

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

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

**A For the 2019 calendar year, or tax year beginning and ending**

<b>B</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	<b>C Name of organization</b> <b>LOWELL OBSERVATORY</b> Doing business as Number and street (or P.O. box if mail is not delivered to street address) Room/suite <b>1400 W. MARS HILL ROAD</b> City or town, state or province, country, and ZIP or foreign postal code <b>FLAGSTAFF, AZ 86001-4470</b>	<b>D Employer identification number</b> <b>86-0098918</b>
	<b>F Name and address of principal officer:</b> <b>JEFF HALL</b> <b>SAME AS C ABOVE</b>	<b>E Telephone number</b> <b>928-774-3358</b>
<b>I Tax-exempt status:</b> <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		<b>G Gross receipts \$</b> <b>29,990,303.</b>
<b>J Website:</b> ▶ <b>WWW.LOWELL.EDU</b>		<b>H(a) Is this a group return for subordinates?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>H(b) Are all subordinates included?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If "No," attach a list. (see instructions)
<b>K Form of organization:</b> <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Trust <input type="checkbox"/> Association <input type="checkbox"/> Other ▶		<b>H(c) Group exemption number</b> ▶
<b>L Year of formation:</b> <b>1946</b>		<b>M State of legal domicile:</b> <b>AZ</b>

<b>Part I Summary</b>			
<b>1</b>	Briefly describe the organization's mission or most significant activities: <b>LOWELL'S MISSION IS TO PURSUE THE STUDY OF ASTRONOMY</b>		
<b>2</b>	Check this box <input type="checkbox"/> if the organization discontinued its operations or disposed of more than 25% of its net assets.		
<b>Activities &amp; Governance</b>	<b>3</b> Number of voting members of the governing body (Part VI, line 1a) .....	<b>3</b>	<b>1</b>
	<b>4</b> Number of independent voting members of the governing body (Part VI, line 1b) .....	<b>4</b>	<b>0</b>
	<b>5</b> Total number of individuals employed in calendar year 2019 (Part V, line 2a) .....	<b>5</b>	<b>183</b>
	<b>6</b> Total number of volunteers (estimate if necessary) .....	<b>6</b>	<b>94</b>
	<b>7a</b> Total unrelated business revenue from Part VIII, column (C), line 12 .....	<b>7a</b>	<b>0.</b>
	<b>b</b> Net unrelated business taxable income from Form 990-T, line 39 .....	<b>7b</b>	<b>0.</b>
<b>Revenue</b>	<b>8</b> Contributions and grants (Part VIII, line 1h) .....	<b>Prior Year</b>	<b>Current Year</b>
	<b>9</b> Program service revenue (Part VIII, line 2g) .....	<b>11,300,815.</b>	<b>22,432,053.</b>
	<b>10</b> Investment income (Part VIII, column (A), lines 3, 4, and 7d) .....	<b>4,994,781.</b>	<b>4,273,398.</b>
	<b>11</b> Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e) .....	<b>143,345.</b>	<b>2,074,969.</b>
	<b>12</b> Total revenue - add lines 8 through 11 (must equal Part VIII, column (A), line 12) .....	<b>358,358.</b>	<b>441,100.</b>
<b>Expenses</b>	<b>13</b> Grants and similar amounts paid (Part IX, column (A), lines 1-3) .....	<b>16,797,299.</b>	<b>29,221,520.</b>
	<b>14</b> Benefits paid to or for members (Part IX, column (A), line 4) .....	<b>744,082.</b>	<b>819,057.</b>
	<b>15</b> Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10) .....	<b>0.</b>	<b>0.</b>
	<b>16a</b> Professional fundraising fees (Part IX, column (A), line 11e) .....	<b>7,190,579.</b>	<b>7,869,184.</b>
	<b>b</b> Total fundraising expenses (Part IX, column (D), line 25) ▶ <b>1,199,361.</b>	<b>0.</b>	<b>0.</b>
	<b>17</b> Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e) .....	<b>4,894,757.</b>	<b>5,658,676.</b>
	<b>18</b> Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25) .....	<b>12,829,418.</b>	<b>14,346,917.</b>
	<b>19</b> Revenue less expenses. Subtract line 18 from line 12 .....	<b>3,967,881.</b>	<b>14,874,603.</b>
<b>Net Assets or Fund Balances</b>	<b>20</b> Total assets (Part X, line 16) .....	<b>Beginning of Current Year</b>	<b>End of Year</b>
	<b>21</b> Total liabilities (Part X, line 26) .....	<b>48,062,648.</b>	<b>65,145,325.</b>
	<b>22</b> Net assets or fund balances. Subtract line 21 from line 20 .....	<b>16,568,732.</b>	<b>20,739,131.</b>
		<b>31,493,916.</b>	<b>44,406,194.</b>

**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.

<b>Sign Here</b>	▶ Signature of officer <b>ANNE LABRUZZO, DEPUTY DIRECTOR OF ADMIN.</b> Type or print name and title	Date
<b>Paid Preparer Use Only</b>	Print/Type preparer's name <b>KELLY L. MELTZER, CPA</b>	Preparer's signature <b>KELLY L. MELTZER, CP</b>
	Firm's name ▶ <b>BEACHFLEISCHMAN PC</b>	Date <b>06/24/20</b>
	Firm's address ▶ <b>1985 E. RIVER ROAD, SUITE 201 TUCSON, AZ 85718</b>	Check if self-employed <input type="checkbox"/> PTIN <b>P00633511</b>
		Firm's EIN ▶ <b>86-0683059</b>
		Phone no. <b>520-321-4600</b>

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 \$ 9,193,463. including grants of \$ 819,057. ) (Revenue \$ 3,208,190. )
CONTINUING A 125-YEAR-LONG LEGACY OF ASTRONOMICAL DISCOVERY, LOWELL OBSERVATORY ASTRONOMERS CONDUCTED FOREFRONT RESEARCH IN ALL AREAS OF ASTRONOMY, INCLUDING STUDIES OF THE SUN, SOLAR SYSTEM, STARS, EXOPLANETS, GALAXIES, AND COSMOLOGY. IN 2019, LOWELL ASTRONOMERS PUBLISHED MORE THAN 72 PAPERS IN LEADING SCIENTIFIC JOURNALS, PARTICIPATED REGULARLY IN MAJOR SCIENTIFIC MISSIONS, USED MAJOR TELESCOPES AROUND THE WORLD AND IN SPACE, AND WERE ACTIVE IN PUBLIC OUTREACH. LOWELL ASTRONOMERS CONTINUE TO BE VERY SUCCESSFUL AT OBTAINING GRANTS IN SUPPORT OF THEIR RESEARCH FROM NASA, THE NATIONAL SCIENCE FOUNDATION, AND OTHER AGENCIES. THE 4.3-METER LOWELL DISCOVERY TELESCOPE (LDT) DELIVERED 300 SCIENCE NIGHTS IN 2019 TO ASTRONOMERS FROM OUR OWN STAFF AND FROM OUR PARTNER INSTITUTIONS (CURRENT PARTNERS

4b (Code: ) (Expenses \$ 2,366,707. including grants of \$ ) (Revenue \$ 1,506,308. )
THE YEAR 2019 MARKED THE 125TH ANNIVERSARY OF LOWELL OBSERVATORY, WHOSE PUBLIC EDUCATION PROGRAMS WELCOMED MORE THAN 100,000 GUESTS FROM AROUND THE WORLD. GUESTS ENJOYED HISTORICAL TOURS OF THE CAMPUS AND SOLAR VIEWING DURING THE DAY AND WERE AWED BY ASTRONOMY-THEMED PRESENTATIONS AND TELESCOPE VIEWING DURING THE EVENING. THE GIOVALE OPEN DECK OBSERVATORY, A NEW STATE-OF-THE-ART PUBLIC OBSERVING PLAZA EQUIPPED WITH SIX ADVANCED TELESCOPES, OPENED TO THE PUBLIC ON SATURDAY, OCTOBER 6, 2019. SOME 1,800 VISITORS PARTICIPATED IN THE FESTIVITIES THAT DAY, SETTING THE RECORD FOR ONE-DAY ATTENDANCE. THE OBSERVATORY ALSO HOSTED SEVERAL HIGH-PROFILE EVENTS RELATED TO THE 50TH ANNIVERSARY OF THE APOLLO MOON LANDING AS PART OF FLAGSTAFF'S LUNAR LEGACY CAMPAIGN, WHICH GARNERED MULTIPLE AWARDS. LOWELL OBSERVATORY CAMPS FOR KIDS (LOCKS)

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

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

4e Total program service expenses 11,560,170.

Part IV Checklist of Required Schedules

Table with 3 columns: Question ID, Yes, No. Rows include questions 1 through 21 regarding organizational requirements and financial 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-1c regarding Form 1096 and backup withholding rules.



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

Table with columns for question number, question text, and Yes/No columns. Includes questions 2a through 16 regarding employee counts, tax returns, unrelated business income, foreign accounts, prohibited transactions, and charitable contributions.

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

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

**Section A. Governing Body and Management**

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

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

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

**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.  
 Own website     Another's website     Upon request     Other (explain on Schedule O)
- 19** Describe on Schedule O whether (and if so, how) the organization made its governing documents, conflict of interest policy, and financial statements available to the public during the tax year.
- 20** State the name, address, and telephone number of the person who possesses the organization's books and records **▶**  
**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. See instructions for the order in which to list the persons above.

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

(A) Name and title	(B) Average hours per week (list any hours for related organizations below 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			71.	0.	8,567.	
(2) HALL, JEFFREY C. DIRECTOR	40.00			X			186,611.	0.	17,858.	
(3) LABRUZZO, ANNE DEPUTY DIRECTOR FOR ADMINISTRATION	36.00 4.00			X			139,113.	0.	17,045.	
(4) SCHLEICHER, DAVID ASTRONOMER	40.00				X		151,552.	0.	16,407.	
(5) MASSEY, PHILIP ASTRONOMER	40.00				X		155,163.	0.	16,723.	
(6) HUNTER, DEIDRE ASTRONOMER	40.00				X		146,279.	0.	17,814.	
(7) WEST, MICHAEL DEPUTY DIRECTOR FOR SCIENCE	40.00				X		150,949.	0.	8,584.	
(8) ACTOR, ANNE T. DEPUTY DIRECTOR FOR DEVELOPMENT	38.00 2.00				X		147,724.	0.	16,300.	

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

(A) Name and title	(B) Average hours per week (list any hours for related organizations below 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			
<b>1b Subtotal</b>							1,077,462.	0.	119,298.	
<b>c Total from continuation sheets to Part VII, Section A</b>							0.	0.	0.	
<b>d Total (add lines 1b and 1c)</b>							1,077,462.	0.	119,298.	

**2** Total number of individuals (including but not limited to those listed above) who received more than \$100,000 of reportable compensation from the organization **18**

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

**Section B. Independent Contractors**

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

(A) Name and business address	(B) Description of services	(C) Compensation
BUILDING & ENGINEERING CONTRACTORS SOUTHWEST P.O. BOX 30458, FLAGSTAFF, AZ 86003	CONSTRUCTION	3,260,523.
JOHNSON WALZER ASSOCIATES, LLC, 17 N. SAN FRANCISCO STREET, STE 3A, FLAGSTAFF, AZ	CONSTRUCTION	243,925.
TWILIGHT JANITORIAL SERVICE, INC., 506 N. GRANT STREET, STE D, FLAGSTAFF, AZ 86004	JANITORIAL SERVICES	120,059.

**2** Total number of independent contractors (including but not limited to those listed above) who received more than \$100,000 of compensation from the organization **3**



**Part VIII Statement of Revenue**

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

			(A)	(B)	(C)	(D)	
			Total revenue	Related or exempt function revenue	Unrelated business revenue	Revenue excluded from tax under sections 512 - 514	
<b>Contributions, Gifts, Grants and Other Similar Amounts</b>	<b>1 a</b> Federated campaigns	<b>1a</b>					
	<b>b</b> Membership dues	<b>1b</b>	339,265.				
	<b>c</b> Fundraising events	<b>1c</b>					
	<b>d</b> Related organizations	<b>1d</b>	1,010,255.				
	<b>e</b> Government grants (contributions)	<b>1e</b>	2,567,102.				
	<b>f</b> All other contributions, gifts, grants, and similar amounts not included above	<b>1f</b>	18,515,431.				
	<b>g</b> Noncash contributions included in lines 1a-1f	<b>1g</b>	\$ 2,430,629.				
	<b>h Total.</b> Add lines 1a-1f		22,432,053.				
<b>Program Service Revenue</b>	<b>2 a</b> TELESCOPE ACCESS FEES	<b>Business Code</b>	541700	2,376,660.	2,376,660.		
	<b>b</b> EDUCATIONAL PROGRAMS		611600	1,187,696.	1,187,696.		
	<b>c</b> RESEARCH - GOVERNMENT CONTRACTS		541700	709,042.	709,042.		
	<b>d</b>						
	<b>e</b>						
	<b>f</b> All other program service revenue						
	<b>g Total.</b> Add lines 2a-2f			4,273,398.			
<b>Other Revenue</b>	<b>3</b> Investment income (including dividends, interest, and other similar amounts)			9,825.		9,825.	
	<b>4</b> Income from investment of tax-exempt bond proceeds						
	<b>5</b> Royalties						
	<b>6 a</b> Gross rents	<b>6a</b>	(i) Real				
			(ii) Personal				
	<b>b</b> Less: rental expenses	<b>6b</b>					
	<b>c</b> Rental income or (loss)	<b>6c</b>					
	<b>d</b> Net rental income or (loss)						
	<b>7 a</b> Gross amount from sales of assets other than inventory	<b>7a</b>	(i) Securities	2,449,779.	56,500.		
			(ii) Other				
				441,135.	0.		
				2,008,644.	56,500.		
	<b>b</b> Less: cost or other basis and sales expenses	<b>7b</b>					
<b>c</b> Gain or (loss)	<b>7c</b>						
<b>d</b> Net gain or (loss)			2,065,144.		2,065,144.		
<b>8 a</b> Gross income from fundraising events (not including \$ _____ of contributions reported on line 1c). See Part IV, line 18	<b>8a</b>						
<b>b</b> Less: direct expenses	<b>8b</b>						
<b>c</b> Net income or (loss) from fundraising events							
<b>9 a</b> Gross income from gaming activities. See Part IV, line 19	<b>9a</b>						
<b>b</b> Less: direct expenses	<b>9b</b>						
<b>c</b> Net income or (loss) from gaming activities							
<b>10 a</b> Gross sales of inventory, less returns and allowances	<b>10a</b>		646,260.				
			327,648.				
<b>b</b> Less: cost of goods sold	<b>10b</b>						
<b>c</b> Net income or (loss) from sales of inventory			318,612.	318,612.			
<b>Miscellaneous Revenue</b>	<b>11 a</b> MISCELLANEOUS INCOME	<b>Business Code</b>	900099	122,488.	122,488.		
	<b>b</b>						
	<b>c</b>						
	<b>d</b> All other revenue						
	<b>e Total.</b> Add lines 11a-11d			122,488.			
<b>12 Total revenue.</b> See instructions			29,221,520.	4,714,498.	0.	2,074,969.	

**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	819,057.	819,057.		
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	369,265.	62,628.	268,561.	38,076.
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	6,190,369.	4,908,282.	658,058.	624,029.
8 Pension plan accruals and contributions (include section 401(k) and 403(b) employer contributions)	272,423.	214,941.	31,505.	25,977.
9 Other employee benefits	573,718.	450,898.	67,186.	55,634.
10 Payroll taxes	463,409.	349,740.	69,424.	44,245.
11 Fees for services (nonemployees):				
a Management				
b Legal	20,581.	5,340.	15,241.	
c Accounting	48,760.		48,760.	
d Lobbying				
e Professional fundraising services. See Part IV, line 17				
f Investment management fees	970.		970.	
g Other. (If line 11g amount exceeds 10% of line 25, column (A) amount, list line 11g expenses on Sch O.)	174,847.	72,383.	67,640.	34,824.
12 Advertising and promotion	220,397.	155,027.		65,370.
13 Office expenses	493,084.	372,486.	55,226.	65,372.
14 Information technology	158,418.	52,706.	50,903.	54,809.
15 Royalties				
16 Occupancy	605,850.	575,353.	19,102.	11,395.
17 Travel	342,001.	239,974.	51,625.	50,402.
18 Payments of travel or entertainment expenses for any federal, state, or local public officials				
19 Conferences, conventions, and meetings	115,150.	24,731.	35,606.	54,813.
20 Interest	68,089.	68,089.		
21 Payments to affiliates				
22 Depreciation, depletion, and amortization	1,953,727.	1,898,164.	35,411.	20,152.
23 Insurance	327,971.	323,518.	3,278.	1,175.
24 Other expenses. Itemize expenses not covered above (List miscellaneous expenses on line 24e. If line 24e amount exceeds 10% of line 25, column (A) amount, list line 24e expenses on Schedule O.)				
a <b>INTERCOMPANY REIMBURSEM</b>	633,676.	633,676.		
b <b>REPAIRS AND MAINTENANCE</b>	157,223.	149,691.	6,130.	1,402.
c <b>TRAINING AND DEVELOPMEN</b>	115,606.	49,471.	63,333.	2,802.
d <b>DUES AND SUBSCRIPTIONS</b>	82,253.	57,862.	23,225.	1,166.
e All other expenses	140,073.	76,153.	16,202.	47,718.
25 <b>Total functional expenses.</b> Add lines 1 through 24e	14,346,917.	11,560,170.	1,587,386.	1,199,361.
26 <b>Joint costs.</b> 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) Beginning of year		(B) End of year
<b>Assets</b>	<b>1</b> Cash - non-interest-bearing .....	210,694.	<b>1</b>	133,267.
	<b>2</b> Savings and temporary cash investments .....	234,343.	<b>2</b>	1,929,990.
	<b>3</b> Pledges and grants receivable, net .....	2,060,984.	<b>3</b>	13,030,741.
	<b>4</b> Accounts receivable, net .....	6,986.	<b>4</b>	8,383.
	<b>5</b> Loans and other receivables from any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons .....		<b>5</b>	
	<b>6</b> Loans and other receivables from other disqualified persons (as defined under section 4958(f)(1)), and persons described in section 4958(c)(3)(B) .....		<b>6</b>	
	<b>7</b> Notes and loans receivable, net .....		<b>7</b>	
	<b>8</b> Inventories for sale or use .....	83,530.	<b>8</b>	92,423.
	<b>9</b> Prepaid expenses and deferred charges .....	153,267.	<b>9</b>	103,221.
	<b>10a</b> Land, buildings, and equipment: cost or other basis. Complete Part VI of Schedule D .....	<b>10a</b> 72,622,760.		
	<b>b</b> Less: accumulated depreciation .....	<b>10b</b> 24,266,154.	<b>10c</b>	48,356,606.
	<b>11</b> Investments - publicly traded securities .....	8,865.	<b>11</b>	1,005,946.
	<b>12</b> Investments - other securities. See Part IV, line 11 .....		<b>12</b>	
	<b>13</b> Investments - program-related. See Part IV, line 11 .....		<b>13</b>	
	<b>14</b> Intangible assets .....		<b>14</b>	60,736.
	<b>15</b> Other assets. See Part IV, line 11 .....	425,986.	<b>15</b>	424,012.
<b>16 Total assets.</b> Add lines 1 through 15 (must equal line 33) .....	48,062,648.	<b>16</b>	65,145,325.	
<b>Liabilities</b>	<b>17</b> Accounts payable and accrued expenses .....	488,667.	<b>17</b>	428,132.
	<b>18</b> Grants payable .....		<b>18</b>	
	<b>19</b> Deferred revenue .....	7,847,278.	<b>19</b>	7,514,979.
	<b>20</b> Tax-exempt bond liabilities .....		<b>20</b>	
	<b>21</b> Escrow or custodial account liability. Complete Part IV of Schedule D .....		<b>21</b>	
	<b>22</b> Loans and other payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons .....		<b>22</b>	
	<b>23</b> Secured mortgages and notes payable to unrelated third parties .....	7,482,787.	<b>23</b>	2,595,000.
	<b>24</b> Unsecured notes and loans payable to unrelated third parties .....		<b>24</b>	
	<b>25</b> 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.	<b>25</b>	10,201,020.
	<b>26 Total liabilities.</b> Add lines 17 through 25 .....	16,568,732.	<b>26</b>	20,739,131.
<b>Net Assets or Fund Balances</b>	<b>Organizations that follow FASB ASC 958, check here</b> <input checked="" type="checkbox"/> <b>and complete lines 27, 28, 32, and 33.</b>			
	<b>27</b> Net assets without donor restrictions .....	27,968,589.	<b>27</b>	28,859,141.
	<b>28</b> Net assets with donor restrictions .....	3,525,327.	<b>28</b>	15,547,053.
	<b>Organizations that do not follow FASB ASC 958, check here</b> <input type="checkbox"/> <b>and complete lines 29 through 33.</b>			
	<b>29</b> Capital stock or trust principal, or current funds .....		<b>29</b>	
	<b>30</b> Paid-in or capital surplus, or land, building, or equipment fund .....		<b>30</b>	
	<b>31</b> Retained earnings, endowment, accumulated income, or other funds .....		<b>31</b>	
	<b>32</b> Total net assets or fund balances .....	31,493,916.	<b>32</b>	44,406,194.
	<b>33</b> Total liabilities and net assets/fund balances .....	48,062,648.	<b>33</b>	65,145,325.

**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	29,221,520.
2	Total expenses (must equal Part IX, column (A), line 25)	2	14,346,917.
3	Revenue less expenses. Subtract line 2 from line 1	3	14,874,603.
4	Net assets or fund balances at beginning of year (must equal Part X, line 32, column (A))	4	31,493,916.
5	Net unrealized gains (losses) on investments	5	-1,962,325.
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 on Schedule O)	9	0.
10	Net assets or fund balances at end of year. Combine lines 3 through 9 (must equal Part X, line 32, column (B))	10	44,406,194.

**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 on 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 on Schedule O and describe any steps taken to undergo such audits _____	X	

Form 990 (2019)

**SCHEDULE A**  
**(Form 990 or 990-EZ)**

Department of the Treasury  
Internal Revenue Service

**Public Charity Status and Public Support**

Complete if the organization is a section 501(c)(3) organization or a section 4947(a)(1) nonexempt charitable trust.  
▶ Attach to Form 990 or Form 990-EZ.

▶ Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for instructions and the latest information.

OMB No. 1545-0047

**2019**

Open to Public Inspection

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

**Part I Reason for Public Charity Status** (All organizations must complete this part.) See instructions.

The organization is not a private foundation because it is: (For lines 1 through 12, check only one box.)

- 1  A church, convention of churches, or association of churches described in **section 170(b)(1)(A)(i)**.
- 2  A school described in **section 170(b)(1)(A)(ii)**. (Attach Schedule E (Form 990 or 990-EZ).)
- 3  A hospital or a cooperative hospital service organization described in **section 170(b)(1)(A)(iii)**.
- 4  A medical research organization operated in conjunction with a hospital described in **section 170(b)(1)(A)(iii)**. Enter the hospital's name, city, and state: \_\_\_\_\_
- 5  An organization operated for the benefit of a college or university owned or operated by a governmental unit described in **section 170(b)(1)(A)(iv)**. (Complete Part II.)
- 6  A federal, state, or local government or governmental unit described in **section 170(b)(1)(A)(v)**.
- 7  An organization that normally receives a substantial part of its support from a governmental unit or from the general public described in **section 170(b)(1)(A)(vi)**. (Complete Part II.)
- 8  A community trust described in **section 170(b)(1)(A)(vi)**. (Complete Part II.)
- 9  An agricultural research organization described in **section 170(b)(1)(A)(ix)** operated in conjunction with a land-grant college or university or a non-land-grant college of agriculture (see instructions). Enter the name, city, and state of the college or university: \_\_\_\_\_
- 10  An organization that normally receives: (1) more than 33 1/3% of its support from contributions, membership fees, and gross receipts from activities related to its exempt functions - subject to certain exceptions, and (2) no more than 33 1/3% of its support from gross investment income and unrelated business taxable income (less section 511 tax) from businesses acquired by the organization after June 30, 1975. See **section 509(a)(2)**. (Complete Part III.)
- 11  An organization organized and operated exclusively to test for public safety. See **section 509(a)(4)**.
- 12  An organization organized and operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of one or more publicly supported organizations described in **section 509(a)(1)** or **section 509(a)(2)**. See **section 509(a)(3)**. Check the box in lines 12a through 12d that describes the type of supporting organization and complete lines 12e, 12f, and 12g.
  - a  **Type I.** A supporting organization operated, supervised, or controlled by its supported organization(s), typically by giving the supported organization(s) the power to regularly appoint or elect a majority of the directors or trustees of the supporting organization. **You must complete Part IV, Sections A and B.**
  - b  **Type II.** A supporting organization supervised or controlled in connection with its supported organization(s), by having control or management of the supporting organization vested in the same persons that control or manage the supported organization(s). **You must complete Part IV, Sections A and C.**
  - c  **Type III functionally integrated.** A supporting organization operated in connection with, and functionally integrated with, its supported organization(s) (see instructions). **You must complete Part IV, Sections A, D, and E.**
  - d  **Type III non-functionally integrated.** A supporting organization operated in connection with its supported organization(s) that is not functionally integrated. The organization generally must satisfy a distribution requirement and an attentiveness requirement (see instructions). **You must complete Part IV, Sections A and D, and Part V.**
  - e  Check this box if the organization received a written determination from the IRS that it is a Type I, Type II, Type III functionally integrated, or Type III non-functionally integrated supporting organization.
  - f Enter the number of supported organizations .....
  - g Provide the following information about the supported organization(s).

(i) Name of supported organization	(ii) EIN	(iii) Type of organization (described on lines 1-10 above (see instructions))	(iv) Is the organization listed in your governing document?		(v) Amount of monetary support (see instructions)	(vi) Amount of other support (see instructions)
			Yes	No		
<b>Total</b>						



**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) 2015	(b) 2016	(c) 2017	(d) 2018	(e) 2019	(f) Total
<b>1</b> Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.") .....	3,697,510.	7,675,056.	17,637,617.	11,300,816.	22,432,053.	62,743,052.
<b>2</b> Tax revenues levied for the organization's benefit and either paid to or expended on its behalf .....						
<b>3</b> The value of services or facilities furnished by a governmental unit to the organization without charge ...	118,000.	119,000.	120,000.	121,000.	122,000.	600,000.
<b>4 Total.</b> Add lines 1 through 3 .....	3,815,510.	7,794,056.	17,757,617.	11,421,816.	22,554,053.	63,343,052.
<b>5</b> 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) .....						15,992,027.
<b>6 Public support.</b> Subtract line 5 from line 4.						47,351,025.

**Section B. Total Support**

Calendar year (or fiscal year beginning in) ▶	(a) 2015	(b) 2016	(c) 2017	(d) 2018	(e) 2019	(f) Total
<b>7</b> Amounts from line 4 .....	3,815,510.	7,794,056.	17,757,617.	11,421,816.	22,554,053.	63,343,052.
<b>8</b> Gross income from interest, dividends, payments received on securities loans, rents, royalties, and income from similar sources ...	110,959.	37,614.	3,661.	2,268.	9,825.	164,327.
<b>9</b> Net income from unrelated business activities, whether or not the business is regularly carried on ...	39,509.	41,370.				80,879.
<b>10</b> Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.) .....						
<b>11 Total support.</b> Add lines 7 through 10						63,588,258.
<b>12</b> Gross receipts from related activities, etc. (see instructions) .....					12	22,903,517.
<b>13 First five years.</b> 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 <b>stop here</b> .....						<input type="checkbox"/>

**Section C. Computation of Public Support Percentage**

<b>14</b> Public support percentage for 2019 (line 6, column (f) divided by line 11, column (f)) .....	<b>14</b>	74.47 %
<b>15</b> Public support percentage from 2018 Schedule A, Part II, line 14 .....	<b>15</b>	91.94 %
<b>16a 33 1/3% support test - 2019.</b> If the organization did not check the box on line 13, and line 14 is 33 1/3% or more, check this box and <b>stop here.</b> The organization qualifies as a publicly supported organization .....		<input checked="" type="checkbox"/>
<b>b 33 1/3% support test - 2018.</b> 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 <b>stop here.</b> The organization qualifies as a publicly supported organization .....		<input type="checkbox"/>
<b>17a 10% -facts-and-circumstances test - 2019.</b> 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 <b>stop here.</b> 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>b 10% -facts-and-circumstances test - 2018.</b> 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 <b>stop here.</b> 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>18 Private foundation.</b> 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) 2015	(b) 2016	(c) 2017	(d) 2018	(e) 2019	(f) Total
<b>1</b> Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.") .....						
<b>2</b> 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 .....						
<b>3</b> Gross receipts from activities that are not an unrelated trade or business under section 513 .....						
<b>4</b> Tax revenues levied for the organization's benefit and either paid to or expended on its behalf .....						
<b>5</b> The value of services or facilities furnished by a governmental unit to the organization without charge .....						
<b>6 Total.</b> Add lines 1 through 5 .....						
<b>7a</b> Amounts included on lines 1, 2, and 3 received from disqualified persons .....						
<b>b</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 .....						
<b>c</b> Add lines 7a and 7b .....						
<b>8 Public support.</b> (Subtract line 7c from line 6.)						

**Section B. Total Support**

Calendar year (or fiscal year beginning in) ►	(a) 2015	(b) 2016	(c) 2017	(d) 2018	(e) 2019	(f) Total
<b>9</b> Amounts from line 6 .....						
<b>10a</b> Gross income from interest, dividends, payments received on securities loans, rents, royalties, and income from similar sources .....						
<b>b</b> Unrelated business taxable income (less section 511 taxes) from businesses acquired after June 30, 1975 .....						
<b>c</b> Add lines 10a and 10b .....						
<b>11</b> Net income from unrelated business activities not included in line 10b, whether or not the business is regularly carried on .....						
<b>12</b> Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.) .....						
<b>13 Total support.</b> (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**

<b>15</b> Public support percentage for 2019 (line 8, column (f), divided by line 13, column (f)) .....	<b>15</b>	%
<b>16</b> Public support percentage from 2018 Schedule A, Part III, line 15 .....	<b>16</b>	%

**Section D. Computation of Investment Income Percentage**

<b>17</b> Investment income percentage for 2019 (line 10c, column (f), divided by line 13, column (f)) .....	<b>17</b>	%
<b>18</b> Investment income percentage from 2018 Schedule A, Part III, line 17 .....	<b>18</b>	%

**19a 33 1/3% support tests - 2019.** 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 - 2018.** 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
<b>1</b> 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>		
<b>2</b> 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>		
<b>3a</b> 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>b</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>		
<b>c</b> 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>		
<b>4a</b> 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>b</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>		
<b>c</b> 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>		
<b>5a</b> 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>b Type I or Type II only.</b> Was any added or substituted supported organization part of a class already designated in the organization's organizing document?		
<b>c Substitutions only.</b> Was the substitution the result of an event beyond the organization's control?		
<b>6</b> 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>		
<b>7</b> 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>		
<b>8</b> 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>		
<b>9a</b> 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>b</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>		
<b>c</b> 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>		
<b>10a</b> 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>b</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
<b>11</b> Has the organization accepted a gift or contribution from any of the following persons?		
<b>a</b> 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>b</b> A family member of a person described in (a) above?		
<b>c</b> A 35% controlled entity of a person described in (a) or (b) above? If "Yes" to a, b, or c, provide detail in <b>Part VI</b> .		

**Section B. Type I Supporting Organizations**

	Yes	No
<b>1</b> 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 <b>Part VI</b> 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.		
<b>2</b> 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 <b>Part VI</b> 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
<b>1</b> 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 <b>Part VI</b> 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
<b>1</b> 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?		
<b>2</b> 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 <b>Part VI</b> how the organization maintained a close and continuous working relationship with the supported organization(s).		
<b>3</b> 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 <b>Part VI</b> the role the organization's supported organizations played in this regard.		

**Section E. Type III Functionally Integrated Supporting Organizations**

<b>1</b> Check the box next to the method that the organization used to satisfy the Integral Part Test during the year (see instructions).			
<b>a</b> <input type="checkbox"/> The organization satisfied the Activities Test. Complete <b>line 2</b> below.			
<b>b</b> <input type="checkbox"/> The organization is the parent of each of its supported organizations. Complete <b>line 3</b> below.			
<b>c</b> <input type="checkbox"/> The organization supported a governmental entity. Describe in <b>Part VI</b> how you supported a government entity (see instructions).			
<b>2</b> Activities Test. Answer (a) and (b) below.		Yes	No
<b>a</b> 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 <b>Part VI</b> 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>b</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 <b>Part VI</b> the reasons for the organization's position that its supported organization(s) would have engaged in these activities but for the organization's involvement.			
<b>3</b> Parent of Supported Organizations. Answer (a) and (b) below.			
<b>a</b> 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 <b>Part VI</b> .			
<b>b</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 <b>Part VI</b> 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.

<b>Section A - Adjusted Net Income</b>		(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	<b>Adjusted Net Income</b> (subtract lines 5, 6, and 7 from line 4)	8	

<b>Section B - Minimum Asset Amount</b>		(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	<b>Total</b> (add lines 1a, 1b, and 1c)	1d	
e	<b>Discount</b> claimed for blockage or other factors (explain in detail in <b>Part VI</b> ):		
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	<b>Minimum Asset Amount</b> (add line 7 to line 6)	8	

<b>Section C - Distributable Amount</b>			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	<b>Distributable Amount.</b> 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
<b>1</b> Amounts paid to supported organizations to accomplish exempt purposes	
<b>2</b> Amounts paid to perform activity that directly furthers exempt purposes of supported organizations, in excess of income from activity	
<b>3</b> Administrative expenses paid to accomplish exempt purposes of supported organizations	
<b>4</b> Amounts paid to acquire exempt-use assets	
<b>5</b> Qualified set-aside amounts (prior IRS approval required)	
<b>6</b> Other distributions (describe in <b>Part VI</b> ). See instructions.	
<b>7 Total annual distributions.</b> Add lines 1 through 6.	
<b>8</b> Distributions to attentive supported organizations to which the organization is responsive (provide details in <b>Part VI</b> ). See instructions.	
<b>9</b> Distributable amount for 2019 from Section C, line 6	
<b>10</b> Line 8 amount divided by line 9 amount	

Section E - Distribution Allocations (see instructions)	(i) Excess Distributions	(ii) Underdistributions Pre-2019	(iii) Distributable Amount for 2019
<b>1</b> Distributable amount for 2019 from Section C, line 6			
<b>2</b> Underdistributions, if any, for years prior to 2019 (reasonable cause required- explain in <b>Part VI</b> ). See instructions.			
<b>3</b> Excess distributions carryover, if any, to 2019			
<b>a</b> From 2014			
<b>b</b> From 2015			
<b>c</b> From 2016			
<b>d</b> From 2017			
<b>e</b> From 2018			
<b>f Total</b> of lines 3a through e			
<b>g</b> Applied to underdistributions of prior years			
<b>h</b> Applied to 2019 distributable amount			
<b>i</b> Carryover from 2014 not applied (see instructions)			
<b>j</b> Remainder. Subtract lines 3g, 3h, and 3i from 3f.			
<b>4</b> Distributions for 2019 from Section D, line 7: \$			
<b>a</b> Applied to underdistributions of prior years			
<b>b</b> Applied to 2019 distributable amount			
<b>c</b> Remainder. Subtract lines 4a and 4b from 4.			
<b>5</b> Remaining underdistributions for years prior to 2019, if any. Subtract lines 3g and 4a from line 2. For result greater than zero, explain in <b>Part VI</b> . See instructions.			
<b>6</b> Remaining underdistributions for 2019. Subtract lines 3h and 4b from line 1. For result greater than zero, explain in <b>Part VI</b> . See instructions.			
<b>7 Excess distributions carryover to 2020.</b> Add lines 3j and 4c.			
<b>8</b> Breakdown of line 7:			
<b>a</b> Excess from 2015			
<b>b</b> Excess from 2016			
<b>c</b> Excess from 2017			
<b>d</b> Excess from 2018			
<b>e</b> Excess from 2019			



**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](http://www.irs.gov/Form990) for the latest information.

OMB No. 1545-0047

**2019**

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, 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

Employer identification number

**LOWELL OBSERVATORY**

**86-0098918**

**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
1		\$ 500,000.	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
2		\$ 570,107.	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input checked="" type="checkbox"/> (Complete Part II for noncash contributions.)
3		\$ 13,991,000.	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
4		\$ 2,073,305.	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)
5		\$ 999,037.	Person <input type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input checked="" type="checkbox"/> (Complete Part II for noncash contributions.)
6		\$ 2,133,639.	Person <input checked="" type="checkbox"/> Payroll <input type="checkbox"/> Noncash <input type="checkbox"/> (Complete Part II for noncash contributions.)

Name of organization  <b>LOWELL OBSERVATORY</b>	Employer identification number  <b>86-0098918</b>
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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>709,042.</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.)
	<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  <b>LOWELL OBSERVATORY</b>	Employer identification number  <b>86-0098918</b>
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**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
2	34 SHARES OF MASTERCARD INC _____ _____ _____	\$ 10,107.	12/23/19
5	4900 SHARES BERKSHIRE HATHAWAY _____ _____ _____	\$ 999,037.	04/05/19
	_____ _____ _____	\$ _____	_____
	_____ _____ _____	\$ _____	_____
	_____ _____ _____	\$ _____	_____
	_____ _____ _____	\$ _____	_____

Name of organization <b>LOWELL OBSERVATORY</b>	Employer identification number <b>86-0098918</b>
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**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
<b>(e) Transfer of gift</b>			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
<b>(e) Transfer of gift</b>			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
<b>(e) Transfer of gift</b>			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
<b>(e) Transfer of gift</b>			
Transferee's name, address, and ZIP + 4		Relationship of transferor to transferee	
<b>(e) Transfer of gift</b>			
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](http://www.irs.gov/Form990) for instructions and the latest information.**

OMB No. 1545-0047

**2019**

**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 (for example, 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? .....

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)? .....

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 FASB 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 FASB 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 FASB 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) 2019

**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 make 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 program
  - 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	26,558,269.	33,571,683.	39,620,403.	37,221,789.	35,590,304.
b Contributions	709,421.	467,872.	1,476,056.	1,254,991.	2,282,857.
c Net investment earnings, gains, and losses	4,013,194.	-1,781,866.	4,372,359.	2,174,579.	-377,198.
d Grants or scholarships	163,237.	5,566,105.	11,732,526.	809,006.	168,834.
e Other expenditures for facilities and programs				94,516.	
f Administrative expenses	120,308.	133,315.	164,609.	127,434.	105,340.
g End of year balance	30,997,339.	26,558,269.	33,571,683.	39,620,403.	37,221,789.

- 2 Provide the estimated percentage of the current year end balance (line 1g, column (a)) held as:
- a Board designated or quasi-endowment  0.00 %
  - b Permanent endowment  19.07 %
  - c Term 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:
- |                             | Yes                                 | No                                  |
|-----------------------------|-------------------------------------|-------------------------------------|
| (i) Unrelated organizations |                                     | <input checked="" type="checkbox"/> |
| (ii) Related organizations  | <input checked="" type="checkbox"/> |                                     |
- 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		1,253,088.		1,253,088.
b Buildings		23,572,685.	5,868,711.	17,703,974.
c Leasehold improvements		4,143,823.	3,035,503.	1,108,320.
d Equipment		38,680,621.	14,456,829.	24,223,792.
e Other		4,972,543.	905,111.	4,067,432.
<b>Total.</b> Add lines 1a through 1e. (Column (d) must equal Form 990, Part X, column (B), line 10c.)				48,356,606.

**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)		
<b>Total.</b> (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)		
<b>Total.</b> (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)	
<b>Total.</b> (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	10,200,000.
(3) DUE TO LOWELL OBSERVATORY	
(4) FOUNDATION	1,020.
(5)	
(6)	
(7)	
(8)	
(9)	
<b>Total.</b> (Column (b) must equal Form 990, Part X, col. (B) line 25.) ▶	10,201,020.

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 FASB 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 shaded area for calculations.

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 shaded area for calculations.

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](http://www.irs.gov/Form990) for the latest information.

OMB No. 1545-0047

**2019**

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.

<b>1 (a)</b> Name and address of organization or government	<b>(b)</b> EIN	<b>(c)</b> IRC section (if applicable)	<b>(d)</b> Amount of cash grant	<b>(e)</b> Amount of non-cash assistance	<b>(f)</b> Method of valuation (book, FMV, appraisal, other)	<b>(g)</b> Description of non-cash assistance	<b>(h)</b> Purpose of grant or assistance
LOWELL OBSERVATORY FOUNDATION 1400 W. MARS HILL ROAD FLAGSTAFF, AZ 86001	47-2052113	501(C)(3)	12,374.	0.			TO FUND AN ENDOWMENT
LOWELL OBSERVATORY FOUNDATION 1400 W. MARS HILL ROAD FLAGSTAFF, AZ 86001	47-2052113	501(C)(3)	41,020.	0.			SUPPORT FOR OPERATIONS
PERCIVAL LOWELL TRUST 1400 W. MARS HILL ROAD FLAGSTAFF, AZ 86001	04-2007327	501(C)(3)	10,714.	0.			SUPPORT FOR OPERATIONS
MASSACHUSETTS INSTITUTE OF TECHNOLOGY - 77 MASSACHUSETTS AVENUE - CAMBRIDGE, MA 02139	04-2103594	501(C)(3)	38,911.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
NORTHERN ARIZONA UNIVERSITY P.O. BOX 4070 FLAGSTAFF, AZ 86011	74-2579628	STATE OF ARIZONA	338,482.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
NORTHERN ARIZONA UNIVERSITY P.O. BOX 4070 FLAGSTAFF, AZ 86011	74-2579628	STATE OF ARIZONA	78,732.	0.			NSF GRANT - SUBAWARD COLLABORATION RESEARCH

- 2** Enter total number of section 501(c)(3) and government organizations listed in the line 1 table ..... **9.**
- 3** Enter total number of other organizations listed in the line 1 table ..... **0.**

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

Schedule I (Form 990) (2019)

**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 P.O. BOX 4070 FLAGSTAFF, AZ 86011	74-2579628	STATE OF ARIZONA	32,235.	0.			DONOR FUNDS FOR PREDOCTORAL STUDENT SALARY
PLANETARY SCIENCE INSTITUTE 1700 E. FORT LOWELL, SUITE 106 TUCSON, AZ 85719	33-0175263	501(C)(3)	131,447.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
PURDUE UNIVERSITY 155 S. GRANT STREET WEST LAFAYETTE, IN 47907	35-6002041	501(C)(3)	9,980.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
UNIVERSITY OF MARYLAND - BALTIMORE COUNTY - 1000 HILLTOP CIRCLE - BALTIMORE, MD 21250	52-6002033	STATE OF MARYLAND	43,431.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
UNIVERSITY OF MARYLAND 1104 ATLANTIC BLDG COLLEGE PARK, MD 20742	52-6002033	STATE OF MARYLAND	59,308.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH
UNIVERSITY OF PITTSBURGH 123 UNIVERSITY PLACE, B21 PITTSBURGH, PA 15213	25-0965591	501(C)(3)	22,423.	0.			NASA GRANT - SUBAWARD COLLABORATION RESEARCH

**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

**2019**

Open to Public Inspection

Department of the Treasury  
Internal Revenue Service

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](http://www.irs.gov/Form990) for instructions and the latest information.

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

**Part I Questions Regarding Compensation**

	Yes	No
<b>1a</b> 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 type="checkbox"/> Travel for companions <input type="checkbox"/> Tax indemnification and gross-up payments <input type="checkbox"/> Discretionary spending account <input checked="" type="checkbox"/> Housing allowance or residence for personal use <input type="checkbox"/> Payments for business use of personal residence <input type="checkbox"/> Health or social club dues or initiation fees <input type="checkbox"/> Personal services (such as maid, chauffeur, chef)		
<b>b</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 .....	<b>X</b>	
<b>2</b> 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? .....	<b>X</b>	
<b>3</b> Indicate which, if any, of the following the 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"/> Independent compensation consultant <input type="checkbox"/> Form 990 of other organizations <input type="checkbox"/> Written employment contract <input checked="" type="checkbox"/> Compensation survey or study <input checked="" type="checkbox"/> Approval by the board or compensation committee		
<b>4</b> 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:		
<b>a</b> Receive a severance payment or change-of-control payment? .....		<b>X</b>
<b>b</b> Participate in, or receive payment from, a supplemental nonqualified retirement plan? .....		<b>X</b>
<b>c</b> Participate in, or receive payment from, an equity-based compensation arrangement? .....		<b>X</b>
If "Yes" to any of lines 4a-c, list the persons and provide the applicable amounts for each item in Part III.		
<b>Only section 501(c)(3), 501(c)(4), and 501(c)(29) organizations must complete lines 5-9.</b>		
<b>5</b> 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:		
<b>a</b> The organization? .....		<b>X</b>
<b>b</b> Any related organization? .....		<b>X</b>
If "Yes" on line 5a or 5b, describe in Part III.		
<b>6</b> 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:		
<b>a</b> The organization? .....		<b>X</b>
<b>b</b> Any related organization? .....		<b>X</b>
If "Yes" on line 6a or 6b, describe in Part III.		
<b>7</b> 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 .....		<b>X</b>
<b>8</b> 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 .....		<b>X</b>
<b>9</b> If "Yes" on line 8, did the organization also follow the rebuttable presumption procedure described in Regulations section 53.4958-6(c)? .....		

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

Schedule J (Form 990) 2019

**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	168,611.	0.	18,000.	8,260.	9,598.	204,469.	0.
(2) LABRUZZO, ANNE DEPUTY DIRECTOR FOR ADMINISTRATION	139,113.	0.	0.	7,510.	9,535.	156,158.	0.
(3) SCHLEICHER, DAVID ASTRONOMER	151,552.	0.	0.	7,660.	8,747.	167,959.	0.
(4) MASSEY, PHILIP ASTRONOMER	155,163.	0.	0.	7,660.	9,063.	171,886.	0.
(5) HUNTER, DEIDRE ASTRONOMER	146,279.	0.	0.	7,560.	10,254.	164,093.	0.
(6) WEST, MICHAEL DEPUTY DIRECTOR FOR SCIENCE	150,949.	0.	0.	7,510.	1,074.	159,533.	0.
(7) ACTOR, ANNE T. DEPUTY DIRECTOR FOR DEVELOPMENT	147,724.	0.	0.	7,472.	8,828.	164,024.	0.



**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 STAYED IN A HOUSE OWNED BY LOWELL OBSERVATORY. THE STAY WAS TREATED AS A HOUSING ALLOWANCE AND WAS INCLUDED AS A TAXABLE BENEFIT.

**SCHEDULE M  
(Form 990)**

**Noncash Contributions**

OMB No. 1545-0047

**2019**

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](http://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	18	2,397,246.	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	X	1	1,395.	FAIR MARKET VALUE
19	Food inventory				
20	Drugs and medical supplies				
21	Taxidermy				
22	Historical artifacts				
23	Scientific specimens				
24	Archeological artifacts				
25	Other ▶ ( FURNITURE, SU )	X	9	26,863.	FAIR MARKET VALUE
26	Other ▶ ( LIFE INSURANC )	X	1	3,100.	FAIR MARKET VALUE
27	Other ▶ ( TELESCOPES )	X	2	2,025.	FAIR MARKET VALUE
28	Other ▶ ( )				

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) 2019

**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 OCCURRED.

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](http://www.irs.gov/Form990) for the latest information.

OMB No. 1545-0047

**2019**

Open to Public  
Inspection

Name of the organization

LOWELL OBSERVATORY

Employer identification number

86-0098918

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

ARE BOSTON UNIVERSITY, NORTHERN ARIZONA UNIVERSITY, UNIVERSITY OF MARYLAND, UNIVERSITY OF TOLEDO, AND YALE UNIVERSITY). LDT'S GROWING SUITE OF STATE-OF-THE-ART INSTRUMENTS, SUCH AS THE WORLD-LEADING INFRARED SPECTROGRAPH IGRINS AND THE NEW HIGH-PRECISION SPECTROGRAPH EXPRES, ENABLED CUTTING-EDGE RESEARCH ACROSS MULTIPLE FIELDS, INCLUDING THE SEARCH FOR EXOPLANETS. IN PARTNERSHIP WITH THE US NAVAL OBSERVATORY AND THE NAVAL RESEARCH LABORATORY, LOWELL HAS BEGUN A MULTI-MILLION DOLLAR UPGRADE OF THE NAVAL PRECISION OPTICAL INTERFEROMETER (NPOI) THAT WILL ADD THREE ONE-METER TELESCOPES TO THE EXISTING ARRAY, GREATLY INCREASING THE NUMBER OF OBJECTS OBSERVABLE FROM THAT SITE. LOWELL OBSERVATORY ALSO CONTINUED TO OPERATE OTHER SMALLER TELESCOPES AT ITS ANDERSON MESA SITE, INCLUDING THE HIGHLY SCIENTIFICALLY PRODUCTIVE 42" AND 31" TELESCOPES. ACCESS TO LOCAL TELESCOPES EQUIPPED WITH WORLD-CLASS INSTRUMENTS HAS ENABLED SCIENCE THAT COULD NOT BE DONE ELSEWHERE. IN ADDITION, THE OBSERVATORY IS UNDERTAKING A DRAMATIC EXPANSION OF ITS MAIN CAMPUS ON MARS HILL, INCLUDING NEW EDUCATION AND OUTREACH FACILITIES, ALONG WITH A NEW TECHNICAL SERVICES BUILDING THAT WILL GREATLY INCREASE THE SCIENTIFIC CAPABILITIES OF ITS SUITE OF TELESCOPES.

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

PROGRAMS WERE OFFERED TO CHILDREN THROUGHOUT THE YEAR AT BOTH ON- AND OFF-SITE LOCATIONS. 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

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

THINK CRITICALLY. ON-SITE, ATTENDANCE REACHED RECORD LEVELS FOR BOTH ELEMENTARY AND MIDDLE SCHOOL CAMPS. OFF-SITE, A RECORD NUMBER OF CHILDREN PARTICIPATED IN LOCKS PROGRAMS AT THE FLAGSTAFF FAMILY FOOD CENTER, AND ADDITIONAL CLASSROOMS IN CAVE CREEK, ARIZONA, ADOPTED THE LOCKS - PRESCHOOL CURRICULUM. LOWELL ASTRONOMERS AND EDUCATORS VISITED SEVERAL NATIVE AMERICAN CLASSES THROUGHOUT THE SCHOOL YEAR TO LEAD ASTRONOMY LESSONS AND HOST STAR PARTIES AS PART OF 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 DIRECTOR 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

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

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 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.



**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
<b>a</b> Receipt of (i) interest, (ii) annuities, (iii) royalties, or (iv) rent from a controlled entity		X
<b>b</b> Gift, grant, or capital contribution to related organization(s)	X	
<b>c</b> Gift, grant, or capital contribution from related organization(s)	X	
<b>d</b> Loans or loan guarantees to or for related organization(s)	X	
<b>e</b> Loans or loan guarantees by related organization(s)	X	
<b>f</b> Dividends from related organization(s)		X
<b>g</b> Sale of assets to related organization(s)		X
<b>h</b> Purchase of assets from related organization(s)		X
<b>i</b> Exchange of assets with related organization(s)		X
<b>j</b> Lease of facilities, equipment, or other assets to related organization(s)		X
<b>k</b> Lease of facilities, equipment, or other assets from related organization(s)		X
<b>l</b> Performance of services or membership or fundraising solicitations for related organization(s)	X	
<b>m</b> Performance of services or membership or fundraising solicitations by related organization(s)		X
<b>n</b> Sharing of facilities, equipment, mailing lists, or other assets with related organization(s)	X	
<b>o</b> Sharing of paid employees with related organization(s)	X	
<b>p</b> Reimbursement paid to related organization(s) for expenses		X
<b>q</b> Reimbursement paid by related organization(s) for expenses	X	
<b>r</b> Other transfer of cash or property to related organization(s)		X
<b>s</b> 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	E	10,200,000	END OF YEAR BALANCE
(2) PERCIVAL LOWELL TRUST UW	P	633,676	CASH VALUE
(3) LOWELL OBSERVATORY FOUNDATION	B	52,374	CASH VALUE
(4) LOWELL OBSERVATORY FOUNDATION	C	1,009,235	CASH VALUE
(5)			
(6)			

**Part VI Unrelated Organizations Taxable as a Partnership.** Complete if the organization answered "Yes" on Form 990, Part IV, line 37.

Provide the following information for each entity taxed as a partnership through which the organization conducted more than five percent of its activities (measured by total assets or gross revenue) that was not a related organization. See instructions regarding exclusion for certain investment partnerships.

(a) Name, address, and EIN of entity	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Predominant income (related, unrelated, excluded from tax under sections 512-514)	(e) Are all partners sec. 501(c)(3) orgs.?		(f) Share of total income	(g) Share of end-of-year assets	(h) Dispropor- tionate 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		Yes	No	

**Part VII** Supplemental Information

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

Multiple horizontal lines for supplemental information.