

None
(Title of Class)

Item 1. Description of Registrant's Securities to be Registered.

On September 12, 2002, the Board of Directors of Atwood Oceanics, Inc. (the "Company"), authorized and declared a dividend of one Right (a "Right") for each outstanding share of Common Stock, par value \$1.00 per share ("Common Stock"), of the Company (the "Common Shares"). The dividend was payable on November 5, 2002 (the "Record Date") to the shareholders of record of the Common Shares at the close of business on that date. The description and terms of the Rights are set forth in a Rights Agreement (the "Rights Agreement") between the Company and Continental Stock Transfer & Trust Company, as Rights Agent (the "Rights Agent"), dated as of October 18, 2002. Capitalized terms used and not defined herein have the meanings given to them in the Rights Agreement. The Company filed a Registration Statement on Form 8-A registering the Rights on October 21, 2002 (the "Registration Statement"). In connection with a two-for-one stock split of its Common Stock effected in the form of a 100% stock dividend payable April 7, 2006, the Company filed Post-Effective Amendment No. 1 to the Registration Statement on April 5, 2006.

On June 5, 2008, the Company announced that its Board of Directors had approved a two-for-one stock split of its Common Stock (the "Stock Split") to be effected in the form of a 100% stock dividend payable July 11, 2008 (the "Split Date"), on all Common Shares outstanding as of the close of business on June 27, 2008 (the "Record Date"). There were 32,012,815 Common Shares outstanding as of June 19, 2008. Prior to the Stock Split, upon the occurrence of certain events, each Right entitles the holder to purchase from the Company one two-thousandth of a share of Series A Junior Participating Preferred Stock, no par value, of the Company (the "Preferred Shares"), at a price of \$150.00 per one two-thousandth of a Preferred Share. In connection with the Stock Split, pursuant to Section 11(n) of the Rights Agreement, effective upon the Split Date, the number of the Preferred Shares purchasable upon the exercise of each Right will be decreased from one two-thousandth of a Preferred Share to one four-thousandth of a Preferred Share, and the number of outstanding Rights will be increased by 100%, such that each Common Share outstanding immediately after the Stock Split shall have issued with respect to it one Right. In addition, pursuant to Section 23(a) of the Rights Agreement, the Redemption Price of each Right will be decreased by one-half from \$0.005 to \$0.0025 upon the Split Date.

A copy of the Certificate of Adjustment delivered on June 25, 2008, by the Company to the Rights Agent and a form of the letter to be sent to the Company's shareholders on or about the Split Date in connection with the Stock Split and providing notice of adjustment to the Rights, each required pursuant to the terms of the Rights Agreement, are attached as Exhibits 4.1 and 99.1, respectively, to this Amendment No. 1 and are incorporated herein by reference.

The following Summary of Rights to Purchase Preferred Shares reflects adjustments made in connection with the Stock Split.

Until the earlier to occur of (i) 10 days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired beneficial ownership of 15 percent or more of the outstanding Common Shares and (ii) 10 business days (or such later date as may be determined by action of the Board of Directors of the Company prior to such time

as any person or group of affiliated or associated persons becomes an Acquiring Person) following the commencement of, or first public announcement of an intention to commence, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of affiliated or associated persons of 15 percent or more of the outstanding Common Shares (the earlier of such dates being herein referred to as the "Distribution Date"), the Rights will be evidenced, with respect to any of the Common Share certificates outstanding as of the Record Date, by such Common Share certificate with a copy of a Summary of Rights to Purchase Preferred Shares ("Summary of Rights") in substantially the form attached as Exhibit C to the Rights Agreement. The Rights Agreement provides that an Acquiring Person shall not include any existing shareholder owning 15 percent or more of the Company's Common Shares as of the Record Date unless such shareholder acquires an additional 5 percent more of the Company's Common Shares than it owned as of the Record Date.

The Rights Agreement provides that, until the Distribution Date (or earlier redemption or expiration of the Rights), the Rights will be transferred with and only with the Common Shares. Until the Distribution Date (or earlier redemption or expiration of the Rights), new Common Share certificates issued after the Record Date, upon transfer or new issuance of Common Shares, will contain a notation incorporating the Rights Agreement by reference. Until the Distribution Date (or earlier redemption or expiration of the Rights), the surrender for transfer of any certificates for Common Shares outstanding on or after the Record Date, even without such notation or a copy of this Summary of Rights being attached thereto, will also constitute the transfer of the Rights associated with the Common Shares represented by such certificate. As soon as practicable following the Distribution Date, separate certificates evidencing the Rights ("Right Certificates") will be mailed to holders of record of the Common Shares as of the close of business on the Distribution Date and such separate Right Certificates alone will evidence the Rights.

The Rights are not exercisable until the Distribution Date. The Rights will expire on November 5, 2012 (the "Final Expiration Date"), unless the Final Expiration Date is extended or unless the Rights are earlier redeemed or exchanged by the Company, in each case, as described below.

The Purchase Price payable, and the number of Preferred Shares or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Shares, (ii) upon the grant to holders of the Preferred Shares of certain rights or warrants to subscribe for or purchase Preferred Shares at a price, or securities convertible into Preferred Shares with a conversion price, less than the then current market price of the Preferred Shares or (iii) upon the distribution to holders of the Preferred Shares of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in Preferred Shares) or of subscription rights or warrants (other than those referred to above).

The number of outstanding Rights and the number of one four-thousandths of a Preferred Share issuable upon exercise of each Right are also subject to adjustment in the event of a stock split of the Common Shares or a stock dividend on the Common Shares payable in Common Shares or subdivisions, consolidations or combinations of the Common Shares occurring, in any such case, prior to the Distribution Date.

Preferred Shares purchasable upon exercise of the Rights will not be subject to redemption by the Company. The Preferred Shares shall be entitled to an aggregate dividend of 4000 multiplied times the dividend declared per Common Share. If no dividend is declared in a quarter, the Preferred Shares are entitled to a minimum preferential quarterly dividend of \$0.01 per share. In the event of liquidation, the holder of the Preferred Shares will be entitled to the greater of a minimum preferential liquidation payment of \$1.00 per share and an aggregate payment of 4000 multiplied times the payment made per Common Share. Each Preferred Share will have 4000 votes, voting together with the Common Shares. Finally, in the event of any merger, consolidation or other transaction in which Common Shares are exchanged, each Preferred Share will be entitled to receive 4000 multiplied times the amount received per Common Share. These rights are protected by customary antidilution provisions.

Because of the nature of the Preferred Shares' dividend, liquidation and voting rights, the value of the one four-thousandth interest in a Preferred Share purchasable upon exercise of each Right should approximate the value of one Common Share.

In the event that the Company is acquired in a merger or other business combination transaction or 50 percent or more of its consolidated assets or earning power are sold after a person or group of affiliated or associated persons has become an Acquiring Person, proper provision will be made so that each holder of a Right will thereafter have the right to receive, upon the exercise thereof at the then current exercise price of the Right, that number of shares of common stock of the acquiring company which at the time of such transaction will have a market value of four times the exercise price of the Right. In the event that any person or group of affiliated or associated persons becomes an Acquiring Person, proper provision shall be made so that each holder of a Right, other than Rights beneficially owned by the Acquiring Person (which will thereafter be null and void and nontransferable), will thereafter have the right to receive upon exercise that number of Common Shares of the Company having a market value of four times the exercise price of the Right.

At any time after any person or group of affiliated or associated persons becomes an Acquiring Person and prior to the acquisition by such person or group of 50 percent or more of the outstanding Common Shares, the Board of Directors of the Company may exchange the Rights (other than Rights owned by such person or group which will have become null and void and nontransferable), in whole or in part, at an exchange ratio of one Common Share, or one four-thousandth of a Preferred Share (or of a share of a class or series of the Company's preferred stock having equivalent rights, preferences and privileges), per Right (subject to adjustment).

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments require an adjustment of at least one percent in such Purchase Price. The Company may, but shall not be required to, issue fractions of a Preferred Share (other than one four-thousandth of a Preferred Share or any integral multiple thereof, which may, at the election of the Company, be evidenced by depositary receipts) and in lieu thereof, an adjustment in cash will be made based on the market price of the Preferred Shares on the last trading day prior to the date of exercise.

At any time prior to the close of business on the tenth day following a public announcement that an Acquiring Person has become such an Acquiring Person, the Board of Directors of the Company may redeem the Rights in whole, but not in part, at a price of \$.0025 per Right (the "Redemption Price"). The redemption of the Rights may be made effective at such time, on such basis and with such conditions as the Board of Directors in its sole discretion may establish. The time at which the Rights are redeemed by the Company is herein referred to as the "Redemption Date." Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right thereafter of the holders of Rights will be to receive the Redemption Price.

The terms of the Rights may be amended by the Board of Directors of the Company without the consent of the holders of the Rights, including without limitation an amendment to lower certain thresholds described above to not less than the greater of (i) the sum of 0.001 percent and the largest percentage of the outstanding Common Shares then known by the Company to be beneficially owned by any person or group of affiliated or associated persons and (ii) 10 percent, except that from and after such time as any person or group of affiliated or associated persons becomes an Acquiring Person no such amendment may adversely affect the interests of the holders of the Rights.

Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends.

The Preferred Shares shall rank, with respect to the payment of dividends and as to distributions of assets upon liquidation, dissolution or winding up of the Company, junior to all other series of preferred stock of the Company, if any, unless the Board of Directors of the Company shall specifically determine otherwise in fixing the powers, preferences and relative, participating, optional and other special rights of the shares of any such other series and the qualifications, limitations and restrictions thereof.

As of June 19, 2008, there were 32,012,815 Common Shares issued and outstanding, and an aggregate of an additional 2,701,700 Common Shares reserved for issuance under the Company's stock incentive plans and related agreements. One Right will be distributed with each Common Share issued in connection with the Stock Split, which will be equal to the number of Common Shares owned of record at the close of business on the Record Date. One Right will continue to be issued with respect to each Common Share that shall become outstanding between the Record Date and the earliest of the Distribution Date, the Redemption Date and the Final Expiration Date. In certain circumstances, the Company may issue Rights with respect to Common Shares issued following the Distribution Date and prior to the earlier of the Redemption Date and the Final Expiration Date. The Company's Board of Directors has initially reserved 500,000 Preferred Shares for issuance upon exercise of the Rights, which number is subject to adjustment from time to time in accordance with the Rights Agreement.

The Rights have certain anti-takeover effects. The Rights will cause substantial dilution to a person or group that attempts to acquire the Company in a manner or on terms not approved by the

Board of Directors. The Rights, however, should not deter any prospective offeror willing to negotiate in good faith with the Board of Directors, nor should the Rights interfere with any merger or business combination approved by the Board of Directors of the Company prior to an Acquiring Person's acquiring 15 percent or more of the Common Shares.

The Amended and Restated Certificate of Formation (as amended from time to time, the "Certificate of Formation") and the Second Amended and Restated By-Laws (as amended from time to time, the "By-Laws") of the Company contain several provisions that may make the acquisition of control of the Company by means of a tender offer, open market purchases, proxy fight or otherwise more difficult. These provisions are expected to discourage certain types of transactions that may involve an actual or threatened change of control of the Company and to encourage persons seeking to acquire control of the Company to consult first with the Company's Board to negotiate the terms of any proposed business combination or offer. Takeovers or changes in the Board that might be proposed and effected without prior consultation and negotiation with the Board or the Company's management would not necessarily be detrimental to the Company and its shareholders. However, the Company nonetheless believes that the benefits of increased protection of the Company's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to take over or restructure the Company outweigh the disadvantages of discouraging such proposal, because, among other things, negotiation of such proposals could result in an improvement of their terms.

The Company has in place certain additional measures which could also be considered to have anti-takeover effects. The Company's Certificate of Formation and By-Laws (i) provide that the size of the Board will be fixed by resolution of the directors of the Company, (ii) provide that directors may be removed only with the approval of the holders of at least two-thirds of the combined voting power of the outstanding shares of the Company capital stock entitled to vote generally in the election of directors (the "Voting Stock"), (iii) provide that any vacancy on the Board may be filled by the remaining directors then in office, though less than a quorum, and (iv) authorize the Board to issue one or more series of preferred stock and to determine with respect to any such series the terms and rights thereof.

The foregoing is a summary of certain provisions in the Company's Certificate of Formation and By-Laws, and is qualified in its entirety by reference to the Certificate of Formation and By-Laws.

A copy of the Rights Agreement between the Company and the Rights Agent and the Certificate of Adjustment dated March 17, 2006 specifying the terms of the Rights, except for adjustments made in connection with the Stock Split, are filed as Exhibits 4.2 and 4.3, respectively, hereto and are incorporated herein by reference. The foregoing description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, except for the adjustments relating to the Stock Split which are discussed herein.

Item 2. Exhibits

4.1 Certificate of Adjustment dated as of June 25, 2008, delivered pursuant to the Rights Agreement by and between the Company and Continental Stock Transfer & Trust Company (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed June 25, 2008).

4.2 Rights Agreement, dated effective October 18, 2002, between Atwood Oceanics, Inc. and Continental Stock Transfer & Trust Company, which includes as Exhibit B thereto the Form of Right Certificate. (Incorporated by reference from Exhibit 4.1 to Form 8-A filed October 21, 2002).

4.3 Certificate of Adjustment dated as of March 17, 2006, delivered pursuant to the Rights Agreement by and between the Company and Continental Stock Transfer & Trust Company (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed March 17, 2006).

99.1 Proposed Letter from John R. Irwin, President of the Company, to shareholders of the Company. (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, filed June 25, 2008.)

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereto duly authorized.

ATWOOD OCEANICS, INC.

Dated: June 25, 2008

By: /s/ James M. Holland

James M. Holland
Senior Vice President

INDEX TO EXHIBITS

Exhibit Description

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