

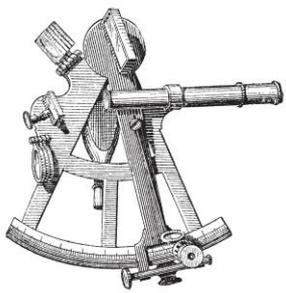
# **NATIONAL SPACE POLICY**

## **A PRÉCIS OF FUNDAMENTALS & PURPOSE**

BY:

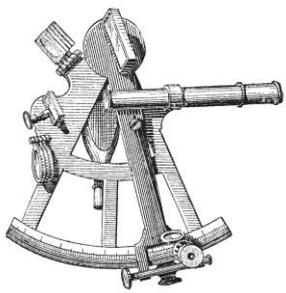
MICHAEL J. LISTNER, ESQUIRE

FOUNDER & PRINCIPAL, SPACE LAW AND POLICY  
SOLUTIONS



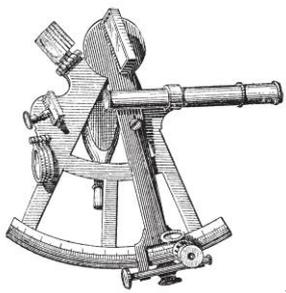
## GENERAL CHARACTERISTICS OF NATIONAL SPACE POLICY

- ❑ Policy directions for government departments, support of and relationships with, the commercial, research and education sectors.
- ❑ The roles and responsibilities of the government departments with a stake in the nation's space sector including their inter-relationships
- ❑ Enunciates a nation's goals in outer space and the means by which they will be achieved.
- ❑ Expresses national security, civil, commercial, and scientific interests and activities in the space environment.
- ❑ Includes implementation guidelines for the nation's individual national security (military, intelligence), civil, and commercial space communities.



## GENERAL CHARACTERISTICS OF NATIONAL SPACE POLICY (CONT)

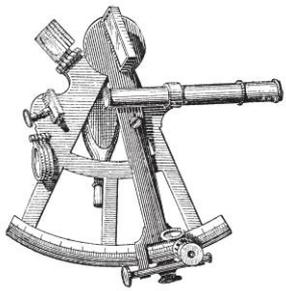
- ❑ Intended for multiple audiences, including the national legislative body, the general public, foreign allies, adversaries, third parties such as the United Nations and non-governmental organizations (NGOs).
- ❑ National space policy for the United States expresses national security, civil, commercial, and scientific interests and activities in the space environment.
- ❑ National Space Policy may encompass several Presidential directives most of which classified but may have unclassified portions for public release.



## GENERAL CHARACTERISTICS OF NATIONAL SPACE POLICY (CONT)

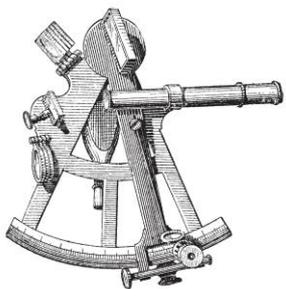
When crafting a national space policy, policy-makers in the United States consider many factors including:

- The nation's space capabilities
- The emerging international security environment
- How adversaries with asymmetric capabilities and associated priorities might relate to the National Space Policy.
- How other countries might find the National Space Policy relevant to their security interests, and
- How the United States can shape the international space regime to achieve its policy objectives.



## GENERAL CHARACTERISTICS OF NATIONAL SPACE POLICY (CONT)

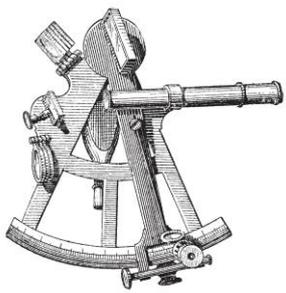
- ❑ Depending on its intended audience, there may be classified and unclassified versions of the National Space Policy, both of which are used to direct executive agencies involved in the nation's outer space activities and guide the Congress to create laws that are consistent with the National Space Policy's edicts.
- ❑ First Preliminary National Space Policy enacted by the Eisenhower Administration on June 20, 1958 by [NSC 5814](#). Each successive Administration has articulated its own National Space Policy in one form or another.
- ❑ Until the Administration of George H.W. Bush, National Space Policies were all classified. Since then, there have been unclassified versions created for public consumption.



## NATIONAL SPACE POLICY AND INTERNATIONAL SPACE LAW

National space policy affects and helps shape the international legal environment. For example, the Eisenhower Administration took up the issue of the delimitation between the atmosphere and outer space in NSC 5814.

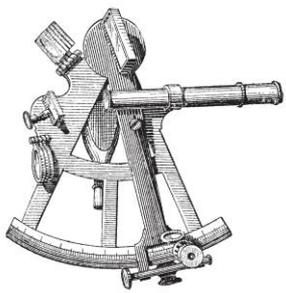
*“Although the successful orbiting of earth satellites has raised a question of national sovereignty ad coelum and as to the doctrine of “freedom of space”, the United States has not recognized any upper limit to sovereignty. In order to maintain (a) flexibility in international negotiations with respect to all uses of “space” and pending an international control agreement, (b) freedom of action with respect to the military uses of “space”, the United States has taken no public position on the definition of outer space.” (NSC 5814, ¶ 11.)*



## NATIONAL SPACE POLICY AND INTERNATIONAL SPACE LAW

NSC 5814 continues to say in Paragraph 36:

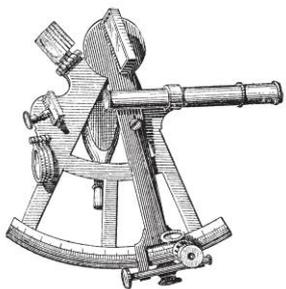
*“The problem of legal definitions is unresolved. As indicated above, there is yet insufficient basis for legally deciding that air space extends only so far and no farther; that outer space begins at a given point above the earth. Because for some time to come, at least, activities on the earth and in the air space, many legal problems with respect to space activities may well be resolved without the necessity of determining or agreeing upon a line of demarcation between air space and outer space. If, by analogy to the Antarctic proposal of the United States, international agreement can be reached upon permissible activities in space and the rules and regulations to be followed with respect thereto, problems of sovereignty may be avoided or at least deferred.*”



## NATIONAL SPACE POLICY AND INTERNATIONAL LAW (CONT)

The position of the United States on this issue remains relatively unchanged. Consider the U.S. statement to COPUOS in 2012:

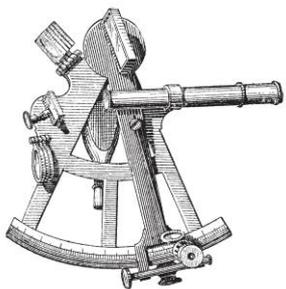
*“...on matters relating to the definition and delimitation of outer space. As we have stated on previous occasions, the United States is of the view that there is no need to seek a legal definition or delimitation for outer space. The current framework has presented no practical difficulties and indeed, activities in outer space are flourishing. Given this situation, an attempt to define or delimit outer space would be an unnecessary theoretical exercise that could potentially complicate existing activities and that might not be able to adapt to continuing technological developments. The current framework has served us well, and we should continue to operate under it until there is a demonstrated need and a practical basis for developing a definition or delimitation. This Subcommittee can operate most effectively and make its most significant contributions when it focuses its attention on practical problems, which are not apparent here.”*



## NATIONAL SPACE POLICY AND INTERNATIONAL SPACE LAW (CONT)

National space policy also sets forth how we engage the international legal community with seeking legal solutions for international issues. Take for example an excerpt from the 2006 National Space Policy of the Administration of President George W. Bush:

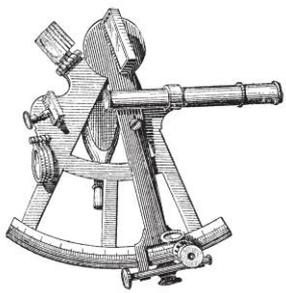
*“The United States will oppose the development of new legal regimes or other restrictions that seek to prohibit or limit U.S. access to or use of space. Proposed arms control agreements or restrictions must not impair the rights of the United States to conduct research, development, testing, and operations or other activities in space for U.S. national interests...”*



## NATIONAL SPACE POLICY AND INTERNATIONAL SPACE LAW (CONT)

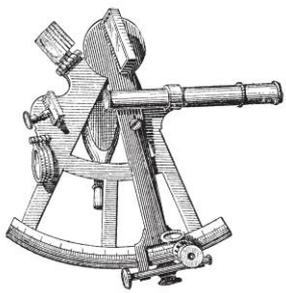
Contrast the engagement policy of the Bush Administration's 2006 Policy with the current National Space Policy:

*“Develop Transparency and Confidence-Building Measures. The United States will pursue bilateral and multilateral transparency and confidence-building measures to encourage responsible actions in, and the peaceful use of, space. The United States will consider proposals and concepts for arms control measures if they are equitable, effectively verifiable, and enhance the national security of the United States and its allies.”*



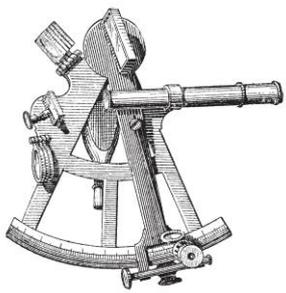
## NATIONAL SPACE POLICY AND PRIVATE SPACE

- ❑ Arguably, the Eisenhower Administration's space policy fostered the environment for private space activities.
- ❑ This is demonstrated with the creation and privately-sponsored launch of Telstar-1 and Telstar-2 by Bell Labs and AT&T.
- ❑ AT&T planned to launch a constellation of 55 Telstar satellites in elliptical orbits ranging from low-earth orbit to medium-earth-orbit to give world-wide coverage.
- ❑ Two Telstar satellites were launched at the beginning of the Kennedy Administration.



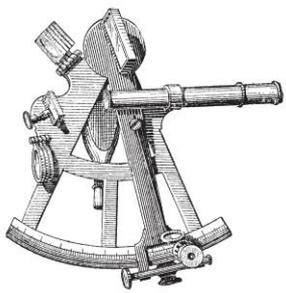
## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

- ❑ The Kennedy Administration derailed private space initiatives out of concern that AT&T would have a monopoly on satellite communications
- ❑ Alternatively, the Administration chose an international route for satellite communications and developed important and foundational policies for communications satellites with the Communications Satellite Act of 1962.
- ❑ This policy shift focused on international efforts for satellite communications and also led to the establishment of the publicly regulated Comsat Corporation, which was the precursor to the quasi-governmental [International Telecommunications Satellite Consortium](#) (INTELSAT).



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

- ❑ This policy shift effectively stopped the concept of private space until it was revived by the Reagan Administration.
  
- ❑ While private space, in particular AT&T's plans for satellite communication, was disrupted by this change in space policy, the introduction of the Comsat Corporation and INTELSAT led to the concept of using geosynchronous slots to place communication satellites .
  
- ❑ This allowed INTELSAT to obtain world-wide telecommunication coverage with three satellites instead of the fifty-five envisioned by AT&T with Telstar.
  
- ❑ The Kennedy Administration's change in space policy came full circle when INTELSAT became a private company in 2001.

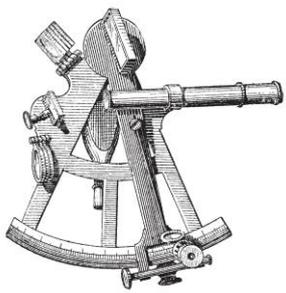


## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

- ❑ The Reagan Administration's non-public National Space Policy ([National Security Decision Directive Number 42](#), July 4, 1982) reintroduced the concept of private space activities. Paragraph III(B) states:

***Private Space Sector Participation:*** *The United States Government will provide a climate conducive to expanded private sector investment and involvement in civil space activities, with due regard to public safety and national security. Private sector space activities will be authorized and supervised or regulated by the government to the extent required by treaty and national security.*

- ❑ This Policy led to Congress passing the Commercial Space Launch Act of 1984, which was signed into law by President Reagan on October 30, 1984.

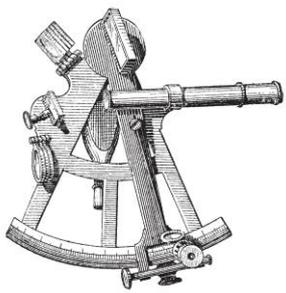


## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

The Administration of President George H.W. Bush continued to support private space activities in the first [National Space Policy \(NSD 30 \(NSPD 1\)\)](#), which was publically released on November 16, 1989.

### Commercial Space Policy

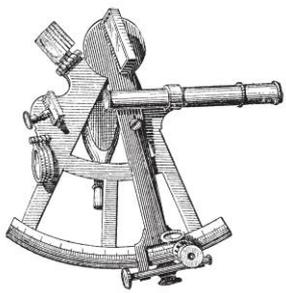
*The United States government shall not preclude or deter the continuing development of a separate non-governmental Commercial Space Sector. Expanding private sector investment in space by the market-driven Commercial Sector generates economic benefits for the Nation and supports Governmental Space Sectors with an increasing range of goods and services. Governmental Space Sectors shall purchase commercially available space goods and services to the fullest extent feasible and shall not conduct activities with potential commercial applications that preclude or deter Commercial Space Sector space activities except for national security or public safety reasons. Commercial Sector space activities shall be supervised or regulated only to the extent required by law, national security, international obligations and public safety.*



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

The Administration of President George H.W. Bush built on its support of commercial space with [Commercial Space Launch Policy \(National Space Policy Directive 2, September 5, 1990.\)](#) This publically released directive had amongst its findings:

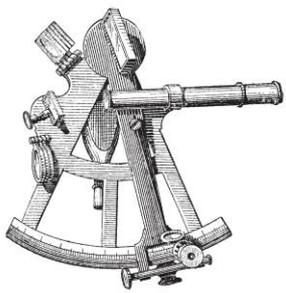
- ❑ That the President approved a National Space Policy that encourages development of a Commercial Space Sector.
- ❑ Recognized that a commercial space launch industry can provide many benefits to the U.S., including benefits to U.S. national security.
- ❑ Required government satellites to be launched on U.S. manufactured launch vehicles, unless the President makes a specific exemption.



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

The Administration of President William J. Clinton continued its support of private space in its [National Space Policy \(PDD/NSC 49 \(PDD/NSTC 8\)](#), September 19, 1996. Among its provisions for Commercial Space Guidelines:

- Support and enhance U.S. economic competitiveness in space activities while protecting national security interests.
- Pursue commercial space objectives **without the use of direct Federal subsidies.**
- Provide access to appropriate U.S. space-related hardware, facilities and data.
- Consistent with national security, provide timely transfer of government developed space technology.

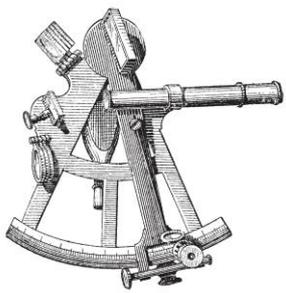


## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

The [National Space Policy](#) (August 11, 2006) of President George W. Bush supersedes the September 19, 1996 Policy but continues its support of private space.

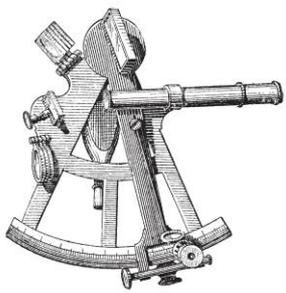
*Commercial Space Guidelines* It is in the interest of the United States to foster the use of U.S. commercial space capabilities around the globe and to enable a dynamic, domestic commercial space sector. To this end, departments and agencies shall:

- *Use U.S. commercial space capabilities and services to the maximum practical extent; purchase commercial capabilities and services when they are available in the commercial marketplace and meet United States Government requirements; and modify commercially available capabilities and services to meet those United States Government requirements when the modification is cost effective;*
- *Develop systems when it is in the national interest and there is no suitable, cost effective U.S. commercial or, as appropriate, foreign commercial service or system that is or will be available when required;*



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

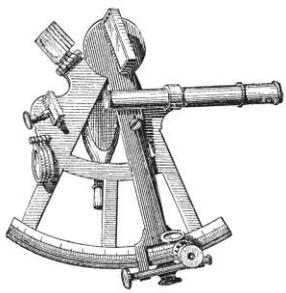
- ❑ *Continue to include and increase U.S. private sector participation in the design and development of United States Government space systems and infrastructures;*
  
- ❑ *Refrain from conducting activities that preclude, deter, or compete with U.S. commercial space activities, unless required by national security or public safety;*
  
- ❑ *Ensure that United States Government space activities, technology, and infrastructure are made available for private use on a reimbursable, non-interference basis to the maximum practical extent, consistent with national security; and*
  
- ❑ *Maintain a timely and responsive regulatory environment for licensing commercial space activities and pursue commercial space objectives **without the use of direct Federal subsidies**, consistent with the regulatory and other authorities of the Secretaries of Commerce and Transportation and the Chairman of the Federal Communications Commission.*



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

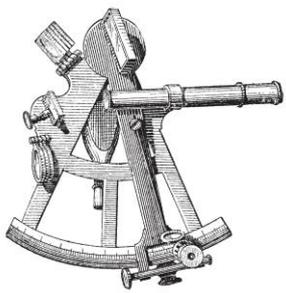
President Barack Obama continues the support of private space in its [June 28, 2010 National Space Policy](#):

- ❑ *Purchase and use commercial space capabilities and services to the maximum practical extent when such capabilities and services are available in the marketplace and meet United States Government requirements;*
- ❑ *Modify commercial space capabilities and services to meet government requirements when existing commercial capabilities and services do not fully meet these requirements and the potential modification represents a more cost-effective and timely acquisition approach for the government;*
- ❑ *Actively explore the use of inventive, nontraditional arrangements for acquiring commercial space goods and services to meet United States Government requirements, including measures such as public-private partnerships, hosting government capabilities on commercial spacecraft, and purchasing scientific or operational data products from commercial satellite operators in support of government missions;*



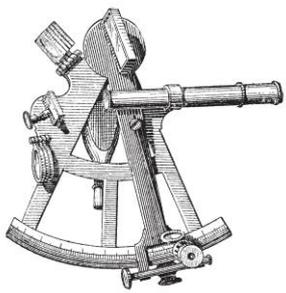
## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

- ❑ *Develop governmental space systems only when it is in the national interest and there is no suitable, cost-effective commercial or, as appropriate, foreign commercial service or system that is or will be available;*
- ❑ *Refrain from conducting United States Government space activities that preclude, discourage, or compete with U.S. commercial space activities, unless required by national security or public safety;*
- ❑ *Pursue potential opportunities for transferring routine, operational space functions to the commercial space sector where beneficial and cost-effective, except where the government has legal, security, or safety needs that would preclude commercialization;*
- ❑ *Cultivate increased technological innovation and entrepreneurship in the commercial space sector through the use of incentives such as prizes and competitions;*



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

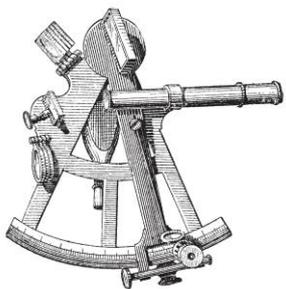
- ❑ *Ensure that United States Government space technology and infrastructure are made available for commercial use on a reimbursable, noninterference, and equitable basis to the maximum practical extent;*
- ❑ *Minimize, as much as possible, the regulatory burden for commercial space activities and ensure that the regulatory environment for licensing space activities is timely and responsive;*
- ❑ *Foster fair and open global trade and commerce through the promotion of suitable standards and regulations that have been developed with input from U.S. industry;*
- ❑ *Encourage the purchase and use of U.S. commercial space services and capabilities in international cooperative arrangements; and*
- ❑ *Actively promote the export of U.S. commercially developed and available space goods and services, including those developed by small- and medium-sized enterprises, for use in foreign markets, consistent with technology transfer and nonproliferation objectives.*



## NATIONAL SPACE POLICY AND PRIVATE SPACE (CONT)

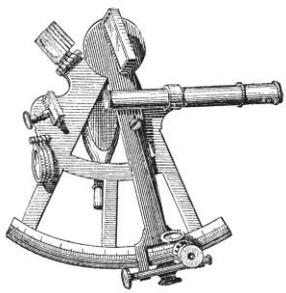
Synopsis of the role of National Space Policy in private space activities.

- ❑ Starting with the Reagan Administration, National Space Policy creates a policy environment where a private interest for non-governmental actors to perform outer space activities can be granted (no 10<sup>th</sup> Amendment Constitutional right to private space activities.)
- ❑ Builds upon and expands the policy environment to define and encourage the ability of private space activities to proliferate.
- ❑ Encourages Congress to pass legislation to refine the scope and supervision of the private interest created under National Space Policy, including delegating to proper executive agencies to implement regulations and supervise private space activities.
- ❑ The current Policy deviates from the Clinton and Bush Policies and allows direct-subsidies for private subsidies.



## OTHER NATIONS WHO HAVE OR WILL HAVE SPACE POLICIES

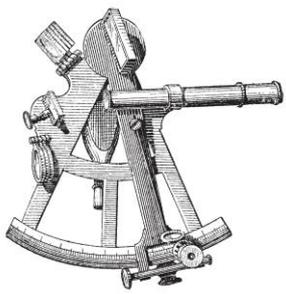
United States	United Kingdom
European Union	Germany
France	Italy
Russia	China
Japan	Australia
Republic of Korea (South Korea)	South Africa
United Arab Emirates (announced March 2015)	Canada (Framework)



# FUTURE NATIONAL SPACE POLICY

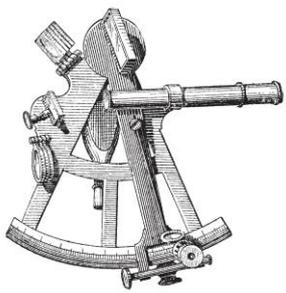
## Areas That Future Space Policy May Address

- Space debris remediation by not only making it policy to pursue space debris removal but also to foster an international legal and policy environment that will encourage space debris removal without international legal and political entanglements.
- Future commercial resource development from asteroids, the Moon, etc.
- Future plans for long-duration missions on celestial bodies and potential settlement.
- Future national and outer space security efforts and issues concerning defensive and offensive capabilities.
- International engagement to shape the legal and geopolitical arena.



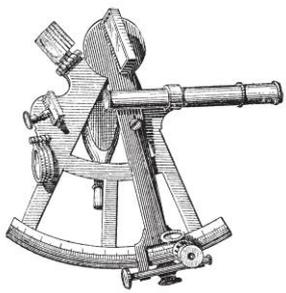
## FINAL THOUGHTS

- ❑ Space policy is the foundation for a nation's outer space activities.
- ❑ The sign of a truly space-faring nation is usually characterized by the optics of their activities and their technological prowess.
- ❑ However, as more nations become involved in outer space activities, the mark of a truly space-faring nation that shows it is committed is one that has invested the time and resources to articulate a space policy.
- ❑ A space policy articulates to the geopolitical community that a nation intends to be a significant player in outer space activities. Additionally, internal policies developed to augment an external space policy will help focus a nation's activities and make its goals more coherent and the means to achieve those goals more compelling.



## REFERENCES & FURTHER READING

- ❑ [Presidential Decisions: National Security Council Documents](#), George Marshall Institute
  
- ❑ Dr. Dana J. Johnson, “[National Space Policy: Opportunities and Challenges in Shaping the International Space Regime](#),” in Air Force Space Command High Frontier: The Journal for Space & Missile Professionals , Volume 3, Number 2, pp. 50-56.
  
- ❑ [AN ANALYSIS OF THE SPACE POLICIES OF THE MAJOR SPACE FARING NATIONS AND SELECTED EMERGING SPACE FARING NATIONS](#) By Graham Gibbs
  
- ❑ Michael J. Listner, [Op-ed | UAE Moving To Become a Player in Outer Space Activities](#), Space News, May 11,2 2015.



## BIOGRAPHY

Michael Listner is the founder and principal of Space Law and Policy Solutions. He is a 1998 graduate of Franklin Pierce University and earned his JD from Regent University School of Law in 2001. Michael is a member of the New Hampshire Bar, and is admitted to practice before the state and federal courts of that state. Michael is also serves as peer-reviewer for Space Policy Journal.