

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). <p style="text-align: center;">▶ Complete all entries in accordance with the instructions to the Form 5500.</p>	OMB Nos. 1210-0110 1210-0089 <div style="text-align: center; font-size: 24pt; font-weight: bold;">2017</div> This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2017 or fiscal plan year beginning <u>10/01/2017</u> and ending <u>09/30/2018</u>	
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)

Part II	Basic Plan Information —enter all requested information		
1a Name of plan <u>MOOG INC. EMPLOYEES' RETIREMENT PLAN</u>	1b Three-digit plan number (PN) ▶	<div style="border: 1px solid black; padding: 2px; display: inline-block;">001</div>	
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) <u>MOOG INC.</u> <u>SENECA STREET AT JAMISON ROAD</u> <u>EAST AURORA, NY 14052-0018</u>		1c Effective date of plan <u>06/30/1959</u>	
		2b Employer Identification Number (EIN) <u>16-0757636</u>	
		2c Plan Sponsor's telephone number <u>716-652-2000</u>	
		2d Business code (see instructions) <u>336410</u>	

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.	07/11/2019	KRISTINE KARNATH
	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 (2017)
v. 170203

3a Plan administrator's name and address ☒ Same as Plan Sponsor	3b Administrator's EIN 3c Administrator's telephone number <div style="background-color: #cccccc; height: 40px; width: 100%;"></div>
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 5930
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) 2564
a(2) Total number of active participants at the end of the plan year	6a(2) 2399
b Retired or separated participants receiving benefits	6b 2360
c Other retired or separated participants entitled to future benefits	6c 646
d Subtotal. Add lines 6a(2) , 6b , and 6c	6d 5405
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	6e 425
f Total. Add lines 6d and 6e	6f 5830
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	6g
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6h 0
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:

1A 3H

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) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
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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

- (1)** ☒ **R** (Retirement Plan Information)
- (2)** ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3)** ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

- (1)** ☒ **H** (Financial Information)
- (2)** ☐ **I** (Financial Information – Small Plan)
- (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 2017 Form M-1 annual report. If the plan was not required to file the 2017 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 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning 10/01/2017 and ending 09/30/2018	
A Name of plan MOOG INC. EMPLOYEES' RETIREMENT PLAN	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 MOOG INC.	D Employer Identification Number (EIN) 16-0757636

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 SYMETRA LIFE INSURANCE COMPANY
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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
91-0742147	68608	LP1040392		12/01/2017	09/30/2018

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.

(a) Total amount of commissions paid	(b) Total amount of fees paid

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** 483984**5** Current value of plan's interest under this contract in separate accounts at year end **5****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. **6d**
Specify nature of costs ▶**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** 0**c** Additions: (1) Contributions deposited during the year **7c(1)**
(2) Dividends and credits **7c(2)**
(3) Interest credited during the year **7c(3)** 16918
(4) Transferred from separate account **7c(4)** 467066
(5) Other (specify below) **7c(5)**(6) Total additions **7c(6)** 483984**d** Total of balance and additions (add lines **7b** and **7c(6)**). **7d** 483984**e** Deductions:(1) Disbursed from fund to pay benefits or purchase annuities during year **7e(1)**
(2) Administration charge made by carrier **7e(2)**
(3) Transferred to separate account **7e(3)**
(4) Other (specify below) **7e(4)**(5) Total deductions **7e(5)** 0**f** Balance at the end of the current year (subtract line **7e(5)** from line **7d**). **7f** 483984

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)	0
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)	0
(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)	0
(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 SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning 10/01/2017 and ending 09/30/2018

▶ **Round off amounts to nearest dollar.**
▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan <u>MOOG INC. EMPLOYEES' 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 or 5500-SF <u>MOOG INC.</u>	D Employer Identification Number (EIN) <u>16-0757636</u>

E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500
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Part I Basic Information

1 Enter the valuation date: Month <u>10</u> Day <u>01</u> Year <u>2017</u>			
2 Assets:			
a Market value	2a	<u>896880169</u>	
b Actuarial value	2b	<u>868408313</u>	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	<u>2725</u>	<u>282483974</u>	<u>282483974</u>
b For terminated vested participants	<u>641</u>	<u>29921094</u>	<u>29921094</u>
c For active participants	<u>2564</u>	<u>277323594</u>	<u>278468130</u>
d Total	<u>5930</u>	<u>589728662</u>	<u>590873198</u>
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... ☐			
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5	<u>5.92 %</u>	
6 Target normal cost	6	<u>18220875</u>	

Statement by Enrolled Actuary
To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		
<u>BENJAMIN W. GILDE</u>	Signature of actuary	<u>06/24/2019</u>
<u>AON CONSULTING, INC.</u>	Type or print name of actuary	Date <u>17-08001</u>
<u>230 THIRD AVENUE WALTHAM, MA 02451</u>	Firm name	Most recent enrollment number <u>781-891-8600</u>
	Address of the firm	Telephone number (including area code)

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	50290871	0
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9 Amount remaining (line 7 minus line 8)	50290871	0
10 Interest on line 9 using prior year's actual return of <u>11.76</u> %	5914206	0
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		141969309
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.12</u> %		8688522
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance		150657831
d Portion of (c) to be added to prefunding balance		
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	56205077	0

Part III Funding Percentages

14 Funding target attainment percentage	14	137.45%
15 Adjusted funding target attainment percentage	15	146.97%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	119.68%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls**18** Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
Totals ▶			18(b)	0	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	0

20 Quarterly contributions and liquidity shortfalls:

- a** Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No
- b** If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No
- c** If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age.....				22 65
23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute				

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.....	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.....	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):		
a Target normal cost (line 6)	31a	18220875
b Excess assets, if applicable, but not greater than line 31a	31b	18220875
32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment.....	0	0
b Waiver amortization installment	0	0
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....	34	0
	Carryover balance	Prefunding balance
35 Balances elected for use to offset funding requirement.....		0
36 Additional cash requirement (line 34 minus line 35)	36	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	0
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	38a	0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0
40 Unpaid minimum required contributions for all years.....	40	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:		
a Schedule elected	☐ 2 plus 7 years ☐ 15 years	
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011	
42 Amount of acceleration adjustment	42	
43 Excess installment acceleration amount to be carried over to future plan years	43	

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
		2017
		This Form is Open to Public Inspection.

For calendar plan year 2017 or fiscal plan year beginning 10/01/2017 and ending 09/30/2018		
A Name of plan MOOG INC. EMPLOYEES' RETIREMENT PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 MOOG INC.	D Employer Identification Number (EIN) 16-0757636	

Part I	Service Provider Information (see instructions)
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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
HFS
98-0404814
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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)

M AND T BANK

16-0538020

(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?
21 50	TRUSTEE	229685	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

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

THE VANGUARD GROUP

P.O. BOX 1110
VALLEY FORGE, PA 19482-1110

(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?
28 50	INVESTMENT MANAGEMENT	145037	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☐ No ☒

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

AON CONSULTING INC

22-2232264

(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?
11 50	ACTUARIAL	135977	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

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)

BLACKSTONE MANAGEMENT PARTNERS LLC

345 PARK AVENUE
NEW YORK, NY 10154

(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?
28 51 50	INVESTMENT MANAGEMENT	105567	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☐ No ☒

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

Q AND F ADMINISTRATION, INC

16-1302807

(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?
13 50	CONTRACT ADMINISTRATOR	81667	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 H (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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 2017 This Form is Open to Public Inspection
For calendar plan year 2017 or fiscal plan year beginning 10/01/2017 and ending 09/30/2018		
A Name of plan MOOG INC. EMPLOYEES' RETIREMENT PLAN	B Three-digit plan number (PN) ►	001
C Plan sponsor's name as shown on line 2a of Form 5500 MOOG INC.	D Employer Identification Number (EIN) 16-0757636	

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	1265661	0
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)	145000000	0
(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)	7371608	6308100
(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)	37165471	39127111
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)		
(9) Value of interest in common/collective trusts.....	1c(9)		
(10) Value of interest in pooled separate accounts.....	1c(10)		
(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)	625660242	836124263
(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)	463809	483984
(15) Other	1c(15)	2451004	135386

1d Employer-related investments:

		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)	83245987	0
(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	902623782	882178844

Liabilities

g Benefit claims payable	1g	44872	24658
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through 1j)	1k	44872	24658

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	902578910	882154186
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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)		
(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)		0
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)		
(F) Other	2b(1)(F)	714881	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		714881
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)	500517	
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	23749275	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		24249792
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	64580906	
(B) Aggregate carrying amount (see instructions)	2b(4)(B)	9033193	
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		55547713
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)	-54356268	
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		-54356268

		(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)		
(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)		-16105143
c Other income	2c		
d Total income. Add all income amounts in column (b) and enter total.....	2d		10050975

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers.....	2e(1)	29393295	
(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)		29393295
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)	365662	
(2) Contract administrator fees	2i(2)	81667	
(3) Investment advisory and management fees	2i(3)	230390	
(4) Other	2i(4)	404685	
(5) Total administrative expenses. Add lines 2i(1) through (4).....	2i(5)		1082404
j Total expenses. Add all expense amounts in column (b) and enter total.....	2j		30475699

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		-20424724
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) ☐ Unqualified (2) ☐ Qualified (3) ☒ Disclaimer (4) ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? ☒ Yes ☐ No

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

(1) Name: FREED MAXICK CPA, PC

(2) EIN: 45-4051133

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.).....

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.)

	Yes	No	Amount
4a		X	
4b		X	

	Yes	No	Amount
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.)		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.)		X	
e Was this plan covered by a fidelity bond?	X		10000000
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	
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?		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?		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		
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.)	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?		X	
l Has the plan failed to provide any benefit when due under the plan?		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
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.			

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 If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4134349. (See instructions.)

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 2017 This Form is Open to Public Inspection.
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For calendar plan year 2017 or fiscal plan year beginning 10/01/2017 and ending 09/30/2018

A Name of plan <u>MOOG INC. EMPLOYEES' 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>MOOG INC.</u>	D Employer Identification Number (EIN) <u>16-0757636</u>

Part I	Distributions
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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	<u>0</u>
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): <u>16-0538020</u>		
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	<u>0</u>

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.)
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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
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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
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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.
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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) 2017
v. 170203

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (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 participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	14a	
b The plan year immediately preceding the current plan year	14b	
c The second preceding plan year	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

- 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: 21.0% Investment-Grade Debt: 79.0% High-Yield Debt: 0.0% Real Estate: 0.0% Other: 0.0%

- 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):

Financial Statements and Supplemental Schedules

**Moog Inc. Employees' Retirement Plan
Years Ended September 30, 2018 and 2017
With Independent Auditor's Report**

MOOG INC. EMPLOYEES' RETIREMENT PLAN
FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULES
YEARS ENDED SEPTEMBER 30, 2018 and 2017

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INDEPENDENT AUDITOR'S REPORT

To the Plan Administrator
Moog Inc. Employees' Retirement Plan

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of Moog Inc. Employees' Retirement Plan (the Plan), which comprise the statements of net assets available for benefits as of September 30, 2018 and 2017, and the related statements of changes in net assets available for benefits for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the Plan Administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 5, which was certified by Manufacturers and Traders Trust Company, the trustee of the Plan, except for comparing this information with the related information included in the financial statements. We have been informed by the plan administrator that the trustee holds the Plan's assets and execute transactions. The plan administrator has obtained certifications from the trustee as of September 30, 2018 and 2017, and for the years then ended, that the information provided to the plan administrator by the trustee is complete and accurate.

Disclaimer of Opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Other Matter

The supplemental schedules of (1) Schedule H, line 4i - Schedule of Assets (Held at End of Year), and (2) Schedule H, line 4j - Schedule of Reportable Transactions as of or for the year ended September 30, 2018, are required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and are presented for the purposes of additional analysis and are not a required part of the financial statements. These supplemental schedules are the responsibility of the Plan's management. Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we do not express an opinion on the supplemental schedules.

Report on Form and Content in Compliance with DOL Rules and Regulations

The form and content of the information included in the financial statements and supplemental schedules, other than that derived from the information certified or provided by the trustee, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

Freed Maxick CPAs, P.C.

Buffalo, New York
July 10, 2019

MOOG INC. EMPLOYEES' RETIREMENT PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	September 30,	
	2018	2017
ASSETS		
Investments, at fair value	\$ 882,178,844	\$ 756,358,121
Employer contributions receivable	—	145,000,000
Cash and cash equivalents	—	1,265,661
Total assets	882,178,844	902,623,782
LIABILITIES		
Accounts payable	24,658	44,872
Total liabilities	24,658	44,872
Net assets available for benefits	\$ 882,154,186	\$ 902,578,910
See accompanying Notes to Financial Statements.		

MOOG INC. EMPLOYEES' RETIREMENT PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

	Year Ended September 30,	
	2018	2017
ADDITIONS		
Investment income - interest and dividends	\$ 24,964,673	\$ 12,300,430
Net realized and unrealized appreciation in fair value of investments	—	69,798,749
Employer contributions	—	155,000,000
Total additions	24,964,673	237,099,179
DEDUCTIONS		
Net realized and unrealized depreciation in fair value of investments	14,913,698	—
Pension benefit payments	29,393,295	57,342,885
Administrative expenses	1,082,404	1,954,003
Total deductions	45,389,397	59,296,888
Net (decrease) increase	(20,424,724)	177,802,291
Transfer from other plan	—	860,490
Net assets available for benefits at beginning of year	902,578,910	723,916,129
Net assets available for benefits at end of year	\$ 882,154,186	\$ 902,578,910

See accompanying Notes to Financial Statements.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

1. Description of Plan

The following brief description of the Moog Inc. (the Company) Employees' Retirement Plan (the Plan) is provided for general information purposes only. Participants should refer to the Summary Plan Description for more complete information.

General

The Plan is a noncontributory defined benefit pension plan covering substantially all domestic employees of the Company hired prior to January 1, 2008. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). The Administrative Committee is responsible for the oversight of the Plan, determines the appropriateness of the Plan's investment offerings and monitors investment performance.

The Plan is frozen to new participants. All new employees hired on or after January 1, 2008 are not eligible to participate in the Plan. All employees hired before January 1, 2008 elected either to remain in the Plan and continue to accrue benefits or elected to stop accruing future benefits in the Plan as of April 1, 2008. Employees who elected to stop accruing future benefits receive Company contributions to the Moog Inc. Retirement Savings Plan.

Plan Mergers and Transfers

For the plan year ended September 30, 2017, the Company transferred assets and merged the associated plan of Moog Flo-Tork into the Plan.

Plan Benefits

Participants are eligible for monthly benefit payments upon retirement at age 65 and the completion of five years of vesting service. Normal retirement benefits are equal to the sum of the following:

- **Prior Service Pension** - For credited service before October 1, 1990, 1.15% of the first \$20,000, plus 1.75% of any excess, of prior service compensation multiplied by years of prior service, but not less than the accrued benefit as of December 31, 1998. Prior service compensation is the base annual rate of compensation for the year ended December 31, 1989, plus overtime and shift differential, excluding any other compensation; provided however, profit sharing bonuses (and to the extent necessary, similar compensation) for participants who are not highly compensated employees as defined in Section 414(q) of the Internal Revenue Code (the Code) shall be included in compensation to the extent necessary to satisfy the discrimination requirements under Section 414(s) of the Code.
- **Future Service Pension** - For each year of credited service after September 30, 1990, 1.15% of the first \$20,000, plus 1.75% of the amount over \$20,000. Future service compensation is the base compensation plus shift differential and overtime compensation received during the calendar year ending in the plan year.

The amount of annual compensation used in calculating pension benefits was limited to \$270,000 and \$265,000 for the plan years ended September 30, 2018 and 2017, respectively.

The Plan permits early retirement at a reduced benefit at age 55 with at least 15 years of vesting service.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("US GAAP").

Investment Valuation and Income Recognition

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Administrative Committee determines the Plan's investment policies utilizing information provided by its investment manager and Trustee. See Note 4 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net realized and unrealized appreciation and depreciation in fair value of investments includes the Plan's gains and losses on investments purchased and sold as well as held during the year.

Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits (see Note 6) are those estimated future periodic payments, including lump-sum distributions that are attributable under the Plan's provisions to employee service rendered through the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who have died and (c) present employees or their beneficiaries. The accumulated plan benefits for active employees are based on their compensation during their years of credited service. Benefits payable under all circumstances - retirement, death, disability and termination of employment - are included to the extent they are deemed attributable to employee service rendered to the valuation date.

Payment of Benefits

Benefit payments to participants are recorded when paid.

Administrative Expenses

Direct costs of administering the Plan are borne by the Plan.

Use of Estimates

The preparation of financial statements in accordance with US GAAP requires management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates.

Subsequent Events

The Plan has evaluated subsequent events through July 10, 2019, the date the financial statements were issued, and made no significant changes to the financial statements as a result of the subsequent events evaluation.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

3. Funding Policy

The Company intends to make contributions to the Plan sufficient to provide the Plan with assets with which to pay pension benefits to the Plan's participants.

The Plan has met the minimum funding requirements of ERISA in 2018 and 2017.

4. Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Depending on the nature of the asset or liability, various techniques and assumptions can be used to estimate fair value. The definition of the fair value hierarchy is as follows:

Level 1 - Quoted prices in active markets for identical assets and liabilities.

Level 2 - Observable inputs other than quoted prices in active markets for similar assets and liabilities.

Level 3 - Inputs for which significant valuation assumptions are unobservable in a market and therefore value is based on the best available data, some of which is internally developed and considers risk premiums that a market participant would require.

A financial asset's classification within the hierarchy is determined based on the lowest level of input that is significant to the fair value measurement. The Plan's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

The Plan's assets are invested in cash and cash equivalents, money market funds, shares of registered investment companies, employer securities, insurance contracts, limited partnerships and hedge funds.

Following is a description of the valuation methodologies used for assets measured at fair value. The valuation methodologies used for pension plan assets measured at fair value have not changed between September 30, 2017 and September 30, 2018.

Cash and cash equivalents: Direct cash holdings valued at cost, which approximates fair value.

Money market funds: Institutional short-term investment vehicles valued daily.

Shares of registered investment companies: Consists of both equity and fixed income mutual funds. Valued at quoted market prices that represent the net asset value of shares held by the plan at year end.

Employer securities: Valued at the closing price reported on the New York Stock Exchange.

Investment in insurance contract: Valued at fair value which represents the amount the Plan would receive if they terminated the contract at the reporting date, which is the contract value less a distribution charge and a market value adjustment. Participants may ordinarily direct the withdrawal or transfer on all or a portion of their investment at contract value. There are no distribution charges or market value adjustments assessed on the sum of withdrawals taken in any contract year which do not exceed 10% of the account value of the fund. As of September 30, 2018 withdrawals from the fund are limited to 5% of the beginning balance of the fund payable not more often than quarterly in approximately equal payments. Certain events, such as a change in law, regulation, administrative ruling or employer-initiated termination of the Plan may limit the ability of the Plan to transact the fixed accounts at contract value with the issuer. The Plan's management does not believe that the occurrence of any such events are probable.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

4. Fair Value (continued)

Limited partnerships and hedge funds: Valued at net asset value of units held. The NAV is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the fund less its liability. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different from the reported NAV.

The fair value of securities or other assets for which market quotations are not readily available or for which market quotations do not represent the value at the time of pricing (including certain illiquid securities) are determined in accordance with procedures established under the supervision and responsibility of the Trustee of that investment. Such procedures may include the use of independent pricing services or affiliated advisor pricing, which use prices based upon yields or prices of securities of comparable quality, coupon, maturity and type, indications as to values from dealers, operating data and general market conditions.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables present the fair values and classification of our financial assets measured on a recurring basis as of September 30, 2018 and 2017:

Assets at Fair Value as of September 30, 2018:				
	Level 1	Level 2	Level 3	Total
Investments at fair value:				
Shares of registered investment companies:				
Equity funds	\$ 141,287,353	\$ —	\$ —	\$ 141,287,353
Fixed income funds	694,836,910	—	—	694,836,910
Money market funds	—	6,308,100	—	6,308,100
Insurance contract	—	—	483,984	483,984
Total investments in fair value hierarchy	836,124,263	6,308,100	483,984	842,916,347
Investments measured at NAV practical expedient ⁽¹⁾				39,262,497
Total investments at fair value	\$ 836,124,263	\$ 6,308,100	\$ 483,984	\$ 882,178,844

Assets at Fair Value as of September 30, 2017:				
	Level 1	Level 2	Level 3	Total
Investments at fair value:				
Shares of registered investment companies:				
Equity funds	\$ 302,652,328	\$ —	\$ —	\$ 302,652,328
Fixed income funds	323,007,914	—	—	323,007,914
Employer securities	83,245,987	—	—	83,245,987
Money market funds	—	7,371,608	—	7,371,608
Insurance contract	—	—	463,809	463,809
Total investments in fair value hierarchy	708,906,229	7,371,608	463,809	716,741,646
Investments measured at NAV practical expedient ⁽¹⁾				39,616,475
Total investments at fair value	\$ 708,906,229	\$ 7,371,608	\$ 463,809	\$ 756,358,121

⁽¹⁾ Per adoption of ASU 2015-07, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the statement of net assets available for benefits.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

4. Fair Value (continued)

The following is a roll-forward of plan assets classified as Level 3 within the fair value hierarchy:

	Total
Fair value, September 30, 2016	\$ —
Transfer from other plan	592,725
Return on assets	19,010
Settlements paid in cash	(147,926)
Fair value, September 30, 2017	463,809
Return on assets	20,175
Fair value, September 30, 2018	483,984

Return on assets included in the roll-forward of plan assets classified as Level 3 within the fair value hierarchy are reported in net realized and unrealized appreciation and depreciation in fair value of investments in the statement of changes in net assets available for benefits.

The following table summarizes investments measured at fair value based on net asset value (NAV) per share as of September 30, 2018 and 2017:

	Fair Value as of September 30,		Unfunded	Redemption	Redemption
	2018	2017	Commitments	Frequency	Notice Period
Limited partnerships ⁽¹⁾	\$ 39,127,111	\$ 37,165,471	\$ 5,218,636	Varies	10-45 days
Hedge funds ⁽²⁾	135,386	2,451,004	—	Quarterly	60 days
Total	\$ 39,262,497	\$ 39,616,475	\$ 5,218,636		

(1) Investments in limited partnerships held by us invest primarily in emerging markets, equity and equity related securities. The strategy for the partnerships is to have exposure to certain markets or to securities that are judged to achieve superior earnings growth and/or judged undervalued relative to intrinsic value.

(2) Hedge fund which invests primarily in global equity long and short positions. The primary strategy for the hedge funds is to seek risk-adjusted returns with volatility lower than the broad equity markets primarily through long and short investment opportunities in the global markets.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

5. Financial Certification

Investment information disclosed in the accompanying financial statements and schedules, including the fair value of investments and net realized and unrealized appreciation and depreciation in fair value of investments, interest and dividends for the years ended September 30, 2018 and 2017, respectively, were obtained or derived from information supplied to the Plan administrator and certified as complete and accurate by Manufacturers and Traders Trust Company (the Trustee). The incorporation of this financial information in the accompanying financial statements is based solely on their certification and has not been audited by independent accountants. In addition, the Plan's Trustee has certified the unaudited financial data contained in the schedule as of assets held for investment and reportable transactions at September 30, 2018.

6. Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits, as computed by consulting actuaries from Aon Hewitt, is that amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability or retirement) between the valuation date and the expected date of payment.

The accumulated plan benefit information is determined by the Plan's actuary as of the beginning of the plan year. The accumulated plan benefit information as of the end of the previous plan year is as follows:

	September 30, 2017
Actuarial present value of accumulated plan benefits:	
Vested benefits:	
Participants currently receiving benefits	\$ 264,852,295
Participants with deferred benefits	27,011,554
Other participants	250,044,497
	541,908,346
Nonvested benefits	1,048,083
Total actuarial present value of accumulated plan benefits at end of year	\$ 542,956,429

The following is a summary of the changes in the actuarial present value for the year ended September 30, 2017:

	September 30, 2017
Actuarial present value of accumulated plan benefits at beginning of year	\$ 507,073,014
Increase (decrease) during the year attributable to:	
Benefits accumulated and losses	28,164,829
Interest accumulation	35,918,833
Benefits paid	(57,347,220)
Change in actuarial assumptions	27,985,387
Transfer from other plan	1,161,586
Net increase	35,883,415
Actuarial present value of accumulated plan benefits at end of year	\$ 542,956,429

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

6. Accumulated Plan Benefits (continued)

The Projected Unit Credit Actuarial Cost Method is used to calculate the present value of accumulated plan benefits. Significant assumptions underlying the actuarial computations for the accumulated plan benefit information as of October 1, 2017 include (a) rate of return on investments of 7.00%, net of investment expenses, (b) mortality rates based on published statistical data from the RP-2014 Employee and Healthy Annuitant Mortality Table adjusted backward to 2006 using Scale MP-2014 with generational projections from 2006 with the 2014 Trustee Report of Social Security Administration, Intermediate Alternative, (c) withdrawals based on published statistical data and (d) retirement between the ages of 55 and 70 or age on the valuation date if older. These actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

As of October 1, 2017, the changes in actuarial assumptions from the prior year were due to the change in the discount rate from 4.77% to 3.97 for the obligation, 3.21% to 3.50% for the interest cost and 3.96% to 4.15% for the service cost; decrease in the expected return on asset assumption from 7.50% to 7.00%; and the decrease on the load on service cost from \$1,500,000 to \$850,000. Had the valuation been performed as of September 30, 2017, there would be no material differences.

7. Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event the Plan terminates, the net assets of the Plan will be allocated, as prescribed by ERISA and its related regulations, generally to provide benefits in the order indicated:

- Annuity benefits that former employees or their beneficiaries have been receiving for at least three years, or that employees eligible to retire for that three-year period would have been receiving if they had retired with benefits in the normal form of annuity under the Plan. The priority amount is limited to the lowest benefit that was payable or would have been payable during those three years. The amount is further limited to the lowest benefit that would be payable under plan provisions in effect at any time during the five years preceding plan termination.
- Other vested benefits insured by the Pension Benefit Guaranty Corporation (PBGC), a U.S. Governmental agency.
- All other vested benefits.
- All non-vested benefits.

Should the Plan terminate at some future time, its net assets generally will not be available on a pro rata basis to provide participants' benefits. Whether a particular participant's accumulated plan benefits will be paid depends on both the priority of those benefits and the level of benefits guaranteed by the Pension Benefit Guaranty Corporation (PBGC) at that time. Some benefits may be fully or partially provided for by the then-existing assets and the PBGC guarantee, while other benefits may not be provided for at all.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

NOTES TO THE FINANCIAL STATEMENTS

8. Income Tax Status

The Internal Revenue Service has determined and informed the Plan Sponsor by a letter dated January 30, 2018, that the Plan and related trust are designed in compliance with the applicable requirements of the Internal Revenue Code (IRC); therefore, the related trust is exempt from taxation. The Plan is required to operate in conformity with the IRC to maintain its qualification. The Plan administrator and the Plan's tax counsel believe that the Plan is being operated in compliance with the applicable requirements of the IRC and, therefore, believe that the Plan, as amended, is qualified and the related trust is tax-exempt. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

9. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, 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 the amounts reported in the statements of net assets available for benefits.

Plan contributions are made and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimation and assumption processes, it is at least reasonably possible that changes in these estimates and assumptions in the near term could materially affect the amounts reported and disclosed in the financial statements.

10. Related-Party and Party in Interest Transactions

The Plan no longer held shares of Moog Inc. Class B common stock at September 30, 2018. The Plan held 1,001,034 shares of Moog Inc. Class B common stock at September 30, 2017, valued at \$83,245,987.

11. Plan Amendment

For the plan year ended September 30, 2017, the Plan was amended to permit eligible participants to make a voluntary election, during the window period from June 19, 2017 to August 4, 2017, to commence distribution of the Plan benefit as of September 1, 2017 with the option of receiving a lump-sum distribution of the entire vested Plan benefit. The amount of lump-sum distributions at September 30, 2017 was \$30,572,533 and is included in pension benefit payments on the Statements of Changes in Net Assets Available for Benefits.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

EIN #16-0757636 Plan #001
Schedule H, Line 4i - Schedule of Assets
(Held at End of Year)
September 30, 2018

Identity of Issuer/Description	Cost	Fair Value
Shares of Registered Investment Companies		
Vanguard Long-Term Bond Index Fund Institutional Shares*	\$ 191,736,319	\$ 183,073,280
Vanguard Long-Term Investment Grade Fund Admiral Shares*	367,941,318	355,941,581
Vanguard Long-Term Treasury Fund Admiral Shares*	166,118,769	155,822,049
Vanguard Total Stock Market Index Institutional Plus Shares*	84,902,657	90,143,403
Vanguard Global Minimum Volatility Fund Admiral Shares*	15,756,326	17,052,824
Vanguard Total International Stock Index Fund Institutional Shares*	33,459,722	34,091,126
	<u>859,915,111</u>	<u>836,124,263</u>
Money Market Funds		
Wilmington U.S. Treasury Money Market Fund*	6,308,100	6,308,100
	<u>6,308,100</u>	<u>6,308,100</u>
Insurance Contract		
Symetra Life Insurance Company	483,984	483,984
	<u>483,984</u>	<u>483,984</u>
Limited Partnerships		
Blackstone Capital Partners VI	10,216,136	15,889,914
Blackstone Energy Partners LP	6,788,025	10,983,729
Private Equity Core Fund (QP) IV, LP	3,624,325	10,217,457
Vintage VI Manager LP	2,491,977	2,036,011
	<u>23,120,463</u>	<u>39,127,111</u>
Hedge Fund		
Hedge Fund Opportunities	120,928	135,386
	<u>120,928</u>	<u>135,386</u>
Total investments	<u>\$ 889,948,586</u>	<u>\$ 882,178,844</u>

*Denotes a party-in-interest

This Schedule was prepared from information certified by Manufacturers and Traders Trust Company.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

EIN #16-0757636 Plan #001
Schedule H, Line 4j - Schedule of Reportable Transactions
September 30, 2018

Identity of Party Involved	Description of Assets	Number of Purchases/S ales	Purchase Price	Selling Price	Average Cost of Assets	Current Value of Asset on Transaction Date	Net Gain/(Loss)
Category i - Single Transactions in Excess of 5% of Plan Assets							
Moog Inc. Common Stock Class B*	Employer Securities	726,170	—	55,000,116	60,388,297	55,000,116	(5,388,181)
Vanguard Long-Term Investment Grade Fund Admiral Shares*	Registered Investment Co.	7,104,478	71,400,000	—	71,400,000	71,400,000	—
Vanguard Long-Term Investment Grade Fund Admiral Shares*	Registered Investment Co.	8,019,900	80,600,000	—	80,600,000	80,600,000	—
Vanguard Long-Term Investment Grade Fund Admiral Shares*	Registered Investment Co.	7,279,713	71,050,000	—	71,050,000	71,050,000	—
Vanguard Long-Term Investment Grade Fund Admiral Shares*	Registered Investment Co.	6,331,967	61,800,000	—	61,800,000	61,800,000	—
Vanguard Total Stock Market Index Institutional Plus Shares*	Registered Investment Co.	359,237	—	43,500,000	42,508,913	43,500,000	991,087
Vanguard Total Stock Market Index Institutional Plus Shares*	Registered Investment Co.	331,327	44,782,116	—	44,782,116	44,782,116	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	47,581,254	47,581,254	—	47,581,254	47,581,254	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	50,000,000	—	50,000,000	50,000,000	50,000,000	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	55,000,000	55,000,000	—	55,000,000	55,000,000	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	54,000,000	—	54,000,000	54,000,000	54,000,000	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	54,992,294	54,992,294	—	54,992,294	54,992,294	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	55,000,116	—	55,000,116	55,000,116	55,000,116	—

*Denotes a party-in-interest

This Schedule was prepared solely from information certified by Manufacturers and Traders Trust Company.

MOOG INC. EMPLOYEES' RETIREMENT PLAN

EIN #16-0757636 Plan #001
Schedule H, Line 4j - Schedule of Reportable Transactions
September 30, 2018

Identity of Party Involved	Description of Assets	Number of Purchases/Sales	Purchase Price	Selling Price	Average Cost of Assets	Current Value of Asset on Transaction Date	Net Gain/(Loss)
Category iii - A Series of Transactions in Excess of 5% of Plan Assets							
Moog Inc. Common Stock Class B*	Employer Securities	1	—	55,000,116	60,388,297	55,000,116	(5,388,181)
Vanguard Total International Stock Index Fund Institutional Shares*	Registered Investment Co.	8	18,267,772	—	18,267,772	18,267,772	—
Vanguard Total International Stock Index Fund Institutional Shares*	Registered Investment Co.	5	—	73,960,000	71,774,021	73,960,000	2,185,979
Vanguard Long-Term Bond Index Fund Institutional Shares*	Registered Investment Co.	23	58,160,661	—	58,160,661	58,160,661	—
Vanguard Long-Term Bond Index Fund Institutional Shares*	Registered Investment Co.	3	—	1,090,000	1,131,258	1,090,000	(41,258)
Vanguard Global Minimum Volatility Fund Admiral Shares*	Registered Investment Co.	5	5,803,873	—	5,803,873	5,803,873	—
Vanguard Global Minimum Volatility Fund Admiral Shares*	Registered Investment Co.	6	—	53,450,000	52,748,636	53,450,000	701,364
Vanguard Long-Term Investment Grade Fund Admiral Shares*	Registered Investment Co.	27	310,767,687	—	310,767,687	310,767,687	—
Vanguard Long-Term Investment Grade Fund Admiral Shares*	Registered Investment Co.	2	—	4,850,000	4,930,183	4,850,000	(80,183)
Vanguard Long-Term Treasury Fund Admiral Shares*	Registered Investment Co.	24	42,586,352	—	42,586,352	42,586,352	—
Vanguard Long-Term Treasury Fund Admiral Shares*	Registered Investment Co.	1	—	1,100,000	1,125,633	1,100,000	(25,633)
Vanguard Total Stock Market Index Institutional Plus Shares*	Registered Investment Co.	7	62,561,894	—	62,561,894	62,561,894	—
Vanguard Total Stock Market Index Institutional Plus Shares*	Registered Investment Co.	10	—	135,435,039	128,630,650	135,435,039	6,804,389
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	106	234,309,413	—	234,309,413	234,309,413	—
Wilmington U.S. Treasury Money Market Fund*	Money Market Fund	72	—	235,384,273	235,384,273	235,384,273	—

*Denotes a party-in-interest

This Schedule was prepared solely from information certified by Manufacturers and Traders Trust Company.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, line 26—Schedule of Active Participant Data as of October 1, 2017

**Schedule SB, Line 26—Schedule of Active Participant Data
As of October 1, 2017**

**Moog Inc.
Employees' Retirement Plan
Active Employees**

EIN: 16-0757636 PN: 001

Number of Participants and Average Compensation

Attained Age	Years of Credited Service									
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
<25										
25-29		1	1	3						
30-34		1	5	48 \$61,612						
35-39			6	90 \$78,724	38 \$63,540	6				
40-44		1	3	72 \$82,495	59 \$75,667	41 \$77,817	2			
45-49	1	3	8	81 \$79,558	71 \$89,342	64 \$87,986	14	8		
50-54			7	100 \$82,340	93 \$99,161	72 \$93,367	27 \$86,873	83 \$85,352	16	
55-59		1	16	113 \$80,346	118 \$84,952	94 \$85,007	26 \$119,621	92 \$100,269	165 \$78,278	25 \$58,717
60-64	2		9	91 \$81,518	72 \$77,148	98 \$88,336	20 \$76,581	75 \$101,161	164 \$77,767	150 \$66,084
65-69			4	30 \$78,454	23 \$95,557	32 \$87,757	10	15	29 \$79,829	34 \$77,515
70+				5	3	5		2	6	10

N-2564

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, Part V—Statement of Actuarial Assumptions/Methods

* In fiscal 2017, Flo-Tork, Inc. Defined Benefit Plan and Trust ("Flo-Tork") merged into the Employees' Retirement Plan. The assumptions, as applicable, for the ERP listed below are used for both plans, except where specified otherwise

Interest Rates Based on segment rates with a four-month lookback
(as of June 2017)

1st Segment Rate	4.16%
2nd Segment Rate	5.72%
3rd Segment Rate	6.48%

Salary Increases

<u>Age</u>	<u>Rate</u>
Under 35	5.50%
35–44	4.00%
45–54	3.75%
55+	3.25%

Social Security Wage Base Increases Future wage indices are based on a national average
wage increase of 2.50% per year

Optional Payment Form Election Percentage 40% life annuity
25% joint and 50% survivor annuity
35% joint and 100% survivor annuity
100% life annuity for future deaths
100% lump sum for Flo-Tork

Optional Payment Form Conversion Interest Rate 6.00%
3.21% for Flo-Tork

Optional Payment Form Conversion Mortality 50% male/50% female blend of the UP94 Mortality
Tables projected to 2002 using scale AA

Current IRC section 417(e) unisex mortality for Flo-Tork

Retirement Age

<u>Age</u>	<u>Percentage</u>
Under 55	0%
55–61	2%
62–64	12%
65–66	27%
67–69	20%
70	25%
71 and above	100%

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Assumed Benefit Commencement Age for current and future vested deferred participants is age 65.

Flo-Tork

For actives, age 65 is the assumed retirement age.

Current vested deferred benefits are assumed to commence at age 65. Future vested deferred benefits are assumed to commence immediately at termination.

Mortality Rates

Healthy and Disabled

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables

Withdrawal Rates

45% of the 2004 Society of Actuaries Turnover Table

Sample Rates:

<u>Age</u>	<u>Rate</u>
25	8.46%
30	5.49%
40	3.15%
50	2.53%
55	0.00%

The Actuary's Pension Handbook, Table T-5 for Flo-Tork.

Disability Rates

None

Decrement Timing

Middle of year decrements, with 100% retirement occurring at beginning of year

Surviving Spouse Benefit

It is assumed that 80% of males and 80% of females have an eligible spouse, and that males are three years older than their spouses.

Valuation Compensation

2016 pensionable earnings rolled forward one year with the salary increase assumption

Benefit and Compensation Limits

Projected benefits and compensation are limited by the current IRC section 415 maximum benefit of \$215,000 and the 401(a)(17) compensation limit of \$270,000.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Valuation of Plan Assets

Smoothed fair market value of assets over the current and prior two years, adjusted for contributions, benefit payments, administrative expenses, and expected earnings. The average value of assets calculated in this manner is further limited to not less than 90% nor more than 110% of fair market value.

A characteristic of this method is that the expected distribution of the value of plan assets is skewed toward understatement relative to the corresponding market values for expected long-term rates of return in excess of the third segment rate under IRC section 430(h)(2)(C)(iii).

Expected Return on Assets
2015 Plan Year

7.75%
The applicable third segment rate limitation is 6.81%.

2016 Plan Year

7.50%
The applicable third segment rate limitation is 6.65%.

2017 Plan Year

7.00%
The applicable third segment rate limitation is 6.48%.

Trust Expenses Included in Target Normal Cost

\$525,000 plus anticipated PBGC premiums for 2017.

Actuarial Method

Standard unit credit cost method

Valuation Date

October 1, 2017

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 <div style="text-align: center; font-size: 24pt; font-weight: bold;">2017</div> This Form is Open to Public Inspection
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Part I	Annual Report Identification Information		
For calendar plan year 2017 or fiscal plan year beginning <u>10/01/2017</u> and ending <u>09/30/2018</u>			
A This return/report is for: <div style="display: flex; justify-content: space-between;"> <div> ☐ a multiemployer plan ☒ a single-employer plan </div> <div> ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.) ☐ a DFE (specify) ____ </div> </div>			
B This return/report is: <div style="display: flex; justify-content: space-between;"> <div> ☐ the first return/report ☐ an amended return/report </div> <div> ☐ the final return/report ☐ a short plan year return/report (less than 12 months) </div> </div>			
C If the plan is a collectively-bargained plan, check here. ☐			
D Check box if filing under: <div style="display: flex; justify-content: space-between;"> <div> ☒ Form 5558 ☐ special extension (enter description) </div> <div> ☐ automatic extension </div> <div> ☐ the DFVC program </div> </div>			

Part II	Basic Plan Information—enter all requested information		
1a Name of plan MOOG INC. EMPLOYEES' RETIREMENT PLAN		1b Three-digit plan number (PN) ▶	001
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) MOOG INC. SENECA STREET AT JAMISON ROAD EAST AURORA NY 14052-0018		1c Effective date of plan 06/30/1959	2b Employer Identification Number (EIN) 16-0757636
		2c Plan Sponsor's telephone number 716-652-2000	2d Business code (see instructions) 336410

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		7/11/19	KRISTINE KARNATH
	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 (2017)
v. 170203

3a Plan administrator's name and address ☒ Same as Plan Sponsor	3b Administrator's EIN 3c Administrator's telephone number <div style="background-color: #cccccc; height: 40px; width: 100%;"></div>
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 5,930
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) 2,564
a(2) Total number of active participants at the end of the plan year	6a(2) 2,399
b Retired or separated participants receiving benefits.....	6b 2,360
c Other retired or separated participants entitled to future benefits.....	6c 646
d Subtotal. Add lines 6a(2) , 6b , and 6c	6d 5,405
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	6e 425
f Total. Add lines 6d and 6e	6f 5,830
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	6g
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6h 0
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: 1A 3H	
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) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (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 (1) ☒ R (Retirement Plan Information) (2) ☐ MB (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary (3) ☒ SB (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary	b General Schedules (1) ☒ H (Financial Information) (2) ☐ I (Financial Information – Small Plan) (3) ☒ <u>1</u> A (Insurance Information) (4) ☒ C (Service Provider Information) (5) ☐ D (DFE/Participating Plan Information) (6) ☐ G (Financial Transaction Schedules)
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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 2017 Form M-1 annual report. If the plan was not required to file the 2017 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 _____

Plan Name	Moog Inc. Employees' Retirement Plan
Plan Sponsor EIN	16-0757636
ERISA Plan No.	001
Plan Year End	9/30/2018

The required attachment noted below is included within the Accountant's Opinion attachment to the Form 5500 Schedule H, Part III, which consists of the entire Audit report issued by the Plan's Independent Qualified Public Accountant (IQPA).

Form/Schedule	Line Item	Description
5500 Schedule H	Line 4j	Schedule of Reportable Transactions

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning 10/01/2017 and ending 09/30/2018

► **Round off amounts to nearest dollar.**

► **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan MOOG INC. EMPLOYEES' RETIREMENT PLAN	B Three-digit plan number (PN) ►	001
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF MOOG INC.	D Employer Identification Number (EIN) 16-0757636	
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B		
F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500		

Part I Basic Information				
1 Enter the valuation date: Month <u>10</u> Day <u>01</u> Year <u>2017</u>				
2 Assets:				
a Market value.....	2a	896,880,169		
b Actuarial value	2b	868,408,313		
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target	
a For retired participants and beneficiaries receiving payment	2,725	282,483,974	282,483,974	
b For terminated vested participants	641	29,921,094	29,921,094	
c For active participants	2,564	277,323,594	278,468,130	
d Total	5,930	589,728,662	590,873,198	
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐				
a Funding target disregarding prescribed at-risk assumptions.....	4a			
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b			
5 Effective interest rate	5	5.92%		
6 Target normal cost	6	18,220,875		

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary	<u>6/24/19</u> Date
Benjamin W. Gilde Type or print name of actuary		1708001 Most recent enrollment number
Aon Consulting, Inc. Firm name		781-891-8600 Telephone number (including area code)
230 Third Avenue Waltham MA 02451 Address of the firm		

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

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

Schedule SB (Form 5500) 2017

Part II Beginning of Year Carryover and Prefunding Balances

Part II		Statement of Fund Carryover and Prefunding Balances	
		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	50,290,871	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	50,290,871	0
10	Interest on line 9 using prior year's actual return of <u>11.76%</u>	5,914,206	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		141,969,309
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.12%</u>		8,688,522
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		150,657,831
	d Portion of (c) to be added to prefunding balance		
12	Other reductions in balances due to elections or deemed elections		
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	56,205,077	0

Part III	Funding Percentages
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14	Funding target attainment percentage	14	137.45%
15	Adjusted funding target attainment percentage.....	15	146.97%
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	119.68%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV	Contributions and Liquidity Shortfalls
----------------	---

18 Contributions made to the plan for the plan year by employer(s) and employees:

Contributions made to the plan for the plan year by employer(s) and employee(s)					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
			Totals ►	18(b)	0 18(c)

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c	0

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

C If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

Equity Statement as of end of quarter of this prior year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions)	☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):												
a Target normal cost (line 6)	31a	18,220,875										
b Excess assets, if applicable, but not greater than line 31a	31b	18,220,875										
32 Amortization installments:	<table border="1"> <thead> <tr> <th></th> <th>Outstanding Balance</th> <th>Installment</th> </tr> </thead> <tbody> <tr> <td>a Net shortfall amortization installment</td> <td>0</td> <td>0</td> </tr> <tr> <td>b Waiver amortization installment</td> <td>0</td> <td>0</td> </tr> </tbody> </table>				Outstanding Balance	Installment	a Net shortfall amortization installment	0	0	b Waiver amortization installment	0	0
	Outstanding Balance	Installment										
a Net shortfall amortization installment	0	0										
b Waiver amortization installment	0	0										
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33											
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	34	0										
		Carryover balance	Prefunding balance									
35 Balances elected for use to offset funding requirement			0									
36 Additional cash requirement (line 34 minus line 35)	36	0										
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	0										
38 Present value of excess contributions for current year (see instructions)												
a Total (excess, if any, of line 37 over line 36)	38a	0										
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b											
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0										
40 Unpaid minimum required contributions for all years	40	0										

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, line 22—Description of Weighted Average Retirement Age

The average retirement age shown in line 22 has been calculated by assuming the following retirement rates and no decrements other than retirement for this calculation. All retirements are assumed to occur in at the beginning of the year. The weighted average retirement age is 65.

Retirement Probabilities for Employees' Retirement Plan

<i>a</i> Age	<i>b</i> Rate	<i>c</i> Weight	<i>d</i> Product <i>a x b x c</i>
55	2%	1.0000	1.10
56	2%	0.9800	1.10
57	2%	0.9604	1.09
58	2%	0.9412	1.09
59	2%	0.9224	1.09
60	2%	0.9039	1.08
61	2%	0.8858	1.08
62	12%	0.8681	6.46
63	12%	0.7640	5.78
64	12%	0.6723	5.16
65	27%	0.5916	10.38
66	27%	0.4319	7.70
67	20%	0.3153	4.22
68	20%	0.2522	3.43
69	20%	0.2018	2.78
70	25%	0.1614	2.82
71	100%	0.1211	8.60
Weighted Average			64.97

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, line 24—Change in Actuarial Assumptions

The funding valuation reflects the following assumption changes:

- Trust expenses included in the Target Normal Cost were updated from \$240,000 to \$525,000 plus anticipated PGBC premiums for 2017.
- A decrease in the expected investment return from 7.50% to 7.00%.

These changes were made to better reflect anticipated plan experience. These assumption changes did not reduce the funding shortfall more than the threshold stated in the Internal Revenue Code Section 430(h)(5), as such approval of the Commissioner is not required.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, line 26—Schedule of Active Participant Data as of October 1, 2017

**Schedule SB, Line 26—Schedule of Active Participant Data
As of October 1, 2017**

**Moog Inc.
Employees' Retirement Plan
Active Employees**

EIN: 16-0757636 PN: 001

Number of Participants and Average Compensation

Attained Age	Years of Credited Service									
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
<25										
25-29		1	1	3						
30-34		1	5	48 \$61,612						
35-39			6	90 \$78,724	38 \$63,540	6				
40-44		1	3	72 \$82,495	59 \$75,667	41 \$77,817	2			
45-49	1	3	8	81 \$79,558	71 \$89,342	64 \$87,986	14	8		
50-54			7	100 \$82,340	93 \$99,161	72 \$93,367	27 \$86,873	83 \$85,352	16	
55-59		1	16	113 \$80,346	118 \$84,952	94 \$85,007	26 \$119,621	92 \$100,269	165 \$78,278	25 \$58,717
60-64	2		9	91 \$81,518	72 \$77,148	98 \$88,336	20 \$76,581	75 \$101,161	164 \$77,767	150 \$66,084
65-69			4	30 \$78,454	23 \$95,557	32 \$87,757	10	15	29 \$79,829	34 \$77,515
70+				5	3	5		2	6	10

N-2564

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, Part V—Statement of Actuarial Assumptions/Methods

* In fiscal 2017, Flo-Tork, Inc. Defined Benefit Plan and Trust ("Flo-Tork") merged into the Employees' Retirement Plan. The assumptions, as applicable, for the ERP listed below are used for both plans, except where specified otherwise

Interest Rates Based on segment rates with a four-month lookback
(as of June 2017)

1st Segment Rate	4.16%
2nd Segment Rate	5.72%
3rd Segment Rate	6.48%

Salary Increases

<u>Age</u>	<u>Rate</u>
Under 35	5.50%
35–44	4.00%
45–54	3.75%
55+	3.25%

Social Security Wage Base Increases Future wage indices are based on a national average
wage increase of 2.50% per year

Optional Payment Form Election Percentage 40% life annuity
25% joint and 50% survivor annuity
35% joint and 100% survivor annuity
100% life annuity for future deaths
100% lump sum for Flo-Tork

Optional Payment Form Conversion Interest Rate 6.00%
3.21% for Flo-Tork

Optional Payment Form Conversion Mortality 50% male/50% female blend of the UP94 Mortality
Tables projected to 2002 using scale AA

Current IRC section 417(e) unisex mortality for Flo-Tork

Retirement Age

<u>Age</u>	<u>Percentage</u>
Under 55	0%
55–61	2%
62–64	12%
65–66	27%
67–69	20%
70	25%
71 and above	100%

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Assumed Benefit Commencement Age for current and future vested deferred participants is age 65.

Flo-Tork

For actives, age 65 is the assumed retirement age.

Current vested deferred benefits are assumed to commence at age 65. Future vested deferred benefits are assumed to commence immediately at termination.

Mortality Rates

Healthy and Disabled

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables

Withdrawal Rates

45% of the 2004 Society of Actuaries Turnover Table

Sample Rates:

<u>Age</u>	<u>Rate</u>
25	8.46%
30	5.49%
40	3.15%
50	2.53%
55	0.00%

The Actuary's Pension Handbook, Table T-5 for Flo-Tork.

Disability Rates

None

Decrement Timing

Middle of year decrements, with 100% retirement occurring at beginning of year

Surviving Spouse Benefit

It is assumed that 80% of males and 80% of females have an eligible spouse, and that males are three years older than their spouses.

Valuation Compensation

2016 pensionable earnings rolled forward one year with the salary increase assumption

Benefit and Compensation Limits

Projected benefits and compensation are limited by the current IRC section 415 maximum benefit of \$215,000 and the 401(a)(17) compensation limit of \$270,000.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Valuation of Plan Assets

Smoothed fair market value of assets over the current and prior two years, adjusted for contributions, benefit payments, administrative expenses, and expected earnings. The average value of assets calculated in this manner is further limited to not less than 90% nor more than 110% of fair market value.

A characteristic of this method is that the expected distribution of the value of plan assets is skewed toward understatement relative to the corresponding market values for expected long-term rates of return in excess of the third segment rate under IRC section 430(h)(2)(C)(iii).

Expected Return on Assets
2015 Plan Year

7.75%
The applicable third segment rate limitation is 6.81%.

2016 Plan Year

7.50%
The applicable third segment rate limitation is 6.65%.

2017 Plan Year

7.00%
The applicable third segment rate limitation is 6.48%.

Trust Expenses Included in Target Normal Cost

\$525,000 plus anticipated PBGC premiums for 2017.

Actuarial Method

Standard unit credit cost method

Valuation Date

October 1, 2017

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, Part V—Summary of Plan Provisions

Effective Date	June 30, 1959 Plan amended and restated effective October 1, 2011.
Plan Year	The 12-month plan period beginning on October 1st and ending on the following September 30th
Plan Status	Effective January 1, 2008, the plan was closed to new hires Effective April 1, 2008, the participants who elected to receive a company non-matching contribution under the Moog Retirement Savings Plan ceased accruing benefits under this plan
Eligibility	All employees hired before January 1, 2008 who did not elect to receive Moog's non-matching contributions under the Moog Retirement Savings Plan.
Participation	First day of the month coincident with or next following completion of one year of service with a minimum of 1,000 hours of service. Employees hired on or after January 1, 2008 are not eligible to participate.
Employee Contributions	None—Employer pays for full cost of the plan.
Service	
Vesting Service	Each participant shall receive one year of service for each plan year in which the participant completes 1,000 hours of service.
Credited Service	Prior service: Continuous service (completed months) from hire to September 30, 1990 Future service: Continuous service (completed months) subsequent to September 30, 1990
Compensation	
Prior Service	Prior service compensation is the greater of the January 1, 1988 base rate of pay of the pay received in the calendar year ending December 31, 1989 plus any shift differential or overtime but excluding any other compensation.
Current	Compensation is base pay plus shift differential and overtime received in the calendar year ending in the plan year.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Accrued Benefit

Amount of Benefit: (a) + (b), subject to a minimum of (c):

- (a) For service prior to October 1, 1990: 1.15% of the first \$20,000 of the prior service compensation plus 1.75% of such compensation in excess of \$20,000, for each year of prior service, or if greater, the accrued benefit under the prior accrual formula as of September 30, 1990.
- (b) For service after September 30, 1990: 1.15% of compensation up to \$20,000 plus 1.75% of the excess, for each year until completion of 35 years of credited service (prior and future), plus 1.75% of all compensation in each year subsequent to completion of 35 years of credited service.
- (c) A participant with at least five years of service shall be entitled to a minimum annual benefit of \$2,400 per year, prorated for less than 15 years of credited service.

Normal Retirement
Eligibility

Age 65

Benefit

The accrued benefit

Early Retirement
Eligibility

Age 55 with 15 years of credited service

Benefit

The accrued benefit reduced 0.5% for each month commencement precedes age 65. Benefit may not commence before age 55.

Late Retirement
Eligibility

Retirement after normal retirement age

Benefit

The accrued benefit

Deferred vested
Eligibility

The accrued benefit is nonforfeitable after five years of service.

Benefit

Accrued benefit payable at normal retirement date. A participant with 15 years of service may elect early commencement of benefits after age 55 on an actuarially reduced basis.

Disability
Eligibility

Total and permanent disability

Benefit

Accrued benefit actuarially reduced for commencement prior to normal retirement.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Pre-retirement death

Eligibility

A life annuity is payable to the surviving spouse of a member whose death occurs after becoming vested, but prior to retirement.

Benefit

The amount payable to the surviving spouse is 50% of the member's death benefit determined as if he separated from service on the date of death, survived to his earliest retirement date, elected the joint and 50% survivor option, and then died. If the member is younger than age 55 at death, the survivor benefit may commence as early as the date the member would have attained age 50, with benefit actuarially reduced further for earlier commencement.

Normal Form of Benefits

Unmarried Participants

Life Annuity

Married Participants

Qualified joint and 50% survivor annuity (can elect different optional form with spousal consent)

Optional Forms

- Joint and 100%, 75%, 66 2/3%, 50% contingent annuitant
- Social Security level option
- Term certain and life

Optional Form Conversion

Interest

6.00%

Mortality

UP94 Unisex Mortality Table projected to 2002 with scale AA

Deferred Retirement

For members retiring after their Normal Retirement Date, the age of the member and that of his beneficiary as of his Normal Retirement Date will be utilized in the determination.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Provisions Applicable to Flo-Tork Participants

Plan Status	<p>Ongoing benefit accruals are provided for union employees, and new union employees are eligible to participate in the plan once they satisfy the participation requirements. No employee hired on or after December 7, 2015 will enter the plan.</p> <p>Effective January 1, 2007, future accruals were eliminated for non-union employees.</p>
Eligibility	<p>Hourly employees of the Company, including members of Local #15811AM. Non-union employees no longer accrue benefits as of January 1, 2007.</p>
Participation	<p>First day of the first calendar week following the calendar week in which the employee has completed two months of service and attained age 16.</p>
Employee Contributions	<p>None—Employer pays for full cost of the plan.</p>
Service	
Vesting Service	<p>One year of credit for each plan year with 1,000 or more hours of service.</p>
Credited Service	<p>One year of credit for each plan year with 1,000 or more hours of service. Non-union employees stopped accruing service as of January 1, 2007.</p>

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Accrued Benefit

A monthly lifetime pension payable at normal retirement date equal to the sum of each year's accrual according to the following schedule:

Plan Years Beginning December 1	Benefit Rate
1973	\$5.50
1974–1976	6.60
1977–1979	7.70
1980	8.50
1981–1985	9.50
1986	10.50
1987	11.00
1988	12.00
1989–1990	13.00
1991	14.00
1992	15.00
1993–1994	16.00
1995	17.00
1996	18.00
1997	19.00
1998	20.00
1999	21.00
2000	24.00
2001	25.00
2002–2003	26.00
2004	27.00
2005	29.00
2006	31.00
2007	33.00
2008	35.00
2009	37.00
2010	39.00
2011	41.00
2012–2013	42.00
2014	43.00
2015+	44.50

Normal Retirement

Eligibility

First of month coincident with or next following age 65

Benefit

The accrued benefit

Early Retirement

Eligibility

Age 55 and 5 years of vesting service

Benefit

Accrued benefit commencing at normal retirement date; or present value of accrued benefit payable at early retirement

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Late Retirement	
Eligibility	Retirement after normal retirement age
Benefit	The benefit accrued at date of retirement, subject to actuarial increase after attainment of age 70 ½. <p>Active participants: The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.</p>
Deferred vested	
Eligibility	Five years of vesting service, or age 65 if earlier
Benefit	Accrued benefit commencing at normal retirement date; or present value of accrued benefit payable at termination
Disability	
Eligibility	Totally and permanently disabled for six months
Benefit	Present value of accrued normal retirement benefit
Pre-retirement death	
Eligibility	Death while eligible for a vested benefit
Benefit before normal retirement	Actuarial equivalent of the accrued benefit determined as of the date of death
Benefit after normal retirement	Benefit payable per the form of payment election
Normal Form of Benefits	
Unmarried Participants	Life Annuity
Married Participants	Actuarially equivalent 50% joint and survivor
Optional Forms	<ul style="list-style-type: none"> ▪ Lump sum ▪ Installments over a period certain not exceeding life expectancy ▪ Other single/joint life annuity options; such annuity may not be in a form that provides payments beyond the life expectancy of the participant (or, if applicable, his designated beneficiary).

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Actuarial Equivalence

For non-decreasing life annuities:	
Interest	5.50% pre-retirement interest; 5.00% post-retirement interest
Mortality	1971 Individual Annuity (Male) Mortality Table with a two-year set back
For lump sum payments:	
Interest	Internal Revenue Code Section 417(e)(3) applicable interest rate for the second month preceding the beginning of the plan year
Mortality	Applicable Mortality Table under Internal Revenue Code Section 417(e)(3)(A)(ii)

Plan Changes Since the Prior Year

The funding valuation reflects the following plan change:

- In fiscal 2017, the Flo-Tork, Inc. Defined Benefit plan and Trust ("Flo-Tork") merged into the Employees' Retirement Plan.

Other Information to Fully and Fairly Disclose the Actuarial Position of the Plan

Due to software limitations with the electronic filing process, information filed electronically cannot be controlled by the Enrolled Actuary. The values on the signed Schedule SB will govern to the extent there are any differences in the entries filed electronically and the actual data contained on the signed Schedule SB.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, line 22—Description of Weighted Average Retirement Age

The average retirement age shown in line 22 has been calculated by assuming the following retirement rates and no decrements other than retirement for this calculation. All retirements are assumed to occur in at the beginning of the year. The weighted average retirement age is 65.

Retirement Probabilities for Employees' Retirement Plan

<i>a</i> Age	<i>b</i> Rate	<i>c</i> Weight	<i>d</i> Product <i>a x b x c</i>
55	2%	1.0000	1.10
56	2%	0.9800	1.10
57	2%	0.9604	1.09
58	2%	0.9412	1.09
59	2%	0.9224	1.09
60	2%	0.9039	1.08
61	2%	0.8858	1.08
62	12%	0.8681	6.46
63	12%	0.7640	5.78
64	12%	0.6723	5.16
65	27%	0.5916	10.38
66	27%	0.4319	7.70
67	20%	0.3153	4.22
68	20%	0.2522	3.43
69	20%	0.2018	2.78
70	25%	0.1614	2.82
71	100%	0.1211	8.60
Weighted Average			64.97

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, Part V—Summary of Plan Provisions

Effective Date	June 30, 1959 Plan amended and restated effective October 1, 2011.
Plan Year	The 12-month plan period beginning on October 1st and ending on the following September 30th
Plan Status	Effective January 1, 2008, the plan was closed to new hires Effective April 1, 2008, the participants who elected to receive a company non-matching contribution under the Moog Retirement Savings Plan ceased accruing benefits under this plan
Eligibility	All employees hired before January 1, 2008 who did not elect to receive Moog's non-matching contributions under the Moog Retirement Savings Plan.
Participation	First day of the month coincident with or next following completion of one year of service with a minimum of 1,000 hours of service. Employees hired on or after January 1, 2008 are not eligible to participate.
Employee Contributions	None—Employer pays for full cost of the plan.
Service	
Vesting Service	Each participant shall receive one year of service for each plan year in which the participant completes 1,000 hours of service.
Credited Service	Prior service: Continuous service (completed months) from hire to September 30, 1990 Future service: Continuous service (completed months) subsequent to September 30, 1990
Compensation	
Prior Service	Prior service compensation is the greater of the January 1, 1988 base rate of pay of the pay received in the calendar year ending December 31, 1989 plus any shift differential or overtime but excluding any other compensation.
Current	Compensation is base pay plus shift differential and overtime received in the calendar year ending in the plan year.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Accrued Benefit

Amount of Benefit: (a) + (b), subject to a minimum of (c):

- (a) For service prior to October 1, 1990: 1.15% of the first \$20,000 of the prior service compensation plus 1.75% of such compensation in excess of \$20,000, for each year of prior service, or if greater, the accrued benefit under the prior accrual formula as of September 30, 1990.
- (b) For service after September 30, 1990: 1.15% of compensation up to \$20,000 plus 1.75% of the excess, for each year until completion of 35 years of credited service (prior and future), plus 1.75% of all compensation in each year subsequent to completion of 35 years of credited service.
- (c) A participant with at least five years of service shall be entitled to a minimum annual benefit of \$2,400 per year, prorated for less than 15 years of credited service.

Normal Retirement

Eligibility

Age 65

Benefit

The accrued benefit

Early Retirement

Eligibility

Age 55 with 15 years of credited service

Benefit

The accrued benefit reduced 0.5% for each month commencement precedes age 65. Benefit may not commence before age 55.

Late Retirement

Eligibility

Retirement after normal retirement age

Benefit

The accrued benefit

Deferred vested

Eligibility

The accrued benefit is nonforfeitable after five years of service.

Benefit

Accrued benefit payable at normal retirement date. A participant with 15 years of service may elect early commencement of benefits after age 55 on an actuarially reduced basis.

Disability

Eligibility

Total and permanent disability

Benefit

Accrued benefit actuarially reduced for commencement prior to normal retirement.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Pre-retirement death

Eligibility

A life annuity is payable to the surviving spouse of a member whose death occurs after becoming vested, but prior to retirement.

Benefit

The amount payable to the surviving spouse is 50% of the member's death benefit determined as if he separated from service on the date of death, survived to his earliest retirement date, elected the joint and 50% survivor option, and then died. If the member is younger than age 55 at death, the survivor benefit may commence as early as the date the member would have attained age 50, with benefit actuarially reduced further for earlier commencement.

Normal Form of Benefits

Unmarried Participants

Life Annuity

Married Participants

Qualified joint and 50% survivor annuity (can elect different optional form with spousal consent)

Optional Forms

- Joint and 100%, 75%, 66 2/3%, 50% contingent annuitant
- Social Security level option
- Term certain and life

Optional Form Conversion

Interest

6.00%

Mortality

UP94 Unisex Mortality Table projected to 2002 with scale AA

Deferred Retirement

For members retiring after their Normal Retirement Date, the age of the member and that of his beneficiary as of his Normal Retirement Date will be utilized in the determination.

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Provisions Applicable to Flo-Tork Participants

Plan Status	<p>Ongoing benefit accruals are provided for union employees, and new union employees are eligible to participate in the plan once they satisfy the participation requirements. No employee hired on or after December 7, 2015 will enter the plan.</p> <p>Effective January 1, 2007, future accruals were eliminated for non-union employees.</p>
Eligibility	<p>Hourly employees of the Company, including members of Local #15811AM. Non-union employees no longer accrue benefits as of January 1, 2007.</p>
Participation	<p>First day of the first calendar week following the calendar week in which the employee has completed two months of service and attained age 16.</p>
Employee Contributions	<p>None—Employer pays for full cost of the plan.</p>
Service	
Vesting Service	<p>One year of credit for each plan year with 1,000 or more hours of service.</p>
Credited Service	<p>One year of credit for each plan year with 1,000 or more hours of service. Non-union employees stopped accruing service as of January 1, 2007.</p>

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Accrued Benefit

A monthly lifetime pension payable at normal retirement date equal to the sum of each year's accrual according to the following schedule:

Plan Years Beginning December 1	Benefit Rate
1973	\$5.50
1974–1976	6.60
1977–1979	7.70
1980	8.50
1981–1985	9.50
1986	10.50
1987	11.00
1988	12.00
1989–1990	13.00
1991	14.00
1992	15.00
1993–1994	16.00
1995	17.00
1996	18.00
1997	19.00
1998	20.00
1999	21.00
2000	24.00
2001	25.00
2002–2003	26.00
2004	27.00
2005	29.00
2006	31.00
2007	33.00
2008	35.00
2009	37.00
2010	39.00
2011	41.00
2012–2013	42.00
2014	43.00
2015+	44.50

Normal Retirement

Eligibility

First of month coincident with or next following age 65

Benefit

The accrued benefit

Early Retirement

Eligibility

Age 55 and 5 years of vesting service

Benefit

Accrued benefit commencing at normal retirement date; or present value of accrued benefit payable at early retirement

Schedule SB Attachment (Form 5500)—2017 Plan Year
 Moog Inc. Employees' Retirement Plan
 EIN: 16-0757636 PN: 001

Late Retirement

Eligibility

Retirement after normal retirement age

Benefit

The benefit accrued at date of retirement, subject to actuarial increase after attainment of age 70 ½.

Active participants: The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.

Deferred vested

Eligibility

Five years of vesting service, or age 65 if earlier

Benefit

Accrued benefit commencing at normal retirement date; or present value of accrued benefit payable at termination

Disability

Eligibility

Totally and permanently disabled for six months

Benefit

Present value of accrued normal retirement benefit

Pre-retirement death

Eligibility

Death while eligible for a vested benefit

Benefit before normal retirement

Actuarial equivalent of the accrued benefit determined as of the date of death

Benefit after normal retirement

Benefit payable per the form of payment election

Normal Form of Benefits

Unmarried Participants

Life Annuity

Married Participants

Actuarially equivalent 50% joint and survivor

Optional Forms

- Lump sum
- Installments over a period certain not exceeding life expectancy
- Other single/joint life annuity options; such annuity may not be in a form that provides payments beyond the life expectancy of the participant (or, if applicable, his designated beneficiary).

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Actuarial Equivalence

For non-decreasing life annuities:

Interest 5.50% pre-retirement interest; 5.00% post-retirement interest

Mortality 1971 Individual Annuity (Male) Mortality Table with a two-year set back

For lump sum payments:

Interest Internal Revenue Code Section 417(e)(3) applicable interest rate for the second month preceding the beginning of the plan year

Mortality Applicable Mortality Table under Internal Revenue Code Section 417(e)(3)(A)(ii)

Plan Changes Since the Prior Year

The funding valuation reflects the following plan change:

- In fiscal 2017, the Flo-Tork, Inc. Defined Benefit plan and Trust ("Flo-Tork") merged into the Employees' Retirement Plan.

Other Information to Fully and Fairly Disclose the Actuarial Position of the Plan

Due to software limitations with the electronic filing process, information filed electronically cannot be controlled by the Enrolled Actuary. The values on the signed Schedule SB will govern to the extent there are any differences in the entries filed electronically and the actual data contained on the signed Schedule SB.

Plan Name	Moog Inc. Employees' Retirement Plan
Plan Sponsor EIN	16-0757636
ERISA Plan No.	001
Plan Year End	9/30/2018

The required attachment noted below is included within the Accountant's Opinion attachment to the Form 5500 Schedule H, Part III, which consists of the entire Audit report issued by the Plan's Independent Qualified Public Accountant (IQPA).

Form/Schedule	Line Item	Description
5500 Schedule H	Line 4i	Schedule of Assets (Held at End of Year)

Schedule SB Attachment (Form 5500)—2017 Plan Year
Moog Inc. Employees' Retirement Plan
EIN: 16-0757636 PN: 001

Schedule SB, line 24—Change in Actuarial Assumptions

The funding valuation reflects the following assumption changes:

- Trust expenses included in the Target Normal Cost were updated from \$240,000 to \$525,000 plus anticipated PGBC premiums for 2017.
- A decrease in the expected investment return from 7.50% to 7.00%.

These changes were made to better reflect anticipated plan experience. These assumption changes did not reduce the funding shortfall more than the threshold stated in the Internal Revenue Code Section 430(h)(5), as such approval of the Commissioner is not required.