



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3030

March 31, 2009

VIA U.S. MAIL and FACSIMILE

Gary D. Owens
Chairman of the Board, President and Chief Executive Officer
Oyo Geospace Corporation
7007 Pinemont Drive
Houston, Texas 77040-6601

**Re: Oyo Geospace Corporation
Form 10-K for the fiscal year ended September 30, 2008
Filed December 4, 2008
File No. 1-13601**

Dear Mr. Owens:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended September 30, 2008

Cover Page

1. We note you use file number 333-36727 on the cover pages of your Forms 8-K and when submitting your periodic and current reports on EDGAR, rather than 001-13601 which is the file number associated with your Form 8-A filed on November 12, 1997 and disclosed on the cover pages of your Forms 10-Q and 10-K. Please clarify why you use this number for your Form 8-K filings and how you intend to address this concern in future filings.

Item 11. Executive Compensation, page 29

2. We note your statements on page 14 of the definitive proxy statement that you incorporated by reference into your Form 10-K that you do not benchmark total compensation received by any executive officer to packages received by executive officers at peer companies, but that you that you use information about compensation paid to executive officers at peer companies in your industry in order to “maintain a reasonable compensation package for each executive officer,” and “to retain incentives for such officer to continue to improve the Company’s performance in the future.” We further note your statement on page 16 that you increased base salaries for your chief executive officer, chief technical officer, and chief financial officer in 2008 “in order to retain Messrs. Owens, Sheen and McEntire following the compensation committee’s evaluation of the peer company data,” and on page 17 that the base salary increase of 10% for these officers in 2008 was based on the compensation committee’s evaluation of the peer company data. Based on these statements, it appears that you *do* use benchmarks in making executive compensation decisions. Please clarify in future filings the extent to which compensation decisions are derived from a comparison to peer companies. Specifically, please expand your disclosure to provide a discussion of what salary range and equity compensation levels you target at benchmarked companies, where actual payments and awards fall within this targeted range, and to the extent that actual compensation was outside of this range, an explanation of the reasons for this. Refer to Item 402(b)(2)(xiv) of Regulation S-K.
3. We note from your discussion under “Annual Performance Bonuses” on page 16 of your proxy statement that your annual cash bonus program sets forth “various targets and criteria for the Company’s operating performance and established a cash bonus, assessed on an individual basis, for employees” and that the financial targets are “designed to provide incentives for the employees to work as a team to improve our financial results,” but you have not disclosed the specific targets to be achieved in order for your named executive officers to earn their respective annual cash incentive payments under The 2008 Bonus Plan. Please provide such

disclosure in your future filings, as applicable. In this regard, also tell us whether named executive officers are eligible to participate in the Tier II bonus pool. If so, the performance targets associated with awards from the Tier II pool should also be disclosed. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

4. We note in the summary compensation table on page 18 of your proxy that you have not listed any compensation as non-equity incentive plan compensation. Please tell us how you have determined that the bonus amounts payable are not being paid under a plan, as it appears you have criteria for these bonus amounts as disclosed in the first full paragraph on page 16. Please see Item 402(a)(6)(ii) and Question 119.02 of the Questions and Answers of General Applicability available on our web site. If the amounts paid to your named executive officers as bonuses should be disclosed in future filings under the caption "Non-Equity Incentive Plan Compensation" in your Summary Compensation Table pursuant to Item 402(c)(2)(vii) of Regulation S-K rather than under the caption "Bonus" (refer also to Item 402(a)(6)(iii)), the threshold, target and maximum amounts related to those awards should also be disclosed in your "Grants of Plan Based Awards" table pursuant to Item 402(d)(2)(iii) of Regulation S-K.

Item 12 Securities Ownership of Certain Beneficial Owners and Management, page 29

5. We note your disclosure in footnote 1 on page 12 of the definitive proxy statement that you incorporated by reference into your Form 10-K. Please identify in future filings the individual with beneficial ownership over the shares held by Oyo Corporation and Oyo Corporation U.S.A. Also, please clarify whether Oyo Corporation U.S.A. is the same entity as OYO U.S.A. described on page 29. Tell us why you have not included the shares held by these entities in the beneficial ownership of Mr. Kobayashi or Mr. Still who appear to be executive officers of these entities.

Item 13. Certain Relationships and Related Transactions, page 29

6. Please tell us why you have not disclosed the details of the transactions between Mr. Still and his prior law firm as required by Item 404(a) of Regulation S-K. Please cite any authority upon which you rely.
7. Please reconcile your disclosure on page 24 where you indicate that sales to Oyo Corporation and other affiliated companies were approximately \$.1 million during fiscal 2008 of the definitive proxy statement that you incorporated by reference into your Form 10-K with Note 12 to your financial statements on page F-25 of your Form 10-K, which indicates that sales to Oyo Japan and other affiliated companies were approximately \$.8 million during fiscal 2008.
8. We note that you state in the last paragraph in this section that you do not “have a formal, written policy with respect to related persons transactions.” Please tell us how that satisfies the requirements of Item 404(b) of Regulation S-K and how you intend to address this concern in future filings.

Evaluation of Disclosure Controls and Procedures, page 27

9. We note your disclosure that your chief executive officer and chief financial officer concluded that your disclosure controls and procedures were effective “in ensuring that all material information required to be filed in this annual report has been made known to them in a timely fashion.” If you elect to include any qualifying language as to the effectiveness conclusion, in your future filings such language should include, at a minimum, but only if true, that your officers concluded that your disclosure controls and procedures are effective to ensure that information required to be disclosed by you in reports that you file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to your management, including your principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. See Exchange Act Rule 13a-15(e). Alternatively, if true, your disclosure could simply indicate that your officers determined that your “disclosure controls and procedures are effective” without any further qualifications or attempts to define those disclosure controls and procedures.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please submit your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Jay Webb, Staff Accountant, at (202) 551-3603 or Angela Crane, Accounting Branch Chief, at (202) 551- 3554 if you have questions regarding comments on the financial statements and related matters. Please contact Mary Beth Breslin at (202) 551-3625 or me at (202) 551-3637 if you have questions on other comments.

Sincerely,

Jay Mumford
Senior Attorney