



DIVISION OF
CORPORATION FINANCE

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

January 22, 2015

Harvey Klebanoff
Principal Financial Officer
Zero Gravity Solutions, Inc.
190 NW Spanish Rive Blvd.
Boca Raton, FL 33431

Re: Zero Gravity Solutions, Inc.
Form 10-12G
Filed December 29, 2014
File No. 000-55345

Dear Mr. Klebanoff:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

General

1. Please be advised that your registration statement will automatically become effective 60 days after filing. Upon effectiveness, you will become subject to the reporting requirements of the Securities Exchange Act of 1934, even if we have not cleared comments. In the event it appears that you will not be able to respond by the 60th day, you may wish to consider withdrawing your registration statement and refiling when you have cleared all of our comments.

Item 1. Business, page 3

2. Please disclose here the fact that your independent auditor's report expresses substantial doubt about your ability to continue as a going concern.

3. Please revise to include a detailed plan of operations for the next twelve months. In the discussion of each of your planned activities, include specific information regarding each material event or step required to pursue each of your planned activities, including any contingencies such as raising additional funds, and the timelines and associated costs accompanying each proposed step in your business plan so that an investor can get a clearer understanding. Include a brief summary of your timeline and budget in your summary.

BAM-FX, page 5

4. We note your disclosure that crops created with BAM-FX are not categorized as GMOs. Please describe the significance to you. In addition, based on your disclosure on pages 11 and 13, clarify, if true, that BAM-FX is a formulation of copper and zinc.
5. Please clarify whether any aspects of Directed Selection research can only be conducted in space.

BAM-FX Trials, page 5

6. With a view toward disclosure, please provide the following information with respect to each of the disclosed trials, studies and tests involving your products so that readers may understand the quality of the research that was conducted. For example, tell us:
 - Who conducted the studies and their qualifications;
 - Who funded the research;
 - The sample size of the studies such as number of wheat seeds or potato plants used;
 - Whether the research and results were replicated and how many times;
 - Any quality controls used with respect to the research methods;
 - Whether the results indicated statistically significant differences; and
 - Whether the research results were peer reviewed or independently verified and if so, the qualifications of such persons.
7. Please expand your discussion to provide more insight with respect to each research result, providing quantitative as well as qualitative disclosure. For example, disclose in further detail what is meant by:
 - “improved germination and viability;”
 - “improved plant nutrient status;”
 - “[s]eeds treated with BAM-FX developed significantly greater roots and root hairs (capillary roots), compared to fertilizer or water-only controls.”
 - “less aggressive root structure;”
 - “resulting seedlings had greater leaf surface area compared to height for BAM-FX group, compared to “leggier” control plants receiving NPK fertilizer or water only;”

- “[p]lants receiving BAM-FX with full fertilizer rate tended toward less leaf width and overly tall, weaker plants;”
- “earlier sprout emergence and greater vegetative growth, as measured by leaf and stem biomass;”
- “BAM-FX was found to accelerate plant development;”
- “[b]roccoli showed the clearest advantage with BAM-FX;”
- “raspberry plant growth was visibly increased after BAM-FX foliar spray, as evidenced by greater early season row closure;”
- “root growth was increased, crown junctions between roots and stems/leaves were thicker, and plants generated more leaves;” and
- “spinach that received BAM-FX had longer, thicker roots, and larger leaves...Biomass was increased.”

Similarly, provide further detail with respect to the results from the internal academic and end-user (growers) field studies discussed at the bottom of page 18.

Internal Studies, page 6

8. Please revise to provide legible graphics on page 7. We note that the text accompanying the pictures is illegible.
9. Please refer to the text in “Figure 1” on page 7 and define “stolen growth” and “early tuber initiation.” Similarly, define “phytotoxicity” in the following section.

Directed Selection Research, page 10

10. We note your disclosure that “[a] series of space microgravity experiments were executed by means of six Shuttle flights to the ISS spanning from 2007 through 2011, linked to and supported by the NASA Space Act Agreement of ZGSI founder, Mr. John Wayne Kennedy.” Please disclose whether any agreements are currently in effect to permit your access to the ISS.
11. Please provide us copies of, or direct us to, the “multiple peer-reviewed publications and commercially viable products that are currently in later stages of development.”

Strategy for Growth, page 11

12. We note your disclosure that you have “received initial commercial orders from end users (growers) and distributors, which have been manufactured, invoiced and shipped.” Please disclose the approximate dollar amount and BAM-FX volume of the orders.
13. Please update your disclosure relating to the commencement of initial testing of BAM-FX in Chile.

Intellectual Property, page 13

14. It appears that you have pending patent applications and no patents granted at this time. If so, please make this clear in this section. Please also revise for consistency with your disclosure on page 4 that you acquired “certain patents and technologies” under the Patent Acquisition Agreement with John W. Kennedy.

Strategic Relationships, page 14

15. We note that your subsidiary ZGS UK signed a Memorandum of Understanding with International Institute of Tropical Agriculture. Please file this agreement as an exhibit to your registration statement and describe its material terms or tell us why you believe it is not necessary.

Item 2. Financial Information, page 16

Management’s Discussion and Analysis of Financial Condition and Results of Operation, page 16

Overview, page 16

16. We note your disclosure on page 17 that you will incur additional costs associated with operating as a public company. Please provide an estimate of these additional costs.
17. It appears that a fundamental aspect of your business plan is to conduct further research with respect to BAM-FX and Directed Selection. Please expand the Overview section to quantify the funds you will need to conduct the types of research that you have discussed in this filing.
18. Please revise to disclose whether you have taken any steps to seek additional financing you may need to obtain in connection with your continuing operations and that there is no guarantee that you will be able to obtain additional financing.

For the Year-Ended December 31, 2013, page 17

19. Please provide us with substantiation of the statement that “NASA has recognized the Company as a pathfinder company and has referred to the Company as a prime example of the value of the ISS for developing solutions for existing problems facing humanity on Earth.”

2015 Outlook, page 20

20. Please disclose the amount of time that your present capital will last at your current burn rate here. Please also revise to quantify, if possible, your expected near term and long term financing requirements that are necessary to continue operations.

Item 5. Directors and Executive Officers, page 21

21. Please discuss the specific experience, qualifications, attributes or skills of each director that led to the conclusion that the person should serve as a director. Refer to Item 401(e) of Regulation S-K.

Item 7. Certain Relationships and Related Transactions, and Director Independence, page 25

Certain Relationships and Related Transactions, page 25

22. Please address whether you have a policy for dealing with related party matters or conflicts of interest.

Item 10. Recent Sales of Unregistered Securities, page 26

23. Please identify the “third party” mentioned in subsections (4) and (5) of this section.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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.

Harvey Klebanoff
Zero Gravity Solutions, Inc.
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You may contact Steven Kim at (202) 551-3291 or Douglas Jones at (202) 551-3309 if you have questions regarding comments on the financial statements and related matters. Please contact Tonya K. Aldave at (202) 551-3601 or me at (202)551-3611 with any other questions.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Assistant Director

cc: Peter J. Gennuso, Esq.