

Return of Organization Exempt From Income Tax

OMB No. 1545-0047

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)

2020

Department of the Treasury
Internal Revenue Service

▶ Do not enter social security numbers on this form as it may be made public.
▶ Go to www.irs.gov/Form990 for instructions and the latest information.

Open to Public Inspection

A For the 2020 calendar year, or tax year beginning 1 January, 2020, and ending 31 December, 2020	
B Check if applicable: <input type="checkbox"/> Address change <input type="checkbox"/> Name change <input type="checkbox"/> Initial return <input type="checkbox"/> Final return/terminated <input type="checkbox"/> Amended return <input type="checkbox"/> Application pending	C Name of organization Open Research Institute, Inc.
	Doing business as Open Research Institute, Inc.
	Number and street (or P.O. box if mail is not delivered to street address) Room/suite #1873 3525 Del Mar Heights Road
	City or town, state or province, country, and ZIP or foreign postal code San Diego, CA, USA, 92130
	F Name and address of principal officer: Michelle Thompson 5379 Carmel Knolls Drive, San Diego, CA, 92130
D Employer identification number 82-3945232	
E Telephone number 858 350 7579	
G Gross receipts \$	
H(a) Is this a group return for subordinates? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
H(b) Are all subordinates included? <input type="checkbox"/> Yes <input type="checkbox"/> No If "No," attach a list. See instructions	
H(c) Group exemption number ▶	
I Tax-exempt status: <input checked="" type="checkbox"/> 501(c)(3) <input type="checkbox"/> 501(c) () ◀ (insert no.) <input type="checkbox"/> 4947(a)(1) or <input type="checkbox"/> 527	
J Website: ▶ https://openresearch.institute	
K Form of organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Trust <input type="checkbox"/> Association <input type="checkbox"/> Other ▶	
L Year of formation: 2018	
M State of legal domicile: CA	

Part I Summary		
Activities & Governance	1	Briefly describe the organization's mission or most significant activities: Open Research Institute (ORI) is a non-profit research and development organization which provides all of its work to the general public under the principles of Open Source and Open Access to Research. Scientific and engineering focus is digital communications for amateur radio, both space and terrestrial.
	2	Check this box <input type="checkbox"/> if the organization discontinued its operations or disposed of more than 25% of its net assets.
	3	Number of voting members of the governing body (Part VI, line 1a) 3
	4	Number of independent voting members of the governing body (Part VI, line 1b) 4
	5	Total number of individuals employed in calendar year 2020 (Part V, line 2a) 5
	6	Total number of volunteers (estimate if necessary) 6
	7a	Total unrelated business revenue from Part VIII, column (C), line 12 7a
7b	Net unrelated business taxable income from Form 990-T, Part I, line 11 7b	
Revenue	8	Contributions and grants (Part VIII, line 1h) 0
	9	Program service revenue (Part VIII, line 2g) 0
	10	Investment income (Part VIII, column (A), lines 3, 4, and 7d) 0
	11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e) 0
	12	Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12) 0
	Expenses	13
14		Benefits paid to or for members (Part IX, column (A), line 4) 0
15		Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10) 0
16a		Professional fundraising fees (Part IX, column (A), line 11e) 0
16b		Total fundraising expenses (Part IX, column (D), line 25) ▶ 0
17		Other expenses (Part IX, column (A), lines 11a–11d, 11f–24e) 0
18		Total expenses. Add lines 13–17 (must equal Part IX, column (A), line 25) 0
19		Revenue less expenses. Subtract line 18 from line 12 596267
Net Assets or Fund Balances		20
	21	Total liabilities (Part X, line 26) 0
	22	Net assets or fund balances. Subtract line 21 from line 20 13417

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign Here	Signature of officer <i>Michelle Thompson</i>		Date <i>13 May 2021</i>
	Type or print name and title <i>Michelle Thompson CEO</i>		
Paid Preparer Use Only	Print/Type preparer's name	Preparer's signature	Date
	Firm's name ▶	Firm's EIN ▶	Check <input type="checkbox"/> if self-employed
	Firm's address ▶	Phone no.	

May the IRS discuss this return with the preparer shown above? See instructions ☐ Yes ☐ No

Part III Statement of Program Service AccomplishmentsCheck if Schedule O contains a response or note to any line in this Part III ☒**1** Briefly describe the organization's mission:

ORI is a research institute that shares all of its work with the general public at no cost.
 ORI's primary mission is to provide open source designs and equipment for broadband digital microwave multiplexing radios suitable for both space and terrestrial use. These radios are intended for the amateur radio and amateur radio satellite communications services. These services are established by the International Telecommunication Union (ITU) and regulated by national governments.

2 Did the organization undertake any significant program services during the year which were not listed on the prior Form 990 or 990-EZ? ☒ Yes ☐ No

If "Yes," describe these new services on Schedule O.

3 Did the organization cease conducting, or make significant changes in how it conducts, any program services? ☐ Yes ☒ No

If "Yes," describe these changes on Schedule O.

4 Describe the organization's program service accomplishments for each of its three largest program services, as measured by expenses. Section 501(c)(3) and 501(c)(4) organizations are required to report the amount of grants and allocations to others, the total expenses, and revenue, if any, for each program service reported.**4a** (Code:) (Expenses \$ 79968 including grants of \$ 0) (Revenue \$)

The largest program service as measured by expense was the Phase 4 Digital Multiplexing Transponder, or P4DX. Expenses for 2020 were for laboratory and test equipment, software licenses for required toolchains, and legal expenses for two regulatory filings. Expenses were required to commence design, documentation, test, validation, verification, and hardware and software builds. Program activity is engaged in the design of open source radio equipment used to transmit and receive advanced digital waveforms. This radio design uses adaptive coding and modulation, software-defined radio, and optimal forward error correction coding. The design is available to the general public at no cost. All work is published as it is created, for learning, modification, and re-use. Regulatory filings included the following:

A commodity classification request, submitted to the US Department of Commerce. (EAR) Request was successful.

An advisory opinion request, submitted to the US Department of Commerce. Opinion currently being written.

These filings produced explicit rulings related to the use of public-domain carve-outs in ITAR and EAR, which allow open source satellite work, including technical education activities for the general public, to proceed with increased confidence.

4b (Code:) (Expenses \$ 40,763 including grants of \$ 0) (Revenue \$ 156474)

The second largest program service as measured by expense was GNU Radio Conference 2020. Expenses were for the internet technology and audio-visual services required to stream the 5-day event over the internet, the creation of a full set of recordings available to the general public at no cost, a conference paper submission service, and a conference schedule creation and management service. The GNU Radio Conference is an annual event that gathers people from around the world. The participants at the conference include commercial, industrial, military, academic, amateur, and hobbyist developers. There are four full days of presentations and a day of open meetings with core developers. GNU Radio is the most important digital signal processing software framework available. It is entirely open source and is used to advance the state of the art of software-defined radios. The continued health and development of GNU Radio is central to ORI's research and development.

4c (Code:) (Expenses \$ 4150 including grants of \$) (Revenue \$)

The third largest program service as measured by expense was ITAR and EAR Strategy.

Expenses were for legal work in support of a detailed regulatory filing to take advantage of public domain carve-outs in the International Traffic in Arms Regulations and Export Administration Regulations.

The filing was successful. Most of the expenses were taken in 2019, but there were some expenses in 2020.

This work provided the basis for the successful Commodity Classification Request to the US Department of Commerce and the ongoing work to craft an advisory opinion letter about open source satellite work being free from EAR.

4d Other program services (Describe on Schedule O.)

(Expenses \$ including grants of \$) (Revenue \$)

4e Total program service expenses 124881

Part IV Checklist of Required Schedules

	Yes	No
1 Is the organization described in section 501(c)(3) or 4947(a)(1) (other than a private foundation)? If "Yes," complete Schedule A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Is the organization required to complete Schedule B, Schedule of Contributors See instructions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Did the organization engage in direct or indirect political campaign activities on behalf of or in opposition to candidates for public office? If "Yes," complete Schedule C, Part I	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Section 501(c)(3) organizations. Did the organization engage in lobbying activities, or have a section 501(h) election in effect during the tax year? If "Yes," complete Schedule C, Part II	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Is the organization a section 501(c)(4), 501(c)(5), or 501(c)(6) organization that receives membership dues, assessments, or similar amounts as defined in Revenue Procedure 98-19? If "Yes," complete Schedule C, Part III	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6 Did the organization maintain any donor advised funds or any similar funds or accounts for which donors have the right to provide advice on the distribution or investment of amounts in such funds or accounts? If "Yes," complete Schedule D, Part I	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7 Did the organization receive or hold a conservation easement, including easements to preserve open space, the environment, historic land areas, or historic structures? If "Yes," complete Schedule D, Part II	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8 Did the organization maintain collections of works of art, historical treasures, or other similar assets? If "Yes," complete Schedule D, Part III	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9 Did the organization report an amount in Part X, line 21, for escrow or custodial account liability, serve as a custodian for amounts not listed in Part X; or provide credit counseling, debt management, credit repair, or debt negotiation services? If "Yes," complete Schedule D, Part IV	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10 Did the organization, directly or through a related organization, hold assets in donor-restricted endowments or in quasi endowments? If "Yes," complete Schedule D, Part V	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11 If the organization's answer to any of the following questions is "Yes," then complete Schedule D, Parts VI, VII, VIII, IX, or X as applicable.		
a Did the organization report an amount for land, buildings, and equipment in Part X, line 10? If "Yes," complete Schedule D, Part VI	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b Did the organization report an amount for investments—other securities in Part X, line 12, that is 5% or more of its total assets reported in Part X, line 16? If "Yes," complete Schedule D, Part VII	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c Did the organization report an amount for investments—program related in Part X, line 13, that is 5% or more of its total assets reported in Part X, line 16? If "Yes," complete Schedule D, Part VIII	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d Did the organization report an amount for other assets in Part X, line 15, that is 5% or more of its total assets reported in Part X, line 16? If "Yes," complete Schedule D, Part IX	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e Did the organization report an amount for other liabilities in Part X, line 25? If "Yes," complete Schedule D, Part X	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f Did the organization's separate or consolidated financial statements for the tax year include a footnote that addresses the organization's liability for uncertain tax positions under FIN 48 (ASC 740)? If "Yes," complete Schedule D, Part X	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12a Did the organization obtain separate, independent audited financial statements for the tax year? If "Yes," complete Schedule D, Parts XI and XII	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b Was the organization included in consolidated, independent audited financial statements for the tax year? If "Yes," and if the organization answered "No" to line 12a, then completing Schedule D, Parts XI and XII is optional	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13 Is the organization a school described in section 170(b)(1)(A)(ii)? If "Yes," complete Schedule E	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14a Did the organization maintain an office, employees, or agents outside of the United States?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b Did the organization have aggregate revenues or expenses of more than \$10,000 from grantmaking, fundraising, business, investment, and program service activities outside the United States, or aggregate foreign investments valued at \$100,000 or more? If "Yes," complete Schedule F, Parts I and IV.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15 Did the organization report on Part IX, column (A), line 3, more than \$5,000 of grants or other assistance to or for any foreign organization? If "Yes," complete Schedule F, Parts II and IV	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16 Did the organization report on Part IX, column (A), line 3, more than \$5,000 of aggregate grants or other assistance to or for foreign individuals? If "Yes," complete Schedule F, Parts III and IV.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17 Did the organization report a total of more than \$15,000 of expenses for professional fundraising services on Part IX, column (A), lines 6 and 11e? If "Yes," complete Schedule G, Part I See instructions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18 Did the organization report more than \$15,000 total of fundraising event gross income and contributions on Part VIII, lines 1c and 8a? If "Yes," complete Schedule G, Part II	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19 Did the organization report more than \$15,000 of gross income from gaming activities on Part VIII, line 9a? If "Yes," complete Schedule G, Part III	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20a Did the organization operate one or more hospital facilities? If "Yes," complete Schedule H	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b If "Yes" to line 20a, did the organization attach a copy of its audited financial statements to this return?	<input type="checkbox"/>	<input type="checkbox"/>
21 Did the organization report more than \$5,000 of grants or other assistance to any domestic organization or domestic government on Part IX, column (A), line 1? If "Yes," complete Schedule I, Parts I and II	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part IV Checklist of Required Schedules (continued)

	Yes	No
22 Did the organization report more than \$5,000 of grants or other assistance to or for domestic individuals on Part IX, column (A), line 2? If "Yes," complete Schedule I, Parts I and III	22	✓
23 Did the organization answer "Yes" to Part VII, Section A, line 3, 4, or 5 about compensation of the organization's current and former officers, directors, trustees, key employees, and highest compensated employees? If "Yes," complete Schedule J	23	✓
24a Did the organization have a tax-exempt bond issue with an outstanding principal amount of more than \$100,000 as of the last day of the year, that was issued after December 31, 2002? If "Yes," answer lines 24b through 24d and complete Schedule K. If "No," go to line 25a	24a	✓
b Did the organization invest any proceeds of tax-exempt bonds beyond a temporary period exception?	24b	✓
c Did the organization maintain an escrow account other than a refunding escrow at any time during the year to defease any tax-exempt bonds?	24c	✓
d Did the organization act as an "on behalf of" issuer for bonds outstanding at any time during the year?	24d	✓
25a Section 501(c)(3), 501(c)(4), and 501(c)(29) organizations. Did the organization engage in an excess benefit transaction with a disqualified person during the year? If "Yes," complete Schedule L, Part I	25a	✓
b Is the organization aware that it engaged in an excess benefit transaction with a disqualified person in a prior year, and that the transaction has not been reported on any of the organization's prior Forms 990 or 990-EZ? If "Yes," complete Schedule L, Part I	25b	✓
26 Did the organization report any amount on Part X, line 5 or 22, for receivables from or payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons? If "Yes," complete Schedule L, Part II	26	✓
27 Did the organization provide a grant or other assistance to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor or employee thereof, a grant selection committee member, or to a 35% controlled entity (including an employee thereof) or family member of any of these persons? If "Yes," complete Schedule L, Part III	27	✓
28 Was the organization a party to a business transaction with one of the following parties (see Schedule L, Part IV instructions, for applicable filing thresholds, conditions, and exceptions):		
a A current or former officer, director, trustee, key employee, creator or founder, or substantial contributor? If "Yes," complete Schedule L, Part IV	28a	✓
b A family member of any individual described in line 28a? If "Yes," complete Schedule L, Part IV	28b	✓
c A 35% controlled entity of one or more individuals and/or organizations described in lines 28a or 28b? If "Yes," complete Schedule L, Part IV	28c	✓
29 Did the organization receive more than \$25,000 in non-cash contributions? If "Yes," complete Schedule M	29	✓
30 Did the organization receive contributions of art, historical treasures, or other similar assets, or qualified conservation contributions? If "Yes," complete Schedule M	30	✓
31 Did the organization liquidate, terminate, or dissolve and cease operations? If "Yes," complete Schedule N, Part I	31	✓
32 Did the organization sell, exchange, dispose of, or transfer more than 25% of its net assets? If "Yes," complete Schedule N, Part II	32	✓
33 Did the organization own 100% of an entity disregarded as separate from the organization under Regulations sections 301.7701-2 and 301.7701-3? If "Yes," complete Schedule R, Part I	33	✓
34 Was the organization related to any tax-exempt or taxable entity? If "Yes," complete Schedule R, Part II, III, or IV, and Part V, line 1	34	✓
35a Did the organization have a controlled entity within the meaning of section 512(b)(13)?	35a	✓
b If "Yes" to line 35a, did the organization receive any payment from or engage in any transaction with a controlled entity within the meaning of section 512(b)(13)? If "Yes," complete Schedule R, Part V, line 2	35b	✓
36 Section 501(c)(3) organizations. Did the organization make any transfers to an exempt non-charitable related organization? If "Yes," complete Schedule R, Part V, line 2	36	✓
37 Did the organization conduct more than 5% of its activities through an entity that is not a related organization and that is treated as a partnership for federal income tax purposes? If "Yes," complete Schedule R, Part VI	37	✓
38 Did the organization complete Schedule O and provide explanations in Schedule O for Part VI, lines 11b and 19? Note: All Form 990 filers are required to complete Schedule O.	38	✓

Part V Statements Regarding Other IRS Filings and Tax ComplianceCheck if Schedule O contains a response or note to any line in this Part V ☐

	Yes	No
1a Enter the number reported in Box 3 of Form 1096. Enter -0- if not applicable	1a	0
b Enter the number of Forms W-2G included in line 1a. Enter -0- if not applicable	1b	0
c Did the organization comply with backup withholding rules for reportable payments to vendors and reportable gaming (gambling) winnings to prize winners?	1c	

Part V Statements Regarding Other IRS Filings and Tax Compliance (continued)

		Yes	No
2a	Enter the number of employees reported on Form W-3, Transmittal of Wage and Tax Statements, filed for the calendar year ending with or within the year covered by this return	2a	0
b	If at least one is reported on line 2a, did the organization file all required federal employment tax returns? Note: If the sum of lines 1a and 2a is greater than 250, you may be required to e-file (see instructions)	2b	
3a	Did the organization have unrelated business gross income of \$1,000 or more during the year?	3a	✓
b	If "Yes," has it filed a Form 990-T for this year? If "No" to line 3b, provide an explanation on Schedule O	3b	
4a	At any time during the calendar year, did the organization have an interest in, or a signature or other authority over, a financial account in a foreign country (such as a bank account, securities account, or other financial account)?	4a	✓
b	If "Yes," enter the name of the foreign country See instructions for filing requirements for FinCEN Form 114, Report of Foreign Bank and Financial Accounts (FBAR).		
5a	Was the organization a party to a prohibited tax shelter transaction at any time during the tax year?	5a	✓
b	Did any taxable party notify the organization that it was or is a party to a prohibited tax shelter transaction?	5b	✓
c	If "Yes" to line 5a or 5b, did the organization file Form 8886-T?	5c	
6a	Does the organization have annual gross receipts that are normally greater than \$100,000, and did the organization solicit any contributions that were not tax deductible as charitable contributions?	6a	✓
b	If "Yes," did the organization include with every solicitation an express statement that such contributions or gifts were not tax deductible?	6b	
7	Organizations that may receive deductible contributions under section 170(c).		
a	Did the organization receive a payment in excess of \$75 made partly as a contribution and partly for goods and services provided to the payor?	7a	✓
b	If "Yes," did the organization notify the donor of the value of the goods or services provided?	7b	
c	Did the organization sell, exchange, or otherwise dispose of tangible personal property for which it was required to file Form 8282?	7c	✓
d	If "Yes," indicate the number of Forms 8282 filed during the year	7d	
e	Did the organization receive any funds, directly or indirectly, to pay premiums on a personal benefit contract?	7e	✓
f	Did the organization, during the year, pay premiums, directly or indirectly, on a personal benefit contract?	7f	✓
g	If the organization received a contribution of qualified intellectual property, did the organization file Form 8899 as required?	7g	
h	If the organization received a contribution of cars, boats, airplanes, or other vehicles, did the organization file a Form 1098-C?	7h	
8	Sponsoring organizations maintaining donor advised funds. Did a donor advised fund maintained by the sponsoring organization have excess business holdings at any time during the year?	8	
9	Sponsoring organizations maintaining donor advised funds.		
a	Did the sponsoring organization make any taxable distributions under section 4966?	9a	
b	Did the sponsoring organization make a distribution to a donor, donor advisor, or related person?	9b	
10	Section 501(c)(7) organizations. Enter:		
a	Initiation fees and capital contributions included on Part VIII, line 12	10a	
b	Gross receipts, included on Form 990, Part VIII, line 12, for public use of club facilities	10b	
11	Section 501(c)(12) organizations. Enter:		
a	Gross income from members or shareholders	11a	
b	Gross income from other sources (Do not net amounts due or paid to other sources against amounts due or received from them.)	11b	
12a	Section 4947(a)(1) non-exempt charitable trusts. Is the organization filing Form 990 in lieu of Form 1041?	12a	
b	If "Yes," enter the amount of tax-exempt interest received or accrued during the year	12b	
13	Section 501(c)(29) qualified nonprofit health insurance issuers.		
a	Is the organization licensed to issue qualified health plans in more than one state? Note: See the instructions for additional information the organization must report on Schedule O.	13a	
b	Enter the amount of reserves the organization is required to maintain by the states in which the organization is licensed to issue qualified health plans	13b	
c	Enter the amount of reserves on hand	13c	
14a	Did the organization receive any payments for indoor tanning services during the tax year?	14a	✓
b	If "Yes," has it filed a Form 720 to report these payments? If "No," provide an explanation on Schedule O	14b	
15	Is the organization subject to the section 4960 tax on payment(s) of more than \$1,000,000 in remuneration or excess parachute payment(s) during the year? If "Yes," see instructions and file Form 4720, Schedule N.	15	✓
16	Is the organization an educational institution subject to the section 4968 excise tax on net investment income? If "Yes," complete Form 4720, Schedule O.	16	✓

Part VI Governance, Management, and Disclosure For each "Yes" response to lines 2 through 7b below, and for a "No" response to line 8a, 8b, or 10b below, describe the circumstances, processes, or changes on Schedule O. See instructions.

Check if Schedule O contains a response or note to any line in this Part VI ☒

Section A. Governing Body and Management

		Yes	No
1a Enter the number of voting members of the governing body at the end of the tax year	1a 5		
If there are material differences in voting rights among members of the governing body, or if the governing body delegated broad authority to an executive committee or similar committee, explain on Schedule O.			
b Enter the number of voting members included on line 1a, above, who are independent	1b 5		
2 Did any officer, director, trustee, or key employee have a family relationship or a business relationship with any other officer, director, trustee, or key employee?	2		✓
3 Did the organization delegate control over management duties customarily performed by or under the direct supervision of officers, directors, trustees, or key employees to a management company or other person?	3		✓
4 Did the organization make any significant changes to its governing documents since the prior Form 990 was filed?	4		✓
5 Did the organization become aware during the year of a significant diversion of the organization's assets?	5		✓
6 Did the organization have members or stockholders?	6		✓
7a Did the organization have members, stockholders, or other persons who had the power to elect or appoint one or more members of the governing body?	7a		✓
b Are any governance decisions of the organization reserved to (or subject to approval by) members, stockholders, or persons other than the governing body?	7b		✓
8 Did the organization contemporaneously document the meetings held or written actions undertaken during the year by the following:			
a The governing body?	8a	✓	
b Each committee with authority to act on behalf of the governing body?	8b	✓	
9 Is there any officer, director, trustee, or key employee listed in Part VII, Section A, who cannot be reached at the organization's mailing address? If "Yes," provide the names and addresses on Schedule O	9		✓

Section B. Policies (This Section B requests information about policies not required by the Internal Revenue Code.)

	Yes	No
10a Did the organization have local chapters, branches, or affiliates?	10a	✓
b If "Yes," did the organization have written policies and procedures governing the activities of such chapters, affiliates, and branches to ensure their operations are consistent with the organization's exempt purposes?	10b	
11a Has the organization provided a complete copy of this Form 990 to all members of its governing body before filing the form?	11a	✓
b Describe in Schedule O the process, if any, used by the organization to review this Form 990.		
12a Did the organization have a written conflict of interest policy? If "No," go to line 13	12a	✓
b Were officers, directors, or trustees, and key employees required to disclose annually interests that could give rise to conflicts?	12b	✓
c Did the organization regularly and consistently monitor and enforce compliance with the policy? If "Yes," describe in Schedule O how this was done	12c	✓
13 Did the organization have a written whistleblower policy?	13	✓
14 Did the organization have a written document retention and destruction policy?	14	✓
15 Did the process for determining compensation of the following persons include a review and approval by independent persons, comparability data, and contemporaneous substantiation of the deliberation and decision?		
a The organization's CEO, Executive Director, or top management official	15a	✓
b Other officers or key employees of the organization	15b	✓
If "Yes" to line 15a or 15b, describe the process in Schedule O (see instructions).		
16a Did the organization invest in, contribute assets to, or participate in a joint venture or similar arrangement with a taxable entity during the year?	16a	✓
b If "Yes," did the organization follow a written policy or procedure requiring the organization to evaluate its participation in joint venture arrangements under applicable federal tax law, and take steps to safeguard the organization's exempt status with respect to such arrangements?	16b	

Section C. Disclosure

17 List the states with which a copy of this Form 990 is required to be filed ► **California**

18 Section 6104 requires an organization to make its Forms 1023 (1024 or 1024-A, if applicable), 990, and 990-T (Section 501(c)(3)s only) available for public inspection. Indicate how you made these available. Check all that apply.

☐ Own website ☐ Another's website ☒ Upon request ☐ Other (explain on Schedule O)

19 Describe on Schedule O whether (and if so, how) the organization made its governing documents, conflict of interest policy, and financial statements available to the public during the tax year.

20 State the name, address, and telephone number of the person who possesses the organization's books and records ►

Ken Easton, 5379 Carmel Knolls Drive, San Diego, CA 92130, 858 350 7579

Part VII Compensation of Officers, Directors, Trustees, Key Employees, Highest Compensated Employees, and Independent ContractorsCheck if Schedule O contains a response or note to any line in this Part VII ☐**Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees****1a** Complete this table for all persons required to be listed. Report compensation for the calendar year ending with or within the organization's tax year.

- List all of the organization's **current** officers, directors, trustees (whether individuals or organizations), regardless of amount of compensation. Enter -0- in columns (D), (E), and (F) if no compensation was paid.
- List all of the organization's **current** key employees, if any. See instructions for definition of "key employee."
- List the organization's five **current** highest compensated employees (other than an officer, director, trustee, or key employee) who received reportable compensation (Box 5 of Form W-2 and/or Box 7 of Form 1099-MISC) of more than \$100,000 from the organization and any related organizations.
- List all of the organization's **former** officers, key employees, and highest compensated employees who received more than \$100,000 of reportable compensation from the organization and any related organizations.
- List all of the organization's **former directors or trustees** that received, in the capacity as a former director or trustee of the organization, more than \$10,000 of reportable compensation from the organization and any related organizations.

See instructions for the order in which to list the persons above.

☒ Check this box if neither the organization nor any related organization compensated any current officer, director, or trustee.

(A) Name and title	(B) Average hours per week (list any hours for related organizations below dotted line)	(C) Position (do not check more than one box, unless person is both an officer and a director/trustee)						(D) Reportable compensation from the organization (W-2/1099-MISC)	(E) Reportable compensation from related organizations (W-2/1099-MISC)	(F) Estimated amount of other compensation from the organization and related organizations
		Individual trustee or director	Institutional trustee	Officer	Key employee	Highest compensated employee	Former			
(1) Karen Rucker, Secretary	1			✓				0	0	0
(2) Steve Conklin, CFO	10			✓				0	0	0
(3) Michelle Thompson, CEO	20			✓				0	0	0
(4) Keith Wheeler, Director	10	✓						0	0	0
(5) Ben Hilburn, Director	1	✓						0	0	0
(6)										
(7)										
(8)										
(9)										
(10)										
(11)										
(12)										
(13)										
(14)										

Part VII Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees (continued)

(A) Name and title	(B) Average hours per week (list any hours for related organizations below dotted line)	(C) Position (do not check more than one box, unless person is both an officer and a director/trustee)						(D) Reportable compensation from the organization (W-2/1099-MISC)	(E) Reportable compensation from related organizations (W-2/1099-MISC)	(F) Estimated amount of other compensation from the organization and related organizations
		Individual trustee or director	Institutional trustee	Officer	Key employee	Highest compensated employee	Former			
(15)										
(16)										
(17)										
(18)										
(19)										
(20)										
(21)										
(22)										
(23)										
(24)										
(25)										
1b Subtotal							0	0	0	
c Total from continuation sheets to Part VII, Section A							0	0	0	
d Total (add lines 1b and 1c)							0	0	0	

2 Total number of individuals (including but not limited to those listed above) who received more than \$100,000 of reportable compensation from the organization **0**

- 3** Did the organization list any **former** officer, director, trustee, key employee, or highest compensated employee on line 1a? If "Yes," complete Schedule J for such individual **3** ☐ Yes ☒ No
- 4** For any individual listed on line 1a, is the sum of reportable compensation and other compensation from the organization and related organizations greater than \$150,000? If "Yes," complete Schedule J for such individual **4** ☐ Yes ☒ No
- 5** Did any person listed on line 1a receive or accrue compensation from any unrelated organization or individual for services rendered to the organization? If "Yes," complete Schedule J for such person **5** ☐ Yes ☒ No

Section B. Independent Contractors

1 Complete this table for your five highest compensated independent contractors that received more than \$100,000 of compensation from the organization. Report compensation for the calendar year ending with or within the organization's tax year.

(A) Name and business address	(B) Description of services	(C) Compensation
2 Total number of independent contractors (including but not limited to those listed above) who received more than \$100,000 of compensation from the organization	0	

Part VIII Statement of RevenueCheck if Schedule O contains a response or note to any line in this Part VIII ☐

				(A) Total revenue	(B) Related or exempt function revenue	(C) Unrelated business revenue	(D) Revenue excluded from tax under sections 512-514	
Contributions, Gifts, Grants and Other Similar Amounts	1a	Federated campaigns	1a 0					
	b	Membership dues	1b 0					
	c	Fundraising events	1c 0					
	d	Related organizations	1d 0					
	e	Government grants (contributions)	1e 0					
	f	All other contributions, gifts, grants, and similar amounts not included above	1f 565932					
	g	Noncash contributions included in lines 1a-1f	1g \$ 0					
	h	Total. Add lines 1a-1f		565932				
	Program Service Revenue	2a GNU Radio Conference			Business Code			
			611430	156474	156474	0		
b								
c								
d								
e								
f		All other program service revenue						
g	Total. Add lines 2a-2f				156474			
Other Revenue	3	Investment income (including dividends, interest, and other similar amounts)			0	0	0	0
	4	Income from investment of tax-exempt bond proceeds			0	0	0	0
	5	Royalties			0	0	0	0
	6a	Gross rents	(i) Real	(ii) Personal				
			6a 0	0				
			6b 0	0				
	b	Less: rental expenses		6b 0	0			
	c	Rental income or (loss)		6c 0	0			
	d	Net rental income or (loss)			0	0	0	0
	7a	Gross amount from sales of assets other than inventory	(i) Securities	(ii) Other				
			7a 0	0				
			7b 0	0				
	b	Less: cost or other basis and sales expenses		7b 0	0			
	c	Gain or (loss)		7c 0	0			
	d	Net gain or (loss)			0	0	0	0
	8a	Gross income from fundraising events (not including \$ of contributions reported on line 1c). See Part IV, line 18						
			8a 0					
			8b 0					
	b	Less: direct expenses		8b 0				
	c	Net income or (loss) from fundraising events			0		0	0
	9a	Gross income from gaming activities. See Part IV, line 19						
9a 0								
9b 0								
b	Less: direct expenses		9b 0					
c	Net income or (loss) from gaming activities			0	0	0	0	
10a	Gross sales of inventory, less returns and allowances							
		10a 0						
		10b 0						
b	Less: cost of goods sold		10b 0					
c	Net income or (loss) from sales of inventory			0	0	0	0	
Miscellaneous Revenue	11a AMSAT Payment Refund			Business Code				
				813410	44	0	44	
	b							
	c							
	d	All other revenue						
	e	Total. Add lines 11a-11d						
12	Total revenue. See instructions				722450	156474	44	0

Part IX Statement of Functional Expenses

Section 501(c)(3) and 501(c)(4) organizations must complete all columns. All other organizations must complete column (A).

Check if Schedule O contains a response or note to any line in this Part IX ☐**Do not include amounts reported on lines 6b, 7b, 8b, 9b, and 10b of Part VIII.**

	(A) Total expenses	(B) Program service expenses	(C) Management and general expenses	(D) Fundraising expenses
1 Grants and other assistance to domestic organizations and domestic governments. See Part IV, line 21	0	0		
2 Grants and other assistance to domestic individuals. See Part IV, line 22	0	0		
3 Grants and other assistance to foreign organizations, foreign governments, and foreign individuals. See Part IV, lines 15 and 16	0	0		
4 Benefits paid to or for members	0	0		
5 Compensation of current officers, directors, trustees, and key employees	0	0	0	0
6 Compensation not included above to disqualified persons (as defined under section 4958(f)(1)) and persons described in section 4958(c)(3)(B)	0	0	0	0
7 Other salaries and wages	0	0	0	0
8 Pension plan accruals and contributions (include section 401(k) and 403(b) employer contributions)	0	0	0	0
9 Other employee benefits	0	0	0	0
10 Payroll taxes	0	0	0	0
11 Fees for services (nonemployees):				
a Management	0	0	0	0
b Legal	4150	4150	0	0
c Accounting	0	0	0	0
d Lobbying	0	0	0	0
e Professional fundraising services. See Part IV, line 17	0			0
f Investment management fees	0	0	0	0
g Other. (If line 11g amount exceeds 10% of line 25, column (A) amount, list line 11g expenses on Schedule O.)	0	0	0	0
12 Advertising and promotion	0	0	0	0
13 Office expenses	370	0	370	0
14 Information technology	427	0	427	0
15 Royalties	0	0	0	0
16 Occupancy	0	0	0	0
17 Travel	0	0	0	0
18 Payments of travel or entertainment expenses for any federal, state, or local public officials	0	0	0	0
19 Conferences, conventions, and meetings	425	0	425	0
20 Interest	0	0	0	0
21 Payments to affiliates	0	0	0	0
22 Depreciation, depletion, and amortization	0	0	0	0
23 Insurance	0	0	0	0
24 Other expenses. Itemize expenses not covered above (List miscellaneous expenses on line 24e. If line 24e amount exceeds 10% of line 25, column (A) amount, list line 24e expenses on Schedule O.)				
a P4DX Program Expenses	79968	79968	0	0
b GNU Radio Conference Expenses	40763	40763	0	0
c AMSAT Member Society Dues	80	0	80	0
d	0	0	0	0
e All other expenses	0	0	0	0
25 Total functional expenses. Add lines 1 through 24e	126183	124881	1302	0
26 Joint costs. Complete this line only if the organization reported in column (B) joint costs from a combined educational campaign and fundraising solicitation. Check here <input type="checkbox"/> if following SOP 98-2 (ASC 958-720)				

Part X Balance SheetCheck if Schedule O contains a response or note to any line in this Part X ☒

		(A) Beginning of year		(B) End of year
Assets	1 Cash—non-interest-bearing	13417	1	609684
	2 Savings and temporary cash investments	0	2	0
	3 Pledges and grants receivable, net	0	3	0
	4 Accounts receivable, net	0	4	0
	5 Loans and other receivables from any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons	0	5	0
	6 Loans and other receivables from other disqualified persons (as defined under section 4958(f)(1)), and persons described in section 4958(c)(3)(B)	0	6	0
	7 Notes and loans receivable, net	0	7	0
	8 Inventories for sale or use	0	8	0
	9 Prepaid expenses and deferred charges	0	9	0
	10a Land, buildings, and equipment: cost or other basis. Complete Part VI of Schedule D	10a 74924		
	b Less: accumulated depreciation	10b 0	10c	74924
	11 Investments—publicly traded securities	0	11	0
	12 Investments—other securities. See Part IV, line 11	0	12	0
	13 Investments—program-related. See Part IV, line 11	0	13	0
	14 Intangible assets	0	14	4795
	15 Other assets. See Part IV, line 11	0	15	0
16 Total assets. Add lines 1 through 15 (must equal line 33)	13417	16	689403	
Liabilities	17 Accounts payable and accrued expenses	0	17	0
	18 Grants payable	0	18	0
	19 Deferred revenue	0	19	0
	20 Tax-exempt bond liabilities	0	20	0
	21 Escrow or custodial account liability. Complete Part IV of Schedule D	0	21	0
	22 Loans and other payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons	0	22	0
	23 Secured mortgages and notes payable to unrelated third parties	0	23	0
	24 Unsecured notes and loans payable to unrelated third parties	0	24	0
	25 Other liabilities (including federal income tax, payables to related third parties, and other liabilities not included on lines 17–24). Complete Part X of Schedule D	0	25	0
	26 Total liabilities. Add lines 17 through 25	0	26	0
Net Assets or Fund Balances	Organizations that follow FASB ASC 958, check here <input checked="" type="checkbox"/> and complete lines 27, 28, 32, and 33.			
	27 Net assets without donor restrictions	13417	27	689403
	28 Net assets with donor restrictions	0	28	0
	Organizations that do not follow FASB ASC 958, check here <input type="checkbox"/> and complete lines 29 through 33.			
	29 Capital stock or trust principal, or current funds	0	29	0
	30 Paid-in or capital surplus, or land, building, or equipment fund	0	30	0
	31 Retained earnings, endowment, accumulated income, or other funds	0	31	0
	32 Total net assets or fund balances	13417	32	689403
33 Total liabilities and net assets/fund balances	13417	33	689403	

Part XI Reconciliation of Net AssetsCheck if Schedule O contains a response or note to any line in this Part XI ☒

1	Total revenue (must equal Part VIII, column (A), line 12)	1	722450
2	Total expenses (must equal Part IX, column (A), line 25)	2	126183
3	Revenue less expenses. Subtract line 2 from line 1	3	596267
4	Net assets or fund balances at beginning of year (must equal Part X, line 32, column (A))	4	13417
5	Net unrealized gains (losses) on investments	5	0
6	Donated services and use of facilities	6	0
7	Investment expenses	7	0
8	Prior period adjustments	8	0
9	Other changes in net assets or fund balances (explain on Schedule O)	9	79719
10	Net assets or fund balances at end of year. Combine lines 3 through 9 (must equal Part X, line 32, column (B))	10	689403

Part XII Financial Statements and ReportingCheck if Schedule O contains a response or note to any line in this Part XII ☐

- 1** Accounting method used to prepare the Form 990: ☒ Cash ☐ Accrual ☐ Other _____
If the organization changed its method of accounting from a prior year or checked "Other," explain in Schedule O.

- 2a** Were the organization's financial statements compiled or reviewed by an independent accountant? . . .
If "Yes," check a box below to indicate whether the financial statements for the year were compiled or reviewed on a separate basis, consolidated basis, or both:

☐ Separate basis ☐ Consolidated basis ☐ Both consolidated and separate basis

- b** Were the organization's financial statements audited by an independent accountant?
If "Yes," check a box below to indicate whether the financial statements for the year were audited on a separate basis, consolidated basis, or both:

☐ Separate basis ☐ Consolidated basis ☐ Both consolidated and separate basis

- c** If "Yes" to line 2a or 2b, does the organization have a committee that assumes responsibility for oversight of the audit, review, or compilation of its financial statements and selection of an independent accountant? . . .
If the organization changed either its oversight process or selection process during the tax year, explain on Schedule O.

- 3a** As a result of a federal award, was the organization required to undergo an audit or audits as set forth in the Single Audit Act and OMB Circular A-133?

- b** If "Yes," did the organization undergo the required audit or audits? If the organization did not undergo the required audit or audits, explain why on Schedule O and describe any steps taken to undergo such audits .

	Yes	No
2a		✓
2b		✓
2c		
3a		✓
3b		