

Form **990**

Return of Organization Exempt From Income Tax
Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)

OMB No. 1545-0047

2018

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 2018 calendar year, or tax year beginning and ending

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 LOWELL OBSERVATORY Doing business as Number and street (or P.O. box if mail is not delivered to street address) Room/suite 1400 W MARS HILL ROAD City or town, state or province, country, and ZIP or foreign postal code FLAGSTAFF, AZ 86001-4470 F Name and address of principal officer: JEFF HALL SAME AS C ABOVE	D Employer identification number 86-0098918 E Telephone number 928-774-3358 G Gross receipts \$ 17,153,211. 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: ▶ WWW.LOWELL.EDU		
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: 1946 M State of legal domicile: AZ

Part I Summary

	1	Briefly describe the organization's mission or most significant activities: <u>LOWELL'S MISSION IS TO PURSUE THE STUDY OF ASTRONOMY</u>		
	2	Check this box <input type="checkbox"/> if the organization discontinued its operations or disposed of more than 25% of its net assets.		
Activities & Governance	3	Number of voting members of the governing body (Part VI, line 1a)	3	1
	4	Number of independent voting members of the governing body (Part VI, line 1b)	4	0
	5	Total number of individuals employed in calendar year 2018 (Part V, line 2a)	5	172
	6	Total number of volunteers (estimate if necessary)	6	60
	7a	Total unrelated business revenue from Part VIII, column (C), line 12	7a	0.
	7b	Net unrelated business taxable income from Form 990-T, line 38	7b	0.
	Revenue	8	Contributions and grants (Part VIII, line 1h)	Prior Year 17,637,617.
9		Program service revenue (Part VIII, line 2g)	4,444,956.	4,994,781.
10		Investment income (Part VIII, column (A), lines 3, 4, and 7d)	85,011.	143,345.
11		Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	355,675.	358,358.
12		Total revenue - add lines 8 through 11 (must equal Part VIII, column (A), line 12)	22,523,259.	16,797,299.
Expenses		13	Grants and similar amounts paid (Part IX, column (A), lines 1-3)	1,393,397.
	14	Benefits paid to or for members (Part IX, column (A), line 4)	0.	0.
	15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10)	5,967,868.	7,190,579.
	16a	Professional fundraising fees (Part IX, column (A), line 11e)	0.	0.
	b	Total fundraising expenses (Part IX, column (D), line 25) ▶ 1,231,384.		
	17	Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e)	5,287,538.	4,894,757.
	18	Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25)	12,648,803.	12,829,418.
	19	Revenue less expenses. Subtract line 18 from line 12	9,874,456.	3,967,881.
Net Assets or Fund Balances	20	Total assets (Part X, line 16)	Beginning of Current Year 47,935,722.	End of Year 48,062,648.
	21	Total liabilities (Part X, line 26)	20,259,679.	16,568,732.
	22	Net assets or fund balances. Subtract line 21 from line 20	27,676,043.	31,493,916.

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 ANNE LABRUZZO, DEPUTY DIRECTOR OF ADMIN. Type or print name and title	Date _____		
Paid Preparer Use Only	Print/Type preparer's name MONICA A. VERA, CPA	Preparer's signature MONICA A. VERA, CPA	Date 08/02/19	Check <input type="checkbox"/> if self-employed PTIN P01456278
	Firm's name ▶ BEACHFLEISCHMAN PC		Firm's EIN ▶ 86-0683059	
	Firm's address ▶ 1985 E. RIVER ROAD, SUITE 201 TUCSON, AZ 85718		Phone no. 520-321-4600	

May the IRS discuss this return with the preparer shown above? (see instructions) Yes No

Part III Statement of Program Service Accomplishments

Check if Schedule O contains a response or note to any line in this Part III [X]

1 Briefly describe the organization's mission:
LOWELL'S MISSION IS TO PURSUE THE STUDY OF ASTRONOMY, ESPECIALLY THE STUDY OF THE SOLAR SYSTEM AND ITS EVOLUTION; CONDUCT PURE RESEARCH IN ASTRONOMICAL PHENOMENA; PROVIDE QUALITY PUBLIC EDUCATION AND OUTREACH PROGRAMS TO BRING THE RESULTS OF ASTRONOMICAL RESEARCH TO THE PUBLIC.

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 [X] 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 [X] 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 \$ 8,443,931. including grants of \$ 744,082.) (Revenue \$ 3,973,997.)
LOWELL OBSERVATORY ASTRONOMERS CONDUCTED FOREFRONT RESEARCH IN ALL AREAS OF ASTRONOMY, INCLUDING STUDIES OF THE SUN, SOLAR SYSTEM, STARS, EXOPLANETS, GALAXIES AND COSMOLOGY. IN 2018, LOWELL ASTRONOMERS PUBLISHED MORE THAN 70 PAPERS IN LEADING SCIENTIFIC JOURNALS, PARTICIPATED REGULARLY IN MAJOR SCIENTIFIC MISSIONS, USED MAJOR TELESCOPES AROUND THE WORLD AND IN SPACE, AND WERE VERY SUCCESSFUL AT OBTAINING GRANTS IN SUPPORT OF THEIR RESEARCH FROM NASA, THE NATIONAL SCIENCE FOUNDATION, AND OTHER AGENCIES. LOWELL'S 4.3-METER DISCOVERY CHANNEL TELESCOPE (DCT) WAS BROUGHT INTO FULL OPERATIONS IN 2015, AND IN 2018 WE DELIVERED 304 SCIENCE NIGHTS TO ASTRONOMERS FROM OUR OWN STAFF AND FROM OUR PARTNERS (CURRENT PARTNERS ARE BOSTON UNIVERSITY, KOREA ASTRONOMY AND SPACE SCIENCE INSTITUTE, NORTHERN ARIZONA

4b (Code:) (Expenses \$ 2,099,779. including grants of \$ 0.) (Revenue \$ 1,379,142.)
MORE THAN 100,000 VISITORS PARTICIPATED IN LOWELL OBSERVATORY'S PUBLIC PROGRAMS IN 2018. GUESTS ENJOYED TOURS OF THE CAMPUS, SOLAR VIEWING AND PUTNAM COLLECTION CENTER LOBBY OPEN HOUSES DURING THE DAY AND ASTRONOMY-THEMED PRESENTATIONS AND TELESCOPE VIEWING (WEATHER PERMITTING) DURING THE EVENING. LOWELL OBSERVATORY CURRICULUM FOR KIDS (LOCKS) PROGRAMS CONTINUED TO BE OFFERED BOTH ON- AND OFF-SITE THROUGHOUT THE YEAR. THESE PROGRAMS, FEATURING HANDS-ON ASTRONOMY AND PHYSICS EXERCISES AND EXPLORATIONS, ARE DESIGNED TO ILLUMINATE THE INTERCONNECTIONS BETWEEN STEM SUBJECT AREAS AND FOSTER THE ABILITY TO THINK CRITICALLY. IN 2018, LOCKS PROGRAMS SERVED 270 CHILDREN, 25 PARENTS OF PRESCHOOL-AGED CHILDREN, TEN TEACHERS FROM THE FLAGSTAFF UNIFIED SCHOOL DISTRICT AND FIVE EDUCATION MAJORS AT NORTHERN ARIZONA

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

4d Other program services (Describe in Schedule O.)
(Expenses \$ including grants of \$) (Revenue \$)

4e Total program service expenses 10,543,710.

Part IV Checklist of Required Schedules

Table with 3 columns: Question ID, Yes, No. Rows include questions 1 through 21 regarding organizational requirements and reporting.

Part IV Checklist of Required Schedules (continued)

Table with 3 columns: Question number, Yes, No. Rows 22-38 covering various organizational requirements.

Part V Statements Regarding Other IRS Filings and Tax Compliance

Check if Schedule O contains a response or note to any line in this Part V []

Table with 3 columns: Question number, Yes, No. Rows 1a, 1b, 1c regarding Form 1096 and backup withholding rules.

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		172
b	If at least one is reported on line 2a, did the organization file all required federal employment tax returns?	X	
Note. If the sum of lines 1a and 2a is greater than 250, you may be required to e-file (see instructions)			
3a	Did the organization have unrelated business gross income of \$1,000 or more during the year?		X
b	If "Yes," has it filed a Form 990-T for this year? If "No" to line 3b, provide an explanation in Schedule O		
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)?		X
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?		X
b	Did any taxable party notify the organization that it was or is a party to a prohibited tax shelter transaction?		X
c	If "Yes" to line 5a or 5b, did the organization file Form 8886-T?		
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?		X
b	If "Yes," did the organization include with every solicitation an express statement that such contributions or gifts were not tax deductible?		
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?	X	
b	If "Yes," did the organization notify the donor of the value of the goods or services provided?	X	
c	Did the organization sell, exchange, or otherwise dispose of tangible personal property for which it was required to file Form 8282?		X
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?		X
f	Did the organization, during the year, pay premiums, directly or indirectly, on a personal benefit contract?		X
g	If the organization received a contribution of qualified intellectual property, did the organization file Form 8899 as required?		
h	If the organization received a contribution of cars, boats, airplanes, or other vehicles, did the organization file a Form 1098-C?		
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?		
9	Sponsoring organizations maintaining donor advised funds.		
a	Did the sponsoring organization make any taxable distributions under section 4966?		
b	Did the sponsoring organization make a distribution to a donor, donor advisor, or related person?		
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?		
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?		
	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?		X
b	If "Yes," has it filed a Form 720 to report these payments? If "No," provide an explanation in 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?		X
	If "Yes," see instructions and file Form 4720, Schedule N.		
16	Is the organization an educational institution subject to the section 4968 excise tax on net investment income?		X
	If "Yes," complete Form 4720, Schedule O.		

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 in Schedule O. See instructions.

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

Section A. Governing Body and Management

Table with 3 columns: Question, Yes, No. Rows include: 1a (1), 1b (0), 2 (X), 3 (X), 4 (X), 5 (X), 6 (X), 7a (X), 7b (X), 8a (X), 8b (X), 9 (X).

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

Table with 3 columns: Question, Yes, No. Rows include: 10a (X), 10b, 11a (X), 11b, 12a (X), 12b (X), 12c (X), 13 (X), 14 (X), 15a (X), 15b (X), 16a (X), 16b.

Section C. Disclosure

- 17 List the states with which a copy of this Form 990 is required to be filed NONE
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. [X] Own website [] Another's website [X] Upon request [] Other (explain in Schedule O)
19 Describe in 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 ANNE LABRUZZO - 928-233-3239 1400 W MARS HILL ROAD, FLAGSTAFF, AZ 86001-4470

Part VII Compensation of Officers, Directors, Trustees, Key Employees, Highest Compensated Employees, and Independent Contractors

Check 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.

List persons in the following order: individual trustees or directors; institutional trustees; officers; key employees; highest compensated employees; and former such persons.

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 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) PUTNAM, W. LOWELL TRUSTEE - SOLE	30.00 4.00	X		X				65.	0.	8,570.
(2) HALL, JEFFREY C. DIRECTOR	40.00			X				157,137.	0.	17,394.
(3) LABRUZZO, ANNE DEPUTY DIRECTOR FOR ADMINISTRATION	36.00 4.00			X				107,937.	0.	15,278.
(4) HUNTER, DIEDRE ASTRONOMER	40.00				X			142,455.	0.	17,609.
(5) MASSEY, PHILIP ASTRONOMER	40.00				X			151,139.	0.	16,395.
(6) SCHLEICHER, DAVID ASTRONOMER	40.00				X			147,512.	0.	16,078.
(7) ACTOR, ANNE T. DEPUTY DIRECTOR FOR DEVELOPMENT	38.00 2.00				X			142,931.	0.	15,841.
(8) WEST, MICHAEL DEPUTY DIRECTOR FOR SCIENCE	40.00				X			146,492.	0.	8,225.

Part VIII Statement of Revenue

Check 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	1 a Federated campaigns	1a					
	b Membership dues	1b	289,913.				
	c Fundraising events	1c					
	d Related organizations	1d	5,571,529.				
	e Government grants (contributions)	1e	2,084,955.				
	f All other contributions, gifts, grants, and similar amounts not included above	1f	3,354,418.				
	g Noncash contributions included in lines 1a-1f: \$		221,556.				
	h Total. Add lines 1a-1f		11,300,815.				
	Program Service Revenue	2 a TELESCOPE ACCESS FEES	Business Code 541700	2,343,971.	2,343,971.		
b RESEARCH - GOVERNMENT CONTRACTS		541700	1,564,825.	1,564,825.			
c EDUCATIONAL PROGRAMS		611600	1,085,985.	1,085,985.			
d							
e							
f All other program service revenue							
g Total. Add lines 2a-2f			4,994,781.				
Other Revenue	3 Investment income (including dividends, interest, and other similar amounts)		2,268.			2,268.	
	4 Income from investment of tax-exempt bond proceeds						
	5 Royalties						
	6 a Gross rents	(i) Real					
		(ii) Personal					
		b Less: rental expenses					
		c Rental income or (loss)					
	d Net rental income or (loss)						
	7 a Gross amount from sales of assets other than inventory	(i) Securities					
		(ii) Other					
		b Less: cost or other basis and sales expenses					
		c Gain or (loss)					
	d Net gain or (loss)			141,077.		141,077.	
	8 a Gross income from fundraising events (not including \$ _____ of contributions reported on line 1c). See Part IV, line 18	a					
		b Less: direct expenses	b				
c Net income or (loss) from fundraising events							
9 a Gross income from gaming activities. See Part IV, line 19	a						
	b Less: direct expenses	b					
	c Net income or (loss) from gaming activities						
10 a Gross sales of inventory, less returns and allowances	a	595,665.					
	b Less: cost of goods sold	b	302,508.				
	c Net income or (loss) from sales of inventory		293,157.	293,157.			
Miscellaneous Revenue		Business Code					
11 a MISCELLANEOUS INCOME	900099	65,201.	65,201.				
b							
c							
d All other revenue							
e Total. Add lines 11a-11d		65,201.					
12 Total revenue. See instructions		16,797,299.	5,353,139.	0.	143,345.		

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	744,082.	744,082.		
2 Grants and other assistance to domestic individuals. See Part IV, line 22				
3 Grants and other assistance to foreign organizations, foreign governments, and foreign individuals. See Part IV, lines 15 and 16				
4 Benefits paid to or for members				
5 Compensation of current officers, directors, trustees, and key employees	306,381.	42,662.	213,460.	50,259.
6 Compensation not included above, to disqualified persons (as defined under section 4958(f)(1)) and persons described in section 4958(c)(3)(B)				
7 Other salaries and wages	5,695,408.	4,655,549.	495,659.	544,200.
8 Pension plan accruals and contributions (include section 401(k) and 403(b) employer contributions)	247,844.	200,571.	24,501.	22,772.
9 Other employee benefits	481,628.	390,453.	45,205.	45,970.
10 Payroll taxes	459,318.	355,117.	60,215.	43,986.
11 Fees for services (non-employees):				
a Management				
b Legal	29,613.	22,308.	7,305.	
c Accounting	52,680.		52,680.	
d Lobbying				
e Professional fundraising services. See Part IV, line 17				
f Investment management fees	1,030.		1,030.	
g Other. (If line 11g amount exceeds 10% of line 25, column (A) amount, list line 11g expenses on Sch O.)	262,307.	100,510.	66,154.	95,643.
12 Advertising and promotion	220,286.	375,098.	-280,477.	125,665.
13 Office expenses	459,542.	314,742.	69,224.	75,576.
14 Information technology	105,881.	42,069.	34,563.	29,249.
15 Royalties				
16 Occupancy	536,439.	485,289.	34,079.	17,071.
17 Travel	320,070.	225,183.	51,566.	43,321.
18 Payments of travel or entertainment expenses for any federal, state, or local public officials				
19 Conferences, conventions, and meetings	94,454.	15,480.	21,629.	57,345.
20 Interest	187,990.	187,990.		
21 Payments to affiliates				
22 Depreciation, depletion, and amortization	1,932,066.	1,855,459.	51,091.	25,516.
23 Insurance	289,226.	279,340.	6,506.	3,380.
24 Other expenses. Itemize expenses not covered above. (List miscellaneous expenses in line 24e. If line 24e amount exceeds 10% of line 25, column (A) amount, list line 24e expenses on Schedule O.)				
a REPAIRS AND MAINTENANCE	128,368.	123,043.	3,725.	1,600.
b EMPLOYEE RECRUITMENT AN	76,075.	17,359.	38,277.	20,439.
c DUES AND SUBSCRIPTIONS	75,263.	53,683.	19,139.	2,441.
d TRAINING AND DEVELOPMEN	68,901.	27,893.	37,287.	3,721.
e All other expenses	54,566.	29,830.	1,506.	23,230.
25 Total functional expenses. Add lines 1 through 24e	12,829,418.	10,543,710.	1,054,324.	1,231,384.
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 Sheet

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

		(A)		(B)
		Beginning of year		End of year
Assets	1 Cash - non-interest-bearing	608,331.	1	210,694.
	2 Savings and temporary cash investments	1,319,534.	2	234,343.
	3 Pledges and grants receivable, net	1,798,306.	3	2,060,984.
	4 Accounts receivable, net	22,982.	4	6,986.
	5 Loans and other receivables from current and former officers, directors, trustees, key employees, and highest compensated employees. Complete Part II of Schedule L		5	
	6 Loans and other receivables from other disqualified persons (as defined under section 4958(f)(1)), persons described in section 4958(c)(3)(B), and contributing employers and sponsoring organizations of section 501(c)(9) voluntary employees' beneficiary organizations (see instr). Complete Part II of Sch L		6	
	7 Notes and loans receivable, net		7	
	8 Inventories for sale or use	108,126.	8	83,530.
	9 Prepaid expenses and deferred charges	204,117.	9	153,267.
	10a Land, buildings, and equipment: cost or other basis. Complete Part VI of Schedule D	10a 67,796,985.		
	b Less: accumulated depreciation	10b 22,918,992.	10c	44,877,993.
	11 Investments - publicly traded securities	0.	11	8,865.
	12 Investments - other securities. See Part IV, line 11		12	
	13 Investments - program-related. See Part IV, line 11		13	
	14 Intangible assets		14	
	15 Other assets. See Part IV, line 11	421,766.	15	425,986.
16 Total assets. Add lines 1 through 15 (must equal line 34)	47,935,722.	16	48,062,648.	
Liabilities	17 Accounts payable and accrued expenses	368,682.	17	488,667.
	18 Grants payable		18	
	19 Deferred revenue	8,909,221.	19	7,847,278.
	20 Tax-exempt bond liabilities		20	
	21 Escrow or custodial account liability. Complete Part IV of Schedule D		21	
	22 Loans and other payables to current and former officers, directors, trustees, key employees, highest compensated employees, and disqualified persons. Complete Part II of Schedule L		22	
	23 Secured mortgages and notes payable to unrelated third parties	10,231,776.	23	7,482,787.
	24 Unsecured notes and loans payable to unrelated third parties		24	
	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	750,000.	25	750,000.
	26 Total liabilities. Add lines 17 through 25	20,259,679.	26	16,568,732.
Net Assets or Fund Balances	Organizations that follow SFAS 117 (ASC 958), check here <input checked="" type="checkbox"/> and complete lines 27 through 29, and lines 33 and 34.			
	27 Unrestricted net assets	23,843,727.	27	27,968,589.
	28 Temporarily restricted net assets	3,832,316.	28	3,525,327.
	29 Permanently restricted net assets		29	
	Organizations that do not follow SFAS 117 (ASC 958), check here <input type="checkbox"/> and complete lines 30 through 34.			
	30 Capital stock or trust principal, or current funds		30	
	31 Paid-in or capital surplus, or land, building, or equipment fund		31	
	32 Retained earnings, endowment, accumulated income, or other funds		32	
33 Total net assets or fund balances	27,676,043.	33	31,493,916.	
34 Total liabilities and net assets/fund balances	47,935,722.	34	48,062,648.	

Part XI Reconciliation of Net Assets

Check 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	16,797,299.
2	Total expenses (must equal Part IX, column (A), line 25)	2	12,829,418.
3	Revenue less expenses. Subtract line 2 from line 1	3	3,967,881.
4	Net assets or fund balances at beginning of year (must equal Part X, line 33, column (A))	4	27,676,043.
5	Net unrealized gains (losses) on investments	5	-150,008.
6	Donated services and use of facilities	6	
7	Investment expenses	7	
8	Prior period adjustments	8	
9	Other changes in net assets or fund balances (explain in Schedule O)	9	0.
10	Net assets or fund balances at end of year. Combine lines 3 through 9 (must equal Part X, line 33, column (B))	10	31,493,916.

Part XII Financial Statements and Reporting

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

	Yes	No
1 Accounting method used to prepare the Form 990: <input type="checkbox"/> Cash <input checked="" type="checkbox"/> Accrual <input type="checkbox"/> 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: <input type="checkbox"/> Separate basis <input type="checkbox"/> Consolidated basis <input type="checkbox"/> Both consolidated and separate basis		X
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: <input type="checkbox"/> Separate basis <input checked="" type="checkbox"/> Consolidated basis <input type="checkbox"/> Both consolidated and separate basis	X	
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 in Schedule O.	X	
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? _____	X	
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 in Schedule O and describe any steps taken to undergo such audits _____	X	

Form 990 (2018)

Part II Support Schedule for Organizations Described in Sections 170(b)(1)(A)(iv) and 170(b)(1)(A)(vi)

(Complete only if you checked the box on line 5, 7, or 8 of Part I or if the organization failed to qualify under Part III. If the organization fails to qualify under the tests listed below, please complete Part III.)

Section A. Public Support

Calendar year (or fiscal year beginning in) ▶	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")	5,764,553.	3,697,510.	7,675,056.	17,637,617.	11,300,816.	46,075,552.
2 Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
3 The value of services or facilities furnished by a governmental unit to the organization without charge ...	117,000.	118,000.	119,000.	120,000.	121,000.	595,000.
4 Total. Add lines 1 through 3	5,881,553.	3,815,510.	7,794,056.	17,757,617.	11,421,816.	46,670,552.
5 The portion of total contributions by each person (other than a governmental unit or publicly supported organization) included on line 1 that exceeds 2% of the amount shown on line 11, column (f)						2,106,579.
6 Public support. Subtract line 5 from line 4.						44,563,973.

Section B. Total Support

Calendar year (or fiscal year beginning in) ▶	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
7 Amounts from line 4	5,881,553.	3,815,510.	7,794,056.	17,757,617.	11,421,816.	46,670,552.
8 Gross income from interest, dividends, payments received on securities loans, rents, royalties, and income from similar sources ...	192,885.	110,959.	37,614.	3,661.	2,268.	347,387.
9 Net income from unrelated business activities, whether or not the business is regularly carried on ...		39,509.	41,370.			80,879.
10 Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.)	1,371,252.					1,371,252.
11 Total support. Add lines 7 through 10						48,470,070.
12 Gross receipts from related activities, etc. (see instructions)					12	17,861,371.
13 First five years. If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and stop here						<input type="checkbox"/>

Section C. Computation of Public Support Percentage

14 Public support percentage for 2018 (line 6, column (f) divided by line 11, column (f))	14	91.94 %
15 Public support percentage from 2017 Schedule A, Part II, line 14	15	90.42 %
16a 33 1/3% support test - 2018. If the organization did not check the box on line 13, and line 14 is 33 1/3% or more, check this box and stop here. The organization qualifies as a publicly supported organization		<input checked="" type="checkbox"/>
b 33 1/3% support test - 2017. If the organization did not check a box on line 13 or 16a, and line 15 is 33 1/3% or more, check this box and stop here. The organization qualifies as a publicly supported organization		<input type="checkbox"/>
17a 10% -facts-and-circumstances test - 2018. If the organization did not check a box on line 13, 16a, or 16b, and line 14 is 10% or more, and if the organization meets the "facts-and-circumstances" test, check this box and stop here. Explain in Part VI how the organization meets the "facts-and-circumstances" test. The organization qualifies as a publicly supported organization		<input type="checkbox"/>
b 10% -facts-and-circumstances test - 2017. If the organization did not check a box on line 13, 16a, 16b, or 17a, and line 15 is 10% or more, and if the organization meets the "facts-and-circumstances" test, check this box and stop here. Explain in Part VI how the organization meets the "facts-and-circumstances" test. The organization qualifies as a publicly supported organization		<input type="checkbox"/>
18 Private foundation. If the organization did not check a box on line 13, 16a, 16b, 17a, or 17b, check this box and see instructions		<input type="checkbox"/>

Part III Support Schedule for Organizations Described in Section 509(a)(2)

(Complete only if you checked the box on line 10 of Part I or if the organization failed to qualify under Part II. If the organization fails to qualify under the tests listed below, please complete Part II.)

Section A. Public Support

Calendar year (or fiscal year beginning in) ►	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")						
2 Gross receipts from admissions, merchandise sold or services performed, or facilities furnished in any activity that is related to the organization's tax-exempt purpose						
3 Gross receipts from activities that are not an unrelated trade or business under section 513						
4 Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
5 The value of services or facilities furnished by a governmental unit to the organization without charge ...						
6 Total. Add lines 1 through 5						
7a Amounts included on lines 1, 2, and 3 received from disqualified persons						
b Amounts included on lines 2 and 3 received from other than disqualified persons that exceed the greater of \$5,000 or 1% of the amount on line 13 for the year						
c Add lines 7a and 7b						
8 Public support. (Subtract line 7c from line 6.)						

Section B. Total Support

Calendar year (or fiscal year beginning in) ►	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
9 Amounts from line 6						
10a Gross income from interest, dividends, payments received on securities loans, rents, royalties, and income from similar sources ...						
b Unrelated business taxable income (less section 511 taxes) from businesses acquired after June 30, 1975						
c Add lines 10a and 10b						
11 Net income from unrelated business activities not included in line 10b, whether or not the business is regularly carried on						
12 Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.)						
13 Total support. (Add lines 9, 10c, 11, and 12.)						

14 First five years. If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and **stop here**

Section C. Computation of Public Support Percentage

15 Public support percentage for 2018 (line 8, column (f), divided by line 13, column (f))	15	%
16 Public support percentage from 2017 Schedule A, Part III, line 15	16	%

Section D. Computation of Investment Income Percentage

17 Investment income percentage for 2018 (line 10c, column (f), divided by line 13, column (f))	17	%
18 Investment income percentage from 2017 Schedule A, Part III, line 17	18	%

19a 33 1/3% support tests - 2018. If the organization did not check the box on line 14, and line 15 is more than 33 1/3%, and line 17 is not more than 33 1/3%, check this box and **stop here**. The organization qualifies as a publicly supported organization

b 33 1/3% support tests - 2017. If the organization did not check a box on line 14 or line 19a, and line 16 is more than 33 1/3%, and line 18 is not more than 33 1/3%, check this box and **stop here**. The organization qualifies as a publicly supported organization

20 Private foundation. If the organization did not check a box on line 14, 19a, or 19b, check this box and see instructions

Part IV Supporting Organizations

(Complete only if you checked a box in line 12 on Part I. If you checked 12a of Part I, complete Sections A and B. If you checked 12b of Part I, complete Sections A and C. If you checked 12c of Part I, complete Sections A, D, and E. If you checked 12d of Part I, complete Sections A and D, and complete Part V.)

Section A. All Supporting Organizations

	Yes	No
1 Are all of the organization's supported organizations listed by name in the organization's governing documents? <i>If "No," describe in Part VI how the supported organizations are designated. If designated by class or purpose, describe the designation. If historic and continuing relationship, explain.</i>		
2 Did the organization have any supported organization that does not have an IRS determination of status under section 509(a)(1) or (2)? <i>If "Yes," explain in Part VI how the organization determined that the supported organization was described in section 509(a)(1) or (2).</i>		
3a Did the organization have a supported organization described in section 501(c)(4), (5), or (6)? <i>If "Yes," answer (b) and (c) below.</i>		
b Did the organization confirm that each supported organization qualified under section 501(c)(4), (5), or (6) and satisfied the public support tests under section 509(a)(2)? <i>If "Yes," describe in Part VI when and how the organization made the determination.</i>		
c Did the organization ensure that all support to such organizations was used exclusively for section 170(c)(2)(B) purposes? <i>If "Yes," explain in Part VI what controls the organization put in place to ensure such use.</i>		
4a Was any supported organization not organized in the United States ("foreign supported organization")? <i>If "Yes," and if you checked 12a or 12b in Part I, answer (b) and (c) below.</i>		
b Did the organization have ultimate control and discretion in deciding whether to make grants to the foreign supported organization? <i>If "Yes," describe in Part VI how the organization had such control and discretion despite being controlled or supervised by or in connection with its supported organizations.</i>		
c Did the organization support any foreign supported organization that does not have an IRS determination under sections 501(c)(3) and 509(a)(1) or (2)? <i>If "Yes," explain in Part VI what controls the organization used to ensure that all support to the foreign supported organization was used exclusively for section 170(c)(2)(B) purposes.</i>		
5a Did the organization add, substitute, or remove any supported organizations during the tax year? <i>If "Yes," answer (b) and (c) below (if applicable). Also, provide detail in Part VI, including (i) the names and EIN numbers of the supported organizations added, substituted, or removed; (ii) the reasons for each such action; (iii) the authority under the organization's organizing document authorizing such action; and (iv) how the action was accomplished (such as by amendment to the organizing document).</i>		
b Type I or Type II only. Was any added or substituted supported organization part of a class already designated in the organization's organizing document?		
c Substitutions only. Was the substitution the result of an event beyond the organization's control?		
6 Did the organization provide support (whether in the form of grants or the provision of services or facilities) to anyone other than (i) its supported organizations, (ii) individuals that are part of the charitable class benefited by one or more of its supported organizations, or (iii) other supporting organizations that also support or benefit one or more of the filing organization's supported organizations? <i>If "Yes," provide detail in Part VI.</i>		
7 Did the organization provide a grant, loan, compensation, or other similar payment to a substantial contributor (as defined in section 4958(c)(3)(C)), a family member of a substantial contributor, or a 35% controlled entity with regard to a substantial contributor? <i>If "Yes," complete Part I of Schedule L (Form 990 or 990-EZ).</i>		
8 Did the organization make a loan to a disqualified person (as defined in section 4958) not described in line 7? <i>If "Yes," complete Part I of Schedule L (Form 990 or 990-EZ).</i>		
9a Was the organization controlled directly or indirectly at any time during the tax year by one or more disqualified persons as defined in section 4946 (other than foundation managers and organizations described in section 509(a)(1) or (2))? <i>If "Yes," provide detail in Part VI.</i>		
b Did one or more disqualified persons (as defined in line 9a) hold a controlling interest in any entity in which the supporting organization had an interest? <i>If "Yes," provide detail in Part VI.</i>		
c Did a disqualified person (as defined in line 9a) have an ownership interest in, or derive any personal benefit from, assets in which the supporting organization also had an interest? <i>If "Yes," provide detail in Part VI.</i>		
10a Was the organization subject to the excess business holdings rules of section 4943 because of section 4943(f) (regarding certain Type II supporting organizations, and all Type III non-functionally integrated supporting organizations)? <i>If "Yes," answer 10b below.</i>		
b Did the organization have any excess business holdings in the tax year? <i>(Use Schedule C, Form 4720, to determine whether the organization had excess business holdings.)</i>		

Part IV Supporting Organizations (continued)

	Yes	No
11 Has the organization accepted a gift or contribution from any of the following persons?		
a A person who directly or indirectly controls, either alone or together with persons described in (b) and (c) below, the governing body of a supported organization?		
b A family member of a person described in (a) above?		
c A 35% controlled entity of a person described in (a) or (b) above? If "Yes" to a, b, or c, provide detail in Part VI .		

Section B. Type I Supporting Organizations

	Yes	No
1 Did the directors, trustees, or membership of one or more supported organizations have the power to regularly appoint or elect at least a majority of the organization's directors or trustees at all times during the tax year? If "No," describe in Part VI how the supported organization(s) effectively operated, supervised, or controlled the organization's activities. If the organization had more than one supported organization, describe how the powers to appoint and/or remove directors or trustees were allocated among the supported organizations and what conditions or restrictions, if any, applied to such powers during the tax year.		
2 Did the organization operate for the benefit of any supported organization other than the supported organization(s) that operated, supervised, or controlled the supporting organization? If "Yes," explain in Part VI how providing such benefit carried out the purposes of the supported organization(s) that operated, supervised, or controlled the supporting organization.		

Section C. Type II Supporting Organizations

	Yes	No
1 Were a majority of the organization's directors or trustees during the tax year also a majority of the directors or trustees of each of the organization's supported organization(s)? If "No," describe in Part VI how control or management of the supporting organization was vested in the same persons that controlled or managed the supported organization(s).		

Section D. All Type III Supporting Organizations

	Yes	No
1 Did the organization provide to each of its supported organizations, by the last day of the fifth month of the organization's tax year, (i) a written notice describing the type and amount of support provided during the prior tax year, (ii) a copy of the Form 990 that was most recently filed as of the date of notification, and (iii) copies of the organization's governing documents in effect on the date of notification, to the extent not previously provided?		
2 Were any of the organization's officers, directors, or trustees either (i) appointed or elected by the supported organization(s) or (ii) serving on the governing body of a supported organization? If "No," explain in Part VI how the organization maintained a close and continuous working relationship with the supported organization(s).		
3 By reason of the relationship described in (2), did the organization's supported organizations have a significant voice in the organization's investment policies and in directing the use of the organization's income or assets at all times during the tax year? If "Yes," describe in Part VI the role the organization's supported organizations played in this regard.		

Section E. Type III Functionally Integrated Supporting Organizations

1 Check the box next to the method that the organization used to satisfy the Integral Part Test during the year (see instructions).		
a <input type="checkbox"/> The organization satisfied the Activities Test. Complete line 2 below.		
b <input type="checkbox"/> The organization is the parent of each of its supported organizations. Complete line 3 below.		
c <input type="checkbox"/> The organization supported a governmental entity. Describe in Part VI how you supported a government entity (see instructions).		
2 Activities Test. Answer (a) and (b) below.		
a Did substantially all of the organization's activities during the tax year directly further the exempt purposes of the supported organization(s) to which the organization was responsive? If "Yes," then in Part VI identify those supported organizations and explain how these activities directly furthered their exempt purposes, how the organization was responsive to those supported organizations, and how the organization determined that these activities constituted substantially all of its activities.		
b Did the activities described in (a) constitute activities that, but for the organization's involvement, one or more of the organization's supported organization(s) would have been engaged in? If "Yes," explain in Part VI the reasons for the organization's position that its supported organization(s) would have engaged in these activities but for the organization's involvement.		
3 Parent of Supported Organizations. Answer (a) and (b) below.		
a Did the organization have the power to regularly appoint or elect a majority of the officers, directors, or trustees of each of the supported organizations? Provide details in Part VI .		
b Did the organization exercise a substantial degree of direction over the policies, programs, and activities of each of its supported organizations? If "Yes," describe in Part VI the role played by the organization in this regard.		

Part V Type III Non-Functionally Integrated 509(a)(3) Supporting Organizations

1 Check here if the organization satisfied the Integral Part Test as a qualifying trust on Nov. 20, 1970 (explain in Part VI.) **See instructions.** All other Type III non-functionally integrated supporting organizations must complete Sections A through E.

Section A - Adjusted Net Income		(A) Prior Year	(B) Current Year (optional)
1	Net short-term capital gain	1	
2	Recoveries of prior-year distributions	2	
3	Other gross income (see instructions)	3	
4	Add lines 1 through 3	4	
5	Depreciation and depletion	5	
6	Portion of operating expenses paid or incurred for production or collection of gross income or for management, conservation, or maintenance of property held for production of income (see instructions)	6	
7	Other expenses (see instructions)	7	
8	Adjusted Net Income (subtract lines 5, 6, and 7 from line 4)	8	

Section B - Minimum Asset Amount		(A) Prior Year	(B) Current Year (optional)
1	Aggregate fair market value of all non-exempt-use assets (see instructions for short tax year or assets held for part of year):		
a	Average monthly value of securities	1a	
b	Average monthly cash balances	1b	
c	Fair market value of other non-exempt-use assets	1c	
d	Total (add lines 1a, 1b, and 1c)	1d	
e	Discount claimed for blockage or other factors (explain in detail in Part VI):		
2	Acquisition indebtedness applicable to non-exempt-use assets	2	
3	Subtract line 2 from line 1d	3	
4	Cash deemed held for exempt use. Enter 1-1/2% of line 3 (for greater amount, see instructions)	4	
5	Net value of non-exempt-use assets (subtract line 4 from line 3)	5	
6	Multiply line 5 by .035	6	
7	Recoveries of prior-year distributions	7	
8	Minimum Asset Amount (add line 7 to line 6)	8	

Section C - Distributable Amount			Current Year
1	Adjusted net income for prior year (from Section A, line 8, Column A)	1	
2	Enter 85% of line 1	2	
3	Minimum asset amount for prior year (from Section B, line 8, Column A)	3	
4	Enter greater of line 2 or line 3	4	
5	Income tax imposed in prior year	5	
6	Distributable Amount. Subtract line 5 from line 4, unless subject to emergency temporary reduction (see instructions)	6	
7	<input type="checkbox"/> Check here if the current year is the organization's first as a non-functionally integrated Type III supporting organization (see instructions).		

Part V Type III Non-Functionally Integrated 509(a)(3) Supporting Organizations (continued)

Section D - Distributions	Current Year
1 Amounts paid to supported organizations to accomplish exempt purposes	
2 Amounts paid to perform activity that directly furthers exempt purposes of supported organizations, in excess of income from activity	
3 Administrative expenses paid to accomplish exempt purposes of supported organizations	
4 Amounts paid to acquire exempt-use assets	
5 Qualified set-aside amounts (prior IRS approval required)	
6 Other distributions (describe in Part VI). See instructions.	
7 Total annual distributions. Add lines 1 through 6.	
8 Distributions to attentive supported organizations to which the organization is responsive (provide details in Part VI). See instructions.	
9 Distributable amount for 2018 from Section C, line 6	
10 Line 8 amount divided by line 9 amount	

Section E - Distribution Allocations (see instructions)	(i) Excess Distributions	(ii) Underdistributions Pre-2018	(iii) Distributable Amount for 2018
1 Distributable amount for 2018 from Section C, line 6			
2 Underdistributions, if any, for years prior to 2018 (reasonable cause required- explain in Part VI). See instructions.			
3 Excess distributions carryover, if any, to 2018			
a From 2013			
b From 2014			
c From 2015			
d From 2016			
e From 2017			
f Total of lines 3a through e			
g Applied to underdistributions of prior years			
h Applied to 2018 distributable amount			
i Carryover from 2013 not applied (see instructions)			
j Remainder. Subtract lines 3g, 3h, and 3i from 3f.			
4 Distributions for 2018 from Section D, line 7: \$			
a Applied to underdistributions of prior years			
b Applied to 2018 distributable amount			
c Remainder. Subtract lines 4a and 4b from 4.			
5 Remaining underdistributions for years prior to 2018, if any. Subtract lines 3g and 4a from line 2. For result greater than zero, explain in Part VI . See instructions.			
6 Remaining underdistributions for 2018. Subtract lines 3h and 4b from line 1. For result greater than zero, explain in Part VI . See instructions.			
7 Excess distributions carryover to 2019. Add lines 3j and 4c.			
8 Breakdown of line 7:			
a Excess from 2014			
b Excess from 2015			
c Excess from 2016			
d Excess from 2017			
e Excess from 2018			

Schedule A (Form 990 or 990-EZ) 2018

Schedule B

(Form 990, 990-EZ, or 990-PF)

Department of the Treasury
Internal Revenue Service

Schedule of Contributors

▶ Attach to Form 990, Form 990-EZ, or Form 990-PF.
▶ Go to www.irs.gov/Form990 for the latest information.

OMB No. 1545-0047

2018

Name of the organization

LOWELL OBSERVATORY

Employer identification number

86-0098918

Organization type (check one):

Filers of:

Section:

Form 990 or 990-EZ

501(c)(3) (enter number) organization

4947(a)(1) nonexempt charitable trust **not** treated as a private foundation

527 political organization

Form 990-PF

501(c)(3) exempt private foundation

4947(a)(1) nonexempt charitable trust treated as a private foundation

501(c)(3) taxable private foundation

Check if your organization is covered by the **General Rule** or a **Special Rule**.

Note: Only a section 501(c)(7), (8), or (10) organization can check boxes for both the General Rule and a Special Rule. See instructions.

General Rule

For an organization filing Form 990, 990-EZ, or 990-PF that received, during the year, contributions totaling \$5,000 or more (in money or property) from any one contributor. Complete Parts I and II. See instructions for determining a contributor's total contributions.

Special Rules

For an organization described in section 501(c)(3) filing Form 990 or 990-EZ that met the 33 1/3% support test of the regulations under sections 509(a)(1) and 170(b)(1)(A)(vi), that checked Schedule A (Form 990 or 990-EZ), Part II, line 13, 16a, or 16b, and that received from any one contributor, during the year, total contributions of the greater of (1) \$5,000; or (2) 2% of the amount on (i) Form 990, Part VIII, line 1h; or (ii) Form 990-EZ, line 1. Complete Parts I and II.

For an organization described in section 501(c)(7), (8), or (10) filing Form 990 or 990-EZ that received from any one contributor, during the year, total contributions of more than \$1,000 *exclusively* for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals. Complete Parts I (entering "N/A" in column (b) instead of the contributor name and address), II, and III.

For an organization described in section 501(c)(7), (8), or (10) filing Form 990 or 990-EZ that received from any one contributor, during the year, contributions *exclusively* for religious, charitable, etc., purposes, but no such contributions totaled more than \$1,000. If this box is checked, enter here the total contributions that were received during the year for an *exclusively* religious, charitable, etc., purpose. Don't complete any of the parts unless the **General Rule** applies to this organization because it received *nonexclusively* religious, charitable, etc., contributions totaling \$5,000 or more during the year ▶ \$ _____

Caution: An organization that isn't covered by the General Rule and/or the Special Rules doesn't file Schedule B (Form 990, 990-EZ, or 990-PF), but it **must** answer "No" on Part IV, line 2, of its Form 990; or check the box on line H of its Form 990-EZ or on its Form 990-PF, Part I, line 2, to certify that it doesn't meet the filing requirements of Schedule B (Form 990, 990-EZ, or 990-PF).

Name of organization LOWELL OBSERVATORY	Employer identification number 86-0098918
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Part I Contributors (see instructions). Use duplicate copies of Part I if additional space is needed.

(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
<u>1</u>	 <hr/> <hr/> <hr/>	\$ <u>1,388,549.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
<u>2</u>	 <hr/> <hr/> <hr/>	\$ <u>669,971.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
<u>3</u>	 <hr/> <hr/> <hr/>	\$ <u>257,000.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
<u>4</u>	 <hr/> <hr/> <hr/>	\$ <u>5,400,000.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
<u>5</u>	 <hr/> <hr/> <hr/>	\$ <u>500,000.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
<u>6</u>	 <hr/> <hr/> <hr/>	\$ <u>400,000.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)

Name of organization LOWELL OBSERVATORY	Employer identification number 86-0098918
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Part I Contributors (see instructions). Use duplicate copies of Part I if additional space is needed.

(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
7	<hr/> <hr/> <hr/> <hr/>	\$ <u>275,200.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
8	<hr/> <hr/> <hr/> <hr/>	\$ <u>1,564,825.</u>	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
	<hr/> <hr/> <hr/> <hr/>	\$ _____	Person <input type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
	<hr/> <hr/> <hr/> <hr/>	\$ _____	Person <input type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
	<hr/> <hr/> <hr/> <hr/>	\$ _____	Person <input type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
	<hr/> <hr/> <hr/> <hr/>	\$ _____	Person <input type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
	<hr/> <hr/> <hr/> <hr/>	\$ _____	Person <input type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)

Name of organization LOWELL OBSERVATORY	Employer identification number 86-0098918
---	---

Part II Noncash Property (see instructions). Use duplicate copies of Part II if additional space is needed.

(a) No. from Part I	(b) Description of noncash property given	(c) FMV (or estimate) (See instructions.)	(d) Date received
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	

Name of organization LOWELL OBSERVATORY	Employer identification number 86-0098918
---	---

Part III Exclusively religious, charitable, etc., contributions to organizations described in section 501(c)(7), (8), or (10) that total more than \$1,000 for the year from any one contributor. Complete columns (a) through (e) and the following line entry. For organizations completing Part III, enter the total of exclusively religious, charitable, etc., contributions of \$1,000 or less for the year. (Enter this info. once.) ▶ \$ _____
Use duplicate copies of Part III if additional space is needed.

(a) No. from Part I	(b) Purpose of gift	(c) Use of gift	(d) Description of how gift is held
(e) Transfer of gift			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
(a) No. from Part I	(b) Purpose of gift	(c) Use of gift	(d) Description of how gift is held
(e) Transfer of gift			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
(a) No. from Part I	(b) Purpose of gift	(c) Use of gift	(d) Description of how gift is held
(e) Transfer of gift			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
(a) No. from Part I	(b) Purpose of gift	(c) Use of gift	(d) Description of how gift is held
(e) Transfer of gift			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	

SCHEDULE D
(Form 990)

Department of the Treasury
Internal Revenue Service

Supplemental Financial Statements

▶ Complete if the organization answered "Yes" on Form 990, Part IV, line 6, 7, 8, 9, 10, 11a, 11b, 11c, 11d, 11e, 11f, 12a, or 12b.

▶ Attach to Form 990.

▶ Go to www.irs.gov/Form990 for instructions and the latest information.

OMB No. 1545-0047

2018

Open to Public Inspection

Name of the organization **LOWELL OBSERVATORY** Employer identification number **86-0098918**

Part I Organizations Maintaining Donor Advised Funds or Other Similar Funds or Accounts. Complete if the organization answered "Yes" on Form 990, Part IV, line 6.

	(a) Donor advised funds	(b) Funds and other accounts
1 Total number at end of year		
2 Aggregate value of contributions to (during year)		
3 Aggregate value of grants from (during year)		
4 Aggregate value at end of year		
5 Did the organization inform all donors and donor advisors in writing that the assets held in donor advised funds are the organization's property, subject to the organization's exclusive legal control?		<input type="checkbox"/> Yes <input type="checkbox"/> No
6 Did the organization inform all grantees, donors, and donor advisors in writing that grant funds can be used only for charitable purposes and not for the benefit of the donor or donor advisor, or for any other purpose conferring impermissible private benefit?		<input type="checkbox"/> Yes <input type="checkbox"/> No

Part II Conservation Easements. Complete if the organization answered "Yes" on Form 990, Part IV, line 7.

1 Purpose(s) of conservation easements held by the organization (check all that apply).

Preservation of land for public use (e.g., recreation or education) Preservation of a historically important land area

Protection of natural habitat Preservation of a certified historic structure

Preservation of open space

2 Complete lines 2a through 2d if the organization held a qualified conservation contribution in the form of a conservation easement on the last day of the tax year.

	Held at the End of the Tax Year
a Total number of conservation easements	2a
b Total acreage restricted by conservation easements	2b
c Number of conservation easements on a certified historic structure included in (a)	2c
d Number of conservation easements included in (c) acquired after 7/25/06, and not on a historic structure listed in the National Register	2d

3 Number of conservation easements modified, transferred, released, extinguished, or terminated by the organization during the tax year ▶ _____

4 Number of states where property subject to conservation easement is located ▶ _____

5 Does the organization have a written policy regarding the periodic monitoring, inspection, handling of violations, and enforcement of the conservation easements it holds?

Yes No

6 Staff and volunteer hours devoted to monitoring, inspecting, handling of violations, and enforcing conservation easements during the year ▶ _____

7 Amount of expenses incurred in monitoring, inspecting, handling of violations, and enforcing conservation easements during the year ▶ \$ _____

8 Does each conservation easement reported on line 2(d) above satisfy the requirements of section 170(h)(4)(B)(i) and section 170(h)(4)(B)(ii)?

Yes No

9 In Part XIII, describe how the organization reports conservation easements in its revenue and expense statement, and balance sheet, and include, if applicable, the text of the footnote to the organization's financial statements that describes the organization's accounting for conservation easements.

Part III Organizations Maintaining Collections of Art, Historical Treasures, or Other Similar Assets. Complete if the organization answered "Yes" on Form 990, Part IV, line 8.

1a If the organization elected, as permitted under SFAS 116 (ASC 958), not to report in its revenue statement and balance sheet works of art, historical treasures, or other similar assets held for public exhibition, education, or research in furtherance of public service, provide, in Part XIII, the text of the footnote to its financial statements that describes these items.

b If the organization elected, as permitted under SFAS 116 (ASC 958), to report in its revenue statement and balance sheet works of art, historical treasures, or other similar assets held for public exhibition, education, or research in furtherance of public service, provide the following amounts relating to these items:

(i) Revenue included on Form 990, Part VIII, line 1

(ii) Assets included in Form 990, Part X

2 If the organization received or held works of art, historical treasures, or other similar assets for financial gain, provide the following amounts required to be reported under SFAS 116 (ASC 958) relating to these items:

a Revenue included on Form 990, Part VIII, line 1

b Assets included in Form 990, Part X

LHA For Paperwork Reduction Act Notice, see the Instructions for Form 990. Schedule D (Form 990) 2018

Part III Organizations Maintaining Collections of Art, Historical Treasures, or Other Similar Assets (continued)

3 Using the organization's acquisition, accession, and other records, check any of the following that are a significant use of its collection items (check all that apply):

- a Public exhibition
- b Scholarly research
- c Preservation for future generations
- d Loan or exchange programs
- e Other _____

4 Provide a description of the organization's collections and explain how they further the organization's exempt purpose in Part XIII.

5 During the year, did the organization solicit or receive donations of art, historical treasures, or other similar assets to be sold to raise funds rather than to be maintained as part of the organization's collection? Yes No

Part IV Escrow and Custodial Arrangements. Complete if the organization answered "Yes" on Form 990, Part IV, line 9, or reported an amount on Form 990, Part X, line 21.

1a Is the organization an agent, trustee, custodian or other intermediary for contributions or other assets not included on Form 990, Part X? Yes No

b If "Yes," explain the arrangement in Part XIII and complete the following table:

	Amount
c Beginning balance	1c
d Additions during the year	1d
e Distributions during the year	1e
f Ending balance	1f

2a Did the organization include an amount on Form 990, Part X, line 21, for escrow or custodial account liability? Yes No

b If "Yes," explain the arrangement in Part XIII. Check here if the explanation has been provided on Part XIII

Part V Endowment Funds. Complete if the organization answered "Yes" on Form 990, Part IV, line 10.

	(a) Current year	(b) Prior year	(c) Two years back	(d) Three years back	(e) Four years back
1a Beginning of year balance	33,571,683.	39,620,403.	37,221,789.	35,590,304.	34,950,148.
b Contributions	467,872.	1,476,056.	1,254,991.	2,282,857.	
c Net investment earnings, gains, and losses	-1,781,866.	4,372,359.	2,174,579.	-377,198.	1,623,968.
d Grants or scholarships	5,566,105.	11,732,526.	809,006.	168,834.	700,000.
e Other expenditures for facilities and programs			94,516.		
f Administrative expenses	133,315.	164,609.	127,434.	105,340.	283,812.
g End of year balance	26,558,269.	33,571,683.	39,620,403.	37,221,789.	35,590,304.

2 Provide the estimated percentage of the current year end balance (line 1g, column (a)) held as:

- a Board designated or quasi-endowment .00 %
- b Permanent endowment 19.07 %
- c Temporarily restricted endowment 80.93 %

The percentages on lines 2a, 2b, and 2c should equal 100%.

3a Are there endowment funds not in the possession of the organization that are held and administered for the organization by:

- (i) unrelated organizations
- (ii) related organizations

	Yes	No
3a(i)		X
3a(ii)	X	
3b	X	

b If "Yes" on line 3a(ii), are the related organizations listed as required on Schedule R?

4 Describe in Part XIII the intended uses of the organization's endowment funds.

Part VI Land, Buildings, and Equipment.

Complete if the organization answered "Yes" on Form 990, Part IV, line 11a. See Form 990, Part X, line 10.

Description of property	(a) Cost or other basis (investment)	(b) Cost or other basis (other)	(c) Accumulated depreciation	(d) Book value
1a Land		670,434.		670,434.
b Buildings		23,647,243.	8,360,012.	15,287,231.
c Leasehold improvements				
d Equipment		38,567,187.	13,737,792.	24,829,395.
e Other		4,912,121.	821,188.	4,090,933.
Total. Add lines 1a through 1e. (Column (d) must equal Form 990, Part X, column (B), line 10c.)				44,877,993.

Part VII Investments - Other Securities.

Complete if the organization answered "Yes" on Form 990, Part IV, line 11b. See Form 990, Part X, line 12.

(a) Description of security or category (including name of security)	(b) Book value	(c) Method of valuation: Cost or end-of-year market value
(1) Financial derivatives		
(2) Closely-held equity interests		
(3) Other		
(A)		
(B)		
(C)		
(D)		
(E)		
(F)		
(G)		
(H)		
Total. (Col. (b) must equal Form 990, Part X, col. (B) line 12.) ▶		

Part VIII Investments - Program Related.

Complete if the organization answered "Yes" on Form 990, Part IV, line 11c. See Form 990, Part X, line 13.

(a) Description of investment	(b) Book value	(c) Method of valuation: Cost or end-of-year market value
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
Total. (Col. (b) must equal Form 990, Part X, col. (B) line 13.) ▶		

Part IX Other Assets.

Complete if the organization answered "Yes" on Form 990, Part IV, line 11d. See Form 990, Part X, line 15.

(a) Description	(b) Book value
(1)	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
Total. (Column (b) must equal Form 990, Part X, col. (B) line 15.) ▶	

Part X Other Liabilities.

Complete if the organization answered "Yes" on Form 990, Part IV, line 11e or 11f. See Form 990, Part X, line 25.

1. (a) Description of liability	(b) Book value
(1) Federal income taxes	
(2) DUE TO PERCIVAL LOWELL TRUST UW	750,000.
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
Total. (Column (b) must equal Form 990, Part X, col. (B) line 25.) ▶	750,000.

2. Liability for uncertain tax positions. In Part XIII, provide the text of the footnote to the organization's financial statements that reports the organization's liability for uncertain tax positions under FIN 48 (ASC 740). Check here if the text of the footnote has been provided in Part XIII

Part XI Reconciliation of Revenue per Audited Financial Statements With Revenue per Return.

Complete if the organization answered "Yes" on Form 990, Part IV, line 12a.

Table with 5 main rows and sub-rows (a-e) for adjustments. Columns include line numbers and a final total column.

Part XII Reconciliation of Expenses per Audited Financial Statements With Expenses per Return.

Complete if the organization answered "Yes" on Form 990, Part IV, line 12a.

Table with 5 main rows and sub-rows (a-e) for adjustments. Columns include line numbers and a final total column.

Part XIII Supplemental Information.

Provide the descriptions required for Part II, lines 3, 5, and 9; Part III, lines 1a and 4; Part IV, lines 1b and 2b; Part V, line 4; Part X, line 2; Part XI, lines 2d and 4b; and Part XII, lines 2d and 4b. Also complete this part to provide any additional information.

PART V, LINE 4:

THE ENDOWMENT FUNDS ARE USED FOR SUPPORT OF LOWELL OBSERVATORY AND FOR REINVESTMENT.

PART X, LINE 2:

THE FOLLOWING DISCLOSURE IS RELATED TO THE COMBINED FINANCIAL STATEMENTS OF THE LOWELL OBSERVATORY, TRUST U/W OF PERCIVAL LOWELL, AND THE LOWELL OBSERVATORY FOUNDATION:

THE OBSERVATORY, THE FOUNDATION, AND THE TRUST ARE EXEMPT FROM INCOME TAXES UNDER BOTH INTERNAL REVENUE CODE (IRC) SECTION 501(C)(3) AND ARIZONA INCOME TAX LAWS. THE OBSERVATORY IS CLASSIFIED AS OTHER THAN A PRIVATE

Part XIII Supplemental Information (continued)

FOUNDATION UNDER IRC SECTION 509(A)(1). THE FOUNDATION AND THE TRUST ARE EACH CLASSIFIED AS OTHER THAN A PRIVATE FOUNDATION UNDER IRC SECTION 509(A)(3) AS A SUPPORTING ORGANIZATION OF THE OBSERVATORY. INCOME FROM CERTAIN ACTIVITIES NOT DIRECTLY RELATED TO THE ORGANIZATION'S TAX-EXEMPT PURPOSE, HOWEVER, MAY BE SUBJECT TO TAXATION AS UNRELATED BUSINESS TAXABLE INCOME (UBTI).

FROM TIME TO TIME, THE ORGANIZATION MAY BE SUBJECT TO PENALTIES AND INTEREST ASSESSED BY VARIOUS TAXING AUTHORITIES, WHICH ARE CLASSIFIED AS GENERAL AND ADMINISTRATIVE EXPENSES IF THEY OCCUR.

**SCHEDULE I
(Form 990)**

Department of the Treasury
Internal Revenue Service

**Grants and Other Assistance to Organizations,
Governments, and Individuals in the United States**
Complete if the organization answered "Yes" on Form 990, Part IV, line 21 or 22.
▶ Attach to Form 990.
▶ Go to www.irs.gov/Form990 for the latest information.

OMB No. 1545-0047

2018

**Open to Public
Inspection**

Name of the organization **LOWELL OBSERVATORY** Employer identification number **86-0098918**

Part I General Information on Grants and Assistance

- 1** Does the organization maintain records to substantiate the amount of the grants or assistance, the grantees' eligibility for the grants or assistance, and the selection criteria used to award the grants or assistance? **Yes** **No**
- 2** Describe in Part IV the organization's procedures for monitoring the use of grant funds in the United States.

Part II Grants and Other Assistance to Domestic Organizations and Domestic Governments. Complete if the organization answered "Yes" on Form 990, Part IV, line 21, for any recipient that received more than \$5,000. Part II can be duplicated if additional space is needed.

1 (a) Name and address of organization or government	(b) EIN	(c) IRC section (if applicable)	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of noncash assistance	(h) Purpose of grant or assistance
LOWELL OBSERVATORY FOUNDATION 1400 W. MARS HILL RD FLAGSTAFF, AZ 86001	47-2052113	501(C)(3)	152,450.	0.			TO FUND AN ENDOWMENT
LOWELL OBSERVATORY FOUNDATION 1400 W. MARS HILL RD FLAGSTAFF, AZ 86001	47-2052113	501(C)(3)	18,548.	0.			SUPPORT FOR OPERATIONS
PERCIVAL LOWELL TRUST 1400 W. MARS HILL RD FLAGSTAFF, AZ 86001	04-2007327	501(C)(3)	7,272.	0.			SUPPORT FOR OPERATIONS
MASSACHUSETTS INSTITUTE OF TECHNOLOGY - 77 MASSACHUSETTS AVE - CAMBRIDGE, MA 02139	04-2103594	501(C)(3)	63,520.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
NORTHERN ARIZONA UNIVERSITY PO BOX 4070 FLAGSTAFF, AZ 86011	74-2579628	STATE OF ARIZONA	178,975.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
NORTHERN ARIZONA UNIVERSITY PO BOX 4070 FLAGSTAFF, AZ 86011	74-2579628	STATE OF ARIZONA	71,522.	0.			NSF GRANT - SUBAWARD COLLABORATION RESEARCH

- 2** Enter total number of section 501(c)(3) and government organizations listed in the line 1 table **▶ 14.**
- 3** Enter total number of other organizations listed in the line 1 table **▶**

LHA For Paperwork Reduction Act Notice, see the Instructions for Form 990.

Schedule I (Form 990) (2018)

Part II Continuation of Grants and Other Assistance to Governments and Organizations in the United States (Schedule I (Form 990), Part II.)

(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
NORTHERN ARIZONA UNIVERSITY PO BOX 4070 FLAGSTAFF, AZ 86011	74-2579628	STATE OF ARIZONA	33,208.	0.			DONOR FUNDS FOR PREDOCTORAL STUDENT SALARY
PLANETARY SCIENCE INSTITUTE 1700 E. FORT LOWELL, SUITE 106 TUCSON, AZ 85719	33-0175263	501(C)(3)	15,815.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
PURDUE UNIVERSITY 155 S. GRANT STREET WEST LAFAYETTE, IN 47907	35-6002041	501(C)(3)	9,877.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
UNIVERSITY OF HAWAII 2440 CAMPUS RD, BOX 368 HONOLULU, HI 96822	99-6000354	STATE OF HAWAII	33,926.	0.			DONOR FUNDS FOR PREDOCTORAL STUDENT SALARY
UNIVERSITY OF MARYLAND - BALTIMORE COUNTY - 1000 HILLTOP CIRCLE - BALTIMORE, MD 21250	52-6002033	STATE OF MARYLAND	45,603.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
UNIVERSITY OF MARYLAND 1104 ATLANTIC BLDG COLLEGE PARK, MD 20742	52-6002033	STATE OF MARYLAND	63,017.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
UNIVERSITY OF PITTSBURGH 123 UNIVERSITY PLACE, B21 PITTSBURGH, PA 15213	25-0965591	501(C)(3)	8,230.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
WESTERN WASHINGTON UNIVERSITY 516 HIGH STREET BELLINGHAM, WA 98225	91-6000562	STATE OF WASHINGTON	17,664.	0.			NSF GRANT - SUBAWARD COLLABORATION RESEARCH

Schedule I (Form 990)

Part III Grants and Other Assistance to Domestic Individuals. Complete if the organization answered "Yes" on Form 990, Part IV, line 22.
Part III can be duplicated if additional space is needed.

(a) Type of grant or assistance	(b) Number of recipients	(c) Amount of cash grant	(d) Amount of non-cash assistance	(e) Method of valuation (book, FMV, appraisal, other)	(f) Description of noncash assistance

Part IV Supplemental Information. Provide the information required in Part I, line 2; Part III, column (b); and any other additional information.

PART I, LINE 2:

ALL GRANT RECIPIENTS ARE MAJOR UNIVERSITIES, WITH SOPHISTICATED SYSTEMS FOR ADMINISTERING GRANTS. OBSERVATORY GRANTS TO THE UNIVERSITIES ARE PAID ON A COST REIMBURSEMENT BASIS. THE OBSERVATORY PRINCIPAL INVESTIGATOR UNDER EACH AWARD CLOSELY COORDINATES RESEARCH EFFORTS WITH THE UNIVERSITY RECEIVING THE SUB AWARD AND REVIEWS EACH INVOICE SUBMITTED BY THE UNIVERSITY PRIOR TO PAYMENT.

**SCHEDULE J
(Form 990)**

Compensation Information

OMB No. 1545-0047

2018

Open to Public Inspection

For certain Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees

▶ Complete if the organization answered "Yes" on Form 990, Part IV, line 23.

▶ Attach to Form 990.

▶ Go to www.irs.gov/Form990 for instructions and the latest information.

Department of the Treasury
Internal Revenue Service

Name of the organization

LOWELL OBSERVATORY

Employer identification number

86-0098918

Part I Questions Regarding Compensation

1a Check the appropriate box(es) if the organization provided any of the following to or for a person listed on Form 990, Part VII, Section A, line 1a. Complete Part III to provide any relevant information regarding these items.

- | | |
|--|---|
| <input type="checkbox"/> First-class or charter travel | <input checked="" type="checkbox"/> Housing allowance or residence for personal use |
| <input type="checkbox"/> Travel for companions | <input type="checkbox"/> Payments for business use of personal residence |
| <input type="checkbox"/> Tax indemnification and gross-up payments | <input type="checkbox"/> Health or social club dues or initiation fees |
| <input type="checkbox"/> Discretionary spending account | <input type="checkbox"/> Personal services (such as maid, chauffeur, chef) |

b If any of the boxes on line 1a are checked, did the organization follow a written policy regarding payment or reimbursement or provision of all of the expenses described above? If "No," complete Part III to explain

2 Did the organization require substantiation prior to reimbursing or allowing expenses incurred by all directors, trustees, and officers, including the CEO/Executive Director, regarding the items checked on line 1a?

3 Indicate which, if any, of the following the filing organization used to establish the compensation of the organization's CEO/Executive Director. Check all that apply. Do not check any boxes for methods used by a related organization to establish compensation of the CEO/Executive Director, but explain in Part III.

- | | |
|--|---|
| <input type="checkbox"/> Compensation committee | <input type="checkbox"/> Written employment contract |
| <input type="checkbox"/> Independent compensation consultant | <input checked="" type="checkbox"/> Compensation survey or study |
| <input type="checkbox"/> Form 990 of other organizations | <input checked="" type="checkbox"/> Approval by the board or compensation committee |

4 During the year, did any person listed on Form 990, Part VII, Section A, line 1a, with respect to the filing organization or a related organization:

- a** Receive a severance payment or change-of-control payment?
- b** Participate in, or receive payment from, a supplemental nonqualified retirement plan?
- c** Participate in, or receive payment from, an equity-based compensation arrangement?
- If "Yes" to any of lines 4a-c, list the persons and provide the applicable amounts for each item in Part III.

Only section 501(c)(3), 501(c)(4), and 501(c)(29) organizations must complete lines 5-9.

5 For persons listed on Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation contingent on the revenues of:

- a** The organization?
- b** Any related organization?
- If "Yes" on line 5a or 5b, describe in Part III.

6 For persons listed on Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation contingent on the net earnings of:

- a** The organization?
- b** Any related organization?
- If "Yes" on line 6a or 6b, describe in Part III.

7 For persons listed on Form 990, Part VII, Section A, line 1a, did the organization provide any nonfixed payments not described on lines 5 and 6? If "Yes," describe in Part III

8 Were any amounts reported on Form 990, Part VII, paid or accrued pursuant to a contract that was subject to the initial contract exception described in Regulations section 53.4958-4(a)(3)? If "Yes," describe in Part III

9 If "Yes" on line 8, did the organization also follow the rebuttable presumption procedure described in Regulations section 53.4958-6(c)?

	Yes	No
1b	X	
2	X	
4a		X
4b		X
4c		X
5a		X
5b		X
6a		X
6b		X
7		X
8		X
9		

LHA For Paperwork Reduction Act Notice, see the Instructions for Form 990.

Schedule J (Form 990) 2018

Part II Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees. Use duplicate copies if additional space is needed.

For each individual whose compensation must be reported on Schedule J, report compensation from the organization on row (i) and from related organizations, described in the instructions, on row (ii). Do not list any individuals that aren't listed on Form 990, Part VII.

Note: The sum of columns (B)(i)-(iii) for each listed individual must equal the total amount of Form 990, Part VII, Section A, line 1a, applicable column (D) and (E) amounts for that individual.

(A) Name and Title		(B) Breakdown of W-2 and/or 1099-MISC compensation			(C) Retirement and other deferred compensation	(D) Nontaxable benefits	(E) Total of columns (B)(i)-(D)	(F) Compensation in column (B) reported as deferred on prior Form 990
		(i) Base compensation	(ii) Bonus & incentive compensation	(iii) Other reportable compensation				
(1) HALL, JEFFREY C. DIRECTOR	(i)	151,137.	0.	6,000.	8,050.	9,344.	174,531.	0.
	(ii)	0.	0.	0.	0.	0.	0.	0.
(2) HUNTER, DIEDRE ASTRONOMER	(i)	142,455.	0.	0.	7,363.	10,246.	160,064.	0.
	(ii)	0.	0.	0.	0.	0.	0.	0.
(3) MASSEY, PHILIP ASTRONOMER	(i)	151,139.	0.	0.	7,463.	8,932.	167,534.	0.
	(ii)	0.	0.	0.	0.	0.	0.	0.
(4) SCHLEICHER, DAVID ASTRONOMER	(i)	147,512.	0.	0.	7,463.	8,615.	163,590.	0.
	(ii)	0.	0.	0.	0.	0.	0.	0.
(5) ACTOR, ANNE T. DEPUTY DIRECTOR FOR DEVELOPMENT	(i)	142,931.	0.	0.	7,275.	8,566.	158,772.	0.
	(ii)	0.	0.	0.	0.	0.	0.	0.
(6) WEST, MICHAEL DEPUTY DIRECTOR FOR SCIENCE	(i)	146,492.	0.	0.	7,300.	925.	154,717.	0.
	(ii)	0.	0.	0.	0.	0.	0.	0.
	(i)							
	(ii)							
	(i)							
	(ii)							
	(i)							
	(ii)							
	(i)							
	(ii)							
	(i)							
	(ii)							
	(i)							
	(ii)							
	(i)							
	(ii)							

Part III Supplemental Information

Provide the information, explanation, or descriptions required for Part I, lines 1a, 1b, 3, 4a, 4b, 4c, 5a, 5b, 6a, 6b, 7, and 8, and for Part II. Also complete this part for any additional information.

PART I, LINE 1A:

J. HALL, DIRECTOR AND G. JACOBY, DEPUTY DIRECTOR OF TECHNOLOGY STAYED IN HOUSES OWNED BY LOWELL OBSERVATORY. THEIR STAYS WERE TREATED AS HOUSING ALLOWANCES AND WERE INCLUDED AS A TAXABLE BENEFIT TO EACH.

**SCHEDULE M
(Form 990)**

Noncash Contributions

OMB No. 1545-0047

2018

Open to Public Inspection

Department of the Treasury
Internal Revenue Service

- ▶ Complete if the organizations answered "Yes" on Form 990, Part IV, lines 29 or 30.
- ▶ Attach to Form 990.
- ▶ Go to www.irs.gov/Form990 for instructions and the latest information.

Name of the organization **LOWELL OBSERVATORY** Employer identification number **86-0098918**

Part I Types of Property

	(a) Check if applicable	(b) Number of contributions or items contributed	(c) Noncash contribution amounts reported on Form 990, Part VIII, line 1g	(d) Method of determining noncash contribution amounts
1 Art - Works of art				
2 Art - Historical treasures				
3 Art - Fractional interests				
4 Books and publications				
5 Clothing and household goods				
6 Cars and other vehicles				
7 Boats and planes				
8 Intellectual property				
9 Securities - Publicly traded	X	9	212,280.	TRANSACTION VALUE
10 Securities - Closely held stock				
11 Securities - Partnership, LLC, or trust interests				
12 Securities - Miscellaneous				
13 Qualified conservation contribution - Historic structures				
14 Qualified conservation contribution - Other				
15 Real estate - Residential				
16 Real estate - Commercial				
17 Real estate - Other				
18 Collectibles				
19 Food inventory				
20 Drugs and medical supplies				
21 Taxidermy				
22 Historical artifacts				
23 Scientific specimens				
24 Archeological artifacts				
25 Other ▶ (DINNER & BEVE)	X	2	4,505.	DONOR VALUED
26 Other ▶ (PRINTING)	X	1	2,500.	DONOR VALUED
27 Other ▶ (TELESCOPE PAR)	X	2	2,199.	DONOR VALUED
28 Other ▶ (LIBRARY SUPPL)	X	1	71.	DONOR VALUED

29 Number of Forms 8283 received by the organization during the tax year for contributions for which the organization completed Form 8283, Part IV, Donee Acknowledgement **29**

	Yes	No
30a During the year, did the organization receive by contribution any property reported in Part I, lines 1 through 28, that it must hold for at least three years from the date of the initial contribution, and which isn't required to be used for exempt purposes for the entire holding period?		X
b If "Yes," describe the arrangement in Part II.		
31 Does the organization have a gift acceptance policy that requires the review of any nonstandard contributions?	X	
32a Does the organization hire or use third parties or related organizations to solicit, process, or sell noncash contributions?	X	
b If "Yes," describe in Part II.		
33 If the organization didn't report an amount in column (c) for a type of property for which column (a) is checked, describe in Part II.		

LHA For Paperwork Reduction Act Notice, see the Instructions for Form 990.

Schedule M (Form 990) 2018

Part II **Supplemental Information.** Provide the information required by Part I, lines 30b, 32b, and 33, and whether the organization is reporting in Part I, column (b), the number of contributions, the number of items received, or a combination of both. Also complete this part for any additional information.

SCHEDULE M, PART I, COLUMN (B):

THE AMOUNT IN COLUMN B REPRESENTS THE NUMBER OF INSTANCES THAT A DONATION OCCURED.

SCHEDULE M, LINE 32B:

PUBLICLY TRADED SECURITIES ARE DEPOSITED INTO AN INVESTMENT ACCOUNT OWNED BY THE OBSERVATORY. THE SECURITIES ARE SOLD BY A BROKER SHORTLY AFTER.

SCHEDULE O
(Form 990 or 990-EZ)

Department of the Treasury
Internal Revenue Service

Supplemental Information to Form 990 or 990-EZ

Complete to provide information for responses to specific questions on
Form 990 or 990-EZ or to provide any additional information.

▶ Attach to Form 990 or 990-EZ.

▶ Go to www.irs.gov/Form990 for the latest information.

OMB No. 1545-0047

2018

Open to Public
Inspection

Name of the organization

LOWELL OBSERVATORY

Employer identification number

86-0098918

FORM 990, PART III, LINE 4A, PROGRAM SERVICE ACCOMPLISHMENTS:

UNIVERSITY, UNIVERSITY OF MARYLAND, UNIVERSITY OF TEXAS, UNIVERSITY OF TOLEDO AND YALE UNIVERSITY). WORLD-LEADING INFRARED SPECTROGRAPH IGRINS CAME TO DCT FOR ITS FINAL RUN UNDER THE CURRENT AGREEMENT; THE INSTRUMENT HAS BEEN A GREAT SUCCESS ON THE DCT AND VERY POPULAR AMONGST OUR PARTNERS. OBSERVATIONS USING IGRINS HAVE FOCUSED ON PLANET-FORMING SYSTEMS AND BROWN DRAWS. THE HIGH-RESOLUTION, HIGH-PRECISION SPECTROGRAPH EXPRES FINISHED ON-TELESCOPE COMMISSIONING IN 2018 AND BEGAN COLLECTING SCIENCE DATA AT THE REQUIRED PRECISION LATE IN THE YEAR. YALE CURRENTLY REPORTS A RADIAL VELOCITY PRECISION OF <10 CM/S. WITH FUNDING SECURED BY LOWELL ASTRONOMER GERARD VAN BELLE, LOWELL PURCHASED AND BEGAN TO INSTALL THREE 1-METER CLASS TELESCOPES AT THE NAVAL PRECISION OPTICAL INTERFEROMETER (NPOI) ON ANDERSON MESA. THESE TELESCOPES WILL VASTLY IMPROVE THE CAPABILITIES OF NPOI, INCREASING THE NUMBER OF OBJECTS OBSERVABLE FROM THAT SITE BY A FACTOR OF SEVERAL HUNDRED. NPOI, THE WORLD'S LONGEST BASELINE OPTICAL INTERFEROMETER, IS OPERATED BY LOWELL OBSERVATORY ON A SEVERAL NIGHT A WEEK BASIS IN PARTNERSHIP WITH THE UNITED STATES NAVAL OBSERVATORY (USNO) AND THE NAVAL RESEARCH LABORATORY (NRL).

FORM 990, PART III, LINE 4B, PROGRAM SERVICE ACCOMPLISHMENTS:

UNIVERSITY. SCHOLARSHIPS WERE AWARDED TO 70 CHILDREN FROM LOW-INCOME FAMILIES AND MORE THAN 100 CHILDREN PARTICIPATED IN LOCKS FOR FREE THROUGH OUR PARTNERSHIP WITH THE FLAGSTAFF FAMILY FOOD CENTER. PARTICIPANTS IN LOCKS SUMMER CAMP PROGRAMS SHOWED AN AVERAGE IMPROVEMENT OF ONE GRADE LEVEL BETWEEN PRE- AND POST-SURVEYS. LOWELL

LHA For Paperwork Reduction Act Notice, see the Instructions for Form 990 or 990-EZ.

Schedule O (Form 990 or 990-EZ) (2018)

832211 10-10-18

Name of the organization LOWELL OBSERVATORY	Employer identification number 86-0098918
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ASTRONOMERS AND EDUCATORS VISITED SEVERAL NAVAJO AND HOPI CLASSROOMS THROUGHOUT THE SCHOOL YEAR TO LEAD ASTRONOMY LESSONS AND HOST STAR PARTIES. THESE PARTNERSHIPS WERE MANAGED THROUGH THE OBSERVATORY'S LONG-RUNNING NATIVE AMERICAN ASTRONOMY OUTREACH PROGRAM.

FORM 990, PART VI, SECTION B, LINE 11B:

THE FORM 990 DRAFT WILL BE FIRST REVIEWED BY THE DEPUTY DIRECTORY FOR ADMINISTRATION (DDA) FOR ACCURACY. ONCE IT HAS BEEN DEEMED ACCURATE BY THE DDA IT WILL BE FORWARDED TO THE SOLE TRUSTEE, DIRECTOR AND AUDIT COMMITTEE FOR THEIR REVIEW AND COMMENTS. AFTER ANY QUESTIONS AND COMMENTS HAVE BEEN ADDRESSED IT WILL BE APPROVED AND A FINAL COPY WILL BE SIGNED AND FILED BY THE DDA.

FORM 990, PART VI, SECTION B, LINE 12C:

THE ORGANIZATION CONDUCTS WEEKLY REVIEWS OF PAYABLES INCLUDING POTENTIAL CONFLICTS OF INTEREST AND FOLLOW-UP OCCURS TO ENFORCE COMPLIANCE WITH THE COMPANY POLICY.

FORM 990, PART VI, SECTION B, LINE 15A:

COMPENSATION OF THE DIRECTOR FOR LOWELL OBSERVATORY IS DETERMINED BY THE SOLE TRUSTEE OF THE CORPORATION AFTER REVIEW OF INFORMATION PROVIDED BY THE HUMAN RESOURCE ADMINISTRATOR AND MEMBERS OF THE ADVISORY BOARD WHO ARE OR HAVE BEEN MEMBERS OF THE SCIENTIFIC BUSINESS COMMUNITY. THE HUMAN RESOURCE ADMINISTRATOR REVIEWS THE TOTAL COMPENSATION OF THE DIRECTOR IN ACCORDANCE WITH REGULATIONS/GUIDELINES ESTABLISHED BY THE IRS AND INDUSTRY BEST PRACTICES. DATA REGARDING SALARIES OF OTHER DIRECTORS (CEOS) AT ORGANIZATIONS OF SIMILAR SIZE, INCLUDING BOTH NON-PROFIT AND FOR-PROFIT COMPANIES IS ALSO REVIEWED. THE SOLE TRUSTEE, WITH ADVICE FROM THE

Name of the organization LOWELL OBSERVATORY	Employer identification number 86-0098918
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ADVISORY BOARD, ALSO ESTABLISHES GOALS AND OBJECTIVES FOR THE DIRECTOR AND EVALUATES THE PERFORMANCE OF THE DIRECTOR BASED ON THE PRIOR YEAR'S GOALS AND OBJECTIVES.

FORM 990, PART VI, SECTION C, LINE 19:

WHEN REQUESTED, DOCUMENTS REGARDING THE OBSERVATORY ARE PROVIDED BY THE BUSINESS OFFICE. THE 990 AND AUDITED FINANCIAL STATEMENTS ARE AVAILABLE ON THE LOWELL OBSERVATORY WEBSITE. THE 990 IS ALSO AVAILABLE ON GUIDESTAR AND CHARITY NAVIGATOR. A SUMMARY OF THE CONSOLIDATED FINANCIAL STATEMENTS IS PUBLISHED ANNUALLY IN AN ANNUAL REPORT.

FORM 990, PART VIII, LINE 1F

DURING 2018, THE ORGANIZATION RECEIVED A DONOR COMMITMENT (THE COMMITMENT) FROM THE STEELE FOUNDATION (THE DONOR) IN THE AMOUNT OF \$250,000 FOR REPURPOSING OF THE STEELE VISITOR CENTER INTO THE STEELE LEARNING CENTER. THE DONOR HAS EXPRESSED THEIR FULL INTENT TO MEET THIS COMMITMENT IN A WRITTEN LETTER TO THE ORGANIZATION. THE COMMITMENT IS NOT CONSIDERED A LEGAL PROMISE TO GIVE AND THEREFORE NOT RECORDED AS A PROMISE TO GIVE NOR RECOGNIZED AS REVENUE AT DECEMBER 31, 2018.

Related Organizations and Unrelated Partnerships

▶ Complete if the organization answered "Yes" on Form 990, Part IV, line 33, 34, 35b, 36, or 37.
▶ Attach to Form 990.

▶ Go to www.irs.gov/Form990 for instructions and the latest information.

Name of the organization **LOWELL OBSERVATORY** Employer identification number **86-0098918**

Part I Identification of Disregarded Entities. Complete if the organization answered "Yes" on Form 990, Part IV, line 33.

(a) Name, address, and EIN (if applicable) of disregarded entity	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Total income	(e) End-of-year assets	(f) Direct controlling entity

Part II Identification of Related Tax-Exempt Organizations. Complete if the organization answered "Yes" on Form 990, Part IV, line 34, because it had one or more related tax-exempt organizations during the tax year.

(a) Name, address, and EIN of related organization	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Exempt Code section	(e) Public charity status (if section 501(c)(3))	(f) Direct controlling entity	(g) Section 512(b)(13) controlled entity?	
						Yes	No
PERCIVAL LOWELL TRUST UW - 04-2007327 1400 W MARS HILL ROAD FLAGSTAFF, AZ 86001	TRUST F/B/O LOWELL OBSERVATORY	ARIZONA	501(C)(3)	LINE 12B, II	LOWELL OBSERVATORY	X	
LOWELL OBSERVATORY FOUNDATION - 47-2052113 1400 W MARS HILL ROAD FLAGSTAFF, AZ 86001	FOUNDATION F/B/O LOWELL OBSERVATORY	ARIZONA	501(C)(3)	LINE 12B, II	N/A		X

Part III Identification of Related Organizations Taxable as a Partnership. Complete if the organization answered "Yes" on Form 990, Part IV, line 34, because it had one or more related organizations treated as a partnership during the tax year.

(a) Name, address, and EIN of related organization	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Direct controlling entity	(e) Predominant income (related, unrelated, excluded from tax under sections 512-514)	(f) Share of total income	(g) Share of end-of-year assets	(h) Disproportionate allocations?		(i) Code V-UBI amount in box 20 of Schedule K-1 (Form 1065)	(j) General or managing partner?		(k) Percentage ownership
							Yes	No		Yes	No	

Part IV Identification of Related Organizations Taxable as a Corporation or Trust. Complete if the organization answered "Yes" on Form 990, Part IV, line 34, because it had one or more related organizations treated as a corporation or trust during the tax year.

(a) Name, address, and EIN of related organization	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Direct controlling entity	(e) Type of entity (C corp, S corp, or trust)	(f) Share of total income	(g) Share of end-of-year assets	(h) Percentage ownership	(i) Section 512(b)(13) controlled entity?	
								Yes	No

Part V Transactions With Related Organizations. Complete if the organization answered "Yes" on Form 990, Part IV, line 34, 35b, or 36.

Note: Complete line 1 if any entity is listed in Parts II, III, or IV of this schedule.

1 During the tax year, did the organization engage in any of the following transactions with one or more related organizations listed in Parts II-IV?

	Yes	No
a Receipt of (i) interest, (ii) annuities, (iii) royalties, or (iv) rent from a controlled entity		X
b Gift, grant, or capital contribution to related organization(s)	X	
c Gift, grant, or capital contribution from related organization(s)	X	
d Loans or loan guarantees to or for related organization(s)	X	
e Loans or loan guarantees by related organization(s)	X	
f Dividends from related organization(s)		X
g Sale of assets to related organization(s)		X
h Purchase of assets from related organization(s)		X
i Exchange of assets with related organization(s)		X
j Lease of facilities, equipment, or other assets to related organization(s)		X
k Lease of facilities, equipment, or other assets from related organization(s)		X
l Performance of services or membership or fundraising solicitations for related organization(s)	X	
m Performance of services or membership or fundraising solicitations by related organization(s)		X
n Sharing of facilities, equipment, mailing lists, or other assets with related organization(s)	X	
o Sharing of paid employees with related organization(s)	X	
p Reimbursement paid to related organization(s) for expenses		X
q Reimbursement paid by related organization(s) for expenses	X	
r Other transfer of cash or property to related organization(s)		X
s Other transfer of cash or property from related organization(s)		X

2 If the answer to any of the above is "Yes," see the instructions for information on who must complete this line, including covered relationships and transaction thresholds.

(a) Name of related organization	(b) Transaction type (a-s)	(c) Amount involved	(d) Method of determining amount involved
(1) PERCIVAL LOWELL TRUST UW	D	3,514.	END OF YEAR BALANCE
(2) PERCIVAL LOWELL TRUST UW	E	750,000.	END OF YEAR BALANCE
(3) PERCIVAL LOWELL TRUST UW	C	5,400,000.	CASH VALUE
(4) LOWELL OBSERVATORY FOUNDATION	B	170,998.	CASH VALUE
(5) LOWELL OBSERVATORY FOUNDATION	C	171,529.	CASH VALUE
(6)			

Part VII Supplemental Information.

Provide additional information for responses to questions on Schedule R. See instructions.

Multiple horizontal lines for providing supplemental information.