UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

Form 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 31, 2005

Bimini Mortgage Management, Inc.

(Exact Name of Registrant as Specified in Charter)

Maryland (State or Other Jurisdiction of Incorporation) **001-32171** (Commission File Number)

72-1571637 (IRS Employer Identification No.)

3305 Flamingo Drive, Vero Beach, Florida 32963 (Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code (772) 231-1400

N/A

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 7.01. Regulation FD Disclosure

On May 31, 2005, Bimini Mortgage Management, Inc. issued a press release to announce that its Board of Directors had declared a cash dividend of \$0.40 per share of Class A and Class B Common Stock for the quarter ending June 30, 2005, payable on July 8, 2005 to stockholders of record on June 23, 2005.

A copy of the press release is furnished as Exhibit 99.1 to this report.

ITEM 9.01. Financial Statements and Exhibits

- (c) Exhibits
- 99.1 Press Release dated May 31, 2005

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 31, 2005 BIMINI MORTGAGE MANAGEMENT, INC.

By: /s/ Jeffrey J. Zimmer

Jeffrey J. Zimmer Chairman, Chief Executive Officer and President



BIMINI MORTGAGE MANAGEMENT, INC. DECLARES \$0.40 SECOND QUARTER 2005 CASH DIVIDEND

VERO BEACH, Fla. (May 31, 2005) — Bimini Mortgage Management, Inc. (NYSE:BMM), a real estate investment trust that invests primarily in residential mortgage-related securities, today announced that its Board of Directors has declared a regular quarterly cash dividend of \$0.40 per share on the Company's Class A and Class B Common Stock for the quarter ending June 30, 2005. The dividend is payable July 8, 2005, to stockholders of record on June 23, 2005.

The Board of Directors estimates that this dividend will be paid entirely from taxable earnings. Based on the Company's current earnings estimates, taxable income for the second quarter of 2005 is expected to be about \$0.02 per share more than income as computed in accordance with generally accepted accounting principles. As of May 31, 2005, no capital gains or losses have been recorded for the quarter.

Chief Executive Officer, Jeffrey J. Zimmer, said in a statement that "the Board is pleased to be able to continue paying out dividends at these current attractive levels.

"The Company completed investing the proceeds of our Bimini Capital Trust I offering, and total assets as of May 31, 2005, are approximately \$4 billion. We have positioned the portfolio to protect book value in a rising rate environment while still achieving good rates of return for our shareholders. Balancing these two objectives continues to be our primary goal. Yet, continued increases in the Federal Funds rate will inevitably put pressure on earnings to the extent that our funding rates increase faster than the income on our adjustable rate mortgage assets."

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Bimini Mortgage Management, Inc. invests primarily in residential mortgage-related securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). It earns returns on the spread between the yield on its assets and its costs, including the interest expense on the funds it borrows.

This news release contains forward-looking statements made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. The reader is cautioned that such forward-looking statements are based on information available at the time and on management's good faith belief with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statements. Important factors that could cause such differences are described in the Company's periodic filings with the Securities and Exchange Commission, including the Company's registration statements on Form S-11 and quarterly reports on Form 10-Q. The Company assumes no obligation to update forward-looking information to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information.

Contact: Robert E. Cauley

Chief Financial Officer (772) 231-1400 www.biminireit.com

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