### \*\* PUBLIC DISCLOSURE COPY \*\*

Form **991** 

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

OMB No. 1545-0047

Open to Public Inspection

Department of the Treasury Internal Revenue Service

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

Α	For the	e 2020 calendar year, or tax year beginning and	ending									
В	Check if applicabl	C Name of organization		D Employer identifi	cation number							
	Addre chang											
	Name chang	Doing business as		86-00989	18							
	Initial return Final return	Number and street (or P.O. box if mail is not delivered to street address)  1400 W. MARS HILL ROAD	Number and street (or P.0. box if mail is not delivered to street address)  1400 W. MARS HILL ROAD  Room/suite   E Telephone nur									
	termin ated	City or town, state or province, country, and ZIP or foreign postal code	l	G Gross receipts \$ 17,220,608.								
	Ameno			H(a) Is this a group re								
	Application	F Name and address of principal officer. O EFF 11ALL		for subordinates								
	pendi	SAME AS C ABOVE		<b>H(b)</b> Are all subordinates in	ncluded? Yes No							
		empt status: $X = 501(c)(3) = 501(c)(0) = (insert no.) = 4947(a)(1)$	or 527	If "No," attach a	list. See instructions							
		te: > WWW.LOWELL.EDU		H(c) Group exemptio								
		organization: X Corporation Trust Association Other	<b>L</b> Year	of formation: 1946 N	N State of legal domicile; AZ							
P	art I	Summary	TTICN	TOOTON TO M	O DUDGUE							
Governance	1	Briefly describe the organization's mission or most significant activities: ${\color{red} { m LOWE}}$	д с пп	115510N 15 T	O PURSUE							
ern		Check this box 🕨 🔲 if the organization discontinued its operations or dispo	sed of more	than 25% of its net as								
Š				3	1							
۰		Number of independent voting members of the governing body (Part VI, line 1b)			150							
Activities &		Total number of individuals employed in calendar year 2020 (Part V, line 2a)			156 87							
⋛		Total number of volunteers (estimate if necessary)			0.							
Pc		Total unrelated business revenue from Part VIII, column (C), line 12			0.							
	l b	Net unrelated business taxable income from Form 990-T, Part I, line 11		Prior Year	Current Year							
	8	Contributions and grants (Part VIII, line 1h)		22,432,053.	12,195,142.							
Revenue		Program service revenue (Part VIII, line 2g)		4,273,398.	3,641,276.							
š		Investment income (Part VIII, column (A), lines 3, 4, and 7d)		2,074,969.	99,359.							
æ		Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)		441,100.	197,731.							
		Total revenue - add lines 8 through 11 (must equal Part VIII, column (A), line 12)		29,221,520.								
		Grants and similar amounts paid (Part IX, column (A), lines 1-3)		819,057.	656,951.							
	1	Benefits paid to or for members (Part IX, column (A), line 4)		0.	0.							
ç	1	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10)		7,869,184.	8,017,672.							
Expenses	16a	Professional fundraising fees (Part IX, column (A), line 11e)		0.	0.							
ğ	b	Total fundraising expenses (Part IX, column (D), line 25)   1,216,6	28.									
Ш	17	Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e)		5,658,676.								
	18	Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25)		14,346,917.								
	19	Revenue less expenses. Subtract line 18 from line 12		14,874,603.	2,654,693.							
Net Assets or Fund Balances			Ве	ginning of Current Year	End of Year							
Sset	20	Total assets (Part X, line 16)		65,145,325.	70,100,548.							
et A	21	Total liabilities (Part X, line 26)		20,739,131. 44,406,194.	23,190,520.							
		Net assets or fund balances. Subtract line 21 from line 20		44,406,194.	46,910,028.							
	art II	Signature Block Ilties of perjury, I declare that I have examined this return, including accompanying schedule	ne and etatom	ante and to the heet of m	v knowledge and helief it is							
		it, and complete. Declaration of preparer (other than officer) is based on all information of w			y knowledge and belief, it is							
uu	, 001100	t, and complete. Declaration of proparer (earlier alian emicer) is based on an information of w	mon propuror	nas any knowleage.								
Sig	ın	Signature of officer		Date								
He		ANNE LABRUZZO, DEPUTY DIRECTOR OF ADM	IN.									
		Type or print name and title										
		Print/Type preparer's name Preparer's signature	<b>I</b>	Date Check	PTIN							
Pai	d	MONICA A. VERA, CPA MONICA A. VERA,	CPA 0	7/20/21 if self-employ	P01456278							
Pre	parer	Firm's name BEACHFLEISCHMAN PC		Firm's EIN 🛌	86-0683059							
Use	Only	Firm's address 1985 E. RIVER ROAD, SUITE 201		_								
		TUCSON, AZ 85718		Phone no.52	0-321-4600							
Ma	v the II	RS discuss this return with the preparer shown above? See instructions		•	X Yes No							

	1990 (2020) LOWELL OBSERVATORY 86-0098918	Page 2
Par	t III Statement of Program Service Accomplishments	77
	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 TH	E
	STUDY OF THE SOLAR SYSTEM AND ITS EVOLUTION; CONDUCT PURE RESEARCH	
	ASTRONOMICAL PHENOMENA; PROVIDE QUALITY PUBLIC EDUCATION AND OUTREA	
	PROGRAMS TO BRING THE RESULTS OF ASTRONOMICAL RESEARCH TO THE PUBLI	
2	Did the organization undertake any significant program services during the year which were not listed on the	
		X No
	If "Yes," describe these new services on Schedule O.	
3	3	X No
4	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,	
	revenue, if any, for each program service reported.	and
4a	(Code: ) (Expenses \$ 8,270,071 • including grants of \$ 656,951 • ) (Revenue \$ 3,383,	262.)
	CONTINUING A MORE THAN 125-YEAR-LONG LEGACY OF ASTRONOMICAL DISCOVE	
	LOWELL OBSERVATORY ASTRONOMERS CONDUCTED FOREFRONT RESEARCH IN MANY	•
	AREAS OF ASTRONOMY - FROM THE SUN AND SOLAR SYSTEM TO EXOPLANETS,	
	STARS, GALAXIES, AND COSMOLOGY. IN 2020, LOWELL ASTRONOMERS PUBLIS	HED
	MORE THAN 100 PEER-REVIEWED PAPERS IN LEADING SCIENTIFIC JOURNALS,	
	ALONG WITH ANOTHER 75 PAPERS IN OTHER VENUES. THEY ALSO PARTICIPAT	
	IN MAJOR SCIENTIFIC MISSIONS, USED WORLD-LEADING TELESCOPES ACROSS GLOBE AND IN SPACE, AND WERE ACTIVE IN EDUCATION AND PUBLIC OUTREAC	
	LOWELL ASTRONOMERS CONTINUE TO BE VERY SUCCESSFUL AT OBTAINING GRAN	
	IN SUPPORT OF THEIR RESEARCH FROM NASA, THE NATIONAL SCIENCE	
	FOUNDATION, AND OTHER AGENCIES. THE 4.3-METER LOWELL DISCOVERY	
	TELESCOPE (LDT) DELIVERED APPROXIMATELY 250 SCIENCE NIGHTS LOSIN	G
4b		745.)
	TO ENSURE GUEST AND STAFF SAFETY, LOWELL OBSERVATORY CLOSED ITS DOO	
	TO VISITORS ON MARCH 13, 2020 IN RESPONSE TO THE CORONAVIRUS PANDEM	
	WORKING IN COLLABORATION WITH THE MARKETING AND COMMUNICATIONS	
	DEPARTMENT, THE OUTREACH TEAM WAS ABLE TO CONTINUE OFFERING PROGRAM	S
	THROUGH DIGITAL MEANS. THESE PROGRAMS INCLUDED RECURRING LIVESTREAM	
	SUCH AS INTERACTIVE STARGAZING, THE MARS HILL ALMANAC, AND SAGAS IN	THE
	SKY, AS WELL AS PROGRAMS FOR SPECIAL CELESTIAL OCCASIONS SUCH AS	
	PLANETARY OPPOSITIONS, LUNAR ECLIPSES, AND CONJUNCTIONS. BEGINNING	
	AUGUST, LOWELL WELCOMED GUESTS BACK TO MARS HILL FOR PREMIUM ACCESS PROGRAMS AT THE GIOVALE OPEN DECK OBSERVATORY. THE PUBLIC PROGRAM	
	SUPERVISOR TEAM DEVELOPED A CREATIVE PROGRAM THAT ALLOWED FOR A SOL	EI.V
	OUTDOOR EXPERIENCE TO MINIMIZE RISK OF TRANSMISSION. THESE PROGRAMS	
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 ► 10,594,008.	
	Form 9	90 (2020)

15440720 759078 16383

### Part IV Checklist of Required Schedules

			Yes	No
1	Is the organization described in section 501(c)(3) or 4947(a)(1) (other than a private foundation)?			
	If "Yes," complete Schedule A	1	<u> </u>	
2	Is the organization required to complete Schedule B, Schedule of Contributors?	2	X	
3	Did the organization engage in direct or indirect political campaign activities on behalf of or in opposition to candidates for			
	public office? If "Yes," complete Schedule C, Part I	3		X
4	Section 501(c)(3) organizations. Did the organization engage in lobbying activities, or have a section 501(h) election in effect			,,
	during the tax year? If "Yes," complete Schedule C, Part II	4		X
5	Is the organization a section 501(c)(4), 501(c)(5), or 501(c)(6) organization that receives membership dues, assessments, or			3,7
	similar amounts as defined in Revenue Procedure 98-19? If "Yes," complete Schedule C, Part III	5		X
6	Did the organization maintain any donor advised funds or any similar funds or accounts for which donors have the right to	_		\ <sub>3,7</sub>
	provide advice on the distribution or investment of amounts in such funds or accounts? If "Yes," complete Schedule D, Part I	6		X
7	Did the organization receive or hold a conservation easement, including easements to preserve open space,	_		<b>.</b>
_	the environment, historic land areas, or historic structures? If "Yes," complete Schedule D, Part II	7		X
8	Did the organization maintain collections of works of art, historical treasures, or other similar assets? If "Yes," complete		v	
_	Schedule D, Part III	8	<u> </u>	
9	Did the organization report an amount in Part X, line 21, for escrow or custodial account liability, serve as a custodian for			
	amounts not listed in Part X; or provide credit counseling, debt management, credit repair, or debt negotiation services?			$ _{\mathbf{x}}$
40	If "Yes," complete Schedule D, Part IV	9		
10	Did the organization, directly or through a related organization, hold assets in donor-restricted endowments	40	Х	
	or in quasi endowments? If "Yes," complete Schedule D, Part V	10		
11	If the organization's answer to any of the following questions is "Yes," then complete Schedule D, Parts VI, VII, VIII, IX, or X			
_	as applicable.			
а	Did the organization report an amount for land, buildings, and equipment in Part X, line 10? If "Yes," complete Schedule D, Part VI	11a	Х	
h	Did the organization report an amount for investments - other securities in Part X, line 12, that is 5% or more of its total	Ha	21	
b	assets reported in Part X, line 16? If "Yes," complete Schedule D, Part VII	11b		x
•	Did the organization report an amount for investments - program related in Part X, line 13, that is 5% or more of its total	110		<del></del>
·	assets reported in Part X, line 16? If "Yes," complete Schedule D, Part VIII	11c		x
d	Did the organization report an amount for other assets in Part X, line 15, that is 5% or more of its total assets reported in	110		<del></del>
_	Part X, line 16? If "Yes," complete Schedule D, Part IX	11d		х
е	Did the organization report an amount for other liabilities in Part X, line 25? If "Yes," complete Schedule D, Part X	11e	Х	
f	Did the organization's separate or consolidated financial statements for the tax year include a footnote that addresses			
	the organization's liability for uncertain tax positions under FIN 48 (ASC 740)? If "Yes," complete Schedule D, Part X	11f	X	
12a	Did the organization obtain separate, independent audited financial statements for the tax year? If "Yes," complete			
	Schedule D, Parts XI and XII	12a		Х
b	Was the organization included in consolidated, independent audited financial statements for the tax year?			
	If "Yes," and if the organization answered "No" to line 12a, then completing Schedule D, Parts XI and XII is optional	12b	Х	
13	Is the organization a school described in section 170(b)(1)(A)(ii)? If "Yes," complete Schedule E	13		Х
14a	Did the organization maintain an office, employees, or agents outside of the United States?	14a		X
b	Did the organization have aggregate revenues or expenses of more than \$10,000 from grantmaking, fundraising, business,			
	investment, and program service activities outside the United States, or aggregate foreign investments valued at \$100,000			
	or more? If "Yes," complete Schedule F, Parts I and IV	14b		X
15	Did the organization report on Part IX, column (A), line 3, more than \$5,000 of grants or other assistance to or for any			
	foreign organization? If "Yes," complete Schedule F, Parts II and IV	15		X
16	Did the organization report on Part IX, column (A), line 3, more than \$5,000 of aggregate grants or other assistance to			
	or for foreign individuals? If "Yes," complete Schedule F, Parts III and IV	16		X
17	Did the organization report a total of more than \$15,000 of expenses for professional fundraising services on Part IX,			,,
	column (A), lines 6 and 11e? If "Yes," complete Schedule G, Part I	17		X
18	Did the organization report more than \$15,000 total of fundraising event gross income and contributions on Part VIII, lines			\ •
	1c and 8a? If "Yes," complete Schedule G, Part II	18		X
19	Did the organization report more than \$15,000 of gross income from gaming activities on Part VIII, line 9a? If "Yes,"			<sub>V</sub>
	complete Schedule G, Part III	19		X
20a	Did the organization operate one or more hospital facilities? If "Yes," complete Schedule H	20a		
	If "Yes" to line 20a, did the organization attach a copy of its audited financial statements to this return?	20b		
21	Did the organization report more than \$5,000 of grants or other assistance to any domestic organization or		Х	
	domestic government on Part IX, column (A), line 1? If "Yes," complete Schedule I, Parts I and II	21	Λ	<u> </u>

### Part IV Checklist of Required Schedules (continued)

	<del></del>		Yes	No
22	Did the organization report more than \$5,000 of grants or other assistance to or for domestic individuals on			
	Part IX, column (A), line 2? If "Yes," complete Schedule I, Parts I and III	22		X
23	Did the organization answer "Yes" to Part VII, Section A, line 3, 4, or 5 about compensation of the organization's current			
	and former officers, directors, trustees, key employees, and highest compensated employees? If "Yes," complete		v	
04 -	Schedule J	23	Х	
24 a	Did the organization have a tax-exempt bond issue with an outstanding principal amount of more than \$100,000 as of the last day of the year, that was issued after December 31, 2002? If "Yes," answer lines 24b through 24d and complete			
	Schedule K. If "No," go to line 25a	24a		x
b	Did the organization invest any proceeds of tax-exempt bonds beyond a temporary period exception?	24b		
	Did the organization maintain an escrow account other than a refunding escrow at any time during the year to defease			
	any tax-exempt bonds?	24c		
d	Did the organization act as an "on behalf of" issuer for bonds outstanding at any time during the year?	24d		
25 a	Section 501(c)(3), 501(c)(4), and 501(c)(29) organizations. Did the organization engage in an excess benefit			
	transaction with a disqualified person during the year? If "Yes," complete Schedule L, Part I	25a		X
b	Is the organization aware that it engaged in an excess benefit transaction with a disqualified person in a prior year, and			
	that the transaction has not been reported on any of the organization's prior Forms 990 or 990-EZ? If "Yes," complete			X
00	Schedule L, Part I	25b		
26	Did the organization report any amount on Part X, line 5 or 22, for receivables from or payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35%			
	controlled entity or family member of any of these persons? If "Yes," complete Schedule L, Part II	26		x
27	Did the organization provide a grant or other assistance to any current or former officer, director, trustee, key employee,			
	creator or founder, substantial contributor or employee thereof, a grant selection committee member, or to a 35% controlled			
	entity (including an employee thereof) or family member of any of these persons? If "Yes," complete Schedule L, Part III	27		Х
28	Was the organization a party to a business transaction with one of the following parties (see Schedule L, Part IV			
	instructions, for applicable filing thresholds, conditions, and exceptions):			
а	A current or former officer, director, trustee, key employee, creator or founder, or substantial contributor? If			
	"Yes," complete Schedule L, Part IV	28a		X
	A family member of any individual described in line 28a? If "Yes," complete Schedule L, Part IV	28b		Х
С	A 35% controlled entity of one or more individuals and/or organizations described in lines 28a or 28b?	28c		X
29	"Yes," complete Schedule L, Part IV  Did the organization receive more than \$25,000 in non-cash contributions? If "Yes," complete Schedule M	29	Х	1
30	Did the organization receive contributions of art, historical treasures, or other similar assets, or qualified conservation			
	contributions? If "Yes," complete Schedule M	30		Х
31	Did the organization liquidate, terminate, or dissolve and cease operations? If "Yes," complete Schedule N, Part I	31		Х
32	Did the organization sell, exchange, dispose of, or transfer more than 25% of its net assets? If "Yes," complete			
	Schedule N, Part II	32		X
33	Did the organization own 100% of an entity disregarded as separate from the organization under Regulations			3,
0.4	sections 301.7701-2 and 301.7701-3? If "Yes," complete Schedule R, Part I	33		Х
34	Was the organization related to any tax-exempt or taxable entity? If "Yes," complete Schedule R, Part II, III, or IV, and Part V, line 1	34	Х	
35.2	Part V, line 1  Did the organization have a controlled entity within the meaning of section 512(b)(13)?	35a	X	
	If "Yes" to line 35a, did the organization receive any payment from or engage in any transaction with a controlled entity	554	<del></del>	
	within the meaning of section 512(b)(13)? If "Yes," complete Schedule R, Part V, line 2	35b		х
36	Section 501(c)(3) organizations. Did the organization make any transfers to an exempt non-charitable related organization?			
	If "Yes," complete Schedule R, Part V, line 2	36		Х
37	Did the organization conduct more than 5% of its activities through an entity that is not a related organization			
	and that is treated as a partnership for federal income tax purposes? If "Yes," complete Schedule R, Part VI	37		X
38	Did the organization complete Schedule O and provide explanations in Schedule O for Part VI, lines 11b and 19?		v	
Pai	Note: All Form 990 filers are required to complete Schedule O  rt V Statements Regarding Other IRS Filings and Tax Compliance	38	Х	<u> </u>
· u	Check if Schedule O contains a response or note to any line in this Part V			
			Yes	No
1a	Enter the number reported in Box 3 of Form 1096. Enter -0- if not applicable			
	Enter the number of Forms W-2G included in line 1a. Enter -0- if not applicable 1b 0			
С	Did the organization comply with backup withholding rules for reportable payments to vendors and reportable gaming			
	(gambling) winnings to prize winners?	1c	Х	

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

				Yes	No					
2a	Enter the number of employees reported on Form W-3, Transmittal of Wage and Tax Statements,									
	filed for the calendar year ending with or within the year covered by this return	2a 156								
b	If at least one is reported on line 2a, did the organization file all required federal employment tax return	าร?	2b	X						
	Note: If the sum of lines 1a and 2a is greater than 250, you may be required to e-file (see instructions)									
3a	Did the organization have unrelated business gross income of \$1,000 or more during the year?		3a		Х					
b	If "Yes," has it filed a Form 990-T for this year? If "No" to line 3b, provide an explanation on Schedule	0	3b							
4a	At any time during the calendar year, did the organization have an interest in, or a signature or other a	uthority over, a								
	financial account in a foreign country (such as a bank account, securities account, or other financial a	ccount)?	4a		X					
b	If "Yes," enter the name of the foreign country ▶									
	See instructions for filing requirements for FinCEN Form 114, Report of Foreign Bank and Financial Advanced in the Financi	counts (FBAR).								
5а	Was the organization a party to a prohibited tax shelter transaction at any time during the tax year?		5a 5b		X					
	<b>b</b> Did any taxable party notify the organization that it was or is a party to a prohibited tax shelter transaction?									
	If "Yes" to line 5a or 5b, did the organization file Form 8886-T?		5c							
6a	Does the organization have annual gross receipts that are normally greater than \$100,000, and did the				3,7					
	any contributions that were not tax deductible as charitable contributions?		6a		X					
b	If "Yes," did the organization include with every solicitation an express statement that such contributi	ons or gifts								
_	were not tax deductible?		6b							
7	Organizations that may receive deductible contributions under section 170(c).	Outsided to the payor	_	Х						
a	Did the organization receive a payment in excess of \$75 made partly as a contribution and partly for goods and serv		7a	X						
	If "Yes," did the organization notify the donor of the value of the goods or services provided?		7b	21						
C	Did the organization sell, exchange, or otherwise dispose of tangible personal property for which it wat to file Form 8282?		7c		Х					
٨		7d	70							
	Did the organization receive any funds, directly or indirectly, to pay premiums on a personal benefit or	•	7e		Х					
f	Did the organization, during the year, pay premiums, directly or indirectly, on a personal benefit contra		7 <del>f</del>		Х					
g g	If the organization received a contribution of qualified intellectual property, did the organization file Fo		7g							
•	If the organization received a contribution of cars, boats, airplanes, or other vehicles, did the organiza		7h							
8	Sponsoring organizations maintaining donor advised funds. Did a donor advised fund maintained									
	sponsoring organization have excess business holdings at any time during the year?		8							
9	Sponsoring organizations maintaining donor advised funds.									
а	Did the sponsoring organization make any taxable distributions under section 4966?		9a							
b	Did the sponsoring organization make a distribution to a donor, donor advisor, or related person?		9b							
10	Section 501(c)(7) organizations. Enter:									
а	Initiation fees and capital contributions included on Part VIII, line 12	10a								
b	, , , , , , , , , , , , , , , , , , ,	10b								
11	Section 501(c)(12) organizations. Enter:	1								
	Gross income from members or shareholders	11a								
b	Gross income from other sources (Do not net amounts due or paid to other sources against									
		11b								
	Section 4947(a)(1) non-exempt charitable trusts. Is the organization filing Form 990 in lieu of Form		12a							
	,	12b								
13	Section 501(c)(29) qualified nonprofit health insurance issuers.		13a							
а	Is the organization licensed to issue qualified health plans in more than one state?		ısa							
h	Enter the amount of reserves the organization is required to maintain by the states in which the									
		13b								
С	Enter the amount of reserves on hand	13c								
	Did the organization receive any payments for indoor tanning services during the tax year?		14a		Х					
	If "Yes," has it filed a Form 720 to report these payments? If "No," provide an explanation on Schedule		14b							
15	Is the organization subject to the section 4960 tax on payment(s) of more than \$1,000,000 in remuner									
	excess parachute payment(s) during the year?		15		Х					
	If "Yes," see instructions and file Form 4720, Schedule N.									
16	Is the organization an educational institution subject to the section 4968 excise tax on net investment	income?	16		Х					
	If "Yes," complete Form 4720, Schedule O.									
			Form		(2020)					

orm **990** (2020)

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			X
Sec	tion A. Governing Body and Management			
			Yes	No
1a	Enter the number of voting members of the governing body at the end of the tax year			
	If there are material differences in voting rights among members of the governing body, or if the governing			
	body delegated broad authority to an executive committee or similar committee, explain on Schedule O.			
b	Enter the number of voting members included on line 1a, above, who are independent			
2	Did any officer, director, trustee, or key employee have a family relationship or a business relationship with any other			
	officer, director, trustee, or key employee?	2		X
3	Did the organization delegate control over management duties customarily performed by or under the direct supervision			
	of officers, directors, trustees, or key employees to a management company or other person?	3		Х
4	Did the organization make any significant changes to its governing documents since the prior Form 990 was filed?	4		X
5	Did the organization become aware during the year of a significant diversion of the organization's assets?	5		X
6	Did the organization have members or stockholders?	6		X
7a				
	more members of the governing body?	7a		X
b	Are any governance decisions of the organization reserved to (or subject to approval by) members, stockholders, or			
	persons other than the governing body?	7b		X
8	Did the organization contemporaneously document the meetings held or written actions undertaken during the year by the following:			
а	The governing body?	8a	Х	
b	Each committee with authority to act on behalf of the governing body?	8b	Х	
9	Is there any officer, director, trustee, or key employee listed in Part VII, Section A, who cannot be reached at the			
	organization's mailing address? If "Yes," provide the names and addresses on Schedule O	9		X
Sec	tion B. Policies (This Section B requests information about policies not required by the Internal Revenue Code.)			
			Yes	No
10a	Did the organization have local chapters, branches, or affiliates?	10a		Х
b	If "Yes," did the organization have written policies and procedures governing the activities of such chapters, affiliates,			
	and branches to ensure their operations are consistent with the organization's exempt purposes?	10b		
11a	Has the organization provided a complete copy of this Form 990 to all members of its governing body before filing the form?	11a	Х	
b	Describe in Schedule O the process, if any, used by the organization to review this Form 990.			
12a	Did the organization have a written conflict of interest policy? If "No," go to line 13	12a	Х	
b	Were officers, directors, or trustees, and key employees required to disclose annually interests that could give rise to conflicts?	12b	X	
С	Did the organization regularly and consistently monitor and enforce compliance with the policy? If "Yes," describe			
	in Schedule O how this was done	12c	Х	
13	Did the organization have a written whistleblower policy?	13	X	
14	Did the organization have a written document retention and destruction policy?	14	X	
15	Did the process for determining compensation of the following persons include a review and approval by independent			
	persons, comparability data, and contemporaneous substantiation of the deliberation and decision?			
а	The organization's CEO, Executive Director, or top management official	15a	Х	
b	Other officers or key employees of the organization	15b		Х
	If "Yes" to line 15a or 15b, describe the process in Schedule O (see instructions).			
16a	Did the organization invest in, contribute assets to, or participate in a joint venture or similar arrangement with a			
	taxable entity during the year?	16a		X
b	If "Yes," did the organization follow a written policy or procedure requiring the organization to evaluate its participation			
	in joint venture arrangements under applicable federal tax law, and take steps to safeguard the organization's			
	exempt status with respect to such arrangements?	16b		
Sec	tion 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	) avail	able
	for public inspection. Indicate how you made these available. Check all that apply.			
	X Own website Another's website X 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, are	d finar	ncial	
	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			

032006 12-23-20

Form **990** (2020)

# 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.

(A) Name and title	(B) Average hours per week	box	not c , unle	Pos heck ss pe	more rson	than is bot	h an	(D) Reportable compensation	(E) Reportable compensation from related	(F) Estimated amount of other
	(list any hours for related organizations below line)	Individual trustee or director	Institutional trustee	Officer	Key employee	Highest compensated employee	Former	from the organization (W-2/1099-MISC)	organizations (W-2/1099-MISC)	compensatio from the organization and related organizations
(1) HALL, JEFFREY DIRECTOR	40.00			х				163,080.	0.	18,216
(2) MASSEY, PHILIP	40.00					х			0.	
ASTRONOMER  3) SCHLEICHER, DAVID	40.00					^		159,097.	0.	15,698
ASTRONOMER (4) ACTOR, ANN T.	38.00	_				Х		155,225.	0.	16,56
DEPUTY DIRECTOR FOR DEVELOPMENT	2.00					х		153,475.	0.	16,70
(5) HUNTER, DEIDRE ASTRONOMER	40.00					х		150,559.	0.	15,59
(6) LABRUZZO, ANNE DEPUTY DIRECTOR FOR ADMINISTRATION	36.00			х				146,692.	0.	17,38
(7) WEST, MICHAEL DEPUTY DIRECTOR FOR SCIENCE	40.00					Х		154,245.	0.	8,86
(8) PUTNAM, W. LOWELL TRUSTEE - SOLE	30.00	х		х				23.	0.	8,62
		1								

Form **990** (2020)

Pai	Part VIII Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees (continued)														
	(A) Name and title	(B) Average hours per week	box	not c , unle	Pos heck ss pe	more rson	than is bot	th an	(D)  Reportable compensation from	( <b>E</b> ) Reportable compensation from relate	on	an	(F) stimate nount other		
		(list any hours for related organizations below line)	Individual trustee or director	Institutional trustee	Officer	Key employee	Highest compensated employee	Former	the	organizatior (W-2/1099-MI	าร	compensation from the organization and related organizations			
1b	Subtotal							▶	1,082,396.		0.	11	7,6	41.	
С	Total from continuation sheets to Part V	II, Section A						ightharpoons	0.		0.			0.	
d	Total (add lines 1b and 1c)								1,082,396.		0.	11	7,6	<u>41.</u>	
	Total number of individuals (including but n compensation from the organization	ot limited to th	ose	liste	ed a	bove	e) wl	ho r	received more than \$100	,000 of reportab	ıle			22	
													Yes	No	
3	Did the organization list any <b>former</b> officer,			•		•		•		•				Х	
4	line 1a? If "Yes," complete Schedule J for s For any individual listed on line 1a, is the su											3		Λ	
7	and related organizations greater than \$15	=		-					•	trie organization		4	х		
5	Did any person listed on line 1a receive or a									dual for services	3	-			
	rendered to the organization? If "Yes," com	plete Schedul	e J f	or su	uch	pers	son					5		Х	
Sec	tion B. Independent Contractors														
1	Complete this table for your five highest co the organization. Report compensation for	•	•							•	npensa	ation 1	from		
	(A) Name and business								(B) Description of s	ervices	C		(C) ompensation		
JOI	OHNSON WALZER ASSOCIATES, LLC, 17 N. SAN														

(A)
Name and business address

JOHNSON WALZER ASSOCIATES, LLC, 17 N. SAN
FRANCISCO STREET, SUITE 3A, FLAGSTAFF, AZ CONSTRUCTION

BUILDING & ENGINEERING CONTRACTORS SOUTHWES
P.O. BOX 30458, FLAGSTAFF, AZ 86003

KEI SPACE DESIGN, LTD., 1141 MONTROYAL
BLVD., , NORTH VANCOUVER, CANADA

CONSULTING

229,775.

Form **990** (2020)

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\$100,000 of compensation from the organization

					OBSERV	ATORY			86-0098	918 Page <b>9</b>
Pa	rt V	Ш					5			
			Check if Schedule O	contains	a response	or note to any lin	ne in this Part VIII (A) Total revenue	(B) Related or exempt	(C)	( <b>D</b> ) Revenue excluded
Contributions, Gifts, Grants and Other Similar Amounts	1	b c d e f		ributions grants, an above lines 1a-1	1b	191,676.  198,195. 3,689,721.  8,115,550. 183,762.	12,195,142.			
Program Service Revenue	2 6	a b c d e	TELESCOPE ACCESS FE RESEARCH - GOVERNME EDUCATIONAL PROGRAM  All other program service Total. Add lines 2a-2f	ES NT CON S	TRACTS	541700 541700 611600	2,350,197. 919,002. 372,077.	919,002. 372,077.		
Other Revenue	3 4 5 6 7 7 1 8 8	a b c d a b c d a b c	Investment income (include other similar amounts)	f tax-excession of tax-	(i) Real  Securities 87,314.  1,805. 85,509.  (not of See 8a 8b ing events ies. See 9a 9b activities	est, and	12,208.			87,151.
Miscellaneous Revenue	11 a	a b c	Less: cost of goods sold Net income or (loss) from  MISCELLANEOUS INCOM  All other revenue  Total. Add lines 11a-11d	sales of	inventory	Business Code 900099	83,668. 114,063. 114,063.	114,063.		
	12		Total revenue. See instruction	ns		<b>.</b>	16,133,508.	3,839,007.	0.	99,359.

032009 12-23-20

99,359. Form **990** (2020)

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 respor			(C)	L
	not include amounts reported on lines 6b, 8b, 9b, and 10b of Part VIII.	(A) Total expenses	<b>(B)</b> Program service expenses	( <b>C)</b> Management and general expenses	<b>(D)</b> Fundraising expenses
1	Grants and other assistance to domestic organizations	656 051	656 051		
	and domestic governments. See Part IV, line 21	656,951.	656,951.		
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,	254 016	142 222	100 100	10 (01
	trustees, and key employees	354,016.	143,223.	198,102.	12,691
6	Compensation not included above to disqualified				
	persons (as defined under section 4958(f)(1)) and				
	persons described in section 4958(c)(3)(B)	C 254 224	4 000 600	700 727	600 050
7	Other salaries and wages	6,354,224.	4,882,628.	780,737.	690,859
8	Pension plan accruals and contributions (include	206 226	010 166	36 450	20 562
	section 401(k) and 403(b) employer contributions)	286,096.	219,166.	36,170.	30,760
9	Other employee benefits	593,280.	456,569.	72,945.	63,766
10	Payroll taxes	430,056.	321,344.	64,104.	44,608
11	Fees for services (nonemployees):				
а	Management	10.01		1.5	
b	Legal	18,964.	2,680.	16,284.	
С	Accounting	54,295.		54,295.	
d	Lobbying				
е	Professional fundraising services. See Part IV, line 17				
f	Investment management fees	4,959.		4,959.	
g	Other. (If line 11g amount exceeds 10% of line 25,				
	column (A) amount, list line 11g expenses on Sch O.)	271,313.	107,884.	129,083.	34,346
12	Advertising and promotion	135,332.	20,965.		114,367
13	Office expenses	349,587.	249,493.	35,216.	64,878
14	Information technology	264,909.	128,656.	70,220.	66,033
15	Royalties				
16	Occupancy	582,170.	529,866.	41,739.	10,565
17	Travel	97,720.	54,720.	30,195.	12,805
18	Payments of travel or entertainment expenses				
	for any federal, state, or local public officials				
19	Conferences, conventions, and meetings	53,156.	10,889.	21,897.	20,370
20	Interest	70,654.	68,213.	2,441.	
21	Payments to affiliates				
22	Depreciation, depletion, and amortization	2,109,373.	2,046,175.	45,566.	17,632
23	Insurance	367,680.	359,739.	6,665.	1,276
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 0.)				
а	REPAIRS AND MAINTENANCE	194,091.	187,320.	5,578.	1,193
b	DUES AND SUBSCRIPTIONS	99,020.	68,633.	23,892.	6,495
С	TRAINING AND DEVELOPMEN	45,479.	18,785.	24,093.	2,601
d	EE RECRUITMENT AND RELO	30,797.	29,407.	1,390.	
	All other expenses	54,693.	30,702.	2,608.	21,383
25	Total functional expenses. Add lines 1 through 24e	13,478,815.	10,594,008.	1,668,179.	1,216,628
<u></u> 26	<b>Joint costs.</b> Complete this line only if the organization	<u> </u>			•
	reported in column (B) joint costs from a combined				
	educational campaign and fundraising solicitation.				

Form **990** (2020)

Pa	ILΛ	Dalance Sheet					
		Check if Schedule O contains a response or note to	o an	y line in this Part X			
					(A)		(B)
					Beginning of year		End of year
	1	Cash - non-interest-bearing			133,267.	1	421,749.
	2	Savings and temporary cash investments			1,929,990.	2	1,073,017.
	3	Pledges and grants receivable, net			13,030,741.	3	14,682,096.
	4	Accounts receivable, net			8,383.	4	14,405.
	5	Loans and other receivables from any current or fo	rmer	officer, director,			
		trustee, key employee, creator or founder, substant	tial c	contributor, or 35%			
		controlled entity or family member of any of these p	oerso	ons		5	
	6	Loans and other receivables from other disqualified	sons (as defined				
		under section 4958(f)(1)), and persons described in	sec	tion 4958(c)(3)(B)		6	
ts	7	Notes and loans receivable, net				7	
Assets	8	Inventories for sale or use			92,423.	8	125,635.
⋖	9	Prepaid expenses and deferred charges			103,221.	9	312,433.
	10a	Land, buildings, and equipment: cost or other					
		basis. Complete Part VI of Schedule D1		73,588,690.	10 055 505		45 66 0 000
	b	Less: accumulated depreciation 1	0b	25,975,807.	48,356,606.	10c	47,612,883.
	11	Investments - publicly traded securities			1,005,946.	11	5,297,362.
	12	Investments - other securities. See Part IV, line 11		12			
	13	Investments - program-related. See Part IV, line 11		13			
	14	Intangible assets		60,736.	14	52,300.	
	15	Other assets. See Part IV, line 11		424,012.	15	508,668.	
	16	Total assets. Add lines 1 through 15 (must equal li			65,145,325.	16	70,100,548.
	17	Accounts payable and accrued expenses		428,132.	17	352,354.	
	18	Grants payable	7 514 070	18	7 455 500		
	19	Deferred revenue			7,514,979.	19	7,455,529.
	20	Tax-exempt bond liabilities				20	
	21	Escrow or custodial account liability. Complete Par				21	
ies	22	Loans and other payables to any current or former					
ij		trustee, key employee, creator or founder, substan					
Liabilities		controlled entity or family member of any of these p			2 505 000	22	2 250 071
	23	Secured mortgages and notes payable to unrelated			2,595,000.	23	2,350,971.
	24	Unsecured notes and loans payable to unrelated th				24	
	25	Other liabilities (including federal income tax, payak					
		parties, and other liabilities not included on lines 17	(-24)	. Complete Part X	10,201,020.		13,031,666.
	00	of Schedule D			20,739,131.		23,190,520.
	26	Total liabilities. Add lines 17 through 25			20,739,131.	26	23,190,320.
es		Organizations that follow FASB ASC 958, check	ner				
JIC	07	and complete lines 27, 28, 32, and 33.			28,859,141.	27	25,930,729.
Sale	27				15,547,053.	28	20,979,299.
βE	28	Net assets with donor restrictions Organizations that do not follow FASB ASC 958,			13,341,033.	20	20,515,255
Ξ			, CITE	ck nere			
ō	20	and complete lines 29 through 33.			20		
ets	29 30	Capital stock or trust principal, or current funds  Paid-in or capital surplus, or land, building, or equip				29 30	
Ass	31	Retained earnings, endowment, accumulated incor				31	
Net Assets or Fund Balances	32	Total net assets or fund balances			44,406,194.	32	46,910,028.
Z	33	Total liabilities and net assets/fund balances			65,145,325.	33	70,100,548.
	100	Total habilities and het assets/fully balances			30,110,020	- 00	Form <b>990</b> (2020)

Pa	rt 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		5,13						
2	Total expenses (must equal Part IX, column (A), line 25)	2		3,47						
3	Revenue less expenses. Subtract line 2 from line 1		2,65							
4	Net assets or fund balances at beginning of year (must equal Part X, line 32, column (A))  4 44									
5	Net unrealized gains (losses) on investments	5		-15	0,8	59.				
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	46	5,91	0,0	28.				
Pa	rt 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: Cash X Accrual Other									
	If the organization changed its method of accounting from a prior year or checked "Other," explain in Schedule	О.				1				
2a	Were the organization's financial statements compiled or reviewed by an independent accountant?			2a		Х				
	If "Yes," check a box below to indicate whether the financial statements for the year were compiled or reviewed	d on a								
	separate basis, consolidated basis, or both:									
	Separate basis Consolidated basis Both consolidated and separate basis									
b	Were the organization's financial statements audited by an independent accountant?			2b	Х					
	If "Yes," check a box below to indicate whether the financial statements for the year were audited on a separat									
	consolidated basis, or both:									
	Separate basis X Consolidated basis Both consolidated and separate basis					1				
С	If "Yes" to line 2a or 2b, does the organization have a committee that assumes responsibility for oversight of th	e audi	t,							
	review, or compilation of its financial statements and selection of an independent accountant?			2c	Х	l				
	If the organization changed either its oversight process or selection process during the tax year, explain on Sch	nedule	Ο.							
За	As a result of a federal award, was the organization required to undergo an audit or audits as set forth in the Si	ngle Au	udit							
	Act and OMB Circular A-133?			3a	Х					
b	If "Yes," did the organization undergo the required audit or audits? If the organization did not undergo the requ	ired at	ıdit							
	or audits, explain why on Schedule O and describe any steps taken to undergo such audits			3b	Х					

#### **SCHEDULE A**

(Form 990 or 990-EZ)

Department of the Treasury Internal Revenue Service

Name of the organization

# 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 for instructions and the latest information.

OMB No. 1545-0047

Open to Public Inspection

LOWELL OBSERVATORY

**Employer identification number** 86-0098918

Pa	art I Reason for Public Charity Status. (All organizations must complete this part.) See instructions.					nis part.) S	ee instructions.	
The	organ	ization is not a private found	lation because it is: (	For lines 1 through 12, o	heck only	one box.)		
1		A church, convention of ch	urches, or association	on of churches described	d in <b>sectio</b>	n 170(b)(1	I)(A)(i).	
2		A school described in secti	ion 170(b)(1)(A)(ii). (/	Attach Schedule E (Forn	n 990 or 99	90-EZ).)		
3		A hospital or a cooperative		· ·			ii).	
4	一	A medical research organiz					•	the hospital's name
•		city, and state:	anon operated in col	njanotion with a moopital	GOOGIIDO			the hoopital o haine,
5		An organization operated for	or the benefit of a co	llogo or university owner	d or operat	tod by a g	overnmental unit describ	ood in
3				nege of university owner	o opera	ted by a g	overnmentar unit descrit	Ded III
_		section 170(b)(1)(A)(iv). (C				<b>.</b>	( )	
6	v	A federal, state, or local gov						
7	—							
	section 170(b)(1)(A)(vi). (Complete Part II.)							
8	$\square$	A community trust describe	ed in <b>section 170(b)(</b>	1)(A)(vi). (Complete Par	t II.)			
9		An agricultural research org	ganization described	in section 170(b)(1)(A)(	ix) operate	ed in conju	ınction 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 norma	lly receives (1) more	than 33 1/3% of its sup	port from o	contributio	ons, membership fees, a	nd gross receipts from
		activities related to its exen	npt functions, subjec	t to certain exceptions;	and (2) no	more thar	n 33 1/3% of its support	from gross investment
		income and unrelated busin	ness taxable income	(less section 511 tax) from	om busine	sses acqu	ired by the organization	after June 30, 1975.
		See section 509(a)(2). (Cor	mplete Part III.)					
11		An organization organized a		ively to test for public sa	fety. See	section 50	)9(a)(4).	
12		An organization organized a	and operated exclusi	ively for the benefit of, to	perform t	the functio	ons of, or to carry out the	e purposes of one or
		more publicly supported or	•	· · · ·	•		•	
		lines 12a through 12d that	•					
а		Type I. A supporting orga				•	, ,	, aivina
		the supported organization	· · · · · · · · · · · · · · · · · · ·	· ·				
		organization. You must o						, app 69
b		Type II. A supporting org			tion with it	e sunnorti	ed organization(s) by ha	avina
~		control or management o	•					-
		organization(s). You mus			arric perse	ons that oc	ontrol of manage the sup	pported
_		Type III functionally inte	-		in connoc	tion with	and functionally intograt	od with
·		its supported organization					•	ea with,
d		Type III non-functionally		•				ization(a)
u								• •
		that is not functionally int	-		-		-	iveriess
		requirement (see instruct	•	-				
е		☐ Check this box if the orga					ı Type I, Type II, Type III	
		functionally integrated, or	* *	nally integrated support	ng organiz	zation.		
f		er the number of supported of						
g		vide the following information  i) Name of supported	i about the supporte	(iii) Type of organization	(iv) Is the orga	nization listed	(v) Amount of monetary	(vi) Amount of other
	,	organization	(11) 2.114	(described on lines 1-10	in your governi Yes	ng document? No	support (see instructions)	support (see instructions)
				above (see instructions))	162	NO	,	, , , , , , , , , , , , , , , , , , ,
Γota	11							I

13

LHA For Paperwork Reduction Act Notice, see the Instructions for Form 990 or 990-EZ. 032021 01-25-21

Schedule A (Form 990 or 990-EZ) 2020

### 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.)

Sec	tion A. Public Support	71	•	,			
	dar year (or fiscal year beginning in)	(a) 2016	<b>(b)</b> 2017	(c) 2018	(d) 2019	(e) 2020	(f) Total
	Gifts, grants, contributions, and	` ,	` '	, ,	, ,	. ,	.,
	nembership fees received. (Do not						
	nclude any "unusual grants.")	7,675,056.	17,637,617.	11,300,816.	22,432,053.	12,195,142.	71,240,684.
2	Tax revenues levied for the organ-						
i	zation's benefit and either paid to						
	or expended on its behalf						
3	The value of services or facilities						
	furnished by a governmental unit to						
•	the organization without charge	119,000.		121,000.		123,000.	605,000.
4	Fotal. Add lines 1 through 3	7,794,056.	17,757,617.	11,421,816.	22,554,053.	12,318,142.	71,845,684.
5	The portion of total contributions						
	by each person (other than a						
	governmental unit or publicly						
	supported organization) included						
	on line 1 that exceeds 2% of the						
	amount shown on line 11,						
	column (f)						19,632,520.
	Public support. Subtract line 5 from line 4.						52,213,164.
	tion B. Total Support		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	
	dar year (or fiscal year beginning in)	(a) 2016	<b>(b)</b> 2017	(c) 2018	(d) 2019	(e) 2020	(f) Total
	Amounts from line 4	7,794,056.	17,757,617.	11,421,816.	22,554,053.	12,318,142.	71,845,684.
	Gross income from interest,						
	dividends, payments received on						
	securities loans, rents, royalties,	27 614	2 661	2 260	0 005	12 200	CE E76
	and income from similar sources	37,614.	3,661.	2,268.	9,825.	12,208.	65,576.
	Net income from unrelated business						
	activities, whether or not the	41 270					41 270
	ousiness is regularly carried on	41,370.					41,370.
	Other income. Do not include gain						
	or loss from the sale of capital						
	assets (Explain in Part VI.)						71 052 630
	Fotal support. Add lines 7 through 10	-1- (!1				40 23	71,952,630. ,085,063.
	Gross receipts from related activities,					•	,003,003.
	First 5 years. If the Form 990 is for thorganization, check this box and stop					50 T(C)(3)	ightharpoonup
	tion C. Computation of Publ		rcentage				
	Public support percentage for 2020 (I			column (fl)		14	72.57 %
	Public support percentage from 2019					15	74.47 %
	33 1/3% support test - 2020. If the co					<u> </u>	
	stop here. The organization qualifies						
	33 1/3% support test - 2019. If the c						
	and <b>stop here.</b> The organization qual	-					
	10% -facts-and-circumstances tes						
	and if the organization meets the fact	-					
	neets the facts-and-circumstances te						
	10% -facts-and-circumstances tes	-			-		
	more, and if the organization meets th	-					
	•						
,	organization meets the facts-and-circ	umstances test. Th	ne organization qua	alifies as a publicly	y supported organ	ization	▶Ш

Schedule A (Form 990 or 990-EZ) 2020

#### 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.)

Se	ction A. Public Support	, 1	,				
Cale	endar year (or fiscal year beginning in) 🕨	(a) 2016	<b>(b)</b> 2017	(c) 2018	(d) 2019	(e) 2020	(f) Total
1	Gifts, grants, contributions, and						
	membership fees received. (Do not						
	include any "unusual grants.")						
2	Gross receipts from admissions,						
	merchandise sold or services per-						
	formed, or facilities furnished in any activity that is related to the						
	organization's tax-exempt purpose						
3	Gross receipts from activities that						
	are not an unrelated trade or bus-						
	iness under section 513						
4	Tax revenues levied for the organ-						
	ization's benefit and either paid to						
	or expended on its behalf						
5	The value of services or facilities						
	furnished by a governmental unit to						
	the organization without charge						
6	Total. Add lines 1 through 5						
	Amounts included on lines 1, 2, and						
	3 received from disqualified persons						
ŀ	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						
(	Add lines 7a and 7b						
	Public support. (Subtract line 7c from line 6.)						
	ction B. Total Support						
Cale	endar year (or fiscal year beginning in)	(a) 2016	<b>(b)</b> 2017	(c) 2018	(d) 2019	(e) 2020	(f) Total
9	Amounts from line 6	. ,				, ,	
	Gross income from interest,						
	dividends, payments received on						
	securities loans, rents, royalties, and income from similar sources						
ŀ	Unrelated business taxable income						
	(less section 511 taxes) from businesses						
	acquired after June 30, 1975						
	Add lines 10a and 10b						
	Net income from unrelated business						
	activities not included in line 10b,						
	whether or not the business is regularly carried on						
12	Other income. Do not include gain						
	or loss from the sale of capital						
13	assets (Explain in Part VI.)						
	First 5 years. If the Form 990 is for the	ne organization's f	irst, second, third.	fourth, or fifth tax	vear as a section	501(c)(3) organizat	ion.
		· ·		•			
Se	ction C. Computation of Publ						
	Public support percentage for 2020 (			column (f))		15	%
	Public support percentage from 2019					16	%
	ction D. Computation of Inve					1	,,
	Investment income percentage for 20					17	%
	Investment income percentage from					18	<del>//</del>
	a 33 1/3% support tests - 2020. If the						
.50	more than 33 1/3%, check this box a						
ŀ	33 1/3% support tests - 2019. If the						
•	line 18 is not more than 33 1/3%, che						
20	Private foundation If the organization						

#### Part IV | Supporting Organizations

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

#### Section A. All Supporting Organizations

- 1 Are all of the organization's supported organizations listed by name in the organization's governing documents? 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.
- 2 Did the organization have any supported organization that does not have an IRS determination of status under section 509(a)(1) or (2)? If "Yes," explain in **Part VI** how the organization determined that the supported organization was described in section 509(a)(1) or (2).
- **3a** Did the organization have a supported organization described in section 501(c)(4), (5), or (6)? If "Yes," answer lines 3b and 3c below.
- **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)? If "Yes," describe in **Part VI** when and how the organization made the determination.
- c Did the organization ensure that all support to such organizations was used exclusively for section 170(c)(2)(B) purposes? If "Yes," explain in Part VI what controls the organization put in place to ensure such use.
- **4a** Was any supported organization not organized in the United States ("foreign supported organization")? *If* "Yes," and if you checked box 12a or 12b in Part I, answer lines 4b and 4c below.
- **b** Did the organization have ultimate control and discretion in deciding whether to make grants to the foreign supported organization? 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.
- c Did the organization support any foreign supported organization that does not have an IRS determination under sections 501(c)(3) and 509(a)(1) or (2)? 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.
- 5a Did the organization add, substitute, or remove any supported organizations during the tax year? If "Yes," answer lines 5b and 5c 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).
- **b** Type I or Type II only. Was any added or substituted supported organization part of a class already designated in the organization's organizing document?
- c Substitutions only. Was the substitution the result of an event beyond the organization's control?
- 6 Did the organization provide support (whether in the form of grants or the provision of services or facilities) to anyone other than (i) its supported organizations, (ii) individuals that are part of the charitable class benefited by one or more of its supported organizations, or (iii) other supporting organizations that also support or benefit one or more of the filing organization's supported organizations? If "Yes," provide detail in Part VI.
- 7 Did the organization provide a grant, loan, compensation, or other similar payment to a substantial contributor (as defined in section 4958(c)(3)(C)), a family member of a substantial contributor, or a 35% controlled entity with regard to a substantial contributor? If "Yes," complete Part I of Schedule L (Form 990 or 990-EZ).
- 8 Did the organization make a loan to a disqualified person (as defined in section 4958) not described in line 7? If "Yes," complete Part I of Schedule L (Form 990 or 990-EZ).
- **9a** Was the organization controlled directly or indirectly at any time during the tax year by one or more disqualified persons, as defined in section 4946 (other than foundation managers and organizations described in section 509(a)(1) or (2))? If "Yes," provide detail in **Part VI.**
- **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? If "Yes," provide detail in Part VI.
- c Did a disqualified person (as defined in line 9a) have an ownership interest in, or derive any personal benefit from, assets in which the supporting organization also had an interest? If "Yes," provide detail in Part VI.
- 10a Was the organization subject to the excess business holdings rules of section 4943 because of section 4943(f) (regarding certain Type II supporting organizations, and all Type III non-functionally integrated supporting organizations)? If "Yes," answer line 10b below.
  - **b** Did the organization have any excess business holdings in the tax year? (Use Schedule C, Form 4720, to determine whether the organization had excess business holdings.)

	Yes	No
1		
2		
3a		
3b		
3с		
4a		
4b		
4c		
F-		
5a		
5b		
5c		
33		
6		
7		
8		
00		
9a		
9b		
00		
9c		
10a		
iva		
10b		

Pa	rt IV Supporting Organizations <sub>(continued)</sub>			
			Yes	No
11	Has the organization accepted a gift or contribution from any of the following persons?			
а	A person who directly or indirectly controls, either alone or together with persons described in lines 11b and			
	11c below, the governing body of a supported organization?	11a		
b	A family member of a person described in line 11a above?	11b		
С	A 35% controlled entity of a person described in line 11a or 11b above? If "Yes" to line 11a, 11b, or 11c, provide			
	detail in Part VI.	11c		
Sec	tion B. Type I Supporting Organizations			
			Yes	No
1	Did the governing body, members of the governing body, officers acting in their official capacity, or membership of one or			
	more supported organizations have the power to regularly appoint or elect at least a majority of the organization's officers,			
	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 officers, directors, or trustees were allocated among the			
	supported organizations and what conditions or restrictions, if any, applied to such powers during the tax year.	1		
2	Did the organization operate for the benefit of any supported organization other than the supported			
	organization(s) that operated, supervised, or controlled the supporting organization? If "Yes," explain in			
	Part VI how providing such benefit carried out the purposes of the supported organization(s) that operated,			
	supervised, or controlled the supporting organization.	2		
Sec	tion C. Type II Supporting Organizations			
			Yes	No
1	Were a majority of the organization's directors or trustees during the tax year also a majority of the directors			
	or trustees of each of the organization's supported organization(s)? If "No," describe in Part VI how control			
	or management of the supporting organization was vested in the same persons that controlled or managed			
	the supported organization(s).	1		<u> </u>
Sec	tion D. All Type III Supporting Organizations			
			Yes	No
1	Did the organization provide to each of its supported organizations, by the last day of the fifth month of the			
	organization's tax year, (i) a written notice describing the type and amount of support provided during the prior tax			
	year, (ii) a copy of the Form 990 that was most recently filed as of the date of notification, and (iii) copies of the			
	organization's governing documents in effect on the date of notification, to the extent not previously provided?	1		
2	Were any of the organization's officers, directors, or trustees either (i) appointed or elected by the supported			
	organization(s) or (ii) serving on the governing body of a supported organization? If "No," explain in Part VI how			
	the organization maintained a close and continuous working relationship with the supported organization(s).	2		
3	By reason of the relationship described in line 2, above, did the organization's supported organizations have a			
	significant voice in the organization's investment policies and in directing the use of the organization's			
	income or assets at all times during the tax year? If "Yes," describe in Part VI the role the organization's			
0	supported organizations played in this regard.	3		
Sec	tion E. Type III Functionally Integrated Supporting Organizations			
1	Check the box next to the method that the organization used to satisfy the Integral Part Test during the yea(see instructions)	<b>)-</b>		
а	The organization satisfied the Activities Test. Complete line 2 below.			
b	The organization is the parent of each of its supported organizations. <i>Complete</i> <b>line 3</b> <i>below.</i>			
С	The organization supported a governmental entity. Describe in Part VI how you supported a governmental entity (see in	istructio	$\overline{}$	<u> </u>
2	Activities Test. Answer lines 2a and 2b below.		Yes	No
а				
	the supported organization(s) to which the organization was responsive? If "Yes," then in Part VI identify			
	those supported organizations and explain how these activities directly furthered their exempt purposes,			
	how the organization was responsive to those supported organizations, and how the organization determined			
	that these activities constituted substantially all of its activities.	2a		
b	, , ,			
	one or more of the organization's supported organization(s) would have been engaged in? If "Yes," explain in			
	Part VI the reasons for the organization's position that its supported organization(s) would have engaged in	6.		
_	these activities but for the organization's involvement.	2b		
3	Parent of Supported Organizations. <b>Answer lines 3a and 3b below.</b>			
а		0.5		
L	trustees of each of the supported organizations? <i>If</i> "Yes" or "No" provide details in <b>Part VI.</b> Did the organization exercise a substantial degree of direction over the policies, programs, and activities of each	3a		
n	- Dio the organization exercise a substantial degree of direction over the policies, programs, and activities of each			

of its supported organizations? If "Yes," describe in Part VI the role played by the organization in this regard.

Pa	rt V Type III Non-Functionally Integrated 509(a)(3) Supporti	ng Organ	izations	
1	Check here if the organization satisfied the Integral Part Test as a qualifyi	ng trust on	Nov. 20, 1970 (e <i>xplain in</i> I	Part VI). See instructions.
	All other Type III non-functionally integrated supporting organizations must	st complete	Sections A through E.	
Sect	ion A - Adjusted Net Income		(A) Prior Year	(B) Current Year (optional)
1	Net short-term capital gain	1		
2	Recoveries of prior-year distributions	2		
3	Other gross income (see instructions)	3		
4	Add lines 1 through 3.	4		
5	Depreciation and depletion	5		
6	Portion of operating expenses paid or incurred for production or			
	collection of gross income or for management, conservation, or			
	maintenance of property held for production of income (see instructions)	6		
7	Other expenses (see instructions)	7		
8	Adjusted Net Income (subtract lines 5, 6, and 7 from line 4)	8		
Sect	ion B - Minimum Asset Amount		(A) Prior Year	(B) Current Year (optional)
1	Aggregate fair market value of all non-exempt-use assets (see			
	instructions for short tax year or assets held for part of year):			
а	Average monthly value of securities	1a		
b	Average monthly cash balances	1b		
c	Fair market value of other non-exempt-use assets	1c		
d	Total (add lines 1a, 1b, and 1c)	1d		
е	Discount 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 0.015 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 0.035.	6		
7	Recoveries of prior-year distributions	7		
8	Minimum Asset Amount (add line 7 to line 6)	8		
Sect	ion C - Distributable Amount			Current Year
1	Adjusted net income for prior year (from Section A, line 8, column A)	1		
2	Enter 0.85 of line 1.	2		
3	Minimum asset amount for prior year (from Section B, line 8, column A)	3		
4	Enter greater of line 2 or line 3.	4		
5	Income tax imposed in prior year	5		
6	Distributable Amount. Subtract line 5 from line 4, unless subject to			
	emergency temporary reduction (see instructions).	6		
7	Check here if the current year is the organization's first as a non-functional	ally integrate	ed Type III supporting org	anization (see
	instructions).			

Schedule A (Form 990 or 990-EZ) 2020

Pai	t V   Type III Non-Functionally Integrated 509	(a)(3) Supporting Orga	anizations <sub>(continu</sub>	ıed)	
Sect	on D - Distributions		·		Current Year
1	Amounts paid to supported organizations to accomplish exe	mpt purposes		1	
2	Amounts paid to perform activity that directly furthers exemp	ot purposes of supported			
	organizations, in excess of income from activity			2	
3	Administrative expenses paid to accomplish exempt purpose	es of supported organization	IS	3	
4	Amounts paid to acquire exempt-use assets			4	
5	Qualified set-aside amounts (prior IRS approval required - pro	ovide details in Part VI)		5	
6	Other distributions (describe in Part VI). See instructions.	,		6	
7	Total annual distributions. Add lines 1 through 6.			7	
8	Distributions to attentive supported organizations to which the	he organization is responsive	9		
	(provide details in Part VI). See instructions.		8		
9	Distributable amount for 2020 from Section C, line 6			9	
10	Line 8 amount divided by line 9 amount			10	
Sect	on E - Distribution Allocations (see instructions)	(i) Excess Distributions	(ii) Underdistribution Pre-2020	าร	(iii) Distributable Amount for 2020
_1_	Distributable amount for 2020 from Section C, line 6				
2	Underdistributions, if any, for years prior to 2020 (reason-				
	able cause required - explain in Part VI). See instructions.				
3	Excess distributions carryover, if any, to 2020				
a	From 2015				
b	From 2016				
c	From 2017				
d	From 2018				
е	From 2019				
f	Total of lines 3a through 3e				
g	Applied to underdistributions of prior years				
h	Applied to 2020 distributable amount				
i	Carryover from 2015 not applied (see instructions)				
j	Remainder. Subtract lines 3g, 3h, and 3i from line 3f.				
4	Distributions for 2020 from Section D,				
	line 7: \$				
a	Applied to underdistributions of prior years				
b	Applied to 2020 distributable amount				
c	Remainder. Subtract lines 4a and 4b from line 4.				
5	Remaining underdistributions for years prior to 2020, if				
	any. Subtract lines 3g and 4a from line 2. For result greater				
	than zero, explain in Part VI. See instructions.				
6	Remaining underdistributions for 2020. Subtract lines 3h				
	and 4b from line 1. For result greater than zero, explain in				
	Part VI. See instructions.				
7	Excess distributions carryover to 2021. Add lines 3j				
	and 4c.				
8	Breakdown of line 7:				
а	Excess from 2016				
b	Excess from 2017				
	Excess from 2018				

Schedule A (Form 990 or 990-EZ) 2020

15440720 759078 16383

d Excess from 2019e Excess from 2020

Part VI	Supplemental Information. Provide the explanations required by Part II, line 10; Part II, line 17a or 17b; Part III, line 12; Part IV, Section A, lines 1, 2, 3b, 3c, 4b, 4c, 5a, 6, 9a, 9b, 9c, 11a, 11b, and 11c; Part IV, Section B, lines 1 and 2; Part IV, Section C, line 1; Part IV, Section D, lines 2 and 3; Part IV, Section E, lines 1c, 2a, 2b, 3a, and 3b; Part V, line 1; Part V, Section B, line 1e; Part V, Section D, lines 5, 6, and 8; and Part V, Section E, lines 2, 5, and 6. Also complete this part for any additional information.
	(See instructions.)

Schedule B

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

Department of the Treasury Internal Revenue Service **Schedule of Contributors** 

➤ Attach to Form 990, Form 990-EZ, or Form 990-PF.

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

OMB No. 1545-0047

2020

Name of the organization Employer identification number

LOWELL OBSERVATORY 86-0098918

Organization type (check one):

-					
Filers of:	Section:				
Form 990 or 990-E	Z X 501(c)( 3 ) (enter number) organization				
	4947(a)(1) nonexempt charitable trust <b>not</b> 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 <b>General Rule</b> or a <b>Special Rule.</b> 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					
sections any one o	ganization described in section 501(c)(3) filing Form 990 or 990-EZ that met the 33 1/3% support test of the regulations under 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 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; in 990-EZ, line 1. Complete Parts I and II.				
contribute literary, o	ganization described in section 501(c)(7), (8), or (10) filing Form 990 or 990-EZ that received from any one or, during the year, total contributions of more than \$1,000 exclusively for religious, charitable, scientific, or educational purposes, or for the prevention of cruelty to children or animals. Complete Parts I (entering column (b) instead of the contributor name and address), II, and III.				
year, con is checke purpose.	ganization described in section 501(c)(7), (8), or (10) filing Form 990 or 990-EZ that received from any one contributor, during the tributions exclusively for religious, charitable, etc., purposes, but no such contributions totaled more than \$1,000. If this box d, enter here the total contributions that were received during the year for an exclusively religious, charitable, etc.,  Don't complete any of the parts unless the <b>General Rule</b> applies to this organization because it received nonexclusively charitable, etc., contributions totaling \$5,000 or more during the year \bigsim \frac{\bigsim}{\bigsim} \frac{\bigsim}{\bign} \frac{\bigsim}{\bigsim} \frac{\bigsim}{\bigsim} \bigsim				
but it <b>must</b> answe	religious, charitable, etc., contributions totaling \$5,000 or more during the year \$				

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

Schedule B (Form 990, 990-EZ, or 990-PF) (2020)

Name of organization Employer identification number

#### LOWELL OBSERVATORY

86-0098918

Part I	Contributors (see instructions). Use duplicate copies of Part I if additional	Il space is needed.	
(a)	(b)	(c)	(d)
No.	Name, address, and ZIP + 4	Total contributions	Type of contribution
1		\$1,413,200 <b>.</b>	Person X Payroll Noncash  (Complete Part II for noncash contributions.)
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
2		\$ 600,000.	Person X Payroll
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
3	Nume, address, and 2n + 4	\$ 3,000,000.	Person X Payroll Noncash (Complete Part II for noncash contributions.)
(a)	(b)	(c)	(d)
	Name, address, and ZIP + 4	* 515,500.	Person X Payroll Noncash (Complete Part II for noncash contributions.)
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
5		\$ <u>1,309,645</u> .	Person X Payroll Noncash  (Complete Part II for noncash contributions.)
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
6	Tames, additional 1 1	\$ 1,668,427.	Person X Payroll Noncash (Complete Part II for noncash contributions.)

Name of organization Employer identification number

## LOWELL OBSERVATORY 86-0098918

Part I	Contributors (see instructions). Use duplicate copies of Part I if ac	dditional space is needed.	
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
7		\$\$\$	Person X Payroll
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
8		\$\$\$	Person X Payroll
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
9		\$\$\$	Person X Payroll
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
	rame, address, and 2n + 4	\$	Person Payroll Noncash (Complete Part II for noncash contributions.)
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
		\$	Person Payroll Noncash (Complete Part II for noncash contributions.)
(a) No.	(b) Name, address, and ZIP + 4	(c) Total contributions	(d) Type of contribution
		\$	Person Payroll Noncash (Complete Part II for noncash contributions.)

Name of organization Employer identification number

#### LOWELL OBSERVATORY

86-0098918

Part II	Noncash Property (see instructions). Use duplicate copies of Pa	art 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
(a) No. from Part I	(b)  Description of noncash property given	(c) FMV (or estimate) (See instructions.)	(d) Date received
(a) No. from Part I	(b) Description of noncash property given	(c) FMV (or estimate) (See instructions.)	(d) Date received
(a) No. from Part I	(b) Description of noncash property given	(c) FMV (or estimate) (See instructions.)	(d) Date received
		\$	
(a) No. from Part I	(b) Description of noncash property given	(c) FMV (or estimate) (See instructions.)	(d) Date received
		\$	
(a) No. from Part I	(b)  Description of noncash property given	(c) FMV (or estimate) (See instructions.)	(d) Date received
		   \$	

Name of organization **Employer identification number** 86-0098918 LOWELL OBSERVATORY Part III Exclusively religious, charitable, etc., contributions to organizations described in section 501(c)(7), (8), or (10) that total more than \$1,000 for the year from any one contributor. Complete columns (a) through (e) and the following line entry. For organizations completing Part III, enter the total of exclusively religious, charitable, etc., contributions of \$1,000 or less for the year. (Enter this info. once.) Use duplicate copies of Part III if additional space is needed. (a) No. from Part I (b) Purpose of gift (c) Use of gift (d) Description of how gift is held (e) Transfer of gift Transferee's name, address, and ZIP + 4 Relationship of transferor to transferee (a) No. from (b) Purpose of gift (c) Use of gift (d) Description of how gift is held Part I (e) Transfer of gift Transferee's name, address, and ZIP + 4 Relationship of transferor to transferee (a) No. from Part I (b) Purpose of gift (c) Use of gift (d) Description of how gift is held (e) Transfer of gift Transferee's name, address, and ZIP + 4 Relationship of transferor to transferee (a) No. from (b) Purpose of gift (c) Use of gift (d) Description of how gift is held Part I (e) Transfer of gift Transferee's name, address, and ZIP + 4 Relationship of transferor to transferee

#### **SCHEDULE D** (Form 990)

Department of the Treasury Internal Revenue Service

Supplemental Financial Statements

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

► Attach to Form 990.

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

OMB No. 1545-0047 Open to Public Inspection

Name of the organization

LOWELL OBSERVATORY

**Employer identification number** 86-0098918

Pai	t I Organizations Maintaining Donor Advise	ed Funds or Other Similar Funds or	Accounts. Complete if the
	organization answered "Yes" on Form 990, Part IV, lir	ne 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 f	unds
	are the organization's property, subject to the organization's	exclusive legal control?	Yes No
6	Did the organization inform all grantees, donors, and donor a	advisors in writing that grant funds can be use	d only
	for charitable purposes and not for the benefit of the donor	or donor advisor, or for any other purpose con	ferring
Pai	t II Conservation Easements. Complete if the or	ganization answered "Yes" on Form 990, Part	IV, line 7.
1	Purpose(s) of conservation easements held by the organizat		
	Preservation of land for public use (for example, recrea		storically important land area
	Protection of natural habitat	Preservation of a ce	ertified historic structure
	Preservation of open space		
2	Complete lines 2a through 2d if the organization held a quali	fied conservation contribution in the form of a	
	day of the tax year.		Held at the End of the Tax Year
	Total number of conservation easements		
	Total acreage restricted by conservation easements		•
	Number of conservation easements on a certified historic str		. 2c
a	Number of conservation easements included in (c) acquired		
•	listed in the National Register		
3	Number of conservation easements modified, transferred, re	eleased, extinguished, or terminated by the org	ganization during the tax
4	year  Number of states where preparty subject to concernation as	sament is leasted	
4 5	Number of states where property subject to conservation ea		
3	Does the organization have a written policy regarding the peviolations, and enforcement of the conservation easements		Yes No
6	Staff and volunteer hours devoted to monitoring, inspecting,		
Ū	b	, mandling of violations, and emoreing conserv	ation casements during the year
7	Amount of expenses incurred in monitoring, inspecting, hand	dling of violations, and enforcing conservation	easements during the year
-	<b>▶</b> \$		caccinicate adming the year
8	Does each conservation easement reported on line 2(d) abor	ve satisfy the requirements of section 170(h)(4	4)(B)(i)
	and section 170(h)(4)(B)(ii)?	•	
9	In Part XIII, describe how the organization reports conservat		
	balance sheet, and include, if applicable, the text of the foot	•	
	organization's accounting for conservation easements.	-	
Pai	t III Organizations Maintaining Collections o	of Art, Historical Treasures, or Othe	er Similar Assets.
	Complete if the organization answered "Yes" on Form	n 990, Part IV, line 8.	
1a	If the organization elected, as permitted under FASB ASC 95	58, not to report in its revenue statement and	balance sheet works
	of art, historical treasures, or other similar assets held for pu	blic exhibition, education, or research in furthe	erance of public
	service, provide in Part XIII the text of the footnote to its final	ncial statements that describes these items.	
b	If the organization elected, as permitted under FASB ASC 95	58, to report in its revenue statement and bala	nce sheet works of
	art, historical treasures, or other similar assets held for public	c exhibition, education, or research in furthera	nce of public service,
	provide the following amounts relating to these items:		
	(i) Revenue included on Form 990, Part VIII, line 1		• \$
2	If the organization received or held works of art, historical tre	easures, or other similar assets for financial gai	in, provide
	the following amounts required to be reported under FASB A		
	Revenue included on Form 990, Part VIII, line 1		·
	Assets included in Form 990, Part X		
LHA	For Paperwork Reduction Act Notice, see the Instruction	s for Form 990.	Schedule D (Form 990) 2020

Sche	edule D (Form 990) 2020 LO	WELL OBSERVATORY	Z		86-	009891	8 Page 2
Pai	rt III Organizations Maint	aining Collections of Ar	t, Historical Tr	easures, or Oth	ner Similar As	sets(contil	nued)
3	Using the organization's acquisition	on, accession, and other records	s, check any of the	following that make	significant use o	f its	
	collection items (check all that app	oly):					
а	X Public exhibition	d	Loan or exc	nange program			
b	Scholarly research	е	Other				
С	Preservation for future gene	rations					
4	Provide a description of the organ	ization's collections and explain	how they further the	ne organization's ex	empt purpose in	Part XIII.	
5	During the year, did the organization						
	to be sold to raise funds rather tha	an to be maintained as part of the	ne organization's co	ollection?		Yes	X No
Pai	rt IV Escrow and Custodi	al Arrangements. Comple	te if the organizatio	n answered "Yes" o	n Form 990, Part	IV, line 9, or	
	reported an amount on For	m 990, Part X, line 21.					
1a	Is the organization an agent, truste	ee, custodian or other intermed	iary for contribution	s or other assets no	ot included		
	on Form 990, Part X?					Yes	☐ No
b	If "Yes," explain the arrangement i						
						Amoun	t
С	Beginning balance				1c		
d	Additions during the year						
е	Distributions during the year						
f	Ending balance				1f		
2a	Did the organization include an am				oility?	Yes	□ No
b	If "Yes," explain the arrangement i	n Part XIII. Check here if the ex	planation has been	provided on Part XI	II		
Pai	rt V Endowment Funds.	Complete if the organization ans	swered "Yes" on Fo	rm 990, Part IV, line	10.		
		(a) Current year	(b) Prior year	(c) Two years back	(d) Three years b	ack (e) Four	r years back
1a	Beginning of year balance	30,997,339.	26,558,269.	33,571,683.	39,620,4	03. 37	,221,789
b	Contributions	2,278,596.	709,421.	467,872.	1,476,0	56. 1	,254,991
С	Net investment earnings, gains, ar		4,013,194.	-1,781,866.	4,372,3	59. 2	,174,579
d	Grants or scholarships	175,186.	163,237.	5,566,105.	11,732,5	26.	809,006
е	Other expenditures for facilities						
	and programs						94,516
f	Administrative expenses	118,402.	120,308.	133,315.	164,6	09.	127,434
g		26 215 500	30,997,339.	26,558,269.	33,571,6	83. 39	,620,403
2	Provide the estimated percentage	of the current year end balance	e (line 1g, column (a	i)) held as:	•		
а	Board designated or quasi-endow	ment ▶ 5.7400	%				
b			_				
С	Term endowment ▶ 75.	9500 %					
	The percentages on lines 2a, 2b, a	and 2c should equal 100%.					
За	Are there endowment funds not in	the possession of the organiza	tion that are held a	nd administered for	the organization		
	by:						Yes No
	(i) Unrelated organizations					3a(i)	X
	(ii) Related organizations					3a(ii)	Х
b	If "Yes" on line 3a(ii), are the relate						Х
4	Describe in Part XIII the intended u						
Pai	rt VI Land, Buildings, and						
	Complete if the organization	n answered "Yes" on Form 990	, Part IV, line 11a. S	ee Form 990, Part	K, line 10.		
	Description of property	(a) Cost or ot	her (b) Cost	or other (c)	Accumulated	(d) Boo	k value
		basis (investm	ent) basis	(other) d	epreciation	-	
1a	Land			5,917.			5,917.
					411,953.		8,037.
	Leasehold improvements		3,90	0,007. 2,	922,656.	97	7,351.

Schedule D (Form 990) 2020

25,989,705.

47,612,883.

3,011,873.

15,767,585.

873,613.

e Other

c Leasehold improvements

Total. Add lines 1a through 1e. (Column (d) must equal Form 990, Part X, column (B), line 10c.)

41,757,290.

3,885,486.

Schedule D (Form 990) 2020 LOWELL OBSER	RVATORY	86	-0098918 Page
Part VII Investments - Other Securities.			<u></u>
Complete if the organization answered "Yes" of	on Form 990, Part IV, line	e 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	d-of-year market value
(1) Financial derivatives			
(2) Closely held equity interests			
(3) Other			
(A)			
(B)			
(C)			
(D)			
(E)			
(F)			
(G)			
(H)			
Total. (Col. (b) must equal Form 990, Part X, col. (B) line 12.)			
Part VIII Investments - Program Related.			
Complete if the organization answered "Yes" (			-l -f
(a) Description of investment	(b) Book value	(c) Method of valuation: Cost or end	d-of-year market value
(1)			
(2)			
(3)			
(4)			
(5)			
(6)			
(7)			
(8)			
(9) Total (Col. (b) must squal Form 000, Part V. col. (P) line 12 \			
Total. (Col. (b) must equal Form 990, Part X, col. (B) line 13.)			
Complete if the organization answered "Yes" of	on Form 000 Part IV line	a 11d Soo Form 990 Part V line 15	
	Description	e 11d. See Form 990, Part A, line 15.	(b) Book value
	- CSOTIPTION		(b) Book value
(2)			
(4)			
(5) (6)			
(7)			
(8)			
(9)			
Total. (Column (b) must equal Form 990, Part X, col. (B) line	15)		
Part X Other Liabilities.	10.)		
Complete if the organization answered "Yes" of	on Form 990. Part IV. line	e 11e or 11f. See Form 990. Part X. line <i>25</i>	5.
1. (a) Description of liability	5111 5111 555, 1 are 17, mrs		(b) Book value
(1) Federal income taxes			<u> </u>
(2) DUE TO PERCIVAL LOWELL TRU	JST UW		13,031,666
(3)			,,
(4)			
(5)			
\-/			1

Total. (Column (b) must equal Form 990, Part X, col. (B) line 25.) 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... X

Schedule D (Form 990) 2020

13,031,666.

(6) (7) (8)

Part XI Reconciliation of Revenue per Audited Financial Sta		nue per Return.
Complete if the organization answered "Yes" on Form 990, Part IV, lin		
1 Total revenue, gains, and other support per audited financial statements		1
2 Amounts included on line 1 but not on Form 990, Part VIII, line 12:		
a Net unrealized gains (losses) on investments		
<b>b</b> Donated services and use of facilities		
c Recoveries of prior year grants		
d Other (Describe in Part XIII.)	2d	
e Add lines 2a through 2d		2e
3 Subtract line 2e from line 1		3
4 Amounts included on Form 990, Part VIII, line 12, but not on line 1:		
a Investment expenses not included on Form 990, Part VIII, line 7b	4a	
<b>b</b> Other (Describe in Part XIII.)	4b	
c Add lines 4a and 4b		4c
5 Total revenue. Add lines 3 and 4c. (This must equal Form 990, Part I, line 12.)		
Part XII Reconciliation of Expenses per Audited Financial Sta		enses per Return.
Complete if the organization answered "Yes" on Form 990, Part IV, lin		
Total expenses and losses per audited financial statements		1
2 Amounts included on line 1 but not on Form 990, Part IX, line 25:	1 1	
a Donated services and use of facilities	2a	
<b>b</b> Prior year adjustments	2b	
c Other losses	2c	
d Other (Describe in Part XIII.)	'	
e Add lines 2a through 2d		
3 Subtract line 2e from line 1		3
4 Amounts included on Form 990, Part IX, line 25, but not on line 1:	1 1	
a Investment expenses not included on Form 990, Part VIII, line 7b		
<b>b</b> Other (Describe in Part XIII.)	4b	
c Add lines 4a and 4b		
5 Total expenses. Add lines 3 and 4c. (This must equal Form 990, Part I, line 18	3.)	5
Part XIII Supplemental Information.		
Provide the descriptions required for Part II, lines 3, 5, and 9; Part III, lines 1a and 4		; 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 ar	ny additional information.	
PART V, LINE 4:		
PARI V, LINE 4:		
THE ENDOWMENT FUNDS ARE USED FOR SUPPORT	OF LOWELL ORG	SEDVATORY AND EOD
THE ENDOWMENT FONDS ARE OBED FOR SOLLORI	OF HOWEHH ODE	SERVATORT AND FOR
REINVESTMENT.		
KEINVEDIMENT.		
PART X, LINE 2:		
THE FOLLOWING DISCLOSURE IS RELATED TO TH	E COMBINED FI	NANCIAL STATEMENTS
OF THE LOWELL OBSERVATORY, TRUST U/W OF P	ERCIVAL LOWEI	L, AND THE LOWELL
OBSERVATORY FOUNDATION:		
THE OBSERVATORY, THE FOUNDATION, AND THE	TRUST ARE EXE	MPT FROM INCOME
	na\ a========	.01/01/01
TAXES UNDER BOTH INTERNAL REVENUE CODE (I	RC) SECTION 5	OUI(C)(3) AND ARIZONA
TNCOME MAY IAWG MUE OBGERTAMORY TO CLAC	מדפדפה אמ סשנ	IED WAYN Y DDIMAME
INCOME TAX LAWS. THE OBSERVATORY IS CLAS	SIFIED AS OTE	
032054 12-01-20		Schedule D (Form 990) 2020

#### SCHEDULE I (Form 990)

Department of the Treasury Internal Revenue Service

# Grants and Other Assistance to Organizations, Governments, and Individuals in the United States

Complete if the organization answered "Yes" on Form 990, Part IV, line 21 or 22.

➤ Attach to Form 990.

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

OMB No. 1545-0047

Open to Public Inspection

**Employer identification number** Name of the organization LOWELL OBSERVATORY 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 X Yes criteria used to award the grants or assistance? No 2 Describe in Part IV the organization's procedures for monitoring the use of grant funds in the United States. 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. (f) Method of (c) IRC section 1 (a) Name and address of organization (b) EIN (d) Amount of (e) Amount of (a) Description of (h) Purpose of grant valuation (book, or government (if applicable) cash grant non-cash noncash assistance or assistance FMV, appraisal, assistance other) LOWELL OBSERVATORY FOUNDATION 1400 W. MARS HILL ROAD FLAGSTAFF, AZ 86001 47-2052113 501(C)(3) TO FUND AN ENDOWMENT 53,300 0 MASSACHUSETTS INSTITUTE OF TECHNOLOGY - 77 MASSACHUSETTS NASA GRANT - SUBAWARD AVENUE - CAMBRIDGE, MA 02139 COLLABORATION RESEARCH 04-2103594 501(C)(3) 16,008 NORTHERN ARIZONA UNIVERSITY P.O. BOX 4070 NASA GRANT - SUBAWARD FLAGSTAFF, AZ 86011 74-2579628 STATE OF ARIZONA 323,976 0 COLLABORATION RESEARCH NORTHERN ARTZONA UNIVERSITY P.O. BOX 4070 NSF GRANT - SUBAWARD 74-2579628 FLAGSTAFF AZ 86011 STATE OF ARIZONA 65 260 COLLABORATION RESEARCH NORTHERN ARIZONA UNIVERSITY DONOR FUNDS FOR PREDOCTORAL STUDENT P.O. BOX 4070 74-2579628 STATE OF ARIZONA SALARY FLAGSTAFF, AZ 86011 33 209 0 PLANETARY SCIENCE INSTITUTE 1700 E. FORT LOWELL, SUITE 106 NASA GRANT - SUBAWARD TUCSON, AZ 85719 33-0175263 501(C)(3) 100 401 0 COLLABORATION RESEARCH

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

3 Enter total number of other organizations listed in the line 1 table

2 Enter total number of section 501(c)(3) and government organizations listed in the line 1 table

Schedule I (Form 990) 2020

8.

0.

Schedule I (Form 990)

(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	<b>(h)</b> Purpose of grant or assistance
URDUE UNIVERSITY							
55 S. GRANT STREET							NASA GRANT - SUBAWARD
WEST LAFAYETTE, IN 47907	35-6002041	501(C)(3)	19,807.	0.			COLLABORATION RESEARCH
UNIVERSITY OF MARYLAND							
104 ATLANTIC BLDG							NASA GRANT - SUBAWARD
COLLEGE PARK, MD 20742	52-6002033	STATE OF MARYLANI	6,082.	0.			COLLABORATION RESEARCH
UNIVERSITY OF PITTSBURGH							
123 UNIVERSITY PLACE, B21							NASA GRANT - SUBAWARD
PITTSBURGH, PA 15213	25-0965591	501(C)(3)	10,542.	0.			COLLABORATION RESEARCH
ARIZONA STATE UNIVERSITY							
P.O. BOX 876011							NSF GRANT - SUBAWARD
TEMPE, AZ 85287	86-0196696	STATE OF ARIZONA	28,366.	0.			COLLABORATION RESEARCH

Part III Grants and Other Assistance to Domestic Individuals Part III can be duplicated if additional space is needed.	s. Complete if the	organization answ	ered "Yes" on Form 9	990, Part IV, line 22.		
(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 red	uired in Part I, lin	e 2; Part III, columr	n (b); and any other a	dditional information.		
PART I, LINE 2:						
ALL GRANT RECIPIENTS ARE MAJOR UNI	VERSITIE	S, WITH SO	PHISTICATE	D SYSTEMS FOR		
ADMINISTERING GRANTS. OBSERVATORY	GRANTS	TO THE UN	[VERSITIES	ARE PAID ON A		
COST REIMBURSEMENT BASIS. THE OBSE	RVATORY	PRINCIPAL	INVESTIGAT	OR 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** 

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

Compensated Employees

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

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

Open to Public Inspection

OMB No. 1545-0047

Internal Revenue Service Name of the organization

Department of the Treasury

LOWELL OBSERVATORY

**Employer identification number** 86-0098918

Pa	art I Questions Regarding Compensation					
			Yes	No		
<b>1</b> a	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.					
	First-class or charter travel  Housing allowance or residence for personal use					
	Travel for companions Payments for business use of personal residence					
	Tax indemnification and gross-up payments  Health or social club dues or initiation fees					
	Discretionary spending account  Personal services (such as maid, chauffeur, chef)					
b	If any of the boxes on line 1a are checked, did the organization follow a written policy regarding payment or		37			
	reimbursement or provision of all of the expenses described above? If "No," complete Part III to explain	1b	Х			
2	Did the organization require substantiation prior to reimbursing or allowing expenses incurred by all directors,		37			
	trustees, and officers, including the CEO/Executive Director, regarding the items checked on line 1a?	2	X			
_						
3	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.					
	Compensation committee  Written employment contract					
	Independent compensation consultant  X Compensation survey or study  Form 990 of other organizations  X Approval by the board or compensation committee					
	Form 990 of other organizations  Approval by the board or compensation committee					
4	During the year, did any person listed on Form 990, Part VII, Section A, line 1a, with respect to the filing					
7	organization or a related organization:					
а	Receive a severance payment or change-of-control payment?	4a		Х		
b	Participate in or receive payment from a supplemental nonqualified retirement plan?	4b		Х		
c	Participate in or receive payment from an equity-based compensation arrangement?	4c		Х		
	If "Yes" to any of lines 4a-c, list the persons and provide the applicable amounts for each item in Part III.					
	Only section 501(c)(3), 501(c)(4), and 501(c)(29) organizations must complete lines 5-9.					
5	For persons listed on Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation					
	contingent on the revenues of:					
а	The organization?	5a		Х		
	Any related organization?	5b		Х		
	If "Yes" on line 5a or 5b, describe in Part III.					
6	For persons listed on Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation					
	contingent on the net earnings of:					
а	The organization?	6a		X		
b	Any related organization?	6b		Х		
	If "Yes" on line 6a or 6b, describe in Part III.					
7	For persons listed on Form 990, Part VII, Section A, line 1a, did the organization provide any nonfixed payments			37		
_	not described on lines 5 and 6? If "Yes," describe in Part III	7		X		
8	Were any amounts reported on Form 990, Part VII, paid or accrued pursuant to a contract that was subject to the			37		
_	initial contract exception described in Regulations section 53.4958-4(a)(3)? If "Yes," describe in Part III	8		X		
9	If "Yes" on line 8, did the organization also follow the rebuttable presumption procedure described in					
	Regulations section 53.4958-6(c)?	9		<u> </u>		

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

Schedule J (Form 990) 2020

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.

		(B) Breakdown of	W-2 and/or 1099-MI	SC compensation	(C) Retirement and other deferred	(D) Nontaxable benefits	(E) Total of columns (B)(i)-(D)	(F) Compensation in column (B)	
(A) Name and Title	(i) Base compensation	(ii) Bonus & incentive compensation	(iii) Other reportable compensation	compensation	benefits	(6)(1)-(U)	reported as deferred on prior Form 990		
(1) HALL, JEFFREY	(i)	149,580.	0.	13,500.	8,475.	9,741.	181,296.	0.	
DIRECTOR	(ii)	0.	0.	0.	0.	0.	0.	0.	
(2) MASSEY, PHILIP	(i)	159,097.	0.	0.	7,850.	7,848.	174,795.	0.	
ASTRONOMER	(ii)	0.	0.	0.	0.	0.	0.	0.	
(3) SCHLEICHER, DAVID	(i)	155,225.	0.	0.	7,850.	8,712.	171,787.	0.	
ASTRONOMER	(ii)	0.	0.	0.	0.	0.	0.	0.	
(4) ACTOR, ANN T.	(i)	153,475.	0.	0.	7,750.	8,956.	170,181.	0.	
DEPUTY DIRECTOR FOR DEVELOPMENT	(ii)	0.	0.	0.	0.	0.	0.	0.	
(5) HUNTER, DEIDRE	(i)	150,559.	0.	0.	7,750.	7,843.	166,152.	0.	
ASTRONOMER	(ii)	0.	0.	0.	0.	0.	0.	0.	
(6) LABRUZZO, ANNE	(i)	146,692.	0.	0.	7,700.	9,683.	164,075.	0.	
DEPUTY DIRECTOR FOR ADMINISTRATION	(ii)	0.	0.	0.	0.	0.	0.	0.	
(7) WEST, MICHAEL	(i)	154,245.	0.	0.	7,700.	1,160.	163,105.	0.	
DEPUTY DIRECTOR FOR SCIENCE	(ii)	0.	0.	0.	0.	0.	0.	0.	
	(i)								
	(ii)								
	(i)								
	(ii)								
	(i)								
	(ii)								
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	(ii)								
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	(i)								
	(ii)								
	(i)								
	(ii)								

Part III   Supplemental Information
Provide the information, explanation, or descriptions required for Part I, lines 1a, 1b, 3, 4a, 4b, 4c, 5a, 5b, 6a, 6b, 7, and 8, and for Part II. Also complete this part for any additional information.
PART I, LINE 1A:
J. HALL, DIRECTOR 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

Open to Public Inspection

Department of the Treasury Internal Revenue Service Complete if the organizations answered "Yes" on Form 990, Part IV, lines 29 or 30.

Attach to Form 990.

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

Name of the organization

LOWELL OBSERVATORY

Employer identification number 86-0098918

Pai	rt 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 de noncash contribu		_	3
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	8	174,669.	TRANSACTION	VAL	UE	
10	Securities - Closely held stock							
11	Securities - Partnership, LLC, or trust interests							
12	trust interests Securities - Miscellaneous							
13	Qualified conservation contribution -							
	Historic structures							
14	Qualified conservation contribution - Other							
15	Real estate - Residential							
16	Real estate - Commercial							
17	Real estate - Other							
18	Collectibles							
19	Food inventory							
20	Drugs and medical supplies							
21	Taxidermy							
22	Historical artifacts							
23	Scientific specimens							
24	Archeological artifacts							
25	Other ▶ (TELESCOPES )	X	3		FAIR MARKET			
26	Other ► ( SUPPLIES )	X	4	1,181.	FAIR MARKET	VAL	UE	
27	Other ()							
28	Other ( )							
29	Number of Forms 8283 received by the organiz	zation durin	g the tax year for o	contributions				
	for which the organization completed Form 828	33, Part V, [	Oonee Acknowledg	gement 29				
						Y	'es	No
30a	During the year, did the organization receive by	/ contribution	on any property rep	ported in Part I, lines 1 throu	gh 28, that it			
	must hold for at least three years from the date							
	exempt purposes for the entire holding period?	?				30a	_	<u> </u>
b	If "Yes," describe the arrangement in Part II.							
31	Does the organization have a gift acceptance p	-	•	•		31	X	
32a	Does the organization hire or use third parties of	or related or	ganizations to soli	cit, process, or sell noncash		<b> </b>   .	,	
_	contributions?					32a 2	X	
	If "Yes," describe in Part II.							
33	If the organization didn't report an amount in co	olumn (c) fo	r a type of propert	y for which column (a) is che	cked,			
	describe in Part II.							

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

Schedule M (Form 990) 2020

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

Internal Revenue Service

(Form 990 or 990-EZ)
Department of the Treasury

Supplemental Information to Form 990 or 990-EZ

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

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

QMB No. 1545-0047
2020
Open to Public Inspection

Name of the organization

LOWELL OBSERVATORY

Employer identification number 86-0098918

FORM 990, PART III, LINE 4A, PROGRAM SERVICE ACCOMPLISHMENTS: ONLY 50 NIGHTS TO SHUTDOWNS DUE TO THE COVID-19 PANDEMIC (SIGNIFICANTLY BETTER THAN MANY OTHER COMPARABLE FACILITIES, SOME OF WHICH HAVE STILL NOT RETURNED TO FULL OPERATION). THESE SCIENCE NIGHTS WERE USED BY AS WELL AS ASTRONOMERS AT OUR PARTNER INSTITUTIONS: LOWELL STAFF, BOSTON UNIVERSITY, NORTHERN ARIZONA UNIVERSITY, UNIVERSITY OF MARYLAND, UNIVERSITY OF TOLEDO, AND YALE UNIVERSITY. IN TOTAL, LDT FEATURED PROMINENTLY IN MORE THAN THREE DOZEN SCIENTIFIC OR TECHNICAL PUBLICATIONS IN 2020. LDT'S GROWING SUITE OF STATE-OF-THE-ART SUCH AS THE NEW HIGH-PRECISION SPECTROGRAPH EXPRES, ENABLE INSTRUMENTS, 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 NAVY PRECISION OPTICAL INTERFEROMETER (NPOI) THAT WILL ADD THREE ONE-METER TELESCOPES TO THE EXISTING ARRAY AND COMPLETE OTHER CRITICAL MAINTENANCE AND UPGRADES, GREATLY INCREASING THE SCIENTIFIC PERFORMANCE OF THAT SITE. LOWELL OBSERVATORY ALSO CONTINUED TO OPERATE OTHER SMALLER TELESCOPES AT ITS ANDERSON MESA SITE, AND HAS BEGUN LAYING THE GROUNDWORK FOR THE REPLACEMENT OF ITS ANTIQUATED 31" TELESCOPE WITH A MODERN 1M TELESCOPE. ACCESS TO LOCAL TELESCOPES EQUIPPED WITH WORLD-CLASS INSTRUMENTS HAS ENABLED SCIENCE THAT COULD NOT BE DONE IN ADDITION, THE OBSERVATORY IS UNDERTAKING A DRAMATIC ELSEWHERE. EXPANSION OF ITS MAIN CAMPUS ON MARS HILL, INCLUDING PRELIMINARY DESIGN WORK FOR A NEW TECHNICAL SERVICES BUILDING THAT WILL GREATLY INCREASE THE INSTRUMENTATION AND ENGINEERING CAPABILITIES OF ITS TECHNICAL STAFF.

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

Schedule O (Form 990 or 990-EZ) 2020

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

WERE EXTREMELY WELL RECEIVED BY GUESTS. THE PRIVACY OF A SINGLE GROUP

AT A TELESCOPE FACILITY ALLOWED EDUCATORS TO TAILOR EACH EXPERIENCE TO

THE GUESTS' ASTRONOMY BACKGROUND AND AREAS OF INTEREST. IN SEPTEMBER,

THE PUBLIC PROGRAM WELCOMED ITS NEWEST TELESCOPE: THE DYER TELESCOPE, A

24" PLANEWAVE MOUNTED INSIDE A NEWLY REFURBISHED DOME. THIS TELESCOPE

PROVIDED THE OUTREACH TEAM WITH ANOTHER VENUE IN WHICH TO HOLD INTIMATE

AND PERSONALIZED PREMIUM ACCESS PROGRAMS. IN DECEMBER, THE PLANETS

JUPITER AND SATURN DRIFTED CLOSER TOGETHER IN THE SKY THAN THEY HAVE

BEEN IN CENTURIES, AND THE WHOLE WORLD TURNED ITS EYES ON THE GREAT

CONJUNCTION. IN ADDITION TO THE LARGEST LIVESTREAM TO DATE, THE PUBLIC

PROGRAM DEVELOPED SPECIAL PROGRAMMING TO ALLOW DOZENS OF GUESTS TO VIEW

THE GREAT CONJUNCTION FROM OUR GODO AND DYER TELESCOPES.

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.

Name of the organization  LOWELL OBSERVATORY	Employer identification number 86-0098918
FORM 990, PART VI, SECTION B, LINE 15A:	
COMPENSATION OF THE DIRECTOR FOR LOWELL OBSERVATORY IS DE	TERMINED BY THE
SOLE TRUSTEE OF THE CORPORATION AFTER REVIEW OF INFORMATI	ON PROVIDED BY THE
HUMAN RESOURCE ADMINISTRATOR AND MEMBERS OF THE ADVISORY	BOARD AND LOWELL
OBSERVATORY FOUNDATION WHO HAVE EXPERIENCE IN THE RESEARC	H INDUSTRY OR
COMPENSATION AT NON-PROFITS. THE HUMAN RESOURCE ADMINIST	RATOR REVIEWS THE
TOTAL COMPENSATION OF THE DIRECTOR IN ACCORDANCE WITH	
REGULATIONS/GUIDELINES ESTABLISHED BY THE IRS AND INDUSTR	Y BEST PRACTICES.
DATA REGARDING SALARIES OF OTHER DIRECTORS (CEOS) AT ORGA	NIZATIONS OF
SIMILAR SIZE, INCLUDING BOTH NON-PROFIT AND FOR-PROFIT CO	MPANIES IS ALSO
REVIEWED. THE SOLE TRUSTEE, WITH ADVICE FROM THE ADVISOR	Y BOARD, ALSO
ESTABLISHES GOALS AND OBJECTIVES FOR THE DIRECTOR AND EVA	LUATES THE
PERFORMANCE OF THE DIRECTOR BASED ON THE PRIOR YEAR'S GOA	LS AND OBJECTIVES.
FORM 990, PART VI, SECTION C, LINE 19:	
WHEN REQUESTED, DOCUMENTS REGARDING THE OBSERVATORY ARE F	ROVIDED BY THE
BUSINESS OFFICE. THE 990 AND AUDITED FINANCIAL STATEMENT	'S ARE AVAILABLE ON
THE LOWELL OBSERVATORY WEBSITE. THE 990 IS ALSO AVAILABLE	E ON GUIDESTAR AND
CHARITY NAVIGATOR. A SUMMARY OF THE CONSOLIDATED FINANCI	AL STATEMENTS IS
PUBLISHED ANNUALLY IN AN ANNUAL REPORT.	

#### **SCHEDULE R** (Form 990)

Department of the Treasury Internal Revenue Service

**Related Organizations and Unrelated Partnerships** 

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

➤ Attach to Form 990.

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

Open to Public Inspection

OMB No. 1545-0047

**Employer identification number** 

86-0098918

Name of the organization

LOWELL OBSERVATORY

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>(b)</b> Primary activity	(c) Legal domicile (state or foreign country)	(d) Total income	(e) End-of-year assets	(f) Direct controlling entity

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 Part II organizations during the tax year.

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

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

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)	(b)	(c)	(d)	(e)	(f)	(g)	(1	h)	(i)	(j)	(k)
Name, address, and EIN of related organization	Primary activity	Legal domicile	Direct controlling entity	Predominant income	Share of total	Share of	Disprop	ortionate	Code V-UBI	Genera	or Percentage
of related organization		(state or	entity	(related, unrelated,	income	end-of-year	alloca	itions?	amount in box	partne	ownership
		foreign country)		Predominant income (related, unrelated, excluded from tax under sections 512-514)		assets	Yes	No	amount in box 20 of Schedule K-1 (Form 1065)	Yes	0
										$\sqcup$	
											<del> </del>

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>(b)</b> Primary activity	(c) Legal domicile (state or foreign	(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 Sec 512(k contr enti	tion b)(13) rolled ity?
		country)		or tracty		400010		Yes	No
								$\vdash$	<del></del>
									—
		12							

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

Yes No

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

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?

а	Receipt of (i) interest, (ii) annuities, (iii) royalties, or (iv) rent from a controlled entity				1a		X			
					1b	Х				
С	Gift, grant, or capital contribution from related organization(s)				1c	Х				
d	Loans or loan guarantees to or for related organization(s)				1d	Х				
е	Loans or loan guarantees by related organization(s)				1e	Х				
	, , , , , , , , , , , , , , , , , , , ,									
f	Dividends from related organization(s)				1f		Х			
g	Sale of assets to related organization(s)				1g		X			
					1h		X			
type (a-s)  E 13,031,666.END OF YEAR BALANCE  2)										
b Gift, grant, or capital contribution to related organization(s) c Gift, grant, or capital contribution from related organization(s) d Loans or loan guarantees to or for related organization(s) e Loans or loan guarantees by related organization(s)  f Dividends from related organization(s) g Sale of assets to related organization(s) i Exchange of assets from related organization(s) i Exchange of assets from related organization(s) j Lease of facilities, equipment, or other assets to related organization(s) i Performance of services or membership or fundraising solicitations for related organization(s) m Performance of services or membership or fundraising solicitations by related organization(s) m Performance of services or membership or fundraising solicitations by related organization(s) n Sharing of facilities, equipment, mailing lists, or other assets with related organization(s) n Sharing of paid employees with related organization(s) p Reimbursement paid to related organization(s) for expenses q Reimbursement paid to related organization(s) for expenses  r Other transfer of cash or property for related organization(s)  5 Other transfer of cash or property for related organization(s)  Transaction type (as)  PRECIVAL LOWELL TRUST UW  E 13,031,666 END OF YEAR BALANCE				1j		X				
-										
k	Lease of facilities, equipment, or other assets from related organization(s)				1k		Х			
I Performance of services or membership or fundraising solicitations for related organization(s)										
Performance of services or membership or fundraising solicitations for related organization(s)  m Performance of services or membership or fundraising solicitations by related organization(s)  n Sharing of facilities, equipment, mailing lists, or other assets with related organization(s)  o Sharing of paid employees with related organization(s)										
					1n	Х				
					10	Х				
Ī	onamig or pana on projects man related enganization (o)		•••••							
n	Reimbursement paid to related organization(s) for expenses				1p	х				
Dividends from related organization(s)			1q	Х						
ч	Theiribardeniant paid by rolated organization(b) for expenses				19					
r	Other transfer of cash or property to related organization(s)				1r		Х			
					1s		X			
	· · · · · · · · · · · · · · · · · · ·				13					
		·	·							
	(a) Name of related organization				havlo					
	Hame of folded organization		Amount involved	Wethod of determining amount inv	Oiveu					
		,, , ,								
41	PERCIVAL LOWELL TRUST IIW	E	13 031 666.	END OF VEAR BALANCE						
')	I INCIVILL LOWLED THOSE ON		13/031/0001	END OF THE PRINTED						
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J)										
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6)	ividends from related organization(s) ale of assets to related organization(s) urchase of assets from related organization(s) urchase of assets from related organization(s) urchase of assets from related organization(s) urchase of assets with related organization(s) ease of facilities, equipment, or other assets to related organization(s) ease of facilities, equipment, or other assets from related organization(s) erformance of services or membership or fundraising solicitations for related organization(s) erformance of services or membership or fundraising solicitations by related organization(s) haring of facilities, equipment, mailing lists, or other assets with related organization(s) haring of paid employees with related organization(s) eimbursement paid to related organization(s) for expenses eimbursement paid to related organization(s) for expenses eimbursement paid by related organization(s) for expenses eimbursement paid by related organization(s) for expenses  ther transfer of cash or property to related organization(s) 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)  (b)  Transaction type (a:s)  Amount involved  Method of determining amount invo				D (Ecr	n 000\	2020			
عا عد	o 10-20-20			Scriedule i	1 (1 011	11 220)	2020			

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)	(b)	(c)	(d)	(e Are	<del>)</del>	(f)	(g)	(1	h)	(i)	(	j)	(k)
Name, address, and EIN	Primary activity	Legal domicile	Predominant income (related, unrelated, excluded from tax under sections 512-514)	partner	rs sec.	Share of	Share of	Disp	ropor-	Code V-UBI amount in box 20 of Schedule K-1 (Form 1065)	Gene	ral or	Percentage
of entity		(state or foreign	excluded from tax under	partner 501 (c	c)(3) s.?	total	end-of-year	alloca	ations?	l of Schedule K-1	part	ner?	ownership
		country)	sections 512-514)	Yes			assets	Yes	No	(Form 1065)	Yes	NO	
			·					1.00	1.10		1.00	,,,,,	
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								_			_	$\vdash \vdash$	
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