

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500.	OMB Nos. 1210-0110 1210-0089 2022 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022	
A	This return/report is for: ☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.) ☒ a single-employer plan ☐ a DFE (specify) _____
B	This return/report is: ☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
C	If the plan is a collectively-bargained plan, check here. ▶ ☐
D	Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)
E	If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. ▶ ☐

Part II	Basic Plan Information—enter all requested information
1a	Name of plan AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN
1b	Three-digit plan number (PN) ▶ 001
1c	Effective date of plan 07/01/1972
2a	Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) AMERICAN GEOPHYSICAL UNION 2000 FLORIDA AVENUE NW WASHINGTON, DC 20009-1231
2b	Employer Identification Number (EIN) 52-0955532
2c	Plan Sponsor's telephone number 202-462-6900
2d	Business code (see instructions) 541990

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/16/2023	MARY MOHNEY
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2022)
v. 220413

3a Plan administrator's name and address ☒ Same as Plan Sponsor		3b Administrator's EIN
		3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name		4b EIN 4d PN
5 Total number of participants at the beginning of the plan year		5 575
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d).		
a(1) Total number of active participants at the beginning of the plan year		6a(1) 147
a(2) Total number of active participants at the end of the plan year		6a(2) 159
b Retired or separated participants receiving benefits		6b
c Other retired or separated participants entitled to future benefits.....		6c 409
d Subtotal. Add lines 6a(2) , 6b , and 6c		6d 568
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.		6e 5
f Total. Add lines 6d and 6e		6f 573
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item).....		6g 570
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....		6h 6
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)		7
8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions: 2G 2L		
b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:		
9a Plan funding arrangement (check all that apply)		9b Plan benefit arrangement (check all that apply)
(1) ☒ Insurance	(1) ☒ Insurance	
(2) ☐ Code section 412(e)(3) insurance contracts	(2) ☐ Code section 412(e)(3) insurance contracts	
(3) ☒ Trust	(3) ☒ Trust	
(4) ☐ General assets of the sponsor	(4) ☐ General assets of the sponsor	
10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)		
a Pension Schedules		b General Schedules
(1) ☒ R (Retirement Plan Information)	(1) ☒ H (Financial Information)	
(2) ☐ MB (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary	(2) ☐ I (Financial Information – Small Plan)	
(3) ☐ SB (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary	(3) ☒ 1 A (Insurance Information)	
	(4) ☒ C (Service Provider Information)	
	(5) ☒ D (DFE/Participating Plan Information)	
	(6) ☐ G (Financial Transaction Schedules)	

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2022 Form M-1 annual report. If the plan was not required to file the 2022 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

SCHEDULE A (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Insurance Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500. ▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 AMERICAN GEOPHYSICAL UNION	D Employer Identification Number (EIN) 52-0955532	

Part I	Information Concerning Insurance Contract Coverage, Fees, and Commissions	Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A.
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1 Coverage Information:

(a) Name of insurance carrier TIAA-CREF
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(b) EIN	(c) NAIC code	(d) Contract or identification number	(e) Approximate number of persons covered at end of policy or contract year	Policy or contract year	
				(f) From	(g) To
13-1624203	69345	500479	413	01/01/2022	12/31/2022

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid.
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(a) Total amount of commissions paid	(b) Total amount of fees paid
0	0

3 Persons receiving commissions and fees. (Complete as many entries as needed to report all persons).

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid
--

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid
--

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

Part II Investment and Annuity Contract Information

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

4	Current value of plan's interest under this contract in the general account at year end.....	4	8106354
5	Current value of plan's interest under this contract in separate accounts at year end.....	5	12748868

6 Contracts With Allocated Funds:**a** State the basis of premium rates ▶

b	Premiums paid to carrier	6b	
c	Premiums due but unpaid at the end of the year	6c	
d	If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount..... Specify nature of costs ▶	6d	

e Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity
(3) ☐ other (specify) ▶

f If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ▶ ☐

7 Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)

a Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee
(3) ☒ guaranteed investment (4) ☐ other ▶

b	Balance at the end of the previous year	7b	8277257
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c	Additions: (1) Contributions deposited during the year	7c(1)	18908	
	(2) Dividends and credits.....	7c(2)		
	(3) Interest credited during the year.....	7c(3)	338065	
	(4) Transferred from separate account.....	7c(4)	204022	
	(5) Other (specify below)	7c(5)	409	

▶ OTHER

(6) Total additions.....	7c(6)	561404
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d Total of balance and additions (add lines 7b and 7c(6))	7d	8838661
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e Deductions:

(1) Disbursed from fund to pay benefits or purchase annuities during year	7e(1)	475450	
(2) Administration charge made by carrier.....	7e(2)		
(3) Transferred to separate account.....	7e(3)	255986	
(4) Other (specify below)	7e(4)	871	

▶ OTHER

(5) Total deductions.....	7e(5)	732307
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f Balance at the end of the current year (subtract line 7e(5) from line 7d)	7f	8106354
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Part III Welfare Benefit Contract Information

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

8 Benefit and contract type (check all applicable boxes)

- a** ☐ Health (other than dental or vision)
 b ☐ Dental
 c ☐ Vision
 d ☐ Life insurance
e ☐ Temporary disability (accident and sickness)
 f ☐ Long-term disability
 g ☐ Supplemental unemployment
 h ☐ Prescription drug
i ☐ Stop loss (large deductible)
 j ☐ HMO contract
 k ☐ PPO contract
 l ☐ Indemnity contract
m ☐ Other (specify) ▶

9 Experience-rated contracts:

a Premiums: (1) Amount received	9a(1)		
(2) Increase (decrease) in amount due but unpaid	9a(2)		
(3) Increase (decrease) in unearned premium reserve.....	9a(3)		
(4) Earned ((1) + (2) - (3)).....		9a(4)	
b Benefit charges (1) Claims paid.....	9b(1)		
(2) Increase (decrease) in claim reserves	9b(2)		
(3) Incurred claims (add (1) and (2)).....		9b(3)	
(4) Claims charged		9b(4)	
c Remainder of premium: (1) Retention charges (on an accrual basis) --			
(A) Commissions	9c(1)(A)		
(B) Administrative service or other fees	9c(1)(B)		
(C) Other specific acquisition costs.....	9c(1)(C)		
(D) Other expenses	9c(1)(D)		
(E) Taxes	9c(1)(E)		
(F) Charges for risks or other contingencies	9c(1)(F)		
(G) Other retention charges.....	9c(1)(G)		
(H) Total retention.....		9c(1)(H)	
(2) Dividends or retroactive rate refunds. (These amounts were ☐ paid in cash, or ☐ credited.)		9c(2)	
d Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement.....		9d(1)	
(2) Claim reserves		9d(2)	
(3) Other reserves		9d(3)	
e Dividends or retroactive rate refunds due. (Do not include amount entered in line 9c(2).).....		9e	

10 Nonexperience-rated contracts:

a Total premiums or subscription charges paid to carrier	10a	
b If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount.	10b	

Specify nature of costs.

Part IV Provision of Information

11 Did the insurance company fail to provide any information necessary to complete Schedule A? ☐ Yes ☒ No

12 If the answer to line 11 is "Yes," specify the information not provided. ▶

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2022
		This Form is Open to Public Inspection.

For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022	
A Name of plan AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 AMERICAN GEOPHYSICAL UNION	D Employer Identification Number (EIN) 52-0955532

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions)..... ☒ Yes ☐ No
- b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
TIAA
13-1624203
(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
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(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

TIAA - TEACHERS INSURANCE AND ANNUITY

730 THIRD AVE.
NEW YORK, NY 10017-3206

13-1624203

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
12 15 37	N/A	24410	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☐ No ☒

(a) Enter name and EIN or address (see instructions)

RBC WEALTH MANAGEMENT

2010 CORPORATE RIDGE RD., 250
MCLEAN, VA 22102

41-1416330

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
12 15 37	N/A	8448	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE D (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	DFE/Participating Plan Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection.
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN	B Three-digit plan number (PN) ►	001
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 AMERICAN GEOPHYSICAL UNION	D Employer Identification Number (EIN) 52-0955532	

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
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a Name of MTIA, CCT, PSA, or 103-12 IE: TIAA REAL ESTATE		
b Name of sponsor of entity listed in (a): TIAA-CREF		
c EIN-PN 13-1624203-004	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 618928
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
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code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)

Part II **Information on Participating Plans (to be completed by DFEs)**

(Complete as many entries as needed to report all participating plans)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
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plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
For calendar plan year 2022 or fiscal plan year beginning <u>01/01/2022</u> and ending <u>12/31/2022</u>		
A Name of plan <u>AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN</u>	B Three-digit plan number (PN) ►	<u>001</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>AMERICAN GEOPHYSICAL UNION</u>	D Employer Identification Number (EIN) <u>52-0955532</u>	

Part I	Asset and Liability Statement		
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.			
Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash.....		1a	
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions.....		1b(1)	
(2) Participant contributions.....		1b(2)	
(3) Other.....		1b(3)	
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit).....		1c(1)	
(2) U.S. Government securities		1c(2)	
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred		1c(3)(A)	
(B) All other		1c(3)(B)	
(4) Corporate stocks (other than employer securities):			
(A) Preferred		1c(4)(A)	
(B) Common.....		1c(4)(B)	
(5) Partnership/joint venture interests		1c(5)	
(6) Real estate (other than employer real property)		1c(6)	
(7) Loans (other than to participants).....		1c(7)	
(8) Participant loans.....		1c(8)	78592130543
(9) Value of interest in common/collective trusts.....		1c(9)	
(10) Value of interest in pooled separate accounts		1c(10)	617808618928
(11) Value of interest in master trust investment accounts.....		1c(11)	
(12) Value of interest in 103-12 investment entities		1c(12)	
(13) Value of interest in registered investment companies (e.g., mutual funds).....		1c(13)	3026759423602434
(14) Value of funds held in insurance company general account (unallocated contracts).....		1c(14)	82772578106354
(15) Other		1c(15)	

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	39241251	32458259

Liabilities

g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through 1j)	1k		

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	39241251	32458259
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Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income

		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	1306023	
(B) Participants	2a(1)(B)		
(C) Others (including rollovers)	2a(1)(C)		
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		1306023
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)	4974	
(F) Other	2b(1)(F)	329493	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		334467
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	356057	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		356057
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		50918
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		-5845641
c Other income	2c		
d Total income. Add all income amounts in column (b) and enter total	2d		-3798176
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	2955139	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		2955139
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)	29677	
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)		
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		29677
j Total expenses. Add all expense amounts in column (b) and enter total	2j		2984816
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d	2k		-6782992
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☐ Unmodified (2) ☐ Qualified (3) ☒ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☐ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: JOHNSON LAMBERT LLP

(2) EIN: 52-1446779

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)

	Yes	No	Amount
4a		X	

	Yes	No	Amount
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)			
4b		X	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)			
4c		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)			
4d		X	
e Was this plan covered by a fidelity bond?	X		500000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
4f		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?			
4g		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?			
4h		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	X		
4i	X		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)			
4j		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?			
4k		X	
l Has the plan failed to provide any benefit when due under the plan?			
4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
4m		X	
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			
4n		X	

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☐ Yes ☐ No ☐ Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____.

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection.
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN		B Three-digit plan number (PN) ► 001
C Plan sponsor's name as shown on line 2a of Form 5500 AMERICAN GEOPHYSICAL UNION		D Employer Identification Number (EIN) 52-0955532
Part I Distributions		
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....		1
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 13-1624203		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year.....		3 96
Part II Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)		
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ☐ Yes ☐ No ☒ N/A If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived).....		6a
b Enter the amount contributed by the employer to the plan for this plan year.....		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount).....		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ☐ Yes ☐ No ☐ N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ☐ Yes ☐ No ☒ N/A		
Part III Amendments		
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box..... ☐ Increase ☐ Decrease ☐ Both ☐ No		
Part IV ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.		
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?..... ☐ Yes ☐ No		
11 a Does the ESOP hold any preferred stock?..... ☐ Yes ☐ No		
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.)..... ☐ Yes ☐ No		
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?..... ☐ Yes ☐ No		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2022 v. 220413		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14	Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:		
	a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment).....	14a	
	b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b	
	c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c	
15	Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:		
	a The corresponding number for the plan year immediately preceding the current plan year.....	15a	
	b The corresponding number for the second preceding plan year.....	15b	
16	Information with respect to any employers who withdrew from the plan during the preceding plan year:		
	a Enter the number of employers who withdrew during the preceding plan year	16a	
	b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers.....	16b	
17	If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐		

Part VI	Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans
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18	If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐
19	If the total number of participants is 1,000 or more, complete lines (a) through (c) a Enter the percentage of plan assets held as: Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____% b Provide the average duration of the combined investment-grade and high-yield debt: ☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more c What duration measure was used to calculate line 19(b)? ☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): _____
20	PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20. a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box: ☐ Yes. ☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date. ☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date. ☐ No. Other. Provide explanation _____

American Geophysical Union Retirement Plan

Financial Statements and Supplemental Schedule

Years ended December 31, 2022 and 2021
with Report of Independent Auditors

American Geophysical Union Retirement Plan
Financial Statements and Supplemental Schedule
Years ended December 31, 2022 and 2021

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Supplemental Schedule*

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*Other supplemental schedules required by 29 CFR 2520-103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

Report of Independent Auditors

Plan Administrator
American Geophysical Union Retirement Plan

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We were engaged to perform audits of the financial statements of American Geophysical Union Retirement Plan (the Plan), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 (ERISA), as permitted by ERISA Section 103(a)(3)(C) (ERISA Section 103(a)(3)(C) audit). The financial statements comprise the statements of net assets available for plan benefits as of December 31, 2022 and 2021, and the related statements of changes in net assets available for plan benefits for the years then ended, and the related notes to the financial statements.

Management, having determined it is permissible in the circumstances, has elected to have the audits of the Plan's financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the Plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA (qualified institution).

Management has obtained certifications from a qualified institution as of December 31, 2022 and 2021, and for the years then ended, stating that the certified investment information, as described in Note C to the financial statements, is complete and accurate.

Disclaimer of Opinion

We do not express an opinion on the accompanying financial statements of the Plan. Because of the significance of the matters described in the Basis for Disclaimer of Opinion section of our report, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on the financial statements.

Basis for Disclaimer of Opinion

The Plan has not maintained sufficient accounting records and supporting documents relating to certain annuity contracts and custodial accounts issued to current and former employees prior to January 1, 2009. Accordingly, we were unable to apply auditing procedures sufficient to determine the extent to which the accompanying financial statements may have been affected by these conditions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments, administering the Plan, and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements

Our responsibility is to conduct an audit of the Plan's financial statements in accordance with auditing standards generally accepted in the United States of America and to issue an auditor's report. However, because of the matters described in the Basis for Disclaimer of Opinion section of our report, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on these financial statements.

We are required to be independent of the Plan, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits.

Other Matter - Supplemental Schedule Required by ERISA

The supplemental schedule, Schedule H, Line 4i - Schedule of Assets (Held at End of Year) as of December 31, 2022 is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Because of the significance of the matter described in the Basis for Disclaimer of Opinion section of our report, it is inappropriate to and we do not express an opinion on this supplemental schedule.

A handwritten signature in black ink that reads "Johnson Lambert LLP". The signature is written in a cursive, flowing style.

Park Ridge, Illinois
October 13, 2023

American Geophysical Union Retirement Plan

Statements of Net Assets Available for Plan Benefits

As of December 31, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Investments, fair value	\$ 32,106,672	\$ 38,984,033
Investments, contract value	219,387	177,033
TIAA loan default fund	1,657	1,593
Notes receivable from participants	<u>130,543</u>	<u>78,592</u>
Net assets available for plan benefits	<u>\$ 32,458,259</u>	<u>\$ 39,241,251</u>

See accompanying notes to the financial statements.

American Geophysical Union Retirement Plan

Statements of Changes in Net Assets Available for Plan Benefits

Years ended December 31, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Investment (loss) income:		
Interest and dividends	\$ 690,524	\$ 1,702,137
Net change in fair value of investments	<u>(5,794,723)</u>	<u>2,718,827</u>
Total investment (loss) income	<u>(5,104,199)</u>	<u>4,420,964</u>
Contributions:		
Employer, net of forfeitures	<u>1,306,023</u>	<u>1,376,688</u>
Total contributions	1,306,023	1,376,688
Distributions:		
Benefits paid directly to participants or beneficiaries	2,955,139	1,294,797
Administrative expenses	<u>29,677</u>	<u>30,770</u>
Total distributions	<u>2,984,816</u>	<u>1,325,567</u>
Change in net assets available for plan benefits	(6,782,992)	4,472,085
Net assets available for plan benefits		
Beginning of year	<u>39,241,251</u>	<u>34,769,166</u>
End of year	<u><u>\$ 32,458,259</u></u>	<u><u>\$ 39,241,251</u></u>

See accompanying notes to the financial statements.

American Geophysical Union Retirement Plan

Notes to Financial Statements

Years ended December 31, 2022 and 2021

Note A - Description of Plan

The following description of the American Geophysical Union Retirement Plan (the Plan) provides only general information. Participants should refer to the Plan agreement for a more comprehensive description of the Plan's provisions. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

General

The Plan is a defined contribution plan, established July 1, 1972 and most recently amended and restated effective January 1, 2019. Eligible employees of the American Geophysical Union (AGU or Plan Administrator) are permitted to participate upon hire. Employees who are 18 years of age or older and have worked 1,000 service hours during the plan year are eligible to receive an Employer contribution.

The Plan is administered by AGU and funded through individually owned annuities (Individual Agreement) issued by Teachers Insurance and Annuity Association (TIAA) and the College Retirement Equities Fund (CREF), and mutual funds for which TIAA, FSB serves as the trustee. All investments are participant directed.

Contributions

The Plan's contributions are employer and rollover contributions only; employee contributions are not allowed in the Plan. The employer contributions made to the Plan are nondiscretionary and are allocated using an integrated formula. Under this formula, participants receive a base contribution of 9% of their compensation up to the taxable wage base. Participants whose compensation exceeds the taxable wage base receive an additional contribution of 5.7% on the amount of compensation exceeding the taxable wage base. In certain years prior to January 1, 2009, employees were able to make contributions to the Plan.

Participant Individual Accounts

Participants are responsible for directing the investment of their individual account. Each participant's account is credited with employer contributions and an allocation of the investment earnings or losses thereon. Earnings or losses are allocated by fund based on the ratio of a participant's account invested in a particular fund to all participants' investment in that fund. The benefit to which a participant is entitled is provided from the participant's vested account.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note A - Description of Plan (Continued)

Vesting

Participants hired after January 1, 2009, become 100% vested in their accounts after completing three years of service. Participants hired prior to January 1, 2009 are immediately vested in accordance with prior eligibility requirements. All participants will become immediately vested in their accounts when they reach normal retirement age, the Plan is terminated, contributions to the Plan are discontinued, or a participant becomes disabled or dies. Nonvested portions of participants' accounts are forfeited and may be applied to reduce Employer contributions or pay plan expenses. The Plan Administrator applied \$33,762 and \$46,220 of forfeited amounts to reduce Employer contributions in 2022 and 2021, respectively. The balance in the forfeiture account as of December 31, 2022 and 2021 totaled \$17 and \$0, respectively.

Administrative Expenses

Certain expenses of maintaining the Plan are paid directly by AGU and excluded from these financial statements. Record keeping and certain other administrative expenses are paid out of the assets of the Plan. Fees related to the administration of notes receivable from participants are charged directly to the participant account and are included in administrative expenses. Investment related expenses are included in the net change in fair value of investments.

Payment of Benefits

A participant may request a distribution of employer contributions under the following circumstances, (1) the participant becomes disabled, (2) the participant reaches normal retirement age or (3) the participant qualifies for a hardship.

Prior to taking a hardship distribution, a participant must take all other distributions available under the Plan. Participants under age 59½, may be subject to a 10% penalty tax on hardship distribution amounts.

In spite of the distribution events listed above, employer contributions held in annuity contracts issued after 2009 are generally not available for distribution until the participant has been in the Plan for five years.

A participant may elect a distribution of transfer contributions and/or rollover contributions at any time subject to the restrictions in the Individual Agreement.

Terminated participants with Individual Account Balances of \$1,000 or less will receive a lump sum payout.

Retired participants may elect to receive a lump sum payment of benefits or apply the vested portion of their Individual Account toward the purchase of an annuity contract, subject to Plan stipulations.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note A - Description of Plan (Continued)

Participants 70 ½ are generally subject to yearly required minimum distributions based on their account value and life expectancy.

Plan Termination

Although it has not expressed any intent to do so, AGU has the right under the Plan to discontinue its contributions at any time and to terminate the Plan by action of the Board subject to the provisions of ERISA. In the event of plan termination, participants would become 100% vested and would receive the value of their accounts.

Plan Loans

Plan loans are issued directly from funds owned by TIAA and CREF. These loans are collateralized by the participant's account to cover 110% of the outstanding loan in case of default. The collateral is held in the TIAA traditional annuity and is an asset of the Plan. The amounts collateralized by participant balances are \$133,352 and \$223,380 as of December 31, 2022 and 2021, respectively.

Notes Receivable from Participants

Participants may borrow from their accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50% of their vested account balance. The notes receivable terms range from one to five years or longer, as determined by the Plan Administrator, for the purchase of a primary residence. The notes are secured by the balance in the participant's account and bear interest at 4.25% to 6.50%, as determined by the Plan Administrator. Principal and interest are paid ratably through payroll deductions. Notes receivable from participants mature at various dates through June 2031.

Note B - Summary of Significant Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared using the accrual basis of accounting.

Use of Estimates

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States (GAAP), requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

The Plan's investments in mutual funds are valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-ended mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value (NAV) and to transact at that price.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note B - Summary of Accounting Policies (Continued)

Investment Valuation and Income Recognition (Continued)

The Plan invests in TIAA Traditional Annuities, which are considered non-benefit fully responsive fixed annuity contracts. These investments are reported at fair value. The TIAA Traditional Annuity guarantees principal and a specified interest rate, with the opportunity for additional amounts determined annually by TIAA's Board of Trustees. Certain restrictions limit participant access to funds based on the type of contract held.

The Plan invests in the TIAA Stable Value Annuity (the Stable Value Annuity). The Stable Value Annuity is a benefit-responsive investment contract (GIC) and is recorded at contract value in accordance with GAAP (see Note E). Contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined contribution plan attributable to fully benefit-responsive guaranteed investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The contract value of fully benefit-responsive investment contracts represent contributions plus earnings, less participant withdrawals and administrative expenses.

The Plan also invests in TIAA and CREF accounts, which are variable annuity funds. The funds are SEC registrants under the Investment Company Act of 1940 as open-ended diversified management investment companies. Each fund determines its share price or NAV each day using market quotations or prices obtained from an independent pricing source to arrive at fair value, except for the Money Market account, which is valued at amortized cost. Accumulation units in these accounts are available for transaction at the closing accumulation unit value on any day the New York Stock Exchange is open for business. In an effort to reduce market timing and excessive trading, shareholders will be locked out of a fund for 90 days if a purchase, sale and repurchase value within that fund is made within a 60-day period, other than for the Money Market accounts.

Additionally, the Plan has investments in TIAA Real Estate Account (REA), which is a pooled separate account that invests mainly in real estate and real estate-related investments. The REA's value is principally derived from the market value of the underlying real estate holdings or other real estate-related investments. Real estate holdings are valued principally using external appraisals, which are estimates of property values based on a professional's opinion. The REA sometimes holds securities as well. These are generally priced using values obtained from independent pricing sources. Unit values for the REA are calculated each day. Accumulation units in the REA are available for transaction at the closing accumulation unit value on any day the New York Stock Exchange is open for business. Transfers out of the REA are limited to one per calendar quarter. Although the underlying assets of the REA cannot be quickly sold and converted to liquid assets, the TIAA general account provides the REA with liquidity guarantee.

There are no unfunded commitments as of December 31, 2022 and 2021.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note B - Summary of Accounting Policies (Continued)

Investment Valuation and Income Recognition (Continued)

Purchases and sales of investments are recorded on a trade-date basis. Dividends are recorded on the ex-dividend date. Interest is accrued when earned.

The Plan presents in the statements of changes in net assets available for plan benefits the net change in the fair value of investments, which consists of the realized gains and losses and the unrealized appreciation and depreciation on investments bought and sold as well as held during the year.

Payment of Benefits

Benefits are recorded when paid.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded on the accrual basis. If a participant ceases to make repayments and the Plan Administrator deems the note receivable from the participant to be in default, the balance of the note receivable from the participant is reduced and a benefit payment is recorded per the Plan agreement.

Risks and Uncertainties

The Plan provides for various investment options. Investment securities are exposed to various risks, such as interest, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for plan benefits.

Subsequent Events

The Plan has performed an evaluation of subsequent events through October 13, 2023, which is the date the financial statements were available to be issued and has considered any relevant matters in the preparation of the financial statements and footnotes.

Reclassifications

Certain amounts in the 2021 financial statements have been reclassified to conform to the 2022 presentation.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note C - Certified Financial Information

Certain information related to investments and notes receivable from participants disclosed in the accompanying financial statements and ERISA-required supplemental schedule, including investments and notes receivable from participants held at December 31, 2022 and 2021, and net change in fair value of investments, and interest and dividends for the years then ended, was obtained by management and agreed to or derived from information certified as complete and accurate by TIAA and CREF.

Note D - Fair Value Measurements

GAAP establishes a three-level hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The levels of the hierarchy and those investments included are as follows:

Level 1 – Inputs that utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that the Plan has the ability to access.

Level 2 – Inputs that include quoted prices for similar assets and liabilities in active markets and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument. Fair values for these instruments are estimated using pricing models, quoted prices of securities with similar characteristics, or discounted cash flows.

Level 3 – Inputs that are unobservable inputs for the asset or liability, which are typically based on an entity's own assumptions, as there is little, if any, related market activity.

In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note D - Fair Value Measurements (Continued)

The following table presents the fair value hierarchy for investments in the Plan measured at fair value as of December 31:

Assets Measured at Fair Value on a Recurring Basis at December 31, 2022				
	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 19,964,280	\$ -	\$ -	\$ 19,964,280
Traditional Annuity Account	-	-	7,885,310	7,885,310
TIAA Loan Default Fund	-	-	1,657	1,657
Real Estate Pooled Separate Account	-	618,928	-	618,928
Variable Annuity Accounts	3,638,154	-	-	3,638,154
Total	<u>\$ 23,602,434</u>	<u>\$ 618,928</u>	<u>\$ 7,886,967</u>	<u>\$ 32,108,329</u>

Assets Measured at Fair Value on a Recurring Basis at December 31, 2021				
	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 26,328,308	\$ -	\$ -	\$ 26,328,308
Traditional Annuity Account	-	-	8,098,631	8,098,631
TIAA Loan Default Fund	-	-	1,593	1,593
Real Estate Pooled Separate Account	-	617,808	-	617,808
Variable Annuity Accounts	3,939,286	-	-	3,939,286
Total	<u>\$ 30,267,594</u>	<u>\$ 617,808</u>	<u>\$ 8,100,224</u>	<u>\$ 38,985,626</u>

A reconciliation of investments measured at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) at December 31 is as follows:

	2022	2021
Beginning balance	\$ 8,100,224	\$ 8,308,775
Investment income	334,466	290,503
Additions	142,156	204,815
Withdrawals	<u>(689,879)</u>	<u>(703,869)</u>
Ending balance	<u>\$ 7,886,967</u>	<u>\$ 8,100,224</u>

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note E - Guaranteed Investment Contracts with TIAA

The Plan has an investment in a fully-benefit responsive contract with TIAA and CREF providing benefits to eligible employees. The contract is credited with cash contributions and earnings and charged for participant-initiated withdrawals or transfer requests. The contract is included in the accompanying financial statements at contract value. The Plan Administrator has not established reserves against the contract value for credit risk of the contract issuer or otherwise as reported to the Plan by TIAA and CREF. TIAA and CREF may terminate the contract and settle transactions at amounts different from contract value if the Plan ceases to comply with Section 401(a) of the Internal Revenue Code (the Code) or fails to fulfill its obligation under the contract.

Note F - Parties-in-Interest Transactions

The Plan's investments include fixed and variable annuity contracts managed by TIAA and CREF. Due to the relationship between the Plan and TIAA and CREF, investment transactions in such investments qualify as party-in-interest transactions which are exempt from the prohibited transaction rules of ERISA. Fees incurred by the Plan for the investment management services are included in the net change in fair value of the investment, as they are paid through revenue sharing, rather than a direct payment. Loans to participants also represent party-in-interest transactions. Additionally, personnel and facilities of AGU have been used to perform administrative functions for the Plan at no cost to the Plan.

Note G - Tax Status

On January 1, 2019, the Plan adopted the TIAA ERISA 403(b) volume submitter plan which has been designed to qualify under of Section 403(b) of the Internal Revenue Code (the Code). The volume submitter sponsor has received an opinion letter from the Internal Revenue Service (IRS) dated August 7, 2017, stating the volume submitter plan document was designed in accordance with the applicable sections of the Code. The Plan is required to operate in conformity with the Code to maintain the tax-exempt status for plan participants under Section 403(b).

Although the Plan and the volume submitter plan document have been amended since receiving the opinion letter, the Plan Administrator believes the Plan is currently designed and being operated in compliance with applicable requirements of the Code. Therefore, no provision for income taxes has been included in the Plan's financial statements. The Plan Administrator has concluded there are no uncertain tax positions as of December 31, 2022 and 2021 in accordance with GAAP.

American Geophysical Union Retirement Plan

Notes to Financial Statements (Continued)

Note H - Prior Period Information

Effective for plan years beginning on or after January 1, 2009, the Department of Labor has issued regulations that eliminated special limited reporting for Code section 403(b) plans. Prior to the 2009 plan year, the Plan was not required to file audited financial statements with its Federal Form 5500. As the Plan has been in existence since 1972, but was not previously audited, there is limited information available to support the historical balances within the Plan's financial statements. The employee files available for Management to use in verifying the completeness and accuracy of the Plan's financial statements are not complete prior to January 1, 2009. Older information for current plan participants, including both current and former employees, is not available. Management has prepared these financial statements using all information available, but due to the lack of historical records, cannot determine that all accounts for periods prior to January 1, 2009 have been completely and accurately presented.

Note I - Concentrations

Plan investments held in various TIAA and CREF funds approximated 70% of total investments as of December 31, 2022 and 2021.

American Geophysical Union Retirement Plan

E.I.N. 52-0955532, Plan Number 001

Schedule H, Line 4i - Schedule of Assets (Held at End of Year)

December 31, 2022

(a)	(b) Identity of Issuer	(c) Description of Investment	(d) Historical cost	(e) Current Value
*	TIAA Traditional Non Benefit Responsive	Fixed annuity		\$ 7,885,310
*	Plan Loan Default Fund	Fixed annuity		1,657
*	TIAA Stable Value Benefit Responsive Annuity	Fixed annuity		219,387
*	TIAA Access Quant Sml Cp Eq	Variable annuity account		21,025
*	TIAA-CREF Bond Index-Inst	Variable annuity account		210,414
*	TIAA-CREF SC Intl Eq-Inst	Variable annuity account		157,866
*	CREF Core Bond	Variable annuity account		209,950
*	CREF Equity Index	Variable annuity account		1,021,050
*	CREF Global Equities	Variable annuity account		490,829
*	CREF Growth	Variable annuity account		1,221,338
*	CREF Inflation-Linked Bond	Variable annuity account		245,423
*	CREF Money Market	Variable annuity account		482,381
*	CREF Social Choice	Variable annuity account		564,782
*	CREF Stock	Variable annuity account		6,424,412
	Vanguard Treasury MoneyMkt Inv	Mutual fund		415,361
	Vanguard Intl Value Inv	Mutual fund		41,223
	Vanguard Small-Cap Idx Adm	Mutual fund		102,058
	Vanguard Target Ret Inc	Mutual fund		207,757
	Vanguard Target Ret 2020 Inv	Mutual fund		1,032,639
	Vanguard Target Ret 2025 Inv	Mutual fund		1,108,588
	Vanguard Target Ret 2030 Inv	Mutual fund		770,088
	Vanguard Target Ret 2035 Inv	Mutual fund		345,674
	Vanguard Target Ret 2040 Inv	Mutual fund		1,080,750
	Vanguard Target Ret 2045 Inv	Mutual fund		1,063,861
	Vanguard Target Ret 2050 Inv	Mutual fund		706,774
*	TIAA Access Bond	Variable annuity account		10,832
*	TIAA Access Bond Plus	Variable annuity account		16,420
*	TIAA Access Equity Index	Variable annuity account		10,753
*	TIAA Access Growth & Income	Variable annuity account		36,250
*	TIAA Access Inflation-Linked Bond	Variable annuity account		12,836
*	TIAA Access International Equity	Variable annuity account		106,373
*	TIAA Access Large-Cap Growth	Variable annuity account		61,616
*	TIAA Access Large-Cap Value	Variable annuity account		67,664
*	TIAA Access Lifecycle 2010	Variable annuity account		1,219
*	TIAA Access Lifecycle 2015	Variable annuity account		18,384
*	TIAA Access Lifecycle 2020	Variable annuity account		28,937
*	TIAA Access Lifecycle 2025	Variable annuity account		345,581
*	TIAA Access Lifecycle 2030	Variable annuity account		162,923
*	TIAA Access Lifecycle 2035	Variable annuity account		71,468
*	TIAA Access Lifecycle 2040	Variable annuity account		21,207
*	TIAA Access Lifecycle 2045	Variable annuity account		123,428
*	TIAA Access Lifecycle 2050	Variable annuity account		137,329
	Vanguard Target Ret 2055 Inv	Mutual fund		498,635
*	TIAA Access Mid-Cap Growth	Variable annuity account		19,829
*	TIAA Access Mid-Cap Value	Variable annuity account		55,455
	Vanguard Mid-Cap Idx Adm	Mutual fund		129,493
*	TIAA Access Real Est Secs	Variable annuity account		61,665
*	TIAA Access Sm-Cap Bl Idx	Variable annuity account		50,138

- Continued -

American Geophysical Union Retirement Plan

E.I.N. 52-0955532, Plan Number 001

Schedule H, Line 4i - Schedule of Assets (Held at End of Year) (Continued)

December 31, 2022

(a)	(b) Identity of Issuer	(c) Description of Investment	(d) Historical cost	(e) Current Value
	Vanguard Target Ret 2060 Inv	Mutual fund		132,897
*	TIAA Access Social Ch Equity	Variable annuity account		28,444
*	TIAA Real Estate	Pooled separate account		618,928
	Vanguard Ttl Stk Mkt Idx Adm	Mutual fund		319,155
	Vanguard Real Estate Idx Adm	Mutual fund		89,895
*	TIAA-CREF Equity Index	Variable annuity account		433,995
*	TIAA-CREF Intl Equity Index	Variable annuity account		274,908
*	TIAA-CREF Large-Cap Growth Idx	Variable annuity account		443,876
*	TIAA-CREF Large Cap Value	Variable annuity account		269,952
	Vanguard Energy Idx Adm	Mutual Fund		39,669
	Vanguard Materials Idx Adm	Mutual Fund		9,927
	Vanguard Intr-Trm Cor Bd Idx Adm	Mutual fund		56,734
	Vanguard Long-Trm Invt Gd Adm	Mutual fund		102,743
	Vanguard Emr Mkts Stk Idx Adm	Mutual fund		127,321
	Vanguard Ttl Intl Stk Idx Adm	Mutual fund		221,293
	Vanguard Intl Growth Adm	Mutual fund		66,287
	Vanguard High-Yield Corp Adm	Mutual fund		70,255
	Vanguard Balanced Idx InstAdm	Mutual fund		186,252
	Vanguard Small-Cap Grw Idx Adm	Mutual fund		17,106
	Vanguard Small-Cap Val Idx Adm	Mutual fund		60,197
	Vanguard Ttl Intl Bnd Idx Adm	Mutual fund		55,406
	Vanguard Info Tech Idx Admiral	Mutual fund		94,440
	Vanguard Mid-Cap Grw Idx Adm	Mutual fund		6,007
	Vanguard Mid-Cap Value Idx Adm	Mutual fund		61,720
	Vanguard US Growth Adm	Mutual fund		241,515
	Vanguard Windsor Adm	Mutual fund		97,179
	Vanguard Intr-Trm Gvt Bd Idx Adm	Mutual fund		8,568
	Vanguard Short-Trm Bd Idx Adm	Mutual fund		114,015
	Total Investments			32,327,716
*	Participant Loans	4.25% - 6.50% maturing through 2031	\$0	130,543
	Total			<u>\$ 32,458,259</u>

(d) Historical cost is omitted as investments are participant directed.

* Party-in-interest

American Geophysical Union Retirement Plan

E.I.N. 52-0955532, Plan Number 001

Schedule H, Line 4i - Schedule of Assets (Held at End of Year)

December 31, 2022

(a)	(b) Identity of Issuer	(c) Description of Investment	(d) Historical cost	(e) Current Value
*	TIAA Traditional Non Benefit Responsive	Fixed annuity		\$ 7,885,310
*	Plan Loan Default Fund	Fixed annuity		1,657
*	TIAA Stable Value Benefit Responsive Annuity	Fixed annuity		219,387
*	TIAA Access Quant Sml Cp Eq	Variable annuity account		21,025
*	TIAA-CREF Bond Index-Inst	Variable annuity account		210,414
*	TIAA-CREF SC Intl Eq-Inst	Variable annuity account		157,866
*	CREF Core Bond	Variable annuity account		209,950
*	CREF Equity Index	Variable annuity account		1,021,050
*	CREF Global Equities	Variable annuity account		490,829
*	CREF Growth	Variable annuity account		1,221,338
*	CREF Inflation-Linked Bond	Variable annuity account		245,423
*	CREF Money Market	Variable annuity account		482,381
*	CREF Social Choice	Variable annuity account		564,782
*	CREF Stock	Variable annuity account		6,424,412
	Vanguard Treasury MoneyMkt Inv	Mutual fund		415,361
	Vanguard Intl Value Inv	Mutual fund		41,223
	Vanguard Small-Cap Idx Adm	Mutual fund		102,058
	Vanguard Target Ret Inc	Mutual fund		207,757
	Vanguard Target Ret 2020 Inv	Mutual fund		1,032,639
	Vanguard Target Ret 2025 Inv	Mutual fund		1,108,588
	Vanguard Target Ret 2030 Inv	Mutual fund		770,088
	Vanguard Target Ret 2035 Inv	Mutual fund		345,674
	Vanguard Target Ret 2040 Inv	Mutual fund		1,080,750
	Vanguard Target Ret 2045 Inv	Mutual fund		1,063,861
	Vanguard Target Ret 2050 Inv	Mutual fund		706,774
*	TIAA Access Bond	Variable annuity account		10,832
*	TIAA Access Bond Plus	Variable annuity account		16,420
*	TIAA Access Equity Index	Variable annuity account		10,753
*	TIAA Access Growth & Income	Variable annuity account		36,250
*	TIAA Access Inflation-Linked Bond	Variable annuity account		12,836
*	TIAA Access International Equity	Variable annuity account		106,373
*	TIAA Access Large-Cap Growth	Variable annuity account		61,616
*	TIAA Access Large-Cap Value	Variable annuity account		67,664
*	TIAA Access Lifecycle 2010	Variable annuity account		1,219
*	TIAA Access Lifecycle 2015	Variable annuity account		18,384
*	TIAA Access Lifecycle 2020	Variable annuity account		28,937
*	TIAA Access Lifecycle 2025	Variable annuity account		345,581
*	TIAA Access Lifecycle 2030	Variable annuity account		162,923
*	TIAA Access Lifecycle 2035	Variable annuity account		71,468
*	TIAA Access Lifecycle 2040	Variable annuity account		21,207
*	TIAA Access Lifecycle 2045	Variable annuity account		123,428
*	TIAA Access Lifecycle 2050	Variable annuity account		137,329
	Vanguard Target Ret 2055 Inv	Mutual fund		498,635
*	TIAA Access Mid-Cap Growth	Variable annuity account		19,829
*	TIAA Access Mid-Cap Value	Variable annuity account		55,455
	Vanguard Mid-Cap Idx Adm	Mutual fund		129,493
*	TIAA Access Real Est Secs	Variable annuity account		61,665
*	TIAA Access Sm-Cap Bl Idx	Variable annuity account		50,138

- Continued -

American Geophysical Union Retirement Plan

E.I.N. 52-0955532, Plan Number 001

Schedule H, Line 4i - Schedule of Assets (Held at End of Year) (Continued)

December 31, 2022

(a)	(b) Identity of Issuer	(c) Description of Investment	(d) Historical cost	(e) Current Value
	Vanguard Target Ret 2060 Inv	Mutual fund		132,897
*	TIAA Access Social Ch Equity	Variable annuity account		28,444
*	TIAA Real Estate	Pooled separate account		618,928
	Vanguard Ttl Stk Mkt Idx Adm	Mutual fund		319,155
	Vanguard Real Estate Idx Adm	Mutual fund		89,895
*	TIAA-CREF Equity Index	Variable annuity account		433,995
*	TIAA-CREF Intl Equity Index	Variable annuity account		274,908
*	TIAA-CREF Large-Cap Growth Idx	Variable annuity account		443,876
*	TIAA-CREF Large Cap Value	Variable annuity account		269,952
	Vanguard Energy Idx Adm	Mutual Fund		39,669
	Vanguard Materials Idx Adm	Mutual Fund		9,927
	Vanguard Intr-Trm Cor Bd Idx Adm	Mutual fund		56,734
	Vanguard Long-Trm Invt Gd Adm	Mutual fund		102,743
	Vanguard Emr Mkts Stk Idx Adm	Mutual fund		127,321
	Vanguard Ttl Intl Stk Idx Adm	Mutual fund		221,293
	Vanguard Intl Growth Adm	Mutual fund		66,287
	Vanguard High-Yield Corp Adm	Mutual fund		70,255
	Vanguard Balanced Idx InstAdm	Mutual fund		186,252
	Vanguard Small-Cap Grw Idx Adm	Mutual fund		17,106
	Vanguard Small-Cap Val Idx Adm	Mutual fund		60,197
	Vanguard Ttl Intl Bnd Idx Adm	Mutual fund		55,406
	Vanguard Info Tech Idx Admiral	Mutual fund		94,440
	Vanguard Mid-Cap Grw Idx Adm	Mutual fund		6,007
	Vanguard Mid-Cap Value Idx Adm	Mutual fund		61,720
	Vanguard US Growth Adm	Mutual fund		241,515
	Vanguard Windsor Adm	Mutual fund		97,179
	Vanguard Intr-Trm Gvt Bd Idx Adm	Mutual fund		8,568
	Vanguard Short-Trm Bd Idx Adm	Mutual fund		114,015
	Total Investments			32,327,716
*	Participant Loans	4.25% - 6.50% maturing through 2031	\$0	130,543
	Total			<u>\$ 32,458,259</u>

(d) Historical cost is omitted as investments are participant directed.

* Party-in-interest

Form 5500Department of the Treasury
Internal Revenue ServiceDepartment of Labor
Employee Benefits Security
Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

► **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210 - 0110
1210 - 0089**2022****This Form is Open to
Public Inspection****Part I Annual Report Identification Information**For calendar plan year 2022 or fiscal plan year beginning **01/01/2022** and ending **12/31/2022**

- A** This return/report is for: ☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instr.)
- ☒ a single-employer plan ☐ a DFE (specify) _____
- B** This return/report is: ☐ the first return/report ☐ the final return/report
- ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
- C** If the plan is a collectively-bargained plan, check here ☐
- D** Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program
- ☐ special extension (enter description) _____
- E** If this is a retroactively adopted plan permitted by SECURE Act section 201, check here ☐

Part II Basic Plan Information - enter all requested information

1a Name of plan AMERICAN GEOPHYSICAL UNION RETIREMENT PLAN	1b Three-digit plan number (PN) ► 001
	1c Effective date of plan 07/01/1972
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) AMERICAN GEOPHYSICAL UNION 2000 FLORIDA AVENUE NW WASHINGTON DC 20009-1231	2b Employer Identification Number (EIN) 52-0955532 2c Plan Sponsor's telephone number 202-462-6900 2d Business code (see instructions) 541990

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE <i>Mary Mohney</i> Signature of plan administrator	<i>10/16/23</i> Date	MARY MOHNEY Enter name of individual signing as plan administrator
SIGN HERE Signature of employer/plan sponsor	 Date	 Enter name of individual signing as employer or plan sponsor
SIGN HERE Signature of DFE	 Date	 Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2022)
v. 220413