

Mail Stop 3561

September 12, 2006

Via Fax & U.S. Mail

Mr. Geoffrey F. Feidelberg
Chief Financial Officer
COMPUDYNE CORPORATION
2530 Riva Road, Suite 201
Annapolis, Maryland 21401

Re: CompuDyne Corporation
Form 10-K for the year ended December 31, 2005
Filed March 28, 2006
File No. 0-29798

Dear Mr. Feidelberg:

We have reviewed your filing and have the following comments. 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

FORM 10-K (Fiscal Year December 31, 2005)

Management's Discussion and Analysis

Results of Operations

Years Ended December 31, 2005 and 2004, page 15

1. For each period in which statements of operations are presented, please expand the disclosures for each segment to provide a discussion of the segment's profitability measure as used by the chief operating decision maker. It is unclear from your MD&A disclosure if gross profit, stated as a percentage under the discussion of cost of goods sold, represents the segment profitability measure. Further, as your segment footnote to the interim financial statements of the March 31, 2006 Form 10-Q includes 'pre-tax income (loss)' by segment, rather than 'gross profit,' clarity should be provided within MD&A and the SFAS No. 131 footnote to disclose which measure is the SFAS No. 131 segment profitability measure. Revise or expand, as appropriate. Please note that, if pre-tax income (loss) by segment represents your SFAS No. 131 segment profitability measure, we will not object if you elect to also discuss segment gross profit in MD&A.
2. See your discussion of 'Revenues from the Attack Protection segment.' With regards to the 2002 purchase of an existing 75,000 square foot factory for use in this segment, we note you appeared to have excess capacity throughout 2002, 2003, and 2004 whereby anticipated increase in demand of your products did not materialize. Please disclose the impact this has had on your segmental results of operations and profitability measure, such as existing revenues not absorbing the depreciation and interest expense costs associated with the facility. Describe your plans, if any, for use of the excess capacity, similar to your discussion under 'Cost of goods sold in the Attack Protection segment' for the fiscal year 2004 versus 2003 period. Also, your disclosures should address whether and how you have evaluated this facility for impairment of long-lived assets.

Taxes on Income, page 18

3. Describe the nature and resolution of the 'uncertain tax positions' that resulted in a previously recorded reserve of \$500,000 that was subsequently reversed in fiscal 2005. In this regard, explain the facts that led you to believe that the reserve was no longer needed. Similarly, we note you recorded \$200,000 in tax reserve reversals in the first quarter of fiscal 2006. Please explain to us the nature of the uncertain tax positions and your methodology for estimating your tax accrual. If the impact of the adoption of FASB Interpretation No. 48 is expected to have a material impact upon your financial statements, appropriate disclosures should be provided.

Liquidity and Capital Resources, page 22

4. Item 303 of Regulation S-K requires that purchase obligations be included in the tabular disclosure of contractual obligations. Purchase obligations are defined as agreements to purchase goods or services that are enforceable and legally binding on the registrant and that specify all significant terms. Accordingly, it appears to us that the purchase obligations described in the first paragraph of page 23 should be included in your table. Please revise or specifically cite the clause or exemption that permits their exclusion.

Critical Accounting Policies and Estimates, page 25

5. Please expand the discussion of revenue recognition to describe how the revenue has been categorized within the two sources as shown on the face of the statements of operations. For example, explain the source and nature of the statements of operations line item 'other revenue.' In this regard, if revenues from services is 10% of revenues or more, it should be separately disclosed on the face of your income statement in accordance with Rule 5-03(b)(1)(d) of Regulation S-X.
6. We assume that substantially all of your arrangements to deliver software or a software system require significant production, modification, or customization of software and are accounted for as long-term contracts under ARB 43, ARB 45 and/or SOP 81-1. If our assumption is not correct, and if significant revenues are earned from activities that fall within the scope of SOP 97-2, please expand your revenue recognition discussions to also address these activities. This comment applies to the disclosures in your accounting policies footnote as well.
7. If contract modifications (change orders) or contract terminations have had a material impact upon your profitability, please expand your disclosures to describe the nature of these transactions and to explain how you account for them.

Financial Statements

Note 2. Earnings Per Share, page 41

8. Please further explain, supplementally and in your footnotes, the nature of the "contingent participation rights" associated with the 2011 notes. Specifically, indicate the date upon which the fair value of common stock must be measured in order to determine whether the contingency criteria have been met. We assume that the ability to declare and distribute dividends equal to the fair value of common shares is determined without regard to the participation rights of the convertible notes. Please confirm or advise, supplementally. Please tell us whether dividend restrictions resulting from debt covenants are considered when measuring your ability to declare and distribute dividends. In addition, tell us whether the criteria would be met if your undistributed earnings for the period technically met the significance threshold but the company elected not to declare or distribute any dividends to common shareholders for business

reasons. Finally, please tell us how and when the related note agreement was filed and cite the specific section of the agreement that describes these contingent participation rights or provide us with a copy of that section with your response. We may have further comments upon review of your response.

Note 8. Goodwill, page 44

9. We note the changes in the operating results and backlog of the Public Safety and Justice segment in fiscal 2005 and in fiscal 2006, to date. Please tell us more about the facts and circumstances that caused these changes to occur and discuss your current expectations for this segment. Discuss the consideration given to the recoverability of goodwill, intangibles and other long-term assets within the segment. Disclosures of conditions and trends relating to this operating segment within your filings should be expanded on an ongoing basis as well, to the extent applicable.

Note 11. Notes Payable and Line of Credit, page 46

10. See your discussion paragraph with respect to amortization of the underwriters' discount on the 2011 Notes. Disclose whether or not the straight-line method of amortization materially differs from the effective interest method. We refer you to paragraph 15 of APB 21.

Note 20. Selected Quarterly Financial Data, page 55

11. Item 302 (a) (3) of Regulation S-K requires that the aggregate effect and nature of any year-end or other adjustments that are material to the results of that quarter be described in accompanying footnotes to your Quarterly Financial Data tables. Please tell us whether and how the fiscal 2004 adjustments disclosed in Items 2 and 3 on page 58 have been described and quantified in this section and elsewhere in the filing.

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 filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the

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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 Ms. Beverly A. Singleton, Staff Accountant, at (202) 551-3328 or Ms. Margery Reich, Senior Staff Accountant, at (202) 551-3347 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3211 with any other questions.

Sincerely,

David R. Humphrey
Branch Chief