minimize or eliminate the conflict.

16.. Our company will make full and immediate public disclosure of any contribution made to any political candidate or organization. The company ethics committee will approve all such contributions.

This principle, while allowing for political contributions, ensures prompt public disclosure and ensures that all such political activities on the part of the organization receive prior approval by the company ethics committee.

Conclusion

Adopting a code of ethics for commercial off-Earth development makes practical sense from two very important perspectives. First, through assuring people and governments that commercial space development will be pursued in a thoughtful, careful, and ethical manner, potential barriers to space commerce can be minimized or eliminated. Second, adopting an ethical approach to conducting business off-Earth is simply the right, intelligent, and safest action we can take. Furthermore, it is important that the space industry develop its own ethical guidelines for space commercialization. The alternative is risking the imposition of less than favorable guidelines on the industry that will restrict economic development in space.

Ray Bradbury, a noted science-fiction author, was one of several speakers at the Space Frontier Foundation conference in 1999. Mr. Bradbury received a question relating to why there is a need for a code of ethics. In response to this question, which suggested that developing space resources and forming settlements on the Moon or elsewhere in space was premature due to the violence, war, and other problems on Earth still requiring resolution, Bradbury offered the following response: “Go into space. Go to the Moon, Alfa Centauri, and Mars. It may not be nice because humans are not nice. But we will also take with us Shakespeare, Emily Dickinson and others. And it will be fine for the human race.”¹¹ As the commercial space industry and space businesses begin operating within adopted codes of ethics, we will be able to claim the assurance espoused by Bradbury that “it will be fine for the human race.”

ENDNOTES

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