Seanergy Maritime Holdings Corp. Form 424B5 November 22, 2016 Filed Pursuant to Rule 424(b)(5) Registration No. 333-205301

Prospectus Supplement (To Prospectus dated August 14, 2015)

1,305,000 Common Shares

Seanergy Maritime Holdings Corp.

We are offering an aggregate of 1,305,000 of our common shares. The common shares are being issued and sold pursuant to a Securities Purchase Agreement, dated November 18, 2016, between us and the institutional investors identified therein (who we refer to herein as the Investors).

Our common shares are listed on The Nasdaq Capital Market, or Nasdaq, under the symbol "SHIP". The last reported sale price of our common shares on Nasdaq on November 18, 2016 was \$2.95 per share. As of the date hereof, we have sold securities with aggregate gross proceeds of \$4,897,000 pursuant to General Instruction I.B.5 of Form F-3 during the twelve calendar month period that ends on and includes the date of this prospectus supplement. The aggregate market value of our common shares held by non-affiliates pursuant to General Instruction I.B.5 of Form F-3 is \$25,639,941.60, which was calculated based on 3,561,103 of our common shares outstanding and held by non-affiliates as of the date of this prospectus supplement and a price of \$7.20 per share, the closing price of our common shares on November 16, 2016. As a result, we are currently eligible to offer and sell up to an aggregate of \$3,649,647.20 of our common shares pursuant to General Instruction I.B.5 of Form F-3.

Investing in our common shares involves a high degree of risk. See "Risk Factors" beginning on page S-5 of this prospectus supplement and page 3 of the accompanying prospectus and in our annual report on Form 20-F for the fiscal year ended December 31, 2015, which is incorporated by reference herein, to read about the risks you should consider before purchasing our common shares.

We have retained Maxim Group LLC (who we refer to herein as the Placement Agent) as our exclusive placement agent to use its reasonable best efforts to solicit offers to purchase our common shares in this offering, and we have agreed to pay the Placement Agent a cash fee of 7.50% of the aggregate gross proceeds in this offering. The Placement Agent is not selling any of our common shares pursuant to this prospectus supplement or the accompanying prospectus. We expect that delivery of our common shares being offered pursuant to this prospectus supplement will be made to the Investors on or about November 23, 2016.

	Per Share	Total
Public offering price	\$2.75	\$3,588,750
Placement Agent's fees	\$0.20625	\$269,156
Proceeds, before expenses, to the Company (1)	\$2.54375	\$3,319,594

(1) We have agreed to pay the Placement Agent a cash fee equal to 7.5% of the gross proceeds. In addition, we have agreed to pay certain expenses and advances of the Placement Agent, as discussed under "Plan of Distribution."

Neither the Securities and Exchange Commission, or the Commission, nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

MAXIM GROUP LLC

The date of this prospectus supplement is November 18, 2016

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Commission utilizing a "shelf" registration process. This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and the securities offered hereby and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying base prospectus, gives more general information and disclosure about the securities we may offer from time to time, some of which does not apply to this offering of common shares. When we refer to the prospectus, we are referring to both parts combined, and when we refer to the accompanying prospectus, we are referring to the base prospectus.

If the description of this offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement. This prospectus supplement, the accompanying prospectus, any free writing prospectus and the documents incorporated into each by reference include important information about us and the common shares being offered and other information you should know before investing. You should read this prospectus supplement and the accompanying prospectus together with the additional information described under the heading, "Where You Can Find Additional Information" in this prospectus supplement and the accompanying prospectus before investing in our common shares.

Any statement made in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that is also incorporated by reference into this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus. We have not authorized anyone to provide you with information that is different from the foregoing. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell our common shares only in jurisdictions where offers and sales are permitted. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus, any free writing prospectus or incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date of such document. Our business, financial condition, results of operations and prospects may have changed since those dates.

Unless otherwise indicated, all references to "\$" and "dollars" in this prospectus supplement are to United States dollars, and financial information presented in this prospectus is derived from financial statements that are incorporated by reference and were prepared in accordance with accounting principles generally accepted in the United States. We have a fiscal year end of December 31.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains certain forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, but are not limited to, statements regarding our or our management's expectations, hopes, beliefs, intentions or strategies regarding the future and other statements that are other than statements of historical fact. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "possible," "potential," "predict," "project," "should," "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements in this prospectus supplement are based upon various assumptions, many of which are based, in turn, upon further assumptions, including without limitation, management's examination of historical operating trends, data contained in our records and other data available from third parties. Although we believe that these assumptions were reasonable when made, because these assumptions are inherently subject to significant uncertainties and contingencies which are difficult or impossible to predict and are beyond our control, we cannot assure you that we will achieve or accomplish these expectations, beliefs or projections. As a result, you are cautioned not to rely on any forward-looking statements.

In addition to these important factors and matters discussed elsewhere herein and in the documents incorporated by reference herein, important factors that, in our view, could cause actual results to differ materially from those discussed in the forward-looking statements include among other things:

- changes in shipping industry trends, including charter rates, vessel values and factors affecting vessel supply and demand:
- ·changes in seaborne and other transportation patterns;
- changes in the supply of or demand for drybulk commodities, including drybulk commodities carried by sea, generally or in particular regions;
- $\cdot changes \ in \ the \ number \ of \ newbuildings \ under \ construction \ in \ the \ drybulk \ shipping \ industry;$
- changes in the useful lives and the value of our vessels and the related impact on our compliance with loan covenants;
- ·the aging of our fleet and increases in operating costs;
- ·changes in our ability to complete future, pending or recent acquisitions or dispositions;
- ·our ability to achieve successful utilization of our expanded fleet;
- changes to our financial condition and liquidity, including our ability to pay amounts that we owe and obtain additional financing to fund capital expenditures, acquisitions and other general corporate activities;
- ·risks related to our business strategy, areas of possible expansion or expected capital spending or operating expenses; changes in the availability of crew, number of off-hire days, classification survey requirements and insurance costs for the vessels in our fleet;

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changes in our ability to leverage the relationships and reputation in the drybulk shipping industry of V.Ships Limited and Fidelity Marine Inc.;

changes in our relationships with our contract counterparties, including the failure of any of our contract counterparties to comply with their agreements with us;

- ·loss of our customers, charters or vessels;
- ·damage to our vessels;
- ·potential liability from future litigation and incidents involving our vessels;
- ·our future operating or financial results;
- ·our ability to continue as a going concern;
- ·acts of terrorism and other hostilities;
- ·changes in global and regional economic and political conditions;
- changes in governmental rules and regulations or actions taken by regulatory authorities, particularly with respect to the drybulk shipping industry; and
- other factors listed from time to time in registration statements, reports or other materials that we have filed with or
- •furnished to the Commission, including our most recent annual report on Form 20-F, which is incorporated by reference in this prospectus supplement.

These factors could cause actual results or developments to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors also could harm our results or developments. Consequently, there can be no assurance that actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements.

We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. If one or more forward-looking statements are updated, no inference should be drawn that additional updates will be made with respect to those or other forward-looking statements.

ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated under the laws of the Republic of the Marshall Islands and our principal executive offices are located outside the United States. The majority of the directors, officers and our independent registered public accounting firm reside outside the United States. In addition, substantially all of our assets and the assets of the directors, officers and our independent registered public accounting firm are located outside the United States. As a result, it may not be possible for you to serve legal process within the United States upon us or any of these persons. It may also not be possible for you to enforce, both in and outside the United States, judgments you may obtain in United States courts against us or these persons in any action, including actions based upon the civil liability provisions of U.S. federal or state securities laws.

Furthermore, there is substantial doubt that courts of such jurisdictions (i) would enforce judgments of U.S. courts obtained in actions against us, our directors or officers and such experts based upon the civil liability provisions of applicable U.S. federal and state securities laws or (ii) would enforce, in original actions, liabilities against us, our directors or officers and such experts based on those laws.

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SUMMARY

This summary highlights certain information that appears elsewhere in this prospectus supplement or in documents incorporated by reference herein, and this summary is qualified in its entirety by that more detailed information. This summary also includes descriptions of certain recent developments. This summary may not contain all of the information that may be important to you. We urge you to carefully read this entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, including our financial statements and the related notes and the information in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations." As an investor or prospective investor, you should also review carefully the sections entitled "Cautionary Statement Regarding Forward-Looking Statements" and "Risk Factors" in this prospectus supplement, the accompanying prospectus and in our annual report on Form 20-F for the year ended December 31, 2015, which is incorporated by reference herein.

Unless the context otherwise requires, as used in this prospectus supplement, the terms "Company," "Seanergy," "we," "us," and "our" refer to Seanergy Maritime Holdings Corp. and all of its subsidiaries, and "Seanergy Maritime Holdings Corp." refers only to Seanergy Maritime Holdings Corp. and not to its subsidiaries. We use the term deadweight ton, or dwt, in describing the size of our vessels. Dwt, expressed in metric tons each of which is equivalent to 1,000 kilograms, refers to the maximum weight of cargo and supplies that a vessel can carry. Our reporting currency is the U.S. dollar and all references in this prospectus to "\$" or "dollars" are to U.S. dollars.

Overview

We are an international shipping company specializing in the worldwide seaborne transportation of drybulk commodities. In March 2014, we completed our financial restructuring by the sale of our then existing fleet and cancelling of all our financial obligations, while in 2015 we acquired our fleet of eight drybulk carriers, which we refer to as our "Fleet."

We believe we have established a reputation in the international ocean transport industry for operating and maintaining vessels with high standards of performance, reliability and safety. We have assembled a management team comprised of executives who have extensive experience operating large and diversified fleets, and who have strong ties to a number of international charterers.

Our Fleet

As of the date of this prospectus supplement, our Fleet consists of eight drybulk carriers, of which six are Capesize vessels and two are Supramax vessels. As of the date of this prospectus supplement, the vessels in our Fleet have a combined cargo-carrying capacity of approximately 1,145,553 dwt and an average age of approximately 7.8 years. Additionally, we have agreed to acquire two Capesize vessels that are scheduled to be delivered between the end of November 2016 and early January 2017. Subject to the successful delivery of the two Capesize vessels, our fleet will have an average age of 7.6 years and a combined cargo-carrying capacity of approximately 1,503,369 dwt.

The following tables lists the vessels in our Fleet and the vessels we have agreed to acquire as of the date of this prospectus supplement:

Fleet

Vessel Name	Year Built	Dwt	Flag	Type of Employment
Leadership	2001	171,199	BA	Spot
Gloriuship	2004	171,314	MI	Spot
Geniuship	2010	170,057	MI	Spot
Premiership	2010	170,024	IoM	Spot
Squireship	2010	170,018	LIB	Spot
Championship	2011	179,238	LIB	Spot
Gladiatorship	2010	56,819	BA	Spot
Guardianship	2011	56,884	MI	Spot

Key to Flags:

BA – Bahamas, IoM – Isle of Man, LIB – Liberia, MI – Marshall Islands

Vessels to be Acquired*

Vessel Name	Year Built	Dwt
Capesize 1	2010	178,838
Capesize 2	2010	178,978

^{*}Subject to successful delivery.

Recent Developments

On August 5, 2016, we entered into a securities purchase agreement with an unaffiliated third party, which is an institutional investor, under which we sold 1,180,000 of our common shares in a registered direct offering at a price of \$4.15 per share. The offering closed on August 10, 2016.

On September 26, 2016, we entered into separate agreements with an unaffiliated third party for the purchase of two secondhand Capesize vessels, or the Vessels, for a gross purchase price of \$20.75 million per vessel. The Vessels are expected to be delivered between the end of November 2016 and early January 2017, subject to the satisfaction of certain customary closing conditions.

On October 4, 2016, we entered into a \$4.2 million loan facility, or the Loan Facility, with Jelco Delta Holding Corp., or Jelco, an entity affiliated with our principal shareholder, to fund the initial deposits for the Vessels. The Loan Facility bears interest at LIBOR plus a margin of 5%, which is payable quarterly. On November 17, 2016, we entered into Amendment No. 1 to the Loan Facility, which provides that effective November 10, 2016, the principal is due on December 31, 2016. The Loan Facility is secured by a pledge of shares in our direct holding subsidiary that owns our two indirect vessel-owning subsidiaries that have agreed to purchase the Vessels.

On October 28, 2016, we filed with the Commission a registration statement on Form F-1 in connection with our contemplated follow-on registered public offering of our securities, comprised of common shares, par value \$0.0001 per share, Class A warrants to purchase common shares, and an underwriter's warrant to purchase common shares. Maxim Group LLC is expected to act as lead managing underwriter and sole book runner for the transaction.

Corporate Information

We were incorporated under the laws of the Republic of the Marshall Islands on January 4, 2008, originally under the name Seanergy Merger Corp., as a wholly-owned subsidiary of Seanergy Maritime Corp. We changed our name to Seanergy Maritime Holdings Corp. on July 11, 2008. Our principal executive office is located at 16 Grigoriou Lambraki Street, 2nd Floor, 166 74 Glyfada, Athens, Greece. Our telephone number at that address is +30 2108913507. Our corporate website address is www.seanergymaritime.com. The information contained on our website does not constitute part of this prospectus supplement.

THE OFFERING

Issuer Seanergy Maritime Holdings Corp.

Common shares

outstanding as of the date of this prospectus

20,694,410 common shares

supplement

Common shares being

1,305,000 common shares

offered

Common shares to be outstanding immediately 21,999,410 common shares after this offering

Use of proceeds

We intend to use the net proceeds of this offering for general corporate purposes, including funding of vessel acquisitions. We do not intend to use any proceeds of this offering to retire existing indebtedness, other than trade debt in the ordinary course of business. We expect that the net proceeds of this offering will be approximately \$3.2 million, after deducting the Placement Agent's fees and estimated offering expenses.

Risk Factors

Investing in our common shares involves a high degree of risk. See "Risk Factors" beginning on page S-5 of this prospectus supplement and page 3 of the accompanying prospectus and in our annual report on Form 20-F for the fiscal year ended December 31, 2015, which is incorporated by reference herein, to read about the risks you should consider before purchasing our common shares.

Listing

Our common shares are listed on Nasdaq under the symbol "SHIP".

RISK FACTORS

An investment in our common shares involves a high degree of risk. Before deciding to invest in our common shares, you should carefully consider the risks described in the accompanying prospectus and under the heading "Risk Factors" beginning on page 4 of our annual report on Form 20-F for the year ended December 31, 2015, which is incorporated by reference into this prospectus supplement. In addition, you should carefully consider the other information in the annual report and other documents that are incorporated by reference into this prospectus supplement. See "Where You Can Find Additional Information." The risks and uncertainties referred to above are not the only risks and uncertainties that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of these risks actually occurs, our business, financial condition and results of operations could be materially adversely affected. In that case, you may lose all or part of your investment in the common shares.

USE OF PROCEEDS

We intend to use the net proceeds of this offering for general corporate purposes, including funding of vessel acquisitions. We do not intend to use any proceeds of this offering to retire existing indebtedness, other than trade debt in the ordinary course of business. We expect that the net proceeds of this offering will be approximately \$3.2 million, after deducting the Placement Agent's fees and estimated offering expenses.

MARKET PRICE OF COMMON SHARES

Our common shares are traded on Nasdaq under the symbol "SHIP". The following table sets forth the high and low closing prices for each of the periods indicated for our common shares as adjusted for the 15-for-1 reverse stock split effective June 24, 2011 and the 5-for-1 reverse split effective January 8, 2016:

effective value 2 i, 2011 and the v for 1 reverse spin				
	High	Low		
For the Year ended December 31:				
2015	\$6.75	\$2.75		
2014	9.95	4.13		
2013	12.30	4.00		
2012	21.15	5.20		
2011	74.18	10.31		

For the Quarter Ended:

September 30, 2016	\$6.20	\$2.06
June 30, 2016	3.01	2.10
March 31, 2016	5.54	1.58
December 31, 2015	4.35	3.00
September 30, 2015	6.75	3.02
June 30, 2015	4.10	2.75
March 31, 2015	4.50	3.25
December 31, 2014	8.80	4.13
September 30, 2014	9.15	6.75
June 30, 2014	8.90	6.40
March 31, 2014	9.95	6.55

For the Month:

November 2016 (up to November 21, 2016)	\$7.20	\$2.05
October 2016	3.03	2.05
September 2016	3.47	2.69
August 2016	6.20	2.90
July 2016	3.55	2.06
June 2016	2.33	2.10
May 2016	2.78	2.19

CAPITALIZATION

The following table sets forth our consolidated capitalization as of June 30, 2016:

·on an actual basis;

on an as adjusted basis to give effect to (a) \$4.1 million in net proceeds from our registered direct offering on August 10, 2016 of 1,180,000 common shares, (b) an installment repayment of \$0.1 million on September 19, 2016 under our March 2015 Alpha Bank A.E. Loan Facility, and (c) a \$4.2 million drawdown under our October 4, 2016 loan agreement with Jelco to fund the initial deposits related to our pending vessel acquisitions; and ·on a further adjusted basis, to give effect to this offering.

There have been no significant adjustments to our capitalization since June 30, 2016, other than the adjustments described above. The historical data in the table is derived from, and should be read in conjunction with, our historical financial statements, which are incorporated by reference into this prospectus supplement. You should read this table in conjunction with the section entitled "Operating and Financial Review and Prospects" and our consolidated financial statements and the related notes thereon in our Annual Report on Form 20-F for the year ended December 31, 2015 and our Report on Form 6-K for the six months ended June 30, 2016, each of which is incorporated by reference herein.

	Actual	As Adjusted	As Further Adjusted
(All figures in thousands of U.S. dollars, except for share amounts) Debt:	(unaudited)	(unaudited)	(unaudited)
Secured long-term debt, net of deferred finance costs	177,090	181,140	181,140
Unsecured convertible promissory notes	510	510	510
Total Debt	177,600	181,650	181,650
Shareholders' equity:			
Preferred stock, \$0.0001 par value; 25,000,000 shares authorized; none			
issued		_	_
Common stock, \$0.0001 par value; 500,000,000 authorized shares as at June			
30, 2016; 19,514,410 shares issued and outstanding as at June 30, 2016	2	2	2
Additional paid-in capital (excluding shareholder's convertible notes)	321,635	325,782	328,982
Shareholder's convertible notes	24,965	24,965	24,965
Accumulated deficit	(325,698)	(325,698)	(325,698)
Total equity	20,904	25,051	28,251
Total capitalization	198,504	206,701	209,901
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PLAN OF DISTRIBUTION

Pursuant to an engagement letter agreement between us and the Placement Agent, we have engaged the Placement Agent to act as the exclusive placement agent in connection with this offering. The Placement Agent is not purchasing or selling any of the shares of common stock we are offering by this prospectus supplement, and are not required to arrange the purchase or sale of any specific number of shares or dollar amount, but the placement agent has agreed to use "reasonable best efforts" to arrange for the sale of the shares offered hereby.

Our agreement with the Placement Agent provides that the obligations of the Placement Agent are subject to certain conditions precedent, including, among other things, the absence of any material adverse change in our business and the receipt of customary opinions and closing certificates.

The Placement Agent shall arrange for the sale of the shares we are offering pursuant to this prospectus supplement to one or more Investors through a Securities Purchase Agreement, dated November 18, 2016, directly between the Investors and us. All of the shares offered hereby will be sold at the same price and, we expect, at a single closing. We established the price following negotiations with prospective Investors and with reference to the prevailing market price of our common stock, recent trends in such price and other factors. It is possible that not all of the shares we are offering pursuant to this prospectus supplement will be sold at the closing, in which case our net proceeds would be reduced. We expect that the sale of the shares will be completed on or around the date indicated on the cover page of this prospectus supplement.

Under the Securities Purchase Agreement, we have agreed not to contract to issue or announce the issuance or proposed issuance of any common stock or common stock equivalents for 20 days following the closing of this offering with certain exceptions. In addition, we have also agreed that for a period of 20 days following the closing of this offering, we will not effect or contract to effect a "Variable Rate Transaction" as defined in the Securities Purchase Agreement.

Commissions and Expenses

We will pay the Placement Agent a placement agent fee equal to 7.5% of the gross proceeds of this offering. The following table shows the per share and total placement agent fee we will pay to the Placement Agent in connection with the sale of the common shares offered hereby, assuming the purchase of all of the shares we are offering.

Per Share \$0.20625 Total \$269,156

In addition, we have agreed to reimburse the placement agent at the closing for its out-of-pocket expenses, including fees of counsel to the placement agent, up to a maximum of \$25,000, subject to compliance with FINRA Rule 5110(f)(2)(D). We estimate the total expenses of this offering, which will be payable by us, excluding the placement agent fee and placement agent counsel fee, will be approximately \$127,000. After deducting the placement agent fee due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$3.2 million.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act of 1933. We have also agreed to contribute to payments the placement agent may be required to make in respect to such liabilities.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "SHIP".

Electronic Distribution

This prospectus supplement and the accompanying prospectus may be made available in electronic format on websites or through other online services maintained by the Placement Agent, or by its respective affiliates. Other than this prospectus supplement and the accompanying prospectus in electronic format, the information on the Placement Agent's websites and any information contained in any other websites maintained by the Placement Agent is not part of this prospectus supplement or the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus forms a part, has not been approved and/or endorsed by us or the Placement Agent, and should not be relied upon by investors.

Regulation M Restrictions

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the Placement Agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of securities by the Placement Agent acting as a principal. Under these rules and regulations, the Placement Agent:

·must not engage in any stabilization activity in connection with our securities; and

must not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed their participation in the distribution.

EXPENSES

The following are the estimated expenses of the issuance and distribution of the securities offered by this prospectus supplement, all of which will be paid by us.

Registration fees	\$416 *
Legal fees and expenses	100,000
Accounting fees and expenses	40,000
Transfer Agent and Registrar Fees	4,500
Miscellaneous	7,084
Total:	\$152,000

*The Registration Fee of \$23,240, covering all of the securities being offered under the registration statement on Form F-3 (File No. 333-205301) filed with the Commission with an effective date of August 14, 2015, of which this prospectus supplement forms a part, was previously paid. We allocate the cost of this fee on an approximately pro-rata basis with each offering.

LEGAL MATTERS

Certain legal matters in connection with the sale of the common shares offered hereby will be passed upon for us by Seward & Kissel LLP, New York, New York with respect to matters of United States and Marshall Islands law. Ellenoff Grossman & Schole LLP, New York, New York will advise on certain legal matters in connection with the offering on behalf of the Placement Agent.

EXPERTS

The consolidated financial statements of Seanergy Maritime Holdings Corp., appearing in Seanergy Maritime Holdings Corp.'s Annual Report (Form 20-F) for the year ended December 31, 2015 (including the schedule appearing therein), have been audited by Ernst & Young (Hellas) Certified Auditors-Accountants S.A., independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about Seanergy Maritime Holdings Corp.'s ability to continue as a going concern as described in Note 1d to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing. The address of Ernst & Young (Hellas) Certified Auditors-Accountants S.A. is 8B Chimarras str., Maroussi, 151 25 Athens, Greece and it is registered as a corporate body with the public register for company auditors-accountants kept with the Body of Certified Auditors-Accountants, or SOEL, Greece with registration number 107.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

As required by the Securities Act of 1933, as amended, we filed a registration statement relating to the securities offered by this prospectus supplement and its accompanying prospectus with the Commission. This prospectus supplement and its accompanying prospectus are a part of that registration statement, which includes additional information.

Government Filings

We file annual and other reports with the Commission. You may read and copy any document that we file and obtain copies at prescribed rates from the Commission's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling 1 (800) SEC-0330. The Commission maintains a website (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the Commission. Further information about our company is available on our website at http://www.seanergymaritime.com. The information on our website, however, is not, and should not be, deemed to be a part of this prospectus supplement.

Information Incorporated by Reference

The Commission allows us to "incorporate by reference" information that we file with it. This means that we can disclose important information to you by referring you to those filed documents. The information incorporated by reference is considered to be a part of this prospectus supplement and accompanying prospectus, and information that we file later with the Commission prior to the termination of this offering will also be considered to be part of this prospectus supplement and the accompanying prospectus and will automatically update and supersede previously filed information, including information contained in this prospectus supplement and the accompanying prospectus. We incorporate by reference the documents listed below:

Our annual report on Form 20-F for the year ended December 31, 2015, filed with the Commission on April 20, 2016; and

Our report on Form 6-K furnished to the Commission on September 29, 2016, containing (i) Management's Discussion and Analysis of Financial Condition and Results of Operations and our Unaudited Interim Condensed ·Consolidated Financial Statements for the six months ended June 30, 2016 and (ii) selected financial information from our Unaudited Interim Condensed Consolidated Financial Statements for the six months ended June 30, 2016, formatted in Extensible Business Reporting Language (XBRL).

We are also incorporating by reference all subsequent annual reports on Form 20-F that we file with the Commission and reports on Form 6-K that we furnish to the Commission after the date of this prospectus supplement that state they are incorporated by reference into this prospectus supplement until we file a post-effective amendment indicating that the offering of the securities made by this prospectus supplement has been terminated. In all cases, you should rely on the later information over different information included in this prospectus supplement or the accompanying prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus. We have not authorized anyone to provide you with information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell our common shares only in jurisdictions where offers and sales are permitted. The information contained in or incorporated by reference in this document is accurate only as of the date such information was issued, regardless of the time of delivery of this prospectus supplement or any sale of our common shares.

You may request a free copy of the above mentioned filings or any subsequent filing we incorporate by reference into this prospectus supplement by contacting us at the following address:

Seanergy Maritime Holdings Corp.

16 Grigoriou Lambraki Street, 2nd Floor

166 74 Glyfada Athens, Greece

Tel: +30 2108913507 Fax: +30 2109638404 Attn: General Counsel

Information Provided by the Company

We will furnish holders of our common shares with annual reports containing audited financial statements and a report by our independent registered public accounting firm. The audited financial statements will be prepared in accordance with U.S. generally accepted accounting principles. As a "foreign private issuer," we are exempt from the rules under the Securities and Exchange Act of 1934, as amended, or the Exchange Act, prescribing the furnishing and content of proxy statements to shareholders. While we furnish proxy statements to shareholders in accordance with the rules of Nasdaq, those proxy statements do not conform to Schedule 14A of the proxy rules promulgated under the Exchange Act. In addition, as a "foreign private issuer," our officers and directors are exempt from the rules under the Exchange Act relating to short swing profit reporting and liability.

PROSPECTUS \$200,000,000

SEANERGY MARITIME HOLDINGS CORP.

Through this prospectus we may periodically offer:

(1) shares of our common stock;	
(2) shares of our preferred stock;	
(3) our debt securities;	
(4) our warrants:	

(5) our rights; and

(5) our purchase contracts;

(6) our units.

We may also offer securities of the types listed above that are convertible or exchangeable into one or more of the securities listed above.

The aggregate offering price of all securities issued under this prospectus may not exceed \$200,000,000. The securities issued under this prospectus may be offered directly or through underwriters, agents or dealers. The names of any underwriters, agents or dealers will be included in a supplement to this prospectus.

The prices and other terms of the securities that we will offer will be determined at the time of their offering and will be described in a supplement to this prospectus.

Our common shares are traded on the Nasdaq Capital Market under the symbol "SHIP."

The aggregate market value of our outstanding common stock held by non-affiliates is \$1,164,999, based on 46,556,771 shares of common stock outstanding, of which 1,765,150 are held by non-affiliates, and a closing price on the Nasdaq Capital Market of \$0.89 on July 30, 2015. As of the date hereof, we have not offered any securities pursuant to General Instruction I.B.5 of Form F-3 during the twelve calendar month period that ends on and includes the date hereof.

An investment in these securities involves risks. See the section entitled "Risk Factors" beginning on page 3 of this prospectus, and other risk factors contained in the applicable prospectus supplement and in the documents incorporated by reference herein and therein.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is August 14, 2015

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This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a shelf registration process. Under the shelf registration process, we may sell shares of common stock, shares of preferred stock, debt securities, warrants, purchase contracts, rights and units described in this prospectus from time to time in one or more offerings, up to a total of \$200,000,000. This prospectus only provides you with a general description of the securities we may offer. Each time we offer securities, we will provide you with a supplement to this prospectus that will describe the specific information about the securities being offered and the specific terms of that offering. The supplement may also add, update or change the information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the prospectus supplement. Before purchasing any securities, you should read carefully both this prospectus and any supplement, together with the additional information described below.

This prospectus and any prospectus supplement are part of a registration statement we filed with the SEC and do not contain all the information in the registration statement. Forms of the indenture and other documents establishing the terms of the offered securities are filed as exhibits to the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. For further information about us or the securities offered hereby, you should refer to the registration statement, which you can obtain from the SEC as described below under the section entitled "Where You Can Find Additional Information."

You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable supplement to this prospectus is accurate as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

SUMMARY

This section summarizes some of the information that is contained in or incorporated by reference in this prospectus. As an investor or prospective investor, you should review carefully all of the information contained or incorporated by reference in this prospectus and any accompanying prospectus supplement, including the "Risk Factors" and our financial statements and related notes contained or incorporated by reference herein and therein, before making an investment decision.

Unless the context otherwise requires, as used in this prospectus, the terms "Company," "we," "us," and "our" refer to Seanergy Maritime Holdings Corp. and all of its subsidiaries, and "Seanergy Maritime Holdings Corp." refers only to Seanergy Maritime Holdings Corp. and not to its subsidiaries. We use the term deadweight ton, or dwt, in describing the size of vessels. Dwt, expressed in metric tons each of which is equivalent to 1,000 kilograms, refers to the maximum weight of cargo and supplies that a vessel can carry. Our reporting currency is the U.S. dollar and all references in this prospectus to "\$" or "dollars" are to U.S. dollars.

Our Company

We are an international shipping company specializing in the worldwide seaborne transportation of dry bulk commodities. In March 2014, we completed a financial restructuring and in March 2015 we acquired our Capesize vessel, the M/V Leadership.

We intend to expand our fleet further and are actively reviewing the market in order to identify suitable vessel acquisitions. We expect to finance these acquisitions with equity provided through capital markets transactions and our shareholders and/or new loan arrangements.

We believe we have established a reputation in the international ocean transport industry for operating and maintaining vessels with high standards of performance, reliability and safety. We have assembled a management team comprised of executives who have extensive experience operating large and diversified fleet, and who have strong ties to a number of international lending institutions and charterers.

Corporate Structure

We were incorporated under the laws of the Republic of the Marshall Islands on January 4, 2008, originally under the name Seanergy Merger Corp., as a wholly-owned subsidiary of Seanergy Maritime Corp. We changed our name to Seanergy Maritime Holdings Corp. on July 11, 2008.

We currently own one Capesize vessel. We intend to continue to review the market in order to identify potential acquisition targets which will be accretive to our earnings per share. Our acquisition strategy focuses on newbuilding or secondhand dry bulk carriers, although we may acquire vessels in other sectors which we believe offer attractive investment opportunities.

The current address of our principal executive office is 16 Grigoriou Lambraki Street, 2nd Floor, 166 74 Glyfada, Athens, Greece. The telephone number of our registered office is +011-30 2130181507. Our corporate website address is www.seanergymaritime.com. The information contained on our website does not constitute part of this prospectus.

Management of Our Fleet

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V.Ships Limited, or V.Ships, performs the technical management of our fleet.

Fidelity Marine Inc., or Fidelity, performs the commercial management of our fleet.

Our vessel's insurances, bunkering and operation are provided through Seanergy Shipmanagement Corp., or Seanergy Shipmanagement, one of our wholly-owned subsidiaries.

Management Agreements

Through Leader Shipping Co., or Leader, our wholly-owned subsidiary and the owner of the M/V Leadership, we have entered into a technical management agreement with V.Ships with respect to the M/V Leadership. Pursuant to this management agreement, V.Ships performs certain duties that include general administrative and support services necessary for the operation of such vessel, including, without limitation, crewing and other technical management, freight management, accounting related to vessels, provisions and operation and, subject to our instructions, sale and purchase of vessels. Pursuant to the management agreement, we pay a monthly management fee of \$10,800.

Seanergy Shipmanagement, our wholly-owned subsidiary, has entered into an agreement with Leader, for the provision of the vessel's insurances, bunkering and operation. Leader shall reimburse Seanergy Shipmanagement for all reasonable running and/or out of pocket expenses in relation to this agreement. The agreement between Leader and Seanergy Shipmanagement is for an indefinite period until terminated by either party giving to the other notice in writing.

Through Seanergy Management Corp., or Seanergy Management, our wholly-owned subsidiary, we have entered into a commercial management agreement with Fidelity with respect to our new vessel, the M/V Leadership. Pursuant to this commercial management agreement, Fidelity performs the commercial management of the vessel and her employment. The Company shall reimburse Fidelity for all reasonable running and/or out of pocket expenses, including but not limited to, telephone, fax, stationary and printing expenses, as well as any pre-approved travelling expenses in relation to this agreement.

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RISK FACTORS

An investment in our securities involves a high degree of risk and uncertainty. You should carefully consider the risks discussed under the caption "Risk Factors" in our Annual Report on Form 20-F for the year ended December 31, 2014, and incorporated by reference herein, as well as the other information included in this prospectus and the other documents we have incorporated by reference in this prospectus, including the section entitled "Risk Factors" in future Annual Reports before deciding to invest in our securities. If any of the risks occur, our business, financial conditions or results of operations may be materially and adversely affected. This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of the risks below.

If the Share Price of Our Common Shares Fluctuates After this Offering, You could Lose a Significant Part of Your Investment.

The market price of our common shares may be influenced by many factors, many of which are beyond our control, including the other risks described under the heading "Risk Factors—Risk Factors Related to Our Common Shares" in our Annual Report on Form 20-F for the year ended December 31, 2014 and the following:

the failure of securities analysts to publish research about us after this offering, or analysts making changes in their financial estimates;

- ·announcements by us or our competitors of significant contracts, acquisitions or capital commitments;
- ·variations in quarterly operating results;
- ·general economic conditions;
- ·terrorist or piracy acts;
- ·future sales of our common shares or other securities; and
- ·investors' perception of us and the international containership sector.

On January 28, 2015, we received notice from the Nasdaq Stock Market, or the Nasdaq, indicating that we were no longer in compliance with Nasdaq Listing Rule 5550(a)(2) because the closing share bid price was below the minimum \$1.00 per share requirement for 30 consecutive business days. We had 180 days, or until July 27, 2015, to regain compliance. On July 28, 2015, the Company received a notice from Nasdaq, granting the Company an extension of time until January 25, 2016, to regain compliance with Nasdaq Listing Rule 5550(a)(2). Under the terms of the extension, if compliance cannot be demonstrated by January 25, 2016, the staff of the SEC, or the Staff, will provide written notification that the Company's securities will be delisted. At that time, the Company may appeal the Staff's determination to a Hearings Panel.

We intend to cure the deficiency within the prescribed grace period. During this time, our common stock will continue to be listed and trade on the Nasdaq Capital Market. However, if we do not regain compliance with the Nasdaq's continued listing standards and delist from the Nasdaq and our common shares are not subsequently listed and registered on another national securities exchange, we will be unable to meet certain transaction requirements that would effectively prevent us from offering and selling additional common shares under this registration statement.

As a result of these factors, investors in our common shares may not be able to resell their common shares at or above the initial offering price. These broad market and industry factors may materially reduce the market price of our common shares, regardless of our operating performance.

We May Issue Additional Common Shares or Other Equity Securities Without Your Approval, Which Would Dilute Your Ownership Interests and May Depress the Market Price of Our Common Shares.

We may issue additional common shares or other equity securities of equal or senior rank in the future in connection with, among other things, future vessel acquisitions or repayment of outstanding indebtedness, without shareholder approval, in a number of circumstances.

Our issuance of additional common shares or other equity securities of equal or senior rank would have the following effects:

- ·our existing shareholders' proportionate ownership interest in us will decrease;
- •the amount of cash available for dividends payable on our common shares may decrease;
- ·the relative voting strength of each previously outstanding common share may be diminished; and
- ·the market price of our common shares may decline.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Our forward-looking statements include, but are not limited to, statements regarding our or our management's expectations, hopes, beliefs, intentions or strategies regarding the future and other statements other than statements of historical fact. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "possible," "potential," "predict," "project," "should," "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements in this prospectus may include, for example, statements about:

- ·our ability to continue as a going concern;
- ·our future operating or financial results;
- our financial condition and liquidity, including our ability to pay amounts that we owe, obtain additional financing in the future to fund capital expenditures, acquisitions and other general corporate activities;
- ·our ability to come to a satisfactory resolution with our lenders in our ongoing debt restructuring process;
- ·our ability to pay dividends in the future;
- ·shipping industry trends, including charter rates and factors affecting vessel supply and demand;
- future, pending or recent acquisitions and disposition, business strategy, areas of possible expansion or contraction, and expected capital spending or operating expenses;
- ·the useful lives and changes in the value of our vessels and their impact on our compliance with loan covenants;
- ·availability of crew, number of off-hire days, classification survey requirements and insurance costs;
- ·global and regional economic and political conditions;
- ·our ability to leverage the relationships and reputation in the dry bulk shipping industry of V.Ships and Fidelity;
- ·changes in seaborne and other transportation patterns;
 - changes in governmental rules and regulations or actions taken by regulatory authorities;
- potential liability from future litigation and incidents involving our vessels;
- ·acts of terrorism and other hostilities;
- •the number of newbuildings under construction in the dry bulk industry;
- ·future charter hire rates and vessel values;
- ·loss of our customers, charters or vessels;

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- ·the aging of our fleet and increases in operating costs; and
- ·damage to our vessels.

See the section entitled "Risk Factors," on page 3 of this prospectus and in our Annual Report on Form 20-F for the fiscal year ended December 31, 2014, and incorporated by reference herein, for a more complete discussion of these risks and uncertainties and for other risks and uncertainties. These factors and the other risk factors described in this prospectus are not necessarily all of the important factors that could cause actual results or developments to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors also could harm our results. Consequently, there can be no assurance that actual results or developments anticipated by us will be realized or, even i