

Mail Stop 4561

December 31, 2008

Kevin C. Burns  
Chief Financial Officer  
AMICAS, Inc.  
20 Guest Street, Suite 400  
Boston, MA 02135

**Re: AMICAS, Inc.  
Form 10-K for Fiscal Year Ended December 31, 2007  
Filed March 17, 2008  
Definitive Proxy State on Schedule 14A  
Filed April 29, 2008  
Form 10-Q for Fiscal Quarter Ended September 30, 2008  
Filed November 7, 2008  
Form 8-K Filed November 4, 2008  
File No. 000-25311**

Dear Mr. Burns:

We have reviewed the above-referenced filings and have the following comments. If indicated, we think you should revise your document 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 supplemental 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 filings. 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.

Form 10-K for Fiscal Year Ended December 31, 2007

Item 1. Business, page 1

1. We note that although you rely on surveys and reports to describe the healthcare market, you have not consistently identified the entity responsible for the data

- cited or provided the publication date. As examples, see the reference to “a survey” in the first paragraph on page 3, the data cited in the fourth paragraph on page 3 and the data attributed to “industry experts” in the first paragraph on page 4. In future filings, please include relevant identification and publication information.
2. In future filings, please distinguish more clearly between existing offerings and planned or future offerings. For instance, we note that you have included in the list of presumably existing Vision Series Products on page 6 a description of the Vision Series Financials. However, you also include a description of Vision Series Financials on page 7, which clearly indicates that the product is currently under development and is not anticipated to be generally available until the first half of 2008. In addition, you include a list of existing and potential offerings on page 8, without distinguishing between the two types.

Competition, page 9

3. We note that your discussion of the competitive conditions in your industry does not include a discussion of your competitive position relative to those of your competitors. Moreover, your disclosure should include a discussion of the positive and negative factors pertaining to your competitive position as well as a discussion of the advantages and disadvantages of your principal products and/or services to the extent known. In future filings, please provide expanded disclosure consistent with the requirements of Item 101(c)(1)(x) of Regulation S-K.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 30

4. We note your overview provides little information regarding how management evaluates the company’s performance. In future filings, please consider revising your overview section to provide a more informative executive level discussion that addresses how management evaluates your financial condition and operating results. An expanded overview could include, for example, a more detailed look at how you earn revenue, your prospects for future growth, material opportunities, and any known trends, demands, commitments, or uncertainties. See SEC Release No. 33-8350 for additional guidance. Note that this comment also relates to the Form 10-Q for the fiscal quarter ended September 30, 2008.

Results of Operations, page 31

5. Throughout the results of operations, you describe factors that contributed to a material change in revenue without quantifying each factor. For instance, in your discussion of maintenance and service revenues in the first full paragraph, you disclose that revenues increased in 2007 by \$1.9 million, primarily because of a \$1.4 million increase due to new customers and associated maintenance revenue offset by customer attrition; however, you do not quantify each component of the increase or the offsetting amounts. Additionally, in the third paragraph of this section you indicate that software license and system revenues decreased in 2007 by \$0.5 million and \$1 million, respectively. You further disclose that these decreases are due to pricing pressures, decreasing volume, and other factors, which are not quantified. In future filings, please quantify the impact of each factor that you discuss with respect to material changes in revenue.
6. We also note that you do not appear to have discussed the underlying reasons for period over period changes. For example, as noted above, you disclose that decreases in software license and system revenues in fiscal 2007 were due to pricing pressures, decreasing volume, and other factors. You should also include a discussion of the business conditions that explain why software discounting increased, contract terms were changed, or volume was reduced. In future filings, please expand your disclosure to discuss the driving factors and any material trends or uncertainties that have had or you believe will have a material favorable or unfavorable impact on revenues. See Item 303(a)(3)(ii) of Regulation S-K.
7. We note that you experienced an increase in maintenance and services revenues in fiscal 2007 as compared to fiscal 2006. Where you experience material increases in revenues, you should provide a discussion of the extent to which such increases are attributable to increases in prices or to increases in volume or to the introduction of new products and services. See Item 303(a)(3)(iii) of Regulation S-K. In addition, the decreases in software license and system revenue appear to constitute a material trend that should also be discussed in Management's Discussion and Analysis.

Liquidity and Capital Resources, page 36

8. We note from your discussion of software license and system revenues on page 31 that you changed your contract terms in fiscal 2007 to include extended payment terms. Please tell us what consideration you gave to addressing the impact of this factor on your operating cash flows pursuant to Section IV.B.1 of SEC Release 33-8350.

Item 8. Financial Statements and Supplementary Data

Consolidated Statements of Operations, page F-4

9. We note that you recognize revenue using contract accounting. Please tell us whether this revenue is reported within product revenue, service revenue, or allocated to both using some allocation method. Additionally, please explain what consideration you gave to disclosing where this revenue is reported and, if applicable, the basis for allocation between product and service revenue.

C. Summary of Significant Accounting Policies

Revenue Recognition, page F-8

10. Please explain to us how you considered paragraph 28 of SOP 97-2 with respect to arrangements that contain extended payment terms. As part of your response, please tell us how your revenue recognition policy addresses arrangements that include extended payment terms.
11. We note you recognize revenue under SOP 81-1 for arrangements that include services essential to the functionality of the software. Please tell us how your revenue recognition policy addresses the disclosure requirements of the SOP for such arrangements.
12. We note that your risk factors indicate you have adjusted your strategy to offer a higher percentage of your products and services using subscription pricing and/or application service provider arrangements. Please explain to us how your revenue recognition policy addresses these types of arrangements.

Exhibits 3.1 and 3.2

13. We note that you have included the certifying officers' titles in the lead sentence to the certifications. Please note that the certifications may not be changed in any respect from the language of Item 601(b)(31) of Regulation S-K, even if the change would appear to be inconsequential in nature. See Section II.B.4 of SEC Release No. 34-46427. Please confirm that you will conform your disclosures in future filings. Note that this comment also relates to the Form 10-Q for the fiscal quarter ended September 30, 2008.

Definitive Proxy Statement on Schedule 14A

Certain Relationships and Related Transactions, page 9

14. Although you indicate that you had no reportable related transactions in fiscal 2007, you have not included a description of your policies and procedures for the review, approval or ratification of any such transactions. Please tell us whether you have such policies and procedures and whether they are in writing. Please confirm that you will include disclosure responsive to Item 404(b) of Regulation S-K in future filings.

Compensation Discussion and Analysis, page 11

15. Please tell us how you determined that you have included in your executive compensation discussion all of the persons covered pursuant to Item 402(a)(3)(iii) of Regulation S-K. In your response, please specifically address whether any officer(s) not named in the summary compensation table is a vice president in charge of a principal business unit, division or function (such as sales, administration or finance) or is an officer or person who performs a policy making function. See Exchange Act Rule 3b-7.
16. Your Compensation Discussion and Analysis does not include in the narrative discussion information concerning Messrs. Hill and McClennen, both of whom are listed in the summary compensation table. The Compensation Discussion and Analysis should be of the information contained in the tables and otherwise disclosed under Executive Compensation. See Instruction 2 to Item 402(b) of Regulation S-K. Please tell us how you determined that disclosure in Compensation Discussion and Analysis for Messrs. Hill and McClennen is not required.
17. You state on page 12 that compensation is based in part on individual performance, and on page 15 that your compensation policies are “designed to retain and motivate our Named Executive Officers and to ultimately reward them for outstanding individual and corporate performance.” However, you have not discussed the compensation committee’s assessment of individual performance for fiscal 2007 for any named executive officers. To the extent your compensation is based in any part on individual performance, the elements of individual performance should be described. See Item 402(b)(2)(vii) of Regulation S-K.

18. Please tell us whether any executive officer, including the chief executive officer, has a role in determining compensation for other executive officers or for himself. To the extent any executive officer has a role in determining executive compensation, this should be disclosed in future filings. See Item 402(b)(2)(xv) of Regulation S-K.

Compensation Elements and Purpose, page 12

19. We note your statement that you intend to bring base salaries and total executive compensation in line with approximately the fiftieth to one hundredth percentile of Health Care Information Technology (HCIT) companies with annual revenues and a market capitalization similar to your own. As it appears you engage in benchmarking compensation, you should disclose the component companies of the benchmark and provide a concise discussion of how the comparative compensation is used, including the nature and extent of any discretion the compensation committee retains. See Item 402(b)(2)(xiv) of Regulation S-K and Question 118.05 of Division of Corporation Finance's compliance and disclosure interpretations of Regulation S-K for more information. Please confirm that you will provide conforming disclosure in future filings.

Compensation Components, page 13

20. We note that you have not disclosed the specific percentile at which base salary for each named executive officer was benchmarked for 2007 nor have you included a discussion of why the salary for each named executive officer was set at the specific amount. Please provide us with this information and confirm that you will provide conforming disclosure in future filings. See Item 402(b)(1)(v) of Regulation S-K.
21. We note that you have not disclosed the annual corporate performance targets (i.e., revenues, sales orders and operating income) nor have you disclosed the quarterly sales order targets on which annual and quarterly cash bonuses are based. If you have omitted performance targets in reliance upon Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a reasonably detailed analysis supporting your conclusion that disclosure of the performance targets would cause you competitive harm.
22. You have provided limited information concerning the degree of difficulty with which the undisclosed performance targets may be achieved, disclosing only whether or not performance targets were achieved, or if only in part, the compensation corresponding to that achievement for 2006 and 2007. In future filings please enhance your discussion of the degree of difficulty that you expect

will be experienced in achieving undisclosed performance targets. For example, provide a more thorough historical assessment of the predictability of achievement of performance objectives and the relation between historical and future achievement. This will provide investors with a better understanding of the arduousness or ease associated with achievement of the undisclosed target levels. For each of the performance bonuses, please discuss how the maximum compensation levels for the named executive officers for 2007 and 2008, as disclosed in the table on page 20, were determined.

Form 10-Q for Fiscal Quarter Ended September 30, 2008

Part I. Financial Information

Item 1. Financial Statements (unaudited)

G. Fair Value Measurements, page 13

23. We note you combine cash and cash equivalents with marketable securities for purposes of disclosing the level within the fair value hierarchy used to measure these instruments. Please tell us how you considered paragraph 32 of SFAS 157.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies, page 17

24. We note there has been a significant decline in your market capitalization since your fiscal year end. Please explain to us how you considered whether or not such a decline was a triggering event requiring you to reassess your goodwill for impairment pursuant to paragraph 28 of SFAS 142. As part of your response, tell us what other factors you considered at September 30, 2008 in concluding an interim goodwill impairment test was not required as well as what consideration you gave to enhancing your risk factors and critical accounting policies related to the valuation of your goodwill.

Form 8-K Filed November 4, 2008

Exhibit 99.1

25. Please revise your disclosures in future filings to remove the reference to "pro forma" when describing your non-GAAP EBITDA measure. "Pro forma" has a different meaning as defined by generally accepted accounting principles and SEC rules that is significantly different than your presentation.

\* \* \* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. If you amend your filings, you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter that keys your response to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing any amendment and your response 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 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.

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.



Kevin C. Burns  
AMICAS, Inc.  
December 31, 2008  
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You may contact Jennifer Fugario, Staff Accountant, at (202) 551-3482, or Mark Shannon, Staff Accountant, at (202) 551-3299 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Kevin Dougherty, Law Clerk, at (202) 551-3271 or Maryse Mills-Apenteng, Staff Attorney, at (202) 551-3457. If you need further assistance, you may contact me at (202) 551-3451.

Sincerely,

Mark Kronforst  
Accounting Branch Chief