

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On February 2, 2010, the Board of Directors (the “Board”) of Gyrodyne Company of America, Inc. (the “Company”) approved amendments to the Company’s Incentive Compensation Plan originally adopted on June 25, 1999 (the “Plan”). The amendments are set forth in an Amended and Restated Incentive Compensation Plan dated as of February 2, 2010, a copy which is filed herewith as Exhibit 10.1 and incorporated by reference herein (the “Amended Plan”). The Board approved the Amended Plan to better align the interests of the participants in the Amended Plan with those of the Company’s shareholders as the Company pursues its strategic plan to position itself over a reasonable period of time for one or more liquidity events that will maximize shareholder value. The Amended Plan provides for, among other things:

Payments Resulting from Distributions to Shareholders Following Asset Dispositions. If the Company receives proceeds from the disposition of assets during any twelve-month period in an aggregate dollar amount greater than or equal to 15% of the total gross fair market value of all the assets of the Company immediately before such dispositions, and within twelve months following the last disposition the Company distributes to shareholders an amount that exceeds income from operations (an “Excess Dividend”), the Company will pay Amended Plan participants an aggregate amount equal to the Excess Dividend per share multiplied by the number of ICR Units in the Amended Plan, currently 110,000 (the “Disposition Dividend”); provided that the Disposition Dividend may not exceed the aggregate amount of payments under the Amended Plan that would have been paid had there been a change-in-control consummated on the date of the payment of the Disposition Dividend. This change was made to encourage management and the Board to consider asset dispositions followed by distributions of proceeds that are in the best interests of the Company’s shareholders but which would otherwise result in a reduction of potential benefits under the Amended Plan.

Vesting. The rights of all Amended Plan participants will immediately vest with respect to their percentage benefit allocations. As originally adopted, Plan participants would not vest until the closing of a change-in-control transaction.

New Participants. As originally adopted, the economic benefit payable to a participant upon a change-in-control transaction was calculated without regard to when an individual became a participant, i.e., such participant’s Plan payment would be equal to the spread between the Company’s stock price at the time of the change-in-control transaction and the stock price at Plan adoption, multiplied by the number of units in the Plan, and then multiplied by such participant’s individual percentage allocation of Plan dollars. As amended, for any individual who becomes a participant after December 31, 2009, the average closing market price of the Company’s stock on the Nasdaq Stock Market for the ten trading days ending on the trading day prior to the date of participation will replace the stock price at Plan adoption in 1999 for the calculation of benefits.

Terminated Employees and Directors. For any Amended Plan participant who is no longer an employee or director on the date of a payment event, the lesser of (i) the transaction date stock price, or (ii) the average closing market price of the Company’s stock on the Nasdaq Stock Market for the ten trading days ending on the trading day prior to the date of departure of the withdrawn participant will replace the transaction date price in the calculation of benefits.

Death. Any participant who dies prior to the occurrence of a payment event will be treated as a terminated employee or director and, accordingly, receive payment upon the occurrence of such payment event. Previously, the Plan provided that the estate of the decedent would receive payment within 60 days following death as if a change-in-control transaction had occurred on the date of death.

The individual percentage allocations for current participants, including the Company's named executive officers, are set forth in the chart in Section 5 of the Amended Plan, attached as Exhibit 10.1 hereto

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

Exhibit No.Exhibit

10.1 Amended and Restated Incentive Compensation Plan dated as of February 2, 2010.

SIGNATURE

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.

GYRODYNE COMPANY OF AMERICA, INC.

By: /s/ Stephen V. Maroney
Stephen V. Maroney
President and Chief Executive Officer

Date: February 8, 2010