

(A Nonprofit California Public Benefit Corporation)

Financial Statements

September 30, 2013 and 2012

(With Independent Auditors' Report Thereon)



KPMG LLP PO Box 4150 Honolulu, HI 96812-4150

Independent Auditors' Report

The Board of Directors California Association for Research in Astronomy:

We have audited the accompanying financial statements of the California Association for Research in Astronomy, which comprise the statements of financial position as of September 30, 2013 and 2012, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Opinion

In our opinion, the financial statements referred to above present fairly in all material respects, the financial position of the California Association for Research in Astronomy as of September 30, 2013 and 2012, and the results of its operations and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



Honolulu, Hawaii March 21, 2014

DBA W.M. KECK OBSERVATORY (A Nonprofit California Public Benefit Corporation)

Statements of Financial Position

September 30, 2013 and 2012

Assets	_	2013	2012
Current assets: Cash and cash equivalents Grants and contracts receivable Contributions receivable Prepaid expenses Investments	\$	17,106,409 569,298 100,000 51,105 62,437	15,187,703 589,269 100,000 44,540
Total current assets		17,889,249	15,921,512
Noncurrent asset: Property and equipment, at cost less accumulated depreciation Total assets	\$	54,844,813 72,734,062	58,364,270 74,285,782
Liabilities and Net Assets	_		
Current liabilities: Accounts payable and accrued expenses Advances University of California – Observatory operations W.M. Keck Foundation Association of Universities for Research in Astronomy Gordon and Betty Moore Foundation Other	\$	3,031,250 10,831,581 1,491,600 904,330 592,911 28,645	2,298,076 10,721,008 1,483,401 64,619 617,969 30,637
Total current liabilities	_	16,880,317	15,215,710
Net assets: Unrestricted Unrestricted – board-designated Temporarily restricted	_	54,657,234 544,525 651,986	58,380,539 305,191 384,342
Total net assets		55,853,745	59,070,072
Commitments	_		
Total liabilities and net assets	\$ _	72,734,062	74,285,782

See accompanying notes to financial statements.

DBA W.M. KECK OBSERVATORY (A Nonprofit California Public Benefit Corporation)

Statements of Activities

Years ended September 30, 2013 and 2012

	_	2013	2012
Changes in unrestricted net assets:			
Unrestricted operating support and revenues:			
Contributions	\$	424,857	3,145,443
Operating revenue:			
University of California: Observatory operations		13,303,223	11,715,451
National Aeronautics and Space Administration		4,146,855	4,429,106
Association of Universities for Research in Astronomy		1,560,289	1,260,573
National Science Foundation		811,334	785,394
Other Interest earned:		1,261,443	3,102,216
Observatory operations		251,861	393,000
Other income		188,505	223,137
Satisfaction of equipment acquisition restrictions		299,185	379,733
	_		<u> </u>
Total unrestricted revenues	_	22,247,552	25,434,053
Expenses:			
Program services:			
Observatory operations		17,501,056	17,283,583
California Institute of Technology asset project		1,666,311	_
Research		5,398	46,145
Administrative and general		3,192,678	2,718,880
Fund-raising	_	664,755	478,510
Total expenses	_	23,030,198	20,527,118
Change in unrestricted net assets, before impairment			
loss on instrumentation		(782,646)	4,906,935
Impairment loss on instrumentation	_	2,701,325	38,287,695
Change in unrestricted net assets	_	(3,483,971)	(33,380,760)
Change in temporarily restricted net assets:			
Contributions		566,829	501,546
Net assets released from restrictions	_	(299,185)	(379,733)
Change in temporarily restricted net assets		267,644	121,813
Change in net assets		(3,216,327)	(33,258,947)
Net assets at beginning of year	_	59,070,072	92,329,019
Net assets at end of year	\$	55,853,745	59,070,072

See accompanying notes to financial statements.

DBA W.M. KECK OBSERVATORY (A Nonprofit California Public Benefit Corporation)

Statements of Cash Flows

Years ended September 30, 2013 and 2012

	_	2013	2012
Cash flows from operating activities:			
Change in net assets	\$	(3,216,327)	(33,258,947)
Adjustments to reconcile change in net assets to net cash			
provided by operating activities:			
Depreciation		6,340,021	5,492,232
Net realized and unrealized gain on investments		(4,676)	
Net loss (gain) on disposal of property and equipment		(39,400)	46,319
Impairment loss on instrumentation		2,701,325	38,287,695
Contribution of equipment			(3,063,792)
Decrease (increase) in assets:		10.071	110 212
Receivables, net		19,971	119,213
Prepaid expenses Increase (decrease) in liabilities:		(6,565)	(16,474)
Accounts payable and accrued expenses		733,174	(702,458)
Advances		931,433	2,789,507
	_		
Net cash provided by operating activities	_	7,458,956	9,693,295
Cash flows from investing activities:			
Purchases of property and equipment		(5,521,889)	(7,345,030)
Purchases of investments		(57,761)	_
Proceeds on sale of property and equipment		39,400	24,600
Net cash used in investing activities	_	(5,540,250)	(7,320,430)
Net increase in cash and cash equivalents		1,918,706	2,372,865
Cash and cash equivalents at beginning of year	_	15,187,703	12,814,838
Cash and cash equivalents at end of year	\$_	17,106,409	15,187,703
Supplemental disclosure of noncash transaction: Contribution of equipment	\$	_	3,063,792

See accompanying notes to financial statements.

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Notes to Financial Statements September 30, 2013 and 2012

(1) Description of Reporting Entity

California Association for Research in Astronomy (CARA) is a nonprofit corporation formed by the California Institute of Technology (Caltech) and the University of California (UC) in January 1985 to build and operate the W. M. Keck Observatory (Observatory) on the summit of Mauna Kea in Hawaii. Tax exempt under Section 501(c)(3) of the Internal Revenue Code, CARA is a nonprofit California public benefit corporation and, as such, is qualified as a nonprofit corporation in the state of Hawaii.

The principal purpose of CARA is to foster astronomical research and to provide technical direction for the development and operation of astronomical facilities on the island of Hawaii, principally on land owned by the state of Hawaii, leased to the University of Hawaii, and subleased to Caltech. The Observatory is owned by Caltech and is leased to CARA for \$1 per year. In consideration for subleasing the land to Caltech for \$1 per year through 2033, the University of Hawaii receives an opportunity to use the Observatory and related facilities and improvements. The astronomical facilities include two 10-meter telescopes (Keck I and Keck II), related instrumentation, adaptive optics technology, support facilities, and required infrastructure improvements.

The costs of development of the Observatory and the development of adaptive optics technology were borne by Caltech, the majority of which were funded by grants from the W.M. Keck Foundation (the Foundation). Caltech's funding for Keck I and Keck II development costs was \$75,222,000 and \$78,600,000, respectively.

UC provided financial support to CARA for preoperating costs during the Observatory's development periods, acquisition of focal plane instrumentation, and observatory operations. UC provides continuing operating support for Keck I operations in the amount of \$3,500,000 per year, which continues through fiscal year 2017, and \$1,750,000 for the six-month period ending March 31, 2018, all measured in 1984 dollars. UC provides support for Keck II operations in the amount of \$2,105,000 per year, which continues through fiscal year 2017, and \$1,052,500 for the six-month period ending March 31, 2018, all measured in 1990 dollars. For fiscal years 2013 and 2012, CARA received operating support for Keck I operations of \$8,042,930 and \$7,885,920, respectively. For fiscal years 2013 and 2012, CARA received operating support for Keck II operations of \$5,370,865 and \$5,164,302, respectively. For fiscal years 2013 and 2012, CARA recognized operating revenue for Keck I and Keck II operations from UC of \$13,303,223 and \$11,715,451, respectively.

(2) Summary of Significant Accounting Policies

(a) Financial Statement Presentation

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP).

CARA follows the requirements of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Section 958-205-45-2, *Not-for-Profit Entities – Presentation of Financial Statement – Other Presentation Matters*. Under FASB ASC Section 958-205-45-2, CARA

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Notes to Financial Statements September 30, 2013 and 2012

is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets based upon the existence or absence of donor-imposed stipulations. Accordingly, net assets of CARA and changes therein are classified and reported as follows:

Unrestricted Net Assets – net assets that are not subject to donor-imposed stipulations and that may be expended for any purpose in performing the objectives of CARA.

Temporarily Restricted Net Assets – net assets subject to donor-imposed stipulations that may or will be met either by actions and/or the passage of time. As the restrictions are satisfied, temporarily restricted net assets are reclassified and reported in the accompanying financial statements as net assets are released from restrictions.

Permanently Restricted Net Assets – net assets subject to donor-imposed stipulations that resources must be maintained in perpetuity. As of September 30, 2013 and 2012, CARA had no permanently restricted net assets.

(b) Cash and Cash Equivalents

For purposes of the statements of cash flows, CARA considers all highly liquid instruments with original maturities of three months or less to be cash equivalents. As of September 30, 2013 and 2012, CARA had cash and cash equivalents in an account with UC totaling \$15,893,918 and \$14,827,417, respectively.

(c) Investments

Investments are reported at fair value with unrealized gains and losses included in the statements of activities.

Gains and losses on investments are reported in the statements of activities as increases or decreases in unrestricted net assets unless their use is temporarily or permanently restricted by explicit donor stipulations or by law.

CARA utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. CARA determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

• Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.

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- Level 2 Inputs: Other than quoted prices included in Level 1 inputs that are observable for the
 asset or liability, either directly or indirectly, for substantially the full term of the asset or
 liability.
- Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at measurement date.

(d) Property and Equipment

Expenditures incurred by CARA for observatory instrumentation and facilities, operating equipment, and vehicles are capitalized at cost, except for donated property that is valued at fair market value at the date of the gift, and depreciated when placed in service. Depreciation is provided over the estimated useful lives of the respective assets using the straight-line method. The estimated useful lives are as follows:

Class of assets	Estimated useful lives		
Observatory instrumentation Observatory facility Vehicles and equipment	10–20 years 3–15 years 3–25 years		

CARA reports contributions designated by donors to acquire long-lived assets as restricted support. Absent explicit donor stipulations about how long those long-lived assets must be maintained, CARA reports expirations of donor restrictions when the acquired long-lived assets are placed in service.

(e) Advances

Operating and instrumentation funds received from UC are recorded as advances until expended for operating expenditures, observatory instrumentation, or vehicles and equipment. Funds received from the Association of Universities for Research in Astronomy (AURA) for the purpose of developing certain instruments for the Keck telescopes or adaptive optics development are recorded as advances until expended for their stated purpose.

(f) Contributions

Contributions are recorded in the period received. CARA reports gifts as restricted support if they are received with donor-imposed stipulations that limit the use of the donated assets. When a donor restriction expires, that is, when a stipulated time restriction ends or purpose restriction is accomplished, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statements of activities as net assets released from restrictions.

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As described in note 1, CARA leases the observatory and related facilities and improvements from Caltech for \$1 per year. As the use of the Observatory is so specific that there is no assignable value, it is impractical to determine a fair rental value to be reported as contribution revenue in the accompanying statements of activities.

(g) Use of Estimates

The preparation of the financial statements in accordance with GAAP requires management of CARA to make a number of estimates and assumptions relating to the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include the carrying amount of property and equipment and valuation allowances for receivables. Actual results could differ from those estimates.

(h) Long-Lived Assets

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset be tested for possible impairment, CARA first compares undiscounted cash flows expected to be generated by an asset to the carrying value of the asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying value exceeds its fair value. Fair value is determined through various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, as necessary.

In 2012, the National Aeronautics and Space Administration (NASA) notified CARA that it would cease funding the development and operation of the Keck Interferometer instrumentation (Interferometer) effective December 31, 2012. As of September 30, 2012, no alternative sources of funding to complete and operate the Interferometer were identified, and accordingly, an impairment loss of \$38,287,695 was recorded. In fiscal September 30, 2013, an additional \$2,701,325 impairment loss was recorded for certain long-lived assets ancillary to the Interferometer.

(i) Sponsored Programs, Grants, and Contracts

Governmental and private grants and contracts normally provide for the recovery of direct and indirect costs, subject to audit. CARA recognizes revenues associated with direct costs as incurred. Indirect costs recovered on federally-sponsored programs are based on cost reimbursement rates negotiated with CARA's cognizant agency, the Office of Naval Research. Indirect costs recovered on all other grants and contracts are based on rates negotiated with the respective parties.

(i) Subsequent Events

CARA has evaluated subsequent events from the balance sheet date through March 21, 2014, the date at which the financial statements were available to be issued. There are no other matters to disclose.

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Notes to Financial Statements September 30, 2013 and 2012

(3) NASA Funding Agreements

In 2008, NASA awarded CARA a five-year cooperative agreement for telescope viewing time, infrastructure renewal, and the development of an archived database. In 2013, NASA renewed the cooperative agreement through 2018. Revenues under the two cooperative agreements were \$4,146,855 and \$4,429,106 in 2013 and 2012, respectively.

(4) Association of Universities for Research in Astronomy Agreements

In 2010, CARA entered into a fixed price contract with AURA for Keck II instrumentation development. CARA was awarded \$1,228,416 to construct the Keck Cosmic Web Imager.

In 2011, CARA entered into a new fixed price contract with AURA for Keck II instrumentation development. CARA was awarded \$1,228,416 to continue constructing the Keck Cosmic Web Imager.

In 2012, CARA entered into a new fixed price contract with AURA for Keck II instrumentation development. CARA was awarded \$2,900,000 to continue constructing the Keck Cosmic Web Imager.

Revenues recognized under these contracts with AURA amounted to \$1,560,289 and \$1,260,573 in 2013 and 2012, respectively. As of September 30, 2013 and 2012, unspent receipts under the AURA contracts amounted to \$904,330 and \$64,619, respectively, and are included as advances in the accompanying statements of financial position.

(5) National Science Foundation (NSF)

(a) Grant Awards

In 2009, NSF awarded CARA a three-year \$1,355,500 grant to improve the Keck II laser launch facility of which \$481,582 and \$136,303, respectively, was recognized as revenue in 2013 and 2012.

In 2010, NSF awarded CARA a four-year \$1,866,000 grant to develop the Keck I laser guide star adaptive optics facility of which \$163,382 and \$643,516, respectively, was recognized as revenue in 2013 and 2012.

In 2012, NSF awarded CARA a two-year \$684,000 grant to develop and demonstrate Point Spread Function (PSF) determination for science observations of which \$166,370 was recognized as revenue in 2013.

Revenues recognized under these grants with NSF amounted to \$811,334 and \$785,394 in 2013 and 2012, respectively.

(b) Contributions

In August 2012, CARA received title to a 20-watt laser system for Keck I from NSF to further research in the field of astronomy. The laser was procured by the Gemini Observatory under an NSF

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grant and valued at \$3,063,792. At September 30, 2013, the contributed value is included in the property and equipment.

(6) Contributions Receivable

Contributions receivable represent unconditional promises to give by donors. In accordance with FASB ASC Section 958-605-25, *Not-for-Profit Entities – Recognition – Promises to Give*, contributions receivable are recorded at their estimated fair value. Amounts due more than one year later are recorded at the present value of the estimated future cash flows, discounted at an interest rate commensurate with the associated risks in the years in which the promises were received. Contributions receivable due in one year or less was \$100,000 at September 30, 2013 and 2012.

(7) Property and Equipment

A summary of property and equipment at September 30, 2013 and 2012 follows:

	_	2013	2012
Instrumentation:			
Property and equipment Construction in progress	\$	72,311,789 5,027,677	72,262,958 3,476,086
	_	77,339,466	75,739,044
Adaptive optics:			
Property and equipment Construction in progress	_	19,845,839 10,832,661	19,756,807 8,621,718
	_	30,678,500	28,378,525
Infrastructure:			
Property and equipment Construction in progress	_	3,473,298 1,229,594	3,129,206 3,065,197
		4,702,892	6,194,403
Vehicles and equipment Less accumulated depreciation	_	4,708,124 (62,584,169)	4,428,678 (56,376,380)
	\$_	54,844,813	58,364,270

Depreciation expense amounted to \$6,340,021 in 2013 and \$5,492,232 in 2012, respectively.

(8) Income Taxes

CARA has received a determination from taxing authorities that it is an organization exempt from taxation under Section 501(c)(3) of the U.S. Internal Revenue Code and Section 23701d of the California Revenue and Taxation Code and is generally not subject to federal or state income taxes. However, CARA is subject

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to income taxes on any net income derived from a trade or business, regularly carried on, and not in furtherance of the purposes for which it was granted exemption. No income tax provision has been recorded as the net income, if any from any unrelated trade or business, in the opinion of management, is not material to the financial statements taken as a whole.

In accordance with FASB Interpretation No. 48 (Interpretation 48), *Accounting for Uncertainty in Income Taxes* (included in FASB ASC Subtopic 740-10 – *Income Taxes* – *Overall*, CARA recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

(9) Related-Party Transactions

Caltech and UC provide various instrument and adaptive optics development services to CARA. During fiscal years 2013 and 2012, total expenditures for these services charged to CARA were \$2,090,329 and \$1,433,065, respectively, by Caltech, and \$402,488 and \$603,019, respectively, by UC.

CARA provided services for projects on Caltech's observatory assets located in Hawaii including: ongoing repair of the telescope mirror segments, a telescope control system upgrade and installation of two photovoltaic systems on Caltech's Waimea headquarters buildings. In fiscal 2013, total expenditures for these projects was \$1,666,311.

(10) Investments

CARA maintains investments that are held to fund the 457(b) deferred compensation obligation, which is described in note 15(b). The investments held to fund deferred compensation totaled \$62,437 at September 30, 2013.

(11) Commitments

CARA entered into various contractual agreements for operations, laser guide star and adaptive optics systems, observatory construction and development of instrumentation and interferometry systems. A summary of commitments at September 30, 2013 follows:

Operations	\$ 2,076,799
Laser guide star and adaptive optics	1,371,670
systems	
Instrumentation	 850,880
Total	\$ 4,299,349

(12) Board-Designated Net Assets

In 2006, CARA established a board-designated Director's Fund separate from its unrestricted, undesignated net assets for receipt of all unrestricted contributions and their subsequent expenditures. In

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2013 and 2012, CARA received contributions of \$239,334 and \$81,651, respectively, which were board-designated for the Director's Fund. At September 30, 2013 and 2012, \$544,525 and \$305,191, respectively, was available in the fund.

(13) Temporarily Restricted Net Assets

In 2013 and 2012, CARA received restricted contributions for various instrumentation & adaptive optics technology development and Advancement Office initiatives totaling \$566,829 and \$501,546, respectively. In 2013 and 2012, \$299,185 and \$379,733, respectively, of temporarily restricted net assets were released from restriction in satisfaction of equipment acquisition and program restrictions. At September 30, 2013 and 2012, \$651,986 and \$384,342, respectively, was available for these activities.

(14) In-Kind Contributions

CARA received the following in-kind contributions during the year ended September 30, 2013:

Professional services Advancement events	\$ 23,979 19,430
Miscellaneous	984
	\$ 44,393

(15) Deferred Compensation

(a) 403(b) Plan

CARA has a defined contribution retirement plan (the Plan), which was established under Section 403(b) of the U.S. Internal Revenue Code. All eligible employees participate in the Plan. An eligible employee is defined as an employee regularly scheduled to work at least 20 hours per week subject to the appropriate waiting period and employment classification as defined in the Plan. CARA is required to make contributions to the Plan at various percentages of base salary depending on the participant's age and grade. Contributions to the Plan amounted to \$865,027 and \$806,618 for fiscal years 2013 and 2012, respectively.

(b) 457(b) Plan

In 2013, CARA established a voluntary deferred compensation plan for a specific group of management designed in accordance with the provisions of Section 457 of the Internal Revenue Code. The plan allows participants to defer a portion of their compensation until after employment termination. Assets in the plan are held by CARA on a nontrust basis and are subject to the claims of its creditors. The plan is funded entirely from the compensation of the participants and vests with the employee immediately. CARA makes no contributions to the plan. The 457(b) plan assets and related liability obligation to participants of \$62,437 as of September 30, 2013, are included on the accompanying balance sheets.