

The SETI League, Inc.

2003 Annual Report Issued 15 May 2004

Contents:

Vision and Mission Statements	2
Executive Director's Message	3
Case for Support	4
Financial Highlights	5
Program Service Accomplishments – Science	6
Program Service Accomplishments – Technology	7
Program Service Accomplishments – Public Education	8
Program Service Accomplishments – Media and Outreach	9
Grant History	10
Annual Budget Highlights – 2004	11
Trustees and Officers	12
Independent Auditor's Report	13
Statements of Assets, Liabilities, and Net Assets	14
Statement of Support, Revenue, and Expenses	15
Notes to the Audited Financial Statements	16
2003 Donors	17
Additional Information	18

SETI scientists seek to determine through microwave and optical measurements whether humankind is alone in the universe. Since Congress terminated NASA's SETI funding in 1993, The SETI League and other scientific groups have been attempting to privatize the research. Experimenters interested in participating in the search for intelligent alien life, or citizens wishing to help support it, should visit us on the Web at <hr/>http://www.setileague.org/>, email to join@setileague.org, send a fax to +1 (201) 641-1771, or contact The SETI League, Inc. membership hotline at +1 (800) TAU-SETI. Be sure to provide us with a postal address to which we will mail further information. The SETI League, Inc. is a membership-supported, non-profit [501(c)(3)], educational and scientific corporation dedicated to the electromagnetic Search for Extra-Terrestrial Intelligence.

Offices: 433 Liberty Street PO Box 555 Little Ferry NJ 07643 USA

Phone: +1 (201) 641-1770

Facsimile: +1 (201) 641-1771

Email: info@setileague.org

Web: www.setileague.org

President: Richard Factor

Executive Director: H. Paul Shuch, Ph.D.

Secretary/Treasurer: A. Heather Wood

Registered Agent: Marc Arnold, Esq.

Board of Trustees: Marc Arnold, Esq. Richard Factor Martin Schreiber, CPA H. Paul Shuch, Ph.D. A. Heather Wood

Advisory Board: Anthony Agnello Sir Arthur C. Clarke Robert S. Dixon, Ph.D. Frank D. Drake, Ph.D. Malcolm I. Raff, Ph.D. Clifford Stoll, Ph.D.



SETI League Vision

Recognizing that confirmed evidence of extraterrestrial intelligence will change forever our view of humanity's place in the cosmos, The SETI League, Inc. envisions a worldwide network of amateur and professional scientists working together to hasten our entry into the galactic community.

SETI League Mission

To encourage and support the Search for Extra-Terrestrial Intelligence by:

- 1. attracting a wide range of amateur and professional scientists into the SETI community;
- 2. developing technologies to assist the SETI experimenter in assembling a workable radio or optical SETI observatory;
- 3. disseminating hardware and software designs in support of SETI;
- 4. coordinating SETI experimenters worldwide in conducting a thorough sky survey;
- 5. providing a variety of forums and media for wide-ranging communication among SETI experimenters, enthusiasts, and organizations;
- 6. designing, assembling, and operating advanced optical and radio telescopes;
- 7. identifying and publicizing potential spin-off applications of SETI technologies; and
- 8. raising public consciousness as to the importance and significance of a broad-based Search for Extra-Terrestrial Intelligence that encompasses a variety of strategies.



Executive Director's Message

Dear SETI Supporters,

Although it always pleases me to address you about SETI science and technology, in recent years my annual messages have concentrated more on financial news. I am afraid this year is no exception, although I am glad to have good news to share with you this time around.

Good news, however, is a double-edged sword. I am pleased to be able to report that, for the first time in four years, The SETI League has concluded Calendar Year 2003 in the black. But I must honestly tell you that the only thing saving us from the prevailing deficit of the past several years is the uncommon generosity of a single individual. During 2003, with financial insolvency looming large, our most generous supporter dug deep, and increased his already substantial annual pledge of support by a whopping \$50,000. Thus, we live to carry on our search for another year.

It's been a good year, as far as our educational, scientific, and technological efforts are concerned, as you will read in the pages of this, our second formal Annual Report. I am very proud of what you, our members and supporters, have accomplished on but a single strand of a shoestring. But as your reputed Chief Scientist, I continue to be frustrated by what has become the reality of the new century: an ever-increasing portion of my time and attention is being diverted away from SETI science, and toward financial crisis management.

Yes, we have managed to reduce operating costs by an impressive 19 percent, through expanded use of electronic media, and decreasing reliance upon printing and post to distribute SETI materials around the world. And yes, we continue to be the world's pre-eminent grassroots scientific endeavor. But the roots seem to be withering. During 2003, fully 88 percent of The SETI League's revenues came from the pockets of just three incredibly generous donors.

Not that I am ungrateful to these giants of SETI privatization. But if we, as a global organization, are to fulfill our mission, we are going to need the modest contributions of several thousand more supporters. Our membership is lagging alarmingly. Show me that our interest is not. Together, we will yet achieve Contact.

> Yours for SETI Success, H. Paul Shuch, Ph.D.



Case for Support

Ever since mankind first used intellect to distinguish itself from the rest of the animal world, a fundamental and profound distinction became evident --- we do not seek simply for survival, we seek to understand.

Intellectual curiosity is part of what separates man from beast. And scientific endeavor has always been driven less by need than by desire. We desire knowledge not for what we can do with that knowledge, but for the sake of the knowledge itself.

Modern scientific research has until recently followed the same principle --- ask the questions, find then answers, then figure out how to apply that knowledge. But today, more and more scientific research is being dictated by a pre-determined end, an application in search of a question.

Scientific research isn't about application, but discovery. The Search for ExtraTerrestrial Intelligence (SETI) is mankind's search to know what, or who, is out there. Because it is contrary to our nature to not try and discover if there is intelligent life beyond our own world.

The SETI League was established in 1994 to continue the scientific research formerly conducted by NASA. When funding for NASA's SETI research was cut, it was left up to a handful of visionary pioneering scientists to privatize the search for intelligent life in the universe.

The SETI League is a 501 (c)(3) not-for-profit scientific research and education organization. Universal in its scope, it is international in its composition, with more than a thousand volunteers in five dozen countries participating in the organization's activities.

Project Argus is a prime example of the type of work **The SETI League** is involved in. *Project Argus* is an effort to deploy and coordinate roughly 5,000 small radio telescopes around the world, in an all-sky survey searching for microwave signals which might possibly be of intelligent extra-terrestrial origin. When fully operational, *Project Argus* will provide the first ever continuous monitoring of the entire sky, in all directions in real time.

SETI League members have developed the necessary hardware, software, protocols and procedures for distribution worldwide. Traditional research grade telescopes, of the type used by NASA, can view only a small fraction of the sky at a given time, typically on the order of one part in a million. To achieve the goal of continuous all-sky coverage would require one million telescopes, properly located and aimed. The cost for such an enterprise would exceed the Gross Planetary Product.

Project Argus has taken an innovative approach to the problem. By employing much smaller, relatively inexpensive amateur radio telescopes, built and operated by **SETI League** members at their own expense, we will be able to achieve an all-sky view for an infinitesimally smaller expenditure.

Only 5,000 of these smaller instruments, properly coordinated, are necessary to see in all directions at once. The equipment, though modest, is capable of detecting microwave radiation from sources out to a distance of several hundred light years.

This is an example of the innovative volunteer projects that members of **The SETI League** are engaged in. And while the relative cost of these types of projects are low, there are hard costs nonetheless.

To continue this research and expand **SETI League** activities, the organization needs to raise \$600,000 over the next three years. Membership dues, gifts and contributions will certainly help, but it is necessary to expand funding sources beyond current levels and current sources.

The SETI League is seeking investments of \$50,000 from foundations, corporations and individuals, those who are committed to scientific research and radio astronomy.

We welcome the opportunity to present our annual report and a full proposal for funding. And while spin-off technologies and applications are an inevitable result of scientific exploration and discovery, it is the search that inspires us, that causes us to lift our eyes to the heavens and wonder.



Financial Highlights



2003 Revenues



2003 Expenses



Program Service Accomplishments – Science

During 2003, The SETI League and its members made the following contributions to direct scientific research and observation:

- Coordinated 123 Project Argus radio telescopes in 22 countries, built and operated by volunteers, logging in excess of 100,000 hours of astrophysical observations. Argus stations analyzed and cataloged dozens of candidate signals during 2003.
- Operated W2ETI Moonbounce Beacon for 10 months, providing 3600 hours of free microwave calibration signals to the world's amateur and professional radio telescopes, including the Arecibo Observatory.
- Provided Committee participation, webmastering, and web hosting services to the SETI Permanent Study Group of the International Academy of Astronautics.
- Over 200 members contributed nearly 1,000 additional years of processing time to the SETI@home distributed computing experiment.



Signal from The SETI League's W2ETI 1296 MHz Lunar Reflective Calibration Beacon, as received at the Arecibo Radio Observatory in Puerto Rico during calibration tests on 15 April 2003. This signal is perhaps 9 dB stronger than the signals received at Arecibo during our first such tests in 2001, and shows the effect of having upgraded our transmitter power from 15 to 100 watts.



The "Big Zipper," a strange signal detection by member Tom Hutter at Project Argus station FN20ut, in January 2003, has been tentatively identified as a swept carrier from the Geotail spacecraft, in elliptical orbit out well beyond the Moon. Similar signals were detected in 1995 by the SETI Institute's Project Phoenix observations, from the Parkes radio telescope in Australia.



Program Service Accomplishments – Technology

During 2003, The SETI League and its members made the following contributions to technology design and development:

- Designed and tested front-end electronics modules for the Very Small Array radio telescope prototype.
- US Patent #6593876, Adaptive Microwave Antenna Array, granted for VSA technology.
- Coordinated and archived four closed technical email lists.
- Inducted two amateur radio astronomers into the Extra-Terrestrial Century Club.
- Designed and published the SETI Horn of Plenty waveguide antenna for L-band radio astronomical observations.



VHF/UHF Weak Signal Microwaves Amateur Satellites Repeaters Packet Radio Projects Interviews Plus...Reviews, Product News, and much morel

Executive director Dr. H. Paul Shuch and his SETI Horn of Plenty antenna appeared on the cover of the Spring 2003 issue of CQ-VHF Magazine. Several SETI League members around the world have duplicated the design for use in their personal Project Argus stations.



Program Service Accomplishments – Public Education

During 2003, The SETI League and its members made the following contributions to educating the public on SETI science and technology:

- Conducted SETICon03, The SETI League's third annual Technical Symposium, sponsored an associated Microwave Hardware Workshop, and published extensive Proceedings.
- Co-sponsored the Third European Radio Astronomy Congress in Heppenheim, Germany.
- Distributed 50 copies of "Tune In The Universe!", a radio amateur's guide to the Search for Extra-Terrestrial Intelligence.
- SETI League personnel delivered over a dozen public lectures on radio astronomy techniques and related SETI science.
- Published more than a dozen technical articles in the popular and scientific press.
- Published second issue of "Contact In Context," a Web-based peer-reviewed SETI scholarly journal.
- Provided webmastering services to the Society of Amateur Radio Astronomers and the International Academy of Astronautics SETI Permanent Study Group.

SETI League Strategic Planning Committee chairman Dr. Malcolm Raff tests a 1420 MHz lownoise amplifier, which he has just constructed at the first SETI League Microwave Hardware Workshop, held in conjunction with SETICon03.





Program Service Accomplishments – Media and Outreach

During 2003, The SETI League and its members engaged in the following media and out-reach activities:

- Published four issues of SearchLites, the quarterly newsletter of The SETI League, Inc.
- Coordinated and archived two open public email lists.
- Distributed nine Press Releases and twelve Editorials to over 700 media outlets worldwide.
- Filed 52 weekly updates to The SETI League's extensive website, bringing its total document count to over 2700 pages.
- 63 volunteer Regional Coordinators in 50 countries conducted more than 20 print and broadcast media briefings and interviews.
- Executive Director granted print media and broadcast interviews in the US and Germany, and presented SETI-related public lectures throughout the US and Europe.
- Presented the ninth annual Giordano Bruno Memorial Award, the second annual Orville N. Greene Service Award, five *Best Ideas* Awards, and twelve SETI SuperStar Awards.



At our Third Annual Awards Banquet, SETI League executive director H. Paul Shuch (left) and Awards Committee chairman David Ocame present the prestigious Giordano Bruno Memorial Award via teleconference to SETI pioneer Prof. Philip Morrison, and in memoriam to his wife, the late educator Phylis Morrison.



Grant History

During 2003 The SETI League, Inc. applied repeatedly for grant funding to support our various educational and scientific projects. Our professional fundraiser, retained in January 2003, surveyed key SETI League supporters, developed a Case Statement, and filed grant applications with 28 corporate and private foundations, without success. We attribute the lack of positive response more to current economic conditions than to any shortcomings in our grantsmanship and fundraising efforts. The email reproduced below is typical of the responses received to our various grant applications throughout the year.

Date: Mon, 27 Jan 2003 15:58:12 -0500 (EST) From: Kevin Marvel <u>marvel@aas.org</u>

Dear AAS Small Research Grant Applicant,

I am writing to inform you that your application for support from the AAS Small Research Grant program was not funded.

The committee, which met at our Seattle meeting in January, had a difficult time coming to its decisions. I hope that you will apply again in the future.

Should you have any specific questions about your grant, you may send me an email or call and I will try and give you a sense of the committee's discussion of your proposal, with (in some cases) specific comments on how you can improve the proposal for the future.

Sincerely,

Dr. Kevin B. Marvel Deputy Executive Officer American Astronomical Society marvel@aas.org 202-328-2010x114





Annual Budget Highlights – 2004

2004 Expense Budget

990 Line	REVENUES:	2004 (revised budget)
1d	Dues, Grants & Contributions	91,000
4	Interest & Investments	240
12	Total Revenues:	91,240
1	EXPENSES:	
13	Educ. and Scientific Programs	112,134
14	Management & General	12,985
15	Fundraising	2,562
17	Total Expenses:	127,681
18	Excess or (Deficit) for the year	(36,441)
	BALANCE SHEET:	
19	Beginning Net Assets	36,441
21	Ending Net Assets	0

Note: Projected revenues include pledged grants and membership dues only. They do not include any future grant amounts or new revenue sources, which we can in no way anticipate.



Trustees and Officers

In accordance with Article V, Section 2 of the Bylaws of The SETI League, Inc., as amended, "The Board shall consist of all officers along with such other trustee positions as determined by the Board of Trustees at their annual meeting." At its annual meeting on 26 April 2003, the Board confirmed the following Officers and Trustees to serve for a term of one year:

Appointee	<u>Position</u>	Professional Affiliation
Richard Factor	President	President, Eventide Inc.
A. Heather Wood	Secretary/Treasurer	Executive Secretary, The SETI League, Inc.
Martin Schreiber, CPA	Trustee	Accountant, Brand Sonnenschine LLP
Marc Arnold, Esq.	Trustee	Attorney, Arnold and Lofaro
H. Paul Shuch, Ph.D.	COO	Executive Director, The SETI League, Inc.

A quorum of the membership confirmed the slate of Officers and Directors at the 2003 SETI League Annual Meeting, held in conjunction with SETICon03 at The College of New Jersey, Ewing NJ.



Independent Auditor's Report

William Q. Hoffmann, LTD. Certified Public Accountings



Pine Street Professional Building 416 Pine Street Williamsport, PA 17301 (570) 526-1938 - Phone (570) 423-6667 - Fax INDEPENDENT AUDITORS' REPORT

April 29, 2004

Board of Directors and Trustees The SETI League, Inc. 433 Liberty Street Little Ferry, NJ 07643

We have audited the accompanying statements of assets, ltabilities and net assets – cash basis of The SETI League, Inc. (a nonprofit organization) as of December 31, 2003 and 2002 and the related statements of support, revenue and expenses – cash basis for the years then ended. These financial statements are the responsibility of the Organization's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 1b, these financial statements were prepared on a cash basis of accounting, which is a comprehensive basis of accounting other than generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the assets, liabilities and net assets of The SETI League, Inc. as of December 31, 2003 and 2002, and its support, revenue and expenses for the years then ended, on the basis of accounting described in Note 1b.

Respectfully submitted,

human, ta

WILLIAM R. HOFFMANN, LTD Certified Public Accountants

WRH:alw

Member.

American In clinte of Cernified Patket Accountants Demographic Accountants (Cernified Pathet Accountants Nacional Conference of CPA, Prochtlenets

-1-



2003 2002

Statements of Assets, Liabilities, and Net Assets

THE SETI LEAGUE, INC. STATEMENTS OF ASSETS, LIABILITIES AND NET ASSETS - CASH BASIS DECEMBER 31, 2003 AND 2002

ASSETS

CURRENT ASSETS: Cash	<u>s</u>	36,441	\$	31,551
TOTAL CURRENT ASSETS		36,441	201	31,551
TOTAL ASSETS	5	36,441	\$	31,551
LIABILITIES AND NET ASSETS				
NET ASSETS:				
Retained earnings		36,441		31,551
TOTAL NET ASSETS		36,441	-	31,551
TOTAL LIABILITIES AND NET ASSETS	5	36,441	\$	31,551

See accompanying notes and accountants' report



Statement of Support, Revenues, and Expenses

THE SETI LEAGUE, INC. STATEMENTS OF SUPPORT, REVENUE AND EXPENSES - CASH BASIS FOR THE YEARS ENDED DECEMBER 31, 2003 AND 2002

	2003	2002
SUPPORT REVENUE:		
Contributions received	\$ 175,329	9 \$ 159,611
Membership fees	16,28	1 14,736
Investment income	12:	3 1,335
Other income	4,633	6,153
TOTAL SUPPORT AND REVENUE	196,360	6 181,835
EXPENSES:		
Salaries	109,420	128,577
Payroll taxes	7,423	3 9,149
Retirement plan contribution	11,489	9 11,700
Employee henefits	12,579	9 13,391
Travel and employee expenses	13,730	0 16,868
Equipment and related expenses	431	8 25,410
Office supplies and expenses	4,584	4 8,048
Bulk mailings and postage	1,78	7 5,973
Telephone	2,399	9 2,443
Professional fees	6,304	4 3,018
Fundraising services	2,000	0 0
Contract labor	9,49	5 2,090
Lab fees	4,670	0 4,508
Storage	803	2 0
Dues and subscriptions	65	7 1,245
Advertising and promotion	8	3 131
Repairs and maintenance	83	2 85
Worker's compensation insurance	849	9 890
Meetings and seminars	63	1 1,598
Licenses and other fees	1,203	3 364
Miscellaneous	85	1 766
TOTAL EXPENSES	191,476	5236,254
CHANGE IN NET ASSETS	4,890	0 (54,419)
NET ASSETS, JANUARY 1	31,55	185,970
NET ASSETS, DECEMBER 31	\$ 36,44	<u>\$ 31,551</u>

See accompanying notes and accountants' report.



Notes to the Audited Financial Statements

THE SETI LEAGUE, INC. NOTES TO THE FINANCIAL STATEMENTS DECEMBER 31, 2003 AND 2002

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Nature of operations

The SETLL cague, Inc. (the Organization) sponsors astronomical research, education, lectures and events in the search for evidence of extra-terrestrial intelligence.

b. Basis of accounting

The Organization's policy is to prepare its financial statements on the cash basis of accounting,

c. Cash and cash equivalents

The Organization considers all highly liquid investments to be cash equivalents.

d. Support and revenue

The Organization is primarily supported by donor contributions and grants. During the years presented, more than 90% of total contributions were received from three major donors.

Contributions and grants received are reported as unrestricted, temporarily restricted, or permanently restricted support, depending on the existence and/or nature of any donor restrictions. Contributions that are restricted by the donor are reported as increases in unrestricted net assets if the restrictions expire in the same year in which the contributions are recognized.

e. Income taxes

The Organization is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. The Organization has no unrelated business income and accordingly the financial statements include no provision for income taxes.

2003 Donors

The following organizations have provided generous support to The SETI League, Inc. during calendar year 2003.

- The Second Foundation
- Orville N. Greene Foundation

The SETI League further recognizes the extraordinary commitment and contribution of our Sustaining Life Members, who have provided annual support of \$1000 US per year or more:

- Mark Pankhurst
- Richard Factor

We gratefully acknowledge the following individuals, who became SETI League Life Members during 2003:

- Peter H. Cheasley
- Brian C. Earle
- Albert A. Harrison
- Gary James Higginbottom

- Vincent L. and Martin Ott
- Wayne Poole
- William M. Roth
- Francis J. Turmo

The SETI League welcomes the following individuals, who became new members of The SETI League during 2003:

Thomas J. Ashenbrenner	Norbert Kelvin	David Ritter
Michael Barker	Candis E. King	Gerry Rolle
Roberto Candura	Marcus Dominic Leech	James Russell
Kenneth Casey	Lester Leonard	R. Scott Saunders
Robert D. Collier	Andy Liakos	Eugene Savage
Christopher J.M. Cummins	Overend J. Lougheed	John Sefick
Edward Dauer	Hamdi Mani	Alain Spang
Steve Deri	Erin Mastrantonio	David G. Stephenson
Shawn Donley	Anthony Monteiro	Glenn Thurman
William H. Edmondson	Marcel Ecaterin Nastase	Brandon Umbricht
Jason Gibson	Vincent L. and Martin Ott	Robert Wilkinson
John and Scott Gothard	Claire J. Pieterek	John F. Winter
Peter Grun	Bertrand Pinel	Graham C. Wiseman
Peter Heist	Wayne Poole	Alexander Zaitsev
Stephan Karpati	Don Price	Gerry and Malou Zeitlin



• Scott Randell Charitable Trust

• Dr. H. Paul Shuch



Additional Information

For additional information about The SETI League, Inc. and its various educational and scientific programs, please see the following pages on The SETI League website.

Main Page	http://www.setileague.org	
Financial Information	http://www.setileague.org/finances	
Membership Services Department	http://www.setileague.org/admin	
Publications Department	http://www.setileague.org/articles	
Press Relations Department	http://www.setileague.org/press	
Photo Gallery	http://www.setileague.org/photos	
Technical Programs:		
Project Argus	http://www.setileague.org/argus	
Very Small Array	http://www.setileague.org/vsa	
Array2k	http://www.setileague.org/array2k	
Moonbounce Beacon	http://www.setileague.org/eme	
Awards Program	http://www.setileague.org/awards	
Hardware Support	http://www.setileague.org/hardware	
Software Support	http://www.setileague.org/software	
Technical Symposium	http://www.setileague.org/seticon	
Dr. SETI ® On Tour	http://www.setileague.org/drseti	