


AMERICAN UNIVERSITY OF ARMENIA
College of Business and Management

MEMORANDUM

TO: Members of the Computer Advisory Committee
Ara Arabyan
Ruben Karapetian
David Livingston
Igor Mktumian
Tigran Nazarian
Virgil Strohmeyer

FROM: Allen G. Greenwood, Chair 

DATE: July 15, 1993

SUBJECT: Minutes of the 7/13/93 meeting of the AUA Computer Advisory Committee

The fourth meeting of the AUA Computer Advisory Committee (CAC) was held Tuesday, July 13, 1993, from 2 until 4:30 p.m. All members were in attendance except Ara Arabyan. David Livingston was introduced and welcomed as a member of the committee.

The minutes of the July 6, 1993 meeting were approved.

Igor presented the inventory of the donated software that was received on the last UAF flight. Although there were nearly 60 different pieces of software on over 200 diskettes (including multiple copies), most of the software is very outdated and of little value to the university, other than for reusing the diskettes. The committee feels donated material should be better screened in the U.S. to avoid shipping unneeded items to Armenia. A similar issue, regarding library books, was raised during a general faculty meeting held earlier this year. It is the belief of the committee that if the AUA is trying to build an image as the leading institution in the region, it should only propagate the latest technology. This philosophy should be explained to potential donors.

Allen indicated that Stepan Karamardian had phoned Michael Kouchakdjian on Monday to put together a "wish list" of equipment for the College of Business and the CBRD. Apparently there are some unused funds, approximately \$55,000, that if not spent would be lost. Stepan needed the information faxed back the same day. Allen felt uncomfortable making any recommendations because this was one of the main charges of this committee and currently the primary focus of its work. He also felt such a decision should not be done hastily and certainly should involve the entire university. David Livingston said he had also been asked the same thing by Michael and offered similar advice. Allen checked with George Gibson and he knew nothing of this matter. Also, no one had received any information from Armen Der-Kiureghian, to whom President Agabian has given overall responsibility for computers. Therefore, since it seemed unlikely the university would be engaging in such a decision without input from this committee, the item was not considered further -- the most effective way to spend additional funds for computing will be the subject of a report to be issued by the committee in a few weeks.

Much of the meeting focused on a discussion of the computing needs of the AUA, in preparation for developing recommendations on how additional funds for computing should be spent. While the following ideas are not yet finalized, they will be a part of the recommended list of items to purchase with additional funds.

The inventory of spares and supplies must be increased. The university should have spare monitors (less than \$200 for a B&W monitor, \$350 for color). Not only could a computer continue to be used when the monitor fails, visiting faculty with their own notebooks or laptops could greatly enhance their computing environment with a monitor. There should also be spare keyboards (approx. \$30), hard disks, and SIMMs (approx. \$35/MB). Ribbons (approx. \$2.50 each) and print cartridges should be more readily available (it was

recommended that refurbished print cartridges should not be used here; despite the lower cost, about 1/3 do not work).

All 286's should be upgraded to 486s because they either will not run current software or run it poorly. David Livingston indicated a 486 motherboard with a 486DLC 33 MHz chip and co-processor only costs about \$360.

The AUA should move towards standardization in hardware and software -- more on the software issue later.

David suggested the AUA consider moving away from machines with floppy drives or at least have locked drives, once the network is in place, to enhance security and reduce the exposure to viruses.

Aragast Corp. will start producing UPSs in about a week. A 600VA unit that will run three computers for up to four hours (running on three car batteries) will cost between \$200 - 300. This sounds like a very good deal. Igor and David will visit Aragast and evaluate the equipment further. David also suggested this type not be used on servers since it will not notify the network software that it is going down, so that it can shutdown gracefully.

According to Ruben there is not a problem with students getting access to computers in the labs. There seems to be sufficient capacity at the moment, except for some times when multiple assignments are due at nearly the same time. There is concern this may not be the case in the fall when there will be significantly more students enrolled at the university. Virgil indicated that this summer ESL is not requiring writing to be word processed; however this will not be the case in the fall. Allen indicated he felt there seemed to be less assignments requiring the computer in the College of Business this term.

With regard to any acquisition of equipment the university should study all products carefully. A lowest cost strategy should be avoided, especially in our isolated environment. The products should be proven reliable and of good quality. As David pointed out, that does not mean buying the most expensive. Also any purchase should include an appropriate number of spare parts.

The issue of the legality of software being used at the AUA was raised by David. The committee recognizes the importance of this issue and has had it as an agenda item to discuss. This issue is obviously related to how additional funds will be used. Issues related to software legality are as follows:

The university must establish a policy on using illegal software in teaching, research, and administration. It should also have a policy on having illegal software installed on its computers. It only seems prudent to devise a plan to move towards a completely legal computing environment. Although the reasons for this should be obvious, for the record, they need to be articulated. If we are to be a model for the region, we cannot freely copy software, even for use within the university -- it is against the law to place single-user license software on multiple machines. We teach ethics in the classroom, but we must demonstrate that we practice what we preach. The AUA is a U.S. corporation an affiliate of the University of California, and receiving funds from U.S. government organizations, such as USAID; therefore, our violations also implicate these organizations.

We feel that attractively-priced site licenses could be negotiated in the U.S. We recognize this involves a considerable amount of work by the U.S.-based administration, but the benefits will be great.

Virgil suggested investigating a process similar to the one offered by Apple. The AUA could become a regional center for software sales.

The AUA needs to establish software standards -- software that will be supported for teaching, research and administration. We have moved from a DOS environment with WordPerfect, Lotus 123, and dBASE III+ as the primary applications to a Windows environment with Word, Excel, and possibly FileMaker Pro as the primary applications. It seems that Windows will be the main computing environment, but one strategy

would be to adopt the standard application based on what company will give us the best licensing agreement for both networked and non-networked software and upgrades.

We should consider moving to DOS 6.0. This could be the first item that we "legalize." David mentioned he bought it for \$33 each in a three-pack. Further discounts may be possible and some vendors are including it bundled with other software; for example, WordPerfect 5.2 and DOS 6.0. The main advantage of DOS 6.0 is it includes a memory manager/optimizer and compression software to greatly increase the effective size of the hard disk. DOS 6.0 is compatible with Windows 3.1.

David and the committee commended Igor for the admirable work he has done on the network plan, but we feel it is essential for the university to hire a consultant to design the network and provide instruction on its operation and maintenance.

As a result, we strongly recommend the university delay its plan to purchase any LAN hardware and software until the recommendations of such a consultant are obtained.

We recognize this will be expensive, but we also feel it is imperative to the successful installation, operation, and maintenance of the network. The university should strive to find a well qualified, highly recommended network specialist.

Members of this committee could do the preliminary work that would be needed in order to get ready for the consultant -- identifying the needs of each area, how to run cable, etc. -- so that the consultant's time in Yerevan could be used in the most effective manner.

While the entire plan for the network should be done now, it should be made operational in phases. The first phase should involve two segments with a bridge. For example, the computer lab and department and another area with dissimilar functions such as a college and research center.

In starting to prepare for planning the network, each department should assess the following: how would their workgroup use a network; what type of software would be used (would it be on the network or locally on individual machines); what type of work would be done on the network; what type of information would have to be shared by people within and outside of the workgroup.

The question of what will be that status of the Mac SE when Professor Kaljian leaves. Will it be placed in the lab? It seems it would go back into the lab, as would all of the computers residing in faculty offices -- they were allocated as a "loan" from the Computer Department.

The university should allocate money for the immediate purchase of "how to" books and videos for the software currently being used at the AUA. Videos will become an important means of "self-instruction" once the language lab is moved to the AUA.

David is very eager to help this committee and the university both now and in the future. He volunteered to provide advice and help even after he leaves in August. We are confident the university will continue to take advantage of David's expertise.

The next meeting will be Tuesday July 20 from 3 p.m. until 4:30 p.m. in room 24. Please note that we have returned to our usual meeting time. If you have not already done so, please provide me with the hardware and software needs of your department by Monday afternoon, at the latest. Also, provide a description of your workgroup would use a network; what type of software would be used (would it be on the network or locally on individual machines); what type of work would be done on the network; what type of information would have to be shared by people within and outside of the workgroup.

cc: Armen Der-Kiureghian
George Gibson