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SOFTWARE PILFERAGE

IN

GOVERNMENT AGENCIES

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Public Administration

---

by

Katherine Marie Foley

March 1992

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Katherine Marie Foley

March 1992

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March 17, 1992
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TABLE OF CONTENTS

INTRODUCTION

The Plan 1

Riverside County 1

Why This Is A Problem 3

How To Research This Project 5

ISSUES

The Law 6

Cases 7

Problems

People Steal Software 10

Why This Is A Problem In Riverside County . . . 11

Why This Is A Problem Everywhere 14

Economic Implications 15

Policies 16

Centralized Policy 17

Decentralized Policy 17

Conclusion 18

METHODS

Introduction 19

Survey Method 19

Survey Selection 20

Survey Questions 22

Conclusion 24

FINDINGS

Policy Review 25

Evaluation of Policies 28

United States Government Agencies

Department of the Air Force 29

State Government Agencies

Department of Motor Vehicles 30

County Government Agencies

Riverside County Auditor Controller 31

Riverside County Building and Safety 31

Riverside County Fire Department 33

Riverside County Flood District 33

Riverside County Public Social Services 34

Riverside County Transportation Department . . 35

Riverside County Waste Management 35

San Diego County 35

City Government Agencies

City Of Corona 36

City Of Rancho Cucamonga 37

City Of Upland 38

Conclusion 39

RECOMMENDATIONS

Policy Development 40

Procedure 40

Policy Content 42

Education 44
Purchasing Recommendation 45
Budget Recommendations 45
Recommendations Conclusion 46
CONCLUSION 47
Appendices
Appendix A United States Code of the Law of the United States of America, Title 17, Chapter 5 51
Appendix B Phone Call Guideline to Other Agencies 59
Appendix C Policy Questionnaire 61
Appendix D Policy Questionnaire Flowchart . . . 63
Appendix E Government Agencies Surveyed 65
Appendix F County of Riverside Personal Computer Software Policy 68
References 74

LIST OF ILLUSTRATIONS

List of Figures

Figure 1 Government Agencies Software Policy Survey Results 26

Figure 2 Government Agency Software Component Comparison Chart 29

INTRODUCTION

THE PLAN

The purposes of this project are to determine if there is a need to develop a centralized policy for software use in Riverside County and, if there is, to propose that policy. This study will identify policies created by other government agencies, the ethical, legal, and financial issues of software pilferage, and information for the development of a centralized software policy that might help promote honesty and integrity among employees.

The study of software pilferage in government agencies will be accomplished by surveying city, county, state, and federal agencies in the Inland Empire. The survey will question whether or not each agency has a software policy in place. Software development companies will be contacted for information on sanctions that might be enforced when a violator of the law is caught. A policy will be created if this study proves there is a need.

RIVERSIDE COUNTY

On May 9, 1893, Riverside County was formed from portions of San Bernardino and San Diego Counties. It became the fifty-third county of California. As of January 1, 1990, there were over one million residents, making Riverside the seventh largest county in California by population. It is the fourth largest county by area with seven thousand two hundred

square miles. This county stretches one hundred eighty four miles from the Colorado River to ten miles from the Pacific Ocean. There are currently more than fifty departments within the county infrastructure, employing approximately eleven thousand employees.[1] Preliminary research with many of the departments indicates, most employees do not know anything about computer software laws.

This project will identify existing software policies, providing a guideline for development of a generic policy in Riverside County, if necessary. For this paper, a software policy is defined as a document that details:

- the laws,
- county responsibilities and liabilities,
- employee responsibilities, and
- sanctions or the consequences for not adhering to the policy.

There are many processes a new policy needs to move through before being presented to the Board of Supervisors for its approval. The policy needs to be developed and approved by the Security Standards Sub-Committee. Then the policy needs to be approved by the Security Standards Committee and the Management Council. The policy is then forwarded to the Board of Supervisors. If the policy is formally adopted by the

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[1]County Administrative Office, Presentation to Rating Agencies (County of Riverside, May 1990), p.1.

Board, implementation will be required in every department in Riverside County.

WHY THIS IS A PROBLEM

Personal computers (PCs) have become an increasingly important tool in both private and public sectors. PCs were first introduced as a viable working tool in the late 1970s by Apple, Commodore, Tandy, and others. An article in the Press Enterprise stated, "'In one decade, the personal computer has become a commodity item,'...It's unlikely that any technology in history had ever undergone commercial development and gained such widespread adoptions so quickly."[2] As a consequence of emerging technology, PCs will probably be used as much in the future as the telephone is currently utilized. There will likely be a PC on every employee's desk and at least one in every home.

With the use of PCs growing at a fast pace, the proper (legal) use of the computer software becomes increasingly important. Computer software is necessary to operate the PC. It is the fuel that makes the hardware function by allowing data to be entered and reports to be printed. Hardware and software are equal and integral parts that enable the computer to function.

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[2]"Personal Computers have come a long way in a Decade," Press Enterprise, 6 August 1991, sec. C, pp. 1, 3.

Computers are popular because they usually take less time and provide accurate computations. Tasks are achieved better and faster on a PC than with pen and paper. Usually, software is placed on the PC by copying from a floppy disk onto the PCs internal hard disk. For this reason, software and how it is utilized is the important issue of this research paper.

For the past ten years, PCs have been a major part of my life. I have seen people copy software illegally--especially in Riverside County. Many individuals copy programs and freely give them to anyone who asks. This is because some people simply do not:

- know the copyright law;
- read the user responsibilities included with a software package; or
- abide by the copyright law.

It is ethically and legally wrong for anyone, including those working for a government agency, to steal software programs.[3] The organization is responsible for educating employees on the copyright law and software use; the employee is responsible to abide by the laws and policies.

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[3]Kathy Foley, "I have a personal bias on this subject because I have been developing personal computer software since 1982," December 1991.

HOW TO RESEARCH THIS PROJECT

There are seven steps to complete this project:

1. Research what has already been done through the library, oral surveys, and oral interviews;
2. Determine if there is a need for a policy (if there is no need, the project ends);
3. Assuming there is a need for a policy, determine which of the existing policies are effective;
4. Write a draft policy and submit it to the Security Standards Sub-Committee, the Security Standards Committee, and the Management Counsel;
5. Refine the draft policy;
6. Submit policy to Board of Supervisors; and
7. Implement the policy.

One method of creating a software policy is to see what else is being done by other agencies. This will be accomplished by surveying Riverside and San Bernardino Counties, state agencies in California, and federal government agencies. Telephone calls will be placed to all incorporated cities in both counties and all departments in Riverside County. The state and federal agencies will be randomly selected from the Riverside telephone book.

A telephone questionnaire will be used to ask questions of the agency. A copy of the software policy will be requested if any agency has one. Each policy will be analyzed

and the most important components will be documented so a comprehensive policy can be created.

ISSUES

THE LAW

The Copyright Act of 1976 protects an author's work until fifty years after his death. According to Morgan,[4] there was much doubt about whether the Act would cover software. This was because PCs were just beginning to surface. Legal reporting terminology did not include words like software piracy or pilferage. The act was modified in 1980 to include computer software.

In the United States Code of the Laws of the United States of America, Title 17, Chapter 5,

> Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 118 [17 USCS && 106-118], or who imports copies or phonorecords into the United States in violation of section 602 [17USCS& 602], is an infringer of the copyright.

An amendment added on December 12, 1980, stated: "A 'computer program' is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result."[5] See Appendix A for a partial copy of Title 17 and its amendments.

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[4]Malcolm J. Morgan and Diane J. Ruskell, "Software Piracy--The Problems," Industrial Management and Data Systems, March/April 1987, p.10.

[5]U.S. Code of the Laws of the United States of America, Title 17-Copyrights, Section 501, 1978, p.231.

According to Malcolm J. Morgan and Diane J. Ruskell,[6] it is important to distinguish between pilferers and pirates. A person who makes unauthorized copies of software for his own use is a pilferer (called pilferage). Someone illegally reselling software is a pirate (called piracy). Most of the industry refers to the illegal copying of software as simply piracy not pilferage. The terms are inaccurately used in the media and through day-to-day conversation among colleagues. For this paper, the term of pilferage will be used for illegally copying software programs for personal use and not for sale.

CASES

On February 28, 1991, the Software Publishers Association (SPA) submitted a press release announcing, "...the completion of a court ordered raid on Parametrix Corporation, an engineering consulting firm with offices in Bellevue, Sumner and Bremerton, Washington, and Portland, Oregon."[7] Through the raid many illegal copies of software were found. The raid was done on Parametrix Corporation because a disgruntled employee called and reported software abuses. The SPA performed the surprise raid for Ashton-Tate Corporation, Lotus

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[6]Malcolm J. Morgan and Diane J. Ruskell, "Software Piracy--The Problems," Industrial Management and Data Systems, March/April 1987, p.8.

[7]Software Publishers Association, "Publishers Raid Seattle-Based Engineering Firm: Find Illegal Software," Press Release, February 28, 1991, p.1.

Development Corporation, Microsoft Corporation, and WordPerfect Corporation by using an *ex parte* writ of seizure and temporary restraining order from the U.S. District Court, Western District of Washington.[8]

On May 7, 1991, a settlement was reached between SPA and Parametrix. Parametrix paid $350,000 plus attorneys' fees to settle the case. The president of Parametrix stated that, "This has been a very difficult situation for us because it happened due to our own carelessness...we simply copied existing software for use with our new computers. We had no policy regarding the use of our software and simply didn't control what was happening...."[9]

Three other lawsuits involving the Software Publishers Association need to be mentioned (although there are many cases that have been settled or are in the process of settlement.) The first case was filed against the University of Oregon Continuation Center. This lawsuit was filed in the United States District Court in Portland on February 26, 1991. The University of Oregon Continuation Center provided software training in their microcomputer laboratory for many businesses in Portland, Oregon. The suit alleged that the University violated the United States copyright law by making

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[8]Ibid.

[9]Software Publishers Association, "Software Publishers Association and Parametrix Reach Settlement," Press Release, May 7, 1991, p.1.

unauthorized copies of software on the PCs. The settlement between SPA and the University of Oregon was as follows:

- the University paid $130,000 to SPA,
- a national conference had to be organized and hosted in Portland on copyright law and software use, and
- the University had to provide an assurance contract that it would develop policies and procedures in compliance with software products.[10]

The second case that needs mentioning is between the SPA and Healthline Systems, Incorporation. A lawsuit was filed for illegally copying commercial software on August 6, 1991 in the United States District Court for the Southern District of California in San Diego. On December 19, 1991 a monetary settlement was reached (the amount was not disclosed) between the two organizations. Healthline also had to agree to stop illegal copying of software.[11]

The last case was filed on December 12, 1991, against Viasoft, Inc. in Phoenix, Arizona. This lawsuit was filed in the United States District Court in Phoenix. Viasoft operated illegally by using many copies of unlicensed software.

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[10]Software Publishers Association, "University of Oregon Center--Software FIrms Settle Lawsuit," Press Release, August 21, 1991, p.1.

[11]Software Publishers Association, "Settlement Reached in Copyright Infringement Suit Against Healthline Systems, Inc.," Press Release, December 19, 1991, p.1.

Through this lawsuit, Viasoft agreed to distribute policies prohibiting illegal software copying. "LeRoy Ellison, the President of Viasoft, Inc. stated, 'Viasoft remains committed to its policy of compliance with software license agreements and has redoubled its efforts to avoid inadvertent or unauthorized use of unlicensed products."[12]

The above cases are just a few that point out that the copyright law amended in 1980 to include software is enforced. "Reproducing computer software without authorization violates the U.S. Copyright Law. It is a Federal Offense."[13] And the SPA is going to continue their campaign until all companies comply with the law.

PROBLEMS

PEOPLE STEAL SOFTWARE

Computer software was probably pilfered years ago because of high costs. Now, software has become reasonably priced and cost may not be a good excuse anymore. For instance, word processing software such as WordPerfect and WordStar cost approximately $500 each in the past five to seven years. These software packages can now be purchased at approximately $250 for higher level versions and $100 for lower level

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[12]Software Publishers Association, "Computer Software Firms Settle Action Against Viasoft, Inc." Press Release, December 12, 1991, p.1.

[13]Automated Data Processing Service Organization (ADAPSO), Thou Shalt Not Dupe, 1984.

versions. Shareware programs for word processing cost as little as $15 and public domain versions are free.

So why would anyone steal software?

> Most software thieves are otherwise honest professionals. Most...would not think of shoplifting even a small item from a store; they would never consider falsifying data in a research project. Yet these same individuals commit what is technically a felony by stealing software. Most know that stealing software is illegal...The process erodes the integrity of the individuals and the institutions for which they work...Software theft is particularly prevalent in universities, which constitute one of our largest markets.[14]

WHY THIS IS A PROBLEM IN RIVERSIDE COUNTY

It is against the law to copy a software program to place on another PC. (Unless an exception is granted by the copyright owner, a copy of the software can be made on another floppy for backup or archival purposes only.) "Infringement of a registered copyright exposes the violator to criminal penalties...In addition to civil penalties, damages up to $250,000 have been awarded, and violators have received jail terms of up to five years."[15]

Many employees in the Riverside County Building and Safety Department have placed unauthorized software programs on other PCs--including PCs in their home. (Recently, a

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[14]Victor Rosenberg, "Software Theft And Copy Protection," Library Journal, February 1, 1989, p.47.

[15]George E. Biles and Sarah B. Swanson, "The Wages of Software Piracy," Information Strategy; The Executive's Journal, Spring 1988, p.5.

procedure was implemented to educate the employees on the copyright law and guidelines for computer software use.) Illegal software duplication is not unique to just the Building and Safety Department; it is happening in many of the departments throughout the county.

This fact has come about through conversation this past year with data processing department heads and their employees. There is a meeting once every month called the PC Users Group Meeting. Any employee in Riverside County and City departments may attend. Many of them have expressed concerns about software pilferage in their departments in addition to other PC problems. Another reason the software duplication problem is well known is by working in and with the departments.

Some people are not able to get enough copies of the many software programs that are on the market today. For instance, one Riverside County employee revealed he had five word processing programs, three spreadsheet programs, and many other programs. All of these programs on an internal hard drive totaling one hundred and fifty million characters of space. He admits he will never use all five word processing programs. Once a person finds a program he likes, he will not usually switch between them. This is because there is a significant time factor involved to learn the new keystrokes and function keys to perform similar tasks.

One important reason that software duplication problems surfaced in Riverside County is computer viruses. Viruses are transported from one computer to another with software programs. A virus can bring a PC down for weeks. It can damage a software program and data files forever. Many departments confessed experiencing virus attacks on their PCs at one of the PC User Group Meetings. Most people at these meetings have expressed a concern for stopping viruses. One way to stop them is to eliminate software pilferage.

Other reasons that software pilferage is a problem in Riverside County are software standardization and software development. When users were illegally making a copy of WordStar to put on one PC, WordPerfect for another, and Microsoft Word for a third, documents could not be easily transferred between the programs. If one of the PCs breaks, the backup copy of the file could not be retrieved on another PC because the program file formats were incompatible.

Software development is when an employee uses a software program to create a unique system to perform a task. For instance, an employee brings in an illegal copy of Pascal and installs it on his PC at work. (Pascal is a software development tool.) That employee creates an inventory system. The system is used by the department for two years successfully. The employee quits, but erases Pascal and the inventory system before leaving. The department has no

recourse. It cannot prosecute the employee because the product and its result were illegally used. The department loses a good product and the cost of employee hours to develop the product that no longer exists.

WHY THIS IS A PROBLEM EVERYWHERE

The issue of software pilferage in the personal computer industry is not new. It has been around since software was first developed. Software developers used to program the copy protections on their disk so only one, two, or three copies could be made. Lotus Development Corporation is one company that had a copy protection on their product. It could only be copied three times then the original floppy disks could no longer be fully copied. If a hard drive needed replacement, a customer had to call the software developer to get another copy of the original software. This resulted in lost sales from many users and organizations, so most developers removed the copy protections. Rosenberg found that copy protections were hard to maintain because up to thirty percent of the customer service phone calls were copy protection problems.[16] In addition to the problems copy protections cause, Central Point created a software program that would copy a program with copy protections!

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[16]Victor Rosenberg, "Software Theft And Copy Protection," Library Journal, February 1, 1989, p.47.

Jin H. Im points out that agencies and their employees are liable for illegally copying software. For instance, a university employee caught making illegal copies of software places many people in jeopardy: the purchasing agent, the employee, the supervisor, and the university could be prosecuted.[17]

ECONOMIC IMPLICATIONS

If management and the employees in organizations continue to ignore software pilferage, there might be economic and development implications. Software developers might not create new programs because of their profit loss. Small software development companies could possibly close their business because of the loss of sales due to piracy or pilferage. Large software development companies would survive, but prosecute violators and increase prices. According to the Vice President of Law and Corporate Affairs for Microsoft Corporation,

> ...it hurts end users as well as software publishers. Users of illegal software don't get full utility from their software because they often don't have manuals. They also are not eligible for product support or the reduced-price upgrades that are frequently offered to those who have genuine product. In addition, unauthorized copying deprives software publishers of revenue that could be channeled into the research and

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[17]Jin H. Im and Clifford Koen, "Software Piracy and Responsibilities of Educational Institutions," Information and Management (Netherlands), April 1990, p.193.

development of improved products. In short, everyone loses.[18]

Two other events could occur. First, many organizations that depend on software to obtain management reports could lose excellent tools for automation. Second, unemployment could go up if the developers close their doors. Morgan believes, "The unauthorized duplication of software may be siphoning billions a year in sales from software publishers, distributors, and dealers, according to industry estimates. Software publishers say that for every package sold there may be between two and fifteen unauthorized copies made."[19]

POLICIES

Webster's definition of a policy is "A plan or course of action, as of a government, political party, or business, designed to influence and determine decisions, actions, and other matters."[20] A policy can be written or verbal. A written policy is formal and more binding. The written policy is necessary for legal matters as well as standards for guidance. Policies can be decentralized, where each department within an agency creates and maintains its own.

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[18]Software Publishers Association, "Publishers Raid Seattle-Based Engineering Firm: Find Illegal Software," Press Release, February 28, 1992, p.1.

[19]Malcolm J. Morgan and Diane J. Ruskell, "Software Piracy--The Problems," Industrial Management and Data Systems, March/April 1987, p.8.

[20]The American Heritage Dictionary, Second College Edition (1982), s.v. Houghton Mifflin Company, p.959.

Centralized policies are written for all departments in an agency with one department responsible for creating and maintaining it. In order to decide whether to create centralized or decentralized policies, the advantages and disadvantages must be considered.

CENTRALIZED POLICY

A centralized policy is usually written by an employee with expertise in the topic field. There are many advantages to a centralized policy. Since the policy is the same for all departments, employees know the policy when transferred within the agency. The Board of Supervisors and Auditor Controller can be assured of consistency. Standards for procedures can be established across the board. Disadvantages to a central policy include resentment from employees over the central control issue and lack of compliance by employees who do not feel the policy is justified.

DECENTRALIZED POLICY

Decentralized policies exist when each department within an agency writes its own version. Decentralized policies provide many views on a subject because of different levels of expertise from the employees of the departments from which the policy is created. A policy written specifically for a department will be unique to that department's needs. Changes can be made quickly and easily. Employees might accept a

decentralized policy over a centralized policy because it was created within their department.

An important disadvantage to consider when decentralizing policy development is that it may never be written. If an employee transfers from one department to another, he has to learn a new policy for procedures that could have been standardized.

CONCLUSION

The issues in this section are law and ethics and how each is addressed in Riverside County and throughout the world. It is against the Copyright Act of 1976 (amended in 1980 to include computer software) to copy software illegally. There is no justification for anyone to break this law. The SPA, BSA, and other corporate inspectors do not accept excuses such as: 1) there is no money in the budget, 2) we did not know our employees were illegally copying software, and 3) we did not understand the law or the vendor's licensing agreement.

Ethically, many people do know the software use rules. Many times a person reads the licensing agreement that the software is sealed in when a product is purchased as he is installing it on a hard drive. The disadvantages to software pilferage (fines and imprisonment) outweigh the advantages (software vendors get exposure.)

METHODS

INTRODUCTION

What are other government agencies doing about software pilferage? Has some type of policy detailing guidelines for an employee's use been implemented for purchased software? Research was done among some selected government agencies to determine the answers to these questions.

SURVEY METHOD

There are three major types of research methods: survey research, experimental research, and field research. Survey research is done to study attitudes and behaviors of a selected population by questioning them and analyzing their responses. Experimental research is performed with a controlled group that reacts to experimental conditions. Field research is conducted when a researcher places himself in an environment while observing a situation.[21] The experimental and field research methods were not adequate for reviewing other organization's policies. Experimental research does not apply to this study and field research would have taken years to complete. The survey research method was used to obtain information on existing software policies in government agencies.

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[21]Therese L. Baker, Doing Social Research, McGraw Hill, Inc., 1988, pp.15,16.

Two types of surveys could have been performed, written or telephone. The written survey would have included:

- preparing a questionnaire,
- mailing it to each agency with self-addressed, stamped envelopes, and
- follow-up phone calls for non-returned questionnaires.

The problem with this method was that it would have been time consuming, costly, the mailings could have been lost or ignored, and there could be a loss of the personal touch. The telephone survey was an excellent method for the following reasons:

- The selected population sample was small enough;
- It was fast;
- Contact was ensured for 100% of the selected population; and
- Validity of the response was assured over a mailed in questionnaire by the sound of the respondent and the way he answered the questions.

SURVEY SELECTION

A stratified cluster method of sampling was used. This method allows selecting a group--the cluster (Inland Empire government agencies) that is stratified (just the incorporated cities of each county). Telephone surveys regarding PC use and policy implementation were conducted for Riverside and San

Bernardino Counties--including their incorporated cities, selected state and Federal agencies. In Riverside and San Bernardino Counties, there was a 100% survey of the incorporated cities. A list of these cities is provided in Appendix E.

Every department in Riverside County was surveyed providing a 100% sample in a government agency where software pilferage is known to occur.[22] This portion of the research helped to determine whether an adequate software policy already existed in any of the departments. State and federal agencies were selected from the Riverside telephone book. The objective of this portion of the survey was to obtain information from this range of government agencies providing software policies to peruse.

As each department in Riverside County or agency was contacted, the following information was documented:

- the agency,
- contact person,
- date,
- phone number,
- did the agency have a policy, and
- would the agency provide a copy for this survey.

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[22]Through conversation with employees and data processing department heads over the past year software pilferage have often been brought to my attention.

The contact person was preferably responsible for policy implementation or data processing standards. A copy of what was said through the telephone conversation is in Appendix B.

SURVEY QUESTIONS

The survey questions were complete enough to provide accurate information for this project. The questions were precise. Each question was understandable by the respondent to have the same meaning and was asked in a way that the respondents wanted to answer them.[23] See Appendix C for a complete list of these questions and Appendix D for a flowchart.

A combination of open-ended and contingency questions were formed for this survey. The most important question (contingency) was the first one, "Do you have personal computers?" If the agency did not have PCs, there was no reason to ask about software policies. Even if the agency had a mini or mainframe computer, software pilferage would not be an issue. This is because the contact would not have that type of software or want it. More importantly it is not the subject of this research project. The majority of employees will not own this type of computer at home. The user usually would not want to steal the software.

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[23]Therese L. Baker, Doing Social Research, McGraw Hill, Inc., 1988, pp.171,172.

Two questions were asked if the agency had PCs. The first question was the number of PCs in the organization. The second question referred to the types of applications purchased for each organization. A description of what a generic software policy might contain was addressed to ask the second important question. "Have you implemented a software policy?"

A software policy was described as a document that details:

- the objective,
- the copyright law including the 1980 amendment adding software,
- the agency's responsibility to uphold the law and keep employees educated,
- the employee's responsibility to abide by the law, and
- sanctions for employees who do not abide by the policy.

Agencies that had software policies in place were asked approximately eight questions depending on how some of them were answered. The last question was, "May I please have a copy of your policy?"

Some individuals who were contacted by telephone and had some type of software policy also had a lot of information to offer. For instance, some policies detailed an area of

concern that was not addressed by others. An interview was then arranged to discuss and obtain a copy of the policies.

The questionnaire was pre-tested on three departments in Riverside County. These departments had experts who gave critical responses before I contacted the other respondents. The questionnaire was modified and the first attempt at contacting all agencies was completed by October 31, 1991. Individuals who were unavailable during this first contact and did not return calls were contacted a second time between November 4, and November 8. The contacts whose policies were not received were contacted a second time. On November 16, 1991, all policies that were received were analyzed and documented.

CONCLUSION

Through the data analysis, the Riverside County Auditor Controller's policy was identified as the policy to start with for Riverside County. Using the results of the data analysis, it was possible to develop a detailed software policy. It is now in the process of coordination through the proper channels for approval. Once approved by all necessary committee members, the policy will be distributed to all the departments in Riverside County. The policy can then be made available for other local government agencies on request.

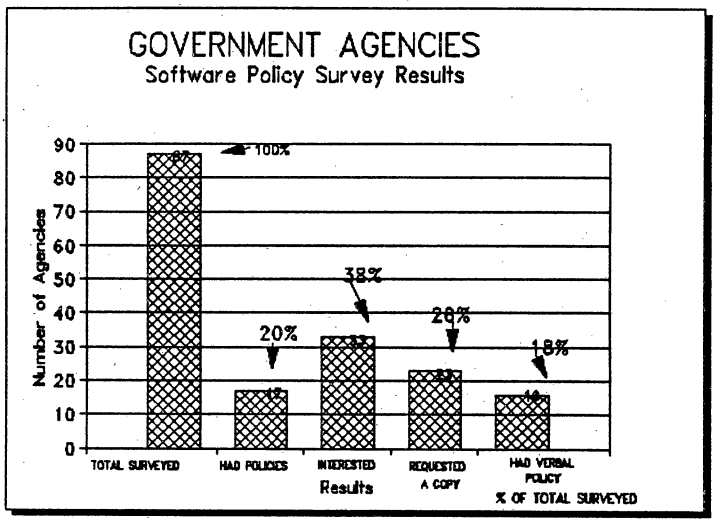
FINDINGS

The purposes of this project were to determine if a countywide centralized policy for software use in Riverside County was essential and, if it was, to propose that policy. The literature provided many examples for the need to maintain control over software purchases and implementation. There are too many organizations who perform surprise raids on large agencies. Companies get caught many times from disgruntled employees. The costs are high when caught, but the embarrassment from press coverage is unbearable.

POLICY REVIEW

The survey research identified organizations who had policies in place. Many organizations who did not have software policies expressed an interest in the subject. (See Appendix E for a list of agencies, their contacts, and policy information. See Figure 1 for a graphical view of the survey results.)

Eighty-seven agencies--federal, state, and local governments--were contacted by telephone to discuss software use and policies. Of the eighty-seven, seventeen agencies (20%) indicated they had policies. Software policy information could not be obtained from two agencies because the contact people were unavailable. Because of time constraints, none of the unavailable contacts were telephoned again. The remaining agencies surveyed provided the following



GOVERNMENT AGENCIES SOFTWARE POLICY SURVEY RESULTS
Figure 1

results:

- Thirty-eight percent showed an interest in the subject of PCs and software pilferage.
- Twenty-six percent requested a copy of a completed policy if one was developed. (Some of these already had policies and wanted to improve them.)
- Eighteen percent mentioned they had a verbal policy and believed it was adequate for their organization.

The seventeen agencies who indicated they had software policies said they would send a copy. Only fourteen of the policies were received. The three agencies who did not send policies were contacted again for a copy. One contact said she could not find it and did not know where to get a copy.

Another contact decided he did not want to send a copy. The other contact did not respond to follow-up calls.

Thirty-eight percent of the people who were contacted showed an interest in this survey, but did not have a policy in place. All the contacts who did have a policy in place also demonstrated an interest. There was positive feedback from everyone. Many did not want to stop talking. There were many questions regarding the contents of a software policy, the law, auditing procedures, etc. Many wanted the researcher's phone number to keep in touch. There was a lot of inter-action between the researcher and the contacts in the oral survey that would not have been obtained through written responses. For instance, many people were pleased to discuss the issue of software policies, software pilferage in the agencies, and the importance of the subject.

Policies were obtained from thirteen government agencies to see what the content was. There were specific areas that were looked for in these policies. An effective software policy should contain all five areas. The specific areas were:

- Did the agency state the objective of the policy?
- Did the agency quote the copyright law and its amendment in 1980 adding computers?
- Were the agency's responsibilities and liabilities defined?

- Were the employee's responsibilities defined?
- Did the agency define sanctions for employees who did not comply?

The only common issue for all policies surveyed was the objective and the employee's responsibilities. Some policies were in memo form consisting of one or two pages. Most of the policies had an outline format with a table of contents. Only one agency, Riverside County Building and Safety, defined and quoted the copyright law with its 1980 computer amendment.

EVALUATION OF POLICIES

See Figure 2 for a comparison chart on each agency's policy components. The following breakdown (in alphabetical order by branch of government) comes from an examination of the components for each policy received. Two areas were analyzed: the policy format and content.

The format was examined to obtain ideas on how to prepare a template for the proposed policy; the content was analyzed to include important components. A rating was given to the policy content on a scale of one to ten; ten being the most complete.

One point was given to the agency for having a policy and another for addressing software use. Additional points were given according to how much the software pilferage issue was addressed and what was mentioned about it. The highest rated policies were analyzed for county implementation.

ORGANIZATION	OBJECTIVE	LAW	AGENCY RESPON.	EMPLOYEE RESPON.	SANCTIONS	SCALE (1-10)
UNITED STATES GOVERNMENT AGENCIES						
Department of the Air Force	yes	no	no	yes	no	3
STATE GOVERNMENT AGENCIES						
Department of Motor Vehicles	yes	no	yes	yes	yes	2
COUNTY GOVERNMENT AGENCIES						
Riverside County Auditor Controller	yes	no	no	yes	no	9
Riverside County Building and Safety	yes	yes	no	yes	yes	8
Riverside County Fire Department	yes	no	no	yes	yes	7
Riverside County Flood District	yes	no	no	yes	yes	4
Riverside County Public Social Services	yes	no	yes	yes	no	6
Riverside County Transportation Depart	no	no	no	yes	yes	2
Riverside County Waste Management	yes	no	no	yes	no	4
San Diego County	yes	no	no	yes	yes	3
CITY GOVERNMENT AGENCIES						
City of Corona	yes	no	yes	yes	no	5
City of Rancho Cucamonga	yes	no	no	yes	yes	5
City of Upland	yes	no	yes	yes	no	1
TOTAL YES RESPONSES	12	1	4	13	7	

GOVERNMENT AGENCY SOFTWARE COMPONENT COMPARISON CHART
Figure 2

UNITED STATES GOVERNMENT AGENCIES

DEPARTMENT OF THE AIR FORCE

FORMAT

The Air Force policy was a professional looking document. The first page had a table of contents identifying paragraphs and pages. It was organized by sections within chapters such as acquisition, installation, operations, maintenance, and other areas for computer use.

CONTENT

Very little was mentioned regarding the software policy and the information was scattered according to the section it

applied. Each department was responsible for all software and related documentation. Personally owned software was discouraged. All software developed for the organization by an employee was required to contain documentation, source listings, and software updates. The policy stated that copying software illegally was not allowed. For further information a legal officer should be contacted.

RATING - 3

STATE GOVERNMENT AGENCIES

DEPARTMENT OF MOTOR VEHICLES

FORMAT

The Department of Motor Vehicles had a policy like the Air Force. The policy was sectioned according to areas of concern with a table of contents preceding it. The two main sections were the policy overview and procedures.

CONTENT

The policy stated that if software was stolen or someone violated the PC software copyright, it would be reported to a division chief or manager. The division chief would notify the police in certain cases. The policy focused on security issues much more than software pilferage.

RATING - 2

COUNTY GOVERNMENT AGENCIES

RIVERSIDE COUNTY AUDITOR CONTROLLER

FORMAT

The Auditor Controller's software policy was prepared in a simple outline format. The main headings were purpose, applicability, policy, and procedure.

CONTENT

The purpose of the Auditor's document was to provide policy and procedures for PC software and accompanying documentation. This policy addressed software issues in every section, paragraph, and sentence. Nothing was mentioned about hardware, security, backup, and the like. The auditor's policy was strictly a software policy.

Many important software issues were covered in this policy. Under the policy section, there was a statement that all employees will abide by the copyright laws and licensing agreements. Then the detail was listed on how this would be accomplished. This policy addressed shareware, public domain software, personally owned software, and procedures on how to follow the policy guidelines.

RATING - 9

RIVERSIDE COUNTY BUILDING AND SAFETY

FORMAT

The Building and Safety policy was formatted like a package. The employee must sign a receipt for the package.

The package included:

- a detailed explanation on the history of PCs and its use,
- personal computer hardware/software guidelines that describe the system, employee responsibilities, and sanctions,
- a receipt listing all hardware/software components and the serial numbers (a copy of this is signed by the employee and placed in their personnel file), and
- a copy of the Thou Shalt Not Dupe book explaining the copyright law and how it applies to software--including fines and imprisonment.

CONTENT

Most of the Building and Safety PC package was educational. A lot of explanation was given about PCs, software and the history. The personal computer hardware/software guidelines addressed the employee's responsibility when using his PC and accompanying software. It detailed the established standards for all Building and Safety PCs.

RATING - 8

RIVERSIDE COUNTY FIRE DEPARTMENT

FORMAT

The Riverside County Fire Department's policy was prepared in a simple format. Sections were numbered sequentially with paragraphs about each subject. The policy covered hardware and software issues. There were two appendices to this policy. The first appendix was a trouble sheet for users to complete before contacting data processing. The second appendix was a memo stating that an employee's job was at risk if he did not abide by the copyright law.

CONTENT

This document started with a statement that employees are expected to follow this personal computer policy. The first section described the PC as a county fixed asset. The second section listed the standard hardware components for a PC. The third section discussed software legalities. The standard software was identified and the copyright law was addressed. The Fire Department also addressed shareware, public domain software, and personally owned software.

RATING - 7

RIVERSIDE COUNTY FLOOD DISTRICT

FORMAT

The policy submitted by the Flood District was one page in length. The subject was software duplicating. There were two sections: definition and policy.

CONTENT

The Flood Department's policy was for software use only. The policy simply stated that an employee would not duplicate software or violations would be dealt with appropriately. The fact that software copyright violation is a serious offense was mentioned. The definition section detailed the three types of software: public domain, shareware, and purchased.

RATING - 4

RIVERSIDE COUNTY PUBLIC SOCIAL SERVICES

FORMAT

The Public Social Services Department's software usage policy was presented in an outline format. There was a table of contents on the first page. The policy had six sections: 1) Introduction, 2) Licensed Department Software, 3) Computer Viruses and Unauthorized Software, 4) Department Standard, 5) Request for Software, and 6) Software Maintenance/Duplication.

CONTENT

This policy described the legal use of software on the first page in the first paragraph. The policy covered computer viruses and types of software such as shareware, public domain, and purchased. The standard software used in the department was listed. Games are not allowed.

RATING - 6

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT

FORMAT

The Personal Computer Policy prepared by Transportation was one page in an outline format.

CONTENT

This policy mixed hardware and software use. A statement was included discussing the copyright law and disciplinary actions when violated. PC software audits were mentioned. Public domain software was allowed with approval from Information Services.

RATING - 4

RIVERSIDE COUNTY WASTE MANAGEMENT

FORMAT

The PC hardware and software policy at Waste Management was a simple memo with one long paragraph. The user must sign, date, and return it to the computer manager.

CONTENT

The objective and employee responsibility are defined. All users were told that software was licensed to one PC only.

RATING - 2

SAN DIEGO COUNTY

FORMAT

The San Diego County virus and software protection policy specifically addressed software. Hardware use was not

mentioned. There was a table of contents with nine sections listed. The document had an outline format.

CONTENT

San Diego County's policy detailed software as a security issue. Virus protection and the safety of data were the biggest concern. The information regarding software use was scattered among the different sections. For instance, in the stand-alone section, the statement "no unlicensed software was allowed to be installed" was mentioned. Software audit practices were in the Network PC section. Very little was mentioned about illegally copying of software, except that it was not allowed.

RATING - 3

CITY GOVERNMENT AGENCIES

CITY OF CORONA

FORMAT

Corona's one page policy was called "Personal Software Usage Employee Agreement." The policy was mailed to all city departments with a memo. The memo detailed the city's objective, the law, and the employee's responsibilities. There were two pages attached to the memo. The first page was a request to have software installed on a PC. The second was an employee agreement that had to be signed by an employee and returned.

CONTENT

Corona's memo to all city departments stated that copying software illegally was a violation of the copyright law. The city would not tolerate it as it placed them at legal and financial risk. The attached agreement stated four facts:

1. The city would not condone illegal duplication of software.
2. Misuse by the employee would be reported to office automation representative or department manager.
3. Personal software packages that were allowed to be used.
4. A statement that the employee was aware of the policy and agreed to uphold it.

RATING - 5

CITY OF RANCHO CUCAMONGA

FORMAT

Rancho Cucamonga's "Computer Policy" was a detailed document addressing many issues with a table of contents in front. Some issues were hardware, software, security, maintenance and repairs. There was a two page software licensing guideline section that detailed the software policy. The last page of the computer policy was the employee acknowledgement form.

CONTENT

With proper authorization, Rancho Cucamonga allows employees to take software home. The policy stated that games and personal software may not be installed at work--even if the employee only wanted to use them at lunch. In the summary of the policy, the city stated it would only allow approved and purchased software on the computers.

The acknowledgement form at the end of the policy was signed and returned by the employee. This form stated that the employee agreed to the city policy, would abide by it, and understood that disciplinary action, including termination and legal action, could occur.

RATING - 5

CITY OF UPLAND

FORMAT

Upland's policy was in an outline format with two sections. The first section was one paragraph on the city background. The second section was the policy. The policy section was divided into computers, printers, electronic mail, records management, telecommunications, and duplication/copiers.

CONTENT

The mailed copy of the policy did not discuss software pilferage. Through discussions on the telephone with the contact person, the city has added software use to a draft

policy. It states that the city does not condone illegal copying of software.

RATING - 1

CONCLUSION

There were four outstanding policies among those that were reviewed. The four policies had the highest rating on the scale in Figure 2 on page 34 and the information provided on software issues was comprehensive. The four policies were from Riverside County's: 1) Auditor Controller, 2) Building and Safety, 3) Fire Department, and 4) Public Social Services.

The Auditor Controller for Riverside County had the most complete software policy of all agencies surveyed. It did not, however, quote the law, define responsibilities of the agency and employee, or define sanctions. It addressed the employee's responsibilities and the objective better than the other policies.

RECOMMENDATIONS

The principle recommendation is for a centralized personal computer software policy to be written for the County of Riverside. There are three supporting recommendations in addition to developing a policy. One recommendation is to establish classes to train management and their employees about the copyright law and proper software use. Another recommendation is to educate management to plan for software program acquisitions in the budget every year. The final

recommendation is to educate purchasing to analyze the requisitions that are received from each department for software acquisitions when a PC is requested.

POLICY DEVELOPMENT

The development of a software policy is a result of the literature review and the oral survey of public entities (federal, state, and local). The research of the current literature indicated a severe lack of discipline in the handling of computer software by the PC users resulting in legal and financial ramifications. The survey of existing software policies within government entities showed very little commonality and a lack of concise direction (even between departments within the same agency). The absence of policy does not justify writing one, but the costly penalties for illegal software use supports the immediate requirement.[24] The procedure for ensuring the adoption and use of the software policy is described in the following paragraphs.

PROCEDURE

Sometimes timing is the key to getting what you want. The timing could not have been better for the development of this policy. On June 19, 1990, Riverside County's Board of Supervisors enacted Policy Number A-38 regarding information technology. It states that information technology is

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[24]A survey of various departments that had software policies in place resulted in a significant amount of adherence to the copyright law.

encouraged to improve the delivery of service to the public by, "Encouraging the creation and maintenance of shared information files except where legal, operational or ethical constraints require redundancy."[25]

A committee was formed in March 1991 (The Security Standards Sub-Committee) to ensure that information technology is addressed through the creation of many needed policies. Some of the policies will address standards for data security, information backups, hardware use, and software use.

Selected members of the committee draft the policies. All members of the committee must approve the new policies. The members include an employee from the Administrative Office, Building and Safety, Information Services, the Sheriff's Department, and other county departments. Some employees were included for a specific purpose. For example, Information Services was included because it is responsible for hardware and software support for all county departments. The Administrative Office was included because it must be knowledgeable in all policies submitted to the Board of Supervisors. The signed policy is then presented to the Management Council for review and approval. With its approval, the policy is submitted to the Board of Supervisors.

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[25]County of Riverside, California; Board of Supervisors Policy, Number A-38, June 19, 1990.

A draft policy was written and submitted to the Security Standards Sub-Committee for approval. The Auditor-Controller's software policy (see page 36) is the ideal template from which to work. The format was within county guidelines; the content included important issues regarding software use.

The Auditor Controller's policy was reworded. Some important issues were added and some unnecessary sentences were removed. This policy then became the draft for presentation as the Software Policy for the County of Riverside. If this policy is accepted by the committee, the policy will then move through the above process until it is presented to the Board of Supervisors.

POLICY CONTENT

Appendix F is a completed copy of the draft copy for the County Of Riverside Personal Computer Software Policy. This policy is sectioned by objective, applicability, policy, procedures, and sanctions. The most important issue in this policy is that all employees must abide by the United States Copyright Law and the vendor licensing agreement. This statement is important because the vendor licensing agreement might allow an organization's employees to take one copy of the software program home with them. The licensing agreements vary from one vendor to another. The agreement might allow

the user to have other rights such as making duplicate disks for backup purposes.[26]

There will be three items attached to the policy when it is distributed to every department. The three items are an SPAudit kit, literature regarding software use and the Copyright Law, and a blank form to order a video about getting caught breaking the law. The SPAudit kit is a software program provided by the SPA to inventory software on an employee's PC. A person simply puts the disk in a floppy drive and executes a program. A listing can be printed for each PC showing all software products, the number of copies on the hard drive, and whose PC the audit was performed on. This tool will be provided with the policy to give each department a method of ensuring that it will abide by the policy.

Educational pamphlets will be attached to the policy. The pamphlets explain the Copyright Law, how it applies to computer software, and answers many common questions that users ask. The third attachment to the policy is a blank form to order a video tape called "Are You Taking Unnecessary Business Risks?" The video costs $10.00. This video is twelve minutes running and educates users about the copyright law and the legal use of software.

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[26]WordPerfect Corporation announced a new licensing agreement in its Winter 1991 report. An employee may take one copy of the program home to place on his PC as long as it does not execute at work and at home during the same time.

EDUCATION

Riverside County has an Affirmative Action Plan (AAP) that requires every employee obtain education on sexual harassment. This policy protects employees from discrimination. Every department in the county **must** create its own policy and send **every** employee in its department to Personnel's sexual harassment class. The recommendation is to create a class on the copyright law and software pilferage issues to protect the county from illegal actions of its' employees. This would cover software use, every department enforcing the policy addressing the issue, and sending each employee to a software use class.

Classes must be created that explain the proper use of software. Copies of the copyright law and its amendment in 1980 adding software will be distributed as it is discussed. Positive and negative examples of software use will be demonstrated. All aspects of each example will be explained. Court cases on agencies that were prosecuted will be discussed. The legal liability of both the county and the employee will be detailed. There must be special mention if the county does not act (once an employee has the knowledge, he can be prosecuted.) Some of the standard software package warnings will be presented and discussed. All questions from the employees must addressed. These classes will be implemented by the same agency responsible for maintaining the

policy--preferably Information Service's End User Computing department. This department is responsible for consulting, training, and implementation of personal computers for all departments in the county.

PURCHASING RECOMMENDATION

Another educational process must be implemented in the purchasing department. The buyer responsible for computer hardware and software purchase orders must analyze the requisitions. He will be looking for a software requisition in addition to any hardware requisition. If a software requisition is not located, the buyer must contact the department who requested a purchase order. He must request information for the software products that the department is planning to operate on the new equipment. If the department does not plan on purchasing legal copies of software to operate on the PC, the buyer should not process the requisition. The department might not realize it has requested personal computer hardware without legal copies of software.

BUDGET RECOMMENDATIONS

One method of eliminating software pilferage is to budget for software expenditures. The departments in Riverside County need to budget for legal copies of software programs for every additional PC purchased. New software products on the market need to be budgeted for with existing PCs in each

department. With budget constraints, obtaining necessary software will be a difficult task. Analysis must be made regarding exactly which employees need particular software products to perform their jobs. The only products purchased will be for the PCs that the software will operate on.

Another budget consideration is software upgrades. An upgrade becomes available from a vendor when the software is modified and problems are fixed. Then the upgrade is made available to the public. Software upgrades can be available once a year and sometimes two to three times in one year. Upgrades can cost between fifty and one hundred dollars per user. Budgeting for computer purchases and upgrades will keep the county in compliance with the law.

RECOMMENDATIONS CONCLUSION

Providing the software policy with its attachments to each department will ensure immediate adherence to the law, education, and a procedure to assist each department head. The policy will be submitted to the Riverside County Board of Supervisors in February, 1992. Once the policy is approved, training on software pilferage and budgeting for software acquisitions will be established.

The educational process must start with top management. If management does not support the software policy, the employees will not either. Education must be ongoing to be

effective. New employees hired into the county will be educated on this subject through the orientation process.

CONCLUSION

The two objectives of this project were: 1) to determine if there was a need to develop a centralized policy for software use in Riverside County and 2) if there was a need, to create a model policy for proposal. A study was performed on government agencies in the Inland Empire. Through a telephone survey, agencies were questioned on software use and existing policies they might have in place. Agencies who had policies were requested to mail a copy.

Riverside County has over ten thousand employees. The issue of legal software use is important to the employee and the county. It is against the United States Copyright Act of 1976 (which was amended in 1980 to include computer software) to violate the rights of the copyright owner. Employees must abide by the licensing agreement provided by the software vendor when using computer programs. If the employee chooses to break the copyright law, Riverside County is liable and many people can be prosecuted--the purchasing agent, the employee, the supervisor, and the county. There are many organizations who perform corporate raids comparing invoices to software residing on PC hard drives. For companies with illegal software, this can be a very costly experience (and possibly imprisonment.)

The cost of purchasing software products is used as an excuse not to pay for them. The cost of not purchasing the products, but illegally copying software on more than one machine would be a much higher expense if caught. The SPA charges an organization for every copy of illegal software it finds on each PC, plus the organization must purchase each copy of the software that was found. This is like paying for the software twice.

A telephone survey was conducted with local, state, and federal government agencies. Seventeen of eighty-seven agencies (20%) had software policies. Twenty percent is a small number considering the liabilities a company can face. Especially since software raids are published in computer magazines and newspapers as they occur. Through conversations in the telephone survey and the literature review, most of management and their employees were unaware of the copyright law. Everyone needs to be educated. Some people who knew the law did not realize the fines and penalties involved. Most people did not know that raids were actually performed in organizations to audit software use. The potential for a lawsuit is too great to ignore the subject of software pilferage.

Fourteen policies were received. The policies were rated according to how well software use and the copyright law were addressed. Only two policies covered software use in a policy

format that was acceptable to me. The two policies were from Riverside County's Auditor Controller and Riverside County's Building and Safety Departments. The Auditor Controller's policy had the best format and good information. Building and Safety's policy described the law and employee sanctions.

The literature review and the telephone survey of public agencies justified the need to develop a centralized software policy. In addition to a software policy, there are three recommendations:

1. Establish classes to train all employees on the copyright law and software use.
2. Educate management to budget for upgrades to existing software and new software.
3. Educate purchasing to match hardware requisitions to software requisitions before issuing purchase orders for PCs.

The software policy needs to be created and put in place before the other three recommendations can be addressed. A complete software policy should be sectioned by: objective, applicability, policy, procedures, and sanctions. The employee and agency responsibilities should be defined along with the copyright law and how it applies to vendor licensing agreements.[27]

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[27]A policy was created combining the Auditor Controller's policy information and Building and Safety's special policy features. The policy was approved by the Riverside County

The issue of the Copyright Law, how it applies to computer software, and the illegal use of software in government agencies is important and must be addressed. No organization should expose itself to the liability if caught (besides the ethical issues involved.) Only one disgruntled employee needs to dial 1-800-388-PIR8 and the SPA shows up with an *ex parte* writ. A software policy will deter theft, but it cannot eliminate pilferage altogether. In addition to an effective software policy, continuous education for software use will help keep some employees honest, making Riverside County number one in its attempts to abide by the law.

Security Standards Sub-Committee in December, 1991. It is currently being approved by the Security Standards Committee.

A P P E N D I X

A

115. Scope of exclusive rights in nondramatic musical works: Compulsory license for making and distributing phonorecords
116. Scope of exclusive rights in nondramatic musical works: Public performances by means of coin-operated phonorecord players
117. Scope of exclusive right: Use in conjunction with computers and similar information systems
118. Scope of exclusive rights: Use of certain works in connection with noncommercial broadcasting

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Other provisions:

Effective Date. Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598, provided that: "This Act [which appears generally as 17 USCS §§ 101 et seq.; for full classification of this Act, consult USCS Tables volumes] becomes effective on January 1, 1978, except as otherwise expressly provided by this Act, including provisions of the first section of this Act [section 101 of Act Oct. 19, 1976, which appears as 17 USCS §§ 101 et seq.]. The provisions of sections 118, 304(b), and chapter 8 of title 17 [17 USCS §§ 118, 304(b), 801 et seq.], as amended by the first section of this Act, take effect upon enactment of this Act [enacted Oct. 19, 1976]."

Lost and expired copyrights; recording rights. Section 103 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2599, provided that: "This Act [which appears generally as 17 USCS §§ 101 et seq.; for full classification of this Act, consult USCS Tables volumes] does not provide copyright protection for any work that goes into the public domain before January 1, 1978. The exclusive rights, as provided by section 106 of title 17 [17 USCS § 106] as amended by the first section of this Act [section 101 of Act Oct. 19, 1976, which appears as 17 USCS §§ 101 et seq.], to reproduce a work in phonorecords and to distribute phonorecords of the work, do not extend to any nondramatic musical work copyrighted before July 1, 1909."

Authorization of appropriations. Section 114 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2602, provided that: "There are hereby authorized to be appropriated such funds as may be necessary to carry out the purposes of this Act [which appears generally as 17 USCS §§ 101 et seq.; for full classification of this Act, consult USCS Tables volume].

Separability of provisions. Section 115 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2602, provided that: "If any provision of title 17 [17 USCS §§ 101 et seq.], as amended by the first section of this Act [section 101 of Act Oct. 19, 1976, which appears as 17 USCS §§ 101 et seq.] is declared unconstitutional, the validity of the remainder of this title [17 USCS §§ 101 et seq.] is not affected."

CROSS REFERENCES

USCS Administrative Rules, Rules of Copyright Office (Library of Congress) 37 CFR Parts 201, 202; USCS Administrative Rules, Universal Copyright Convention.

§ 101. Definitions

As used in this title [17 USCS §§ 101 et seq.], the following terms and their variant forms mean the following:

An "anonymous work" is a work on the copies or phonorecords of which no natural person is identified as author.

"Audiovisual works" are works that consist of a series of related images which are intrinsically intended to be shown by the use of machines or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.

The "best edition" of a work is the edition, published in the United States at any time before the date of deposit, that the Library of Congress determines to be most suitable for its purposes.

A person's "children" are that person's immediate offspring, whether legitimate or not, and any children legally adopted by that person.

A "collective work" is a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.

A "compilation" is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works.

"Copies" are material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.

"Copyright owner", with respect to any one of the exclusive rights comprised in a copyright, refers to the owner of that particular right.

A work is "created" when it is fixed in a copy or phonorecord for the first time; where a work is prepared over a period of time, the portion of it that has been fixed at any particular time constitutes the work as of that time, and where the work has been prepared in different versions, each version constitutes a separate work.

A "derivative work" is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a "derivative work".

A "device", "machine", or "process" is one now known or later developed.

To "display" a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.

A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title [17 USCS §§ 101 et seq.] if a fixation of the work is being made simultaneously with its transmission.

The terms "including" and "such as" are illustrative and not limitative.

A "joint work" is a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole.

"Literary works" are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.

"Motion pictures" are audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion, together with accompanying sounds, if any.

To "perform" a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.

"Phonorecords" are material objects in which sounds, other than those accompanying a motion picture or other audiovisual work, are fixed by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "phonorecords" includes the material object in which the sounds are first fixed.

"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, technical drawings, diagrams, and models. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

A "pseudonymous work" is a work on the copies or phonorecords of which the author is identified under a fictitious name.

"Publication" is the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending. The offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display, constitutes publication. A public performance or display of a work does not of itself constitute publication.

To perform or display a work "publicly" means—

(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or

(2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

"Sound recordings" are works that result from the fixation of a series of musical, spoken, or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the nature of the material objects, such as disks, tapes, or other phonorecords, in which they are embodied.

"State" includes the District of Columbia and the Commonwealth of Puerto Rico, and any territories to which this title [17 USCS §§ 101 et seq.] is made applicable by an Act of Congress.

A "transfer of copyright ownership" is an assignment, mortgage, exclusive license, or any other conveyance, alienation, or hypothecation of a copyright or of any of the exclusive rights comprised in a copyright, whether or not it is limited in time or place of effect, but not including a nonexclusive license.

A "transmission program" is a body of material that, as an aggregate, has been produced for the sole purpose of transmission to the public in sequence and as a unit.

To "transmit" a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.

The "United States", when used in a geographical sense, comprises the several States, the District of Columbia and the Commonwealth of Puerto Rico, and the organized territories under the jurisdiction of the United States Government.

A "useful article" is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey

information. An article that is normally a part of a useful article is considered a "useful article".

The author's "widow" or "widower" is the author's surviving spouse under the law of the author's domicile at the time of his or her death, whether or not the spouse has later remarried.

A "work of the United States Government" is a work prepared by an officer or employee of the United States Government as part of that person's official duties.

A "work made for hire" is—

(1) a work prepared by an employee within the scope of his or her employment; or

(2) a work specially ordered or commissioned for use as a contribution to a collective work, as a part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test, as answer material for a test, or as an atlas, if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire. For the purpose of the foregoing sentence, a "supplementary work" is a work prepared for publication as a secondary adjunct to a work by another author for the purpose of introducing, concluding, illustrating, explaining, revising, commenting upon, or assisting in the use of the other work, such as forewords, afterwords, pictorial illustrations, maps, charts, tables, editorial notes, musical arrangements, answer material for tests, bibliographies, appendixes, and indexes, and an "instructional text" is a literary, pictorial, or graphic work prepared for publication and with the purpose of use in systematic instructional activities.

(Added Oct. 19, 1976, P.L. 94-553, Title I, § 101, 90 Stat 2541.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598, provided that this section "becomes effective on January 1, 1978".

RESEARCH GUIDE

Am Jur:

18 Am Jur 2d, Copyright and Literary Property §§ 34, 37, 66, 77.

Annotations:

Exhibition of picture as publication. 52 L Ed 208.

Application of "works for hire" doctrine under Federal Copyright Act (17 USCS §§ 1 et seq.). 11 ALR Fed 457.

What constitutes publication of architectural plans, drawings, or designs, so as to result in loss of common-law copyright. 77 ALR2d 1048.

Law Review Articles:

Copyright Symposium, 22 New York Law School Law Review 193.

INTERPRETIVE NOTES AND DECISIONS

1. Generally
2. Best edition
3. Compilation
4. Copies
5. Derivative work
6. Display
7. Joint work
8. Motion pictures
9. Perform
10. Publication, generally
11. —Extent of publication, generally
12. ——Limited publication
13. —Public performance, generally
14. ——Drama
15. ——Lecture or speech
16. ——Music
17. —Sale, generally
18. ——Exhibition or delivery for prospective sale
19. Sound recordings
20. Works made for hire

1. Generally

Phrase "works of an author, of which copies are not reproduced for sale", as used in predecessor statute, was intended to modify "lecture," "dramatic composition" and "musical composition." Universal Film Mfg. Co. v Copperman (1914, DC NY) 212 F 301, affd (CA2 NY) 218 F 577, cert den 235 US 704, 59 L Ed 433, 35 S Ct 209.

"Component parts," as used in predecessor statute, does not mean subdivision of rights, licenses, or privileges, but refers to separate chapters, subdivisions, acts, and like of which most works are composed. New Fiction Pub. Co. v Star Co. (1915, DC NY) 220 F 994.

2. Best edition

Where only one edition of book has been published, copies thereof deposited with register of copyrights are of best edition although book might not be suitable for inclusion in "library" collection for public use. Bouve v Twentieth Century-Fox Film Corp. (1941) 74 App DC 271, 122 F2d 51, 50 USPQ 338.

Cutting out and depositing pages containing article in bound volume of encyclopedia is sufficient compliance with "best edition" provision of predecessor statute. Black v Henry G. Allen Co. (1893, CC NY) 56 F 764.

3. Compilation

"Composite works", defined in predecessor statute, are those which contain distinguishable parts which are separately copyrightable. Markham v A. E. Borden Co. (1953, CA1 Mass) 206 F2d 199, 98 USPQ 346.

Book containing comic strips printed on one side of paper only and bearing notice of copyright on title page, although each item in book bears separate copyright notice and most of items bear later release date on which date newspapers are first authorized to use material is "composite work" as defined in predecessor statute. King Features Syndicate, Inc. v Bouve (DC Dist Col) 48 USPQ 237.

"Composite work," by definition in predecessor statute, cannot also be "work made for hire," since latter presupposes that contributors are employees who are not entitled under Copyright Act to renew copyright registrations as "authors"; composite work permits both proprietor of original copyright in composite, as well as individual contributing authors, to apply for renewal. 43 OAG 2.

4. Copies

"Copy" is that which ordinary observation would cause to be recognized as having been taken from or reproduction of another. King Features Syndicate v Fleischer (1924, CA2 NY) 299 F 533.

Photograph of copyrighted piece of statuary is "copy" within predecessor statute. Bracken v Rosenthal (1907, CC Ill) 151 F 136.

5. Derivative work

Extremely brief epitomes of plots of copyrighted operas are not "a version" of copyrighted work. G. Ricordi & Co. v Mason (1913, CA2 NY) 210 F 277.

TV dramatization of copyrighted script is "derivative work." Gilliam v American Broadcasting Co. (1976, CA2) 192 USPQ 1.

6. Display

Exhibition of painting at private academy to limited number of persons subsequent to copyright thereof, but without notice of copyright, is not such publication as will constitute abandonment of owner's exclusive rights therein. Werckmeister v American Lithographic Co. (1904, CA2 NY) 134 F 321.

Exhibition of painting in art salon would not be publication unless public were permitted to make copies thereof. Werckmeister v Springer Lithographing Co. (1894, CC NY) 63 F 808.

Public exhibition of original painting, without copyright notice, is publication. Werckmeister v American Lithographic Co. (1902, CC NY) 117 F 360.

Copyright upon large figure of elk built in city street was defeated by its free public exhibition

108	603
109	603
110	Repealed. See 28 USCS § 1338
111	Repealed. See 28 USCS § 1400
112	502
113	502
114	502
115	507
116	505
201	701(a)
202	701(a)
203	708(c)
204	Repealed.
205	701(c)
206	701(b)
207	702
208	705
209	407, 410
210	707
211	707
212	705
213	704
214	704
215	708(a), (b)
216	703

TABLE OF CONTENTS

Chapter — Beginning Section

9. Protection of Semiconductor Chip Products 901

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1984. Act Nov. 8, 1984, P. L. 98-620, Title III, § 303, 98 Stat. 3356, amended the Table of Contents by adding the item relating to chapter 9.

CHAPTER 1. SUBJECT MATTER AND SCOPE OF COPYRIGHT

Section

106A. Rights of certain authors to attribution and integrity

116. Scope of exclusive rights in nondramatic musical works: Compulsory licenses for public performances by means of coin-operated phonorecord players

116A. Negotiated licenses for public performances by means of coin-operated phonorecord players

117. Limitations on exclusive rights: Computer programs

119. Limitations on exclusive rights: Secondary transmissions of superstations and network stations for private home viewing

120. Scope of exclusive rights in architectural works

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1988. Act Oct. 31, 1988, P. L. 100-568, § 4(b)(2), 102 Stat. 2857, effective as provided by § 13 of such Act, which appears as 17 USCS § 101 note, amended the analysis of this chapter by substituting item 116 for one which read: "116. Scope of exclusive rights in nondramatic musical works: Public performances by means of coin-operated phonorecord players"; and added item 116A.

Act Nov. 16, 1988, P. L. 100-667, Title II, § 202(6), 102 Stat. 1958 effective and terminated as provided by §§ 206 and 207 of such Act, which appear as 17 USCS § 119 note, amended the analysis of this chapter by adding item 119.

1990. Act Dec. 1, 1990, P. L. 101-650, Title VI, § 603(b), 104 Stat. 5130, effective 6 [illegible] § 106A note, amended the analysis of this chapter by adding item 106A.

Title VII, § 704(b)(1) of such Act further, applicable as provided by § 706 of such Act, which appears as 17 USCS § 101 note, amended the analysis of this chapter by adding item 120.

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§ 101. Definitions

[Introductory matter unchanged]

["Anonymous work" unchanged]

An "architectural work" is the design of a building as embodied in any tangible medium of expression, including a building, architectural plans, or drawings. The work includes the overall form as well as the arrangement and composition of spaces and elements in the design, but does not include individual standard features.

["Audiovisual works" unchanged]

The "Berne Convention" is the Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 9, 1886, and all acts, protocols, and revisions thereto.

A work is a "Berne Convention work" if—

(1) in the case of an unpublished work, one or more of the authors is a national of a nation adhering to the Berne Convention, or in the case of a published work, one or more of the authors is a national of a nation adhering to the Berne Convention on the date of first publication;

(2) the work was first published in a nation adhering to the Berne Convention, or was simultaneously first published in a nation adhering to the Berne Convention and in a foreign nation that does not adhere to the Berne Convention;

(3) in the case of an audiovisual work—

(A) if one or more of the authors is a legal entity, that author has its headquarters in a nation adhering to the Berne Convention; or

(B) if one or more of the authors is an individual, that author is domiciled, or has his or her habitual residence in, a nation adhering to the Berne Convention; or

(4) in the case of a pictorial, graphic, or sculptural work that is incorporated in a building or other structure, the building or structure is located in a nation adhering to the Berne Convention.

(5) in the case of an architectural work embodied in a building, such building is erected in a country adhering to the Berne Convention.

For purposes of paragraph (1), an author who is domiciled in or has his or her habitual residence in, a nation adhering to the Berne Convention is considered to be a national of that nation. For purposes of paragraph (2), a work is considered to have been simultaneously published in two or more nations if its dates of publication are within 30 days of one another.

["Best edition" through "compilation" definitions unchanged]

A "computer program" is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

["Copies" and "copyright owner" definitions unchanged]

The "country of origin" of a Berne Convention work, for purposes of section 411 [17 USCS § 411], is the United States if—

(1) in the case of a published work, the work is first published—

(A) in the United States;

(B) simultaneously in the United States and another nation or nations adhering to the Berne Convention, whose law grants a term of copyright protection that is the same as or longer than the term provided in the United States;

(C) simultaneously in the United States and a foreign nation that does not adhere to the Berne Convention; or

(D) in a foreign nation that does not adhere to the Berne Convention, and all of the authors of the work are nationals, domiciliaries, or habitual residents of, or in the case of an audiovisual work legal entities with headquarters in, the United States;

(2) in the case of an unpublished work, all the authors of the work are nationals, domiciliaries, or habitual residents of the United States, or, in the case of an unpublished audiovisual work, all the authors are legal entities with headquarters in the United States; or

(3) in the case of a pictorial, graphic, or sculptural work incorporated in a building or structure, the building or structure is located in the United States.

Convention work is not the United States.

["Work is 'created' " through "phonorecords" definitions unchanged]

"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

["Pseudonymous work" through "widow" or "widower's" definitions unchanged]

A "work of visual art" is—

(1) a painting, drawing, print, or sculpture, existing in a single copy, in a limited edition of 200 copies or fewer that are signed and consecutively numbered by the author, or, in the case of a sculpture, in multiple cast, carved, or fabricated sculptures of 200 or fewer that are consecutively numbered by the author and bear the signature or other identifying mark of the author; or

(2) a still photographic image produced for exhibition purposes only, existing in a single copy that is signed by the author, or in a limited edition of 200 copies or fewer that are signed and consecutively numbered by the author.

A work of visual art does not include—

(A)(i) any poster, map, globe, chart, technical drawing, diagram, model, applied art, motion picture or other audiovisual work, book, magazine, newspaper, periodical, data base, electronic information service, electronic publication, or similar publication;

(ii) any merchandising item or advertising, promotional, descriptive, covering, or packaging material or container;

(iii) any portion or part of any item described in clause (i) or (ii);

(B) any work made for hire; or

(C) any work not subject to copyright protection under this title.

["Work of the United States Government" and "work made for hire" definitions unchanged]

(As amended Dec. 12, 1980, P. L. 96-517, § 10(a), 94 Stat. 3028; Oct. 31, 1988, P. L. 100-568, § 4(a)(1), 102 Stat. 2854; Dec. 1, 1990, P. L. 101-650, Title VI, § 602, Title VII, § 702, 104 Stat. 5128, 5133.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1980. Act Dec. 12, 1980, added "A 'computer program' is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.".

1988. Act Oct. 31, 1988 (effective as provided by § 13 of such Act, which appears as 17 USCS § 101 note) added the definitions beginning "The 'Berne Convention' . . ." and "The 'country of origin' . . .", and, in the definition of "pictorial, graphic, and sculptural works", substituted "diagrams, models, and technical drawings, including architectural plans" for "technical drawings, diagrams, and models".

1990. Act Dec. 1, 1990 (effective 6 months after enactment as provided by § 610 of such Act, which appears as 17 USCS § 106A note) added the definition beginning "A 'work of visual art' ".

Such Act further (applicable as provided by § 706 of such Act, which appears as a note to this section), added the definition beginning "An 'architectural work' "; and in the definition of "Berne Convention work", in para. (3)(B), deleted "or" following the semicolon, in para. (4), substituted "; or" for the concluding period and added para. (5).

Short titles:

Act Oct. 4, 1984, P. L. 98-450, § 1, 98 Stat. 1727, effective upon enactment on Oct. 4, 1984, as provided by § 4(a) of such Act, which appears as 17 USCS § 109 note, provides: "This Act may be cited as the 'Record Rental Amendment of 1984'.". For full classification of such Act, consult USCS Tables volumes.

Act Oct. 31, 1988, P. L. 100-568, § 1, 102 Stat. 2853, effective as provided by § 13 of such Act, which appears as a note to this section, provides: "This Act may be cited as the 'Berne Convention Implementation Act of 1988'.".

Act Nov. 16, 1988, P. L. 100-667, Title II, § 201, 102 Stat. 3949, effective Jan. 1, 1989 through Dec. 31, 1994, as provided by §§ 206 and 207 of such Act, which appear as 17 USCS § 119 note, provides: "This title may be cited as the 'Satellite Home Viewer Act of 1988'.".

'Copyright Fees and Technical Amendments Act of 1989'.". For full classification of this Act, consult USCS Tables volumes.

Act July 3, 1990, P.L. 101-319, § 1, 104 Stat. 290, provides: "This Act may be cited as the 'Copyright Royalty Tribunal Reform and Miscellaneous Pay Act of 1989'." For full classification of this Act, consult USCS Tables volumes.

Act Nov. 15, 1990, P. L. 101-553, § 1, 104 Stat. 2749, provides: "This Act may be cited as the 'Copyright Remedy Clarification Act'.". For full classification of this Act, consult USCS Tables volumes.

Act Dec. 1, 1990, P. L. 101-650, Title VI, § 601, 104 Stat. 5128, effective 6 months after enactment as provided by § 610 of such Act, which appears as 17 USCS § 106A note, provides: "This title may be cited as the 'Visual Artists Rights Act of 1990'.". For full classification of such Title, consult USCS Tables volumes.

Act Dec. 1, 1990, P. L. 101-650, Title VII, § 701, 104 Stat. 5133, provides: "This title may be cited as the 'Architectural Works Copyright Protection Act'.". For full classification of such Title, consult USCS Tables volumes.

Act Dec. 1, 1990, P. L. 101-650, Title VIII, § 801, 104 Stat. 5134, effective on enactment as provided by § 804 of such Act, which appears as 17 USCS § 109 note, provides: "This title [amending 17 USCS § 109; enacting 17 USCS § 205 note] may be cited as the 'Computer Software Rental Amendments Act of 1990'.".

Other provisions:

Congressional declarations. Act Oct. 31, 1988, P. L. 100-568, § 2, 102 Stat. 2853, effective as provided by § 13 of such Act, which appears as a note to this section, provides:

"The Congress makes the following declarations:

"(1) The Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 9, 1886, and all acts, protocols, and revisions thereto (hereafter in this Act [for full classification consult USCS Tables volumes] referred to as the 'Berne Convention') are not self-executing under the Constitution and laws of the United States.

"(2) The obligations of the United States under the Berne Convention may be performed only pursuant to appropriate domestic law.

"(3) The amendments made by this Act [for full classification consult USCS Tables volumes], together with the law as it exists on the date of the enactment of this Act, satisfy the obligations of the United States in adhering to the Berne Convention and no further rights or interests shall be recognized or created for that purpose.".

Construction of the Berne Convention. Act Oct. 31, 1988, P. L. 100-568, § 3, 102 Stat. 2853, effective as provided by § 13 of such Act, which appears as a note to this section, provides:

"(a) Relationship with domestic law. The provisions of the Berne Convention—

"(1) shall be given effect under title 17, as amended by this Act [for full classification consult USCS Tables volumes], and any other relevant provision of Federal or State law, including the common law; and

"(2) shall not be enforceable in any action brought pursuant to the provisions of the Berne Convention itself.

"(b) Certain rights not affected. The provisions of the Berne Convention, the adherence of the United States thereto, and satisfaction of United States obligations thereunder, do not expand or reduce any right of an author of a work, whether claimed under Federal, State, or the common law—

"(1) to claim authorship of the work; or

"(2) to object to any distortion, mutilation, or other modification of, or other derogatory action in relation to, the work, that would prejudice the author's honor or reputation.".

Works in the public domain. Act Oct. 31, 1988, P. L. 100-568, § 12, 102 Stat. 2860, effective as provided by § 13 of such Act, which appears as a note to this section, provides: "Title 17, United States Code, as amended by this Act [for full classification consult USCS Tables volumes], does not provide copyright protection for any work that is in the public domain in the United States.".

Effective date of Act Oct. 31, 1988; effect on pending cases. Act Oct. 31, 1988, P. L. 100-568, § 13, 102 Stat. 2861, provides:

"(a) Effective date. This Act and the amendments made by this Act [for full classification, consult USCS Tables volumes] take effect on the date on which the Berne Convention (as defined in section 101 of title 17, United States Code) enters into force with respect to the United States.

"(b) Effect on pending cases. Any cause of action arising under title 17, United States Code, before the effective date of this Act shall be governed by the provisions of such title as in effect when the cause of action arose.".

First amendment application. Act Dec. 1, 1990, P. L. 101-650, Title VI, § 609, 104 Stat. 5132, effective 6 months after enactment as provided by § 610 of such Act, which appears

§ 412. Registration as prerequisite to certain remedies for infringement

In any action under this title [17 USCS §§ 101 et seq.], other than an action instituted under section 411(b) [17 USCS § 411(b)], no award of statutory damages or of attorney's fees, as provided by sections 504 and 505 [17 USCS §§ 504 and 505], shall be made for—

(1) any infringement of copyright in an unpublished work commenced before the effective date of its registration; or

(2) any infringement of copyright commenced after first publication of the work and before the effective date of its registration, unless such registration is made within three months after the first publication of the work.

(Added Oct. 19, 1976, P. L. 94-553, Title I, § 101, 90 Stat. 2583.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598 provided that this section "becomes effective on January 1, 1978".

CROSS REFERENCES

Statutory damages for infringement, 17 USCS § 504(c).

Costs and attorney's fees as element of damages for infringement, 17 USCS § 505.

RESEARCH GUIDE

Annotations:

Requirements as to deposit of copies of work in copyright office under § 13 of Federal Copyright Act (17 USCS § 13) as prerequisite to infringement action. 16 ALR Fed 595.

CHAPTER 5. COPYRIGHT INFRINGEMENT AND REMEDIES

Section
501. Infringement of copyright
502. Remedies for infringement: Injunctions
503. Remedies for infringement: Impounding and disposition of infringing articles
504. Remedies for infringement: Damages and profits
505. Remedies for infringement: Costs and attorney's fees
506. Criminal offenses
507. Limitations on actions
508. Notification of filing and determination of actions
509. Seizure and forfeiture
510. Remedies for alteration of programing by cable systems

§ 501. Infringement of copyright

(a) Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 118 [17 USCS §§ 106–118], or who imports copies or phonorecords into the United States in violation of section 602 [17 USCS § 602], is an infringer of the copyright.

(b) The legal or beneficial owner of an exclusive right under a copyright is entitled, subject to the requirements of sections 205(d) and 411 [17 USCS §§ 205(d) and 411], to institute an action for any infringement of that particular right committed while he or she is the owner of it. The court may require such owner to serve written notice of the action with a copy of the complaint upon any person shown, by the records of the Copyright Office or otherwise, to have or claim an interest in the copyright, and shall require that such notice be served upon any person whose interest is likely to be affected by a decision in the case. The court may require the joinder, and shall permit the intervention, of any person having or claiming an interest in the copyright.

(c) For any secondary transmission by a cable system that embodies a performance or a display of a work which is actionable as an act of infringement under subsection (c) of section 111 [17 USCS § 111(c)], a television broadcast station holding a copyright or other license to transmit or perform the same version of that work shall, for purposes of subsection (b) of this section, be treated as a legal or beneficial owner if such secondary transmission occurs within the local service area of that television station.

(d) For any secondary transmission by a cable system that is actionable as an act of infringement pursuant to section 111(c)(3) [17 USCS § 111(c)(3)], the following shall also have standing to sue: (i) the primary transmitter

whose transmission has been altered by the cable system; and (ii) any broadcast station within whose local service area the secondary transmission occurs.

(Added Oct. 19, 1976, P. L. 94-553, Title I, § 101, 90 Stat. 2584.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598 provided that this section "becomes effective on January 1, 1978".

Other provisions:

Causes of actions arising before January 1, 1978. Act Oct. 19, 1976, P. L. 94-553, Title I, § 112, 90 Stat. 2600, provided: "All causes of action that arose under title 17 [former 17 USCS §§ 1 et seq.] before January 1, 1978, shall be governed by title 17 [former 17 USCS §§ 1 et seq.] as it existed when the cause of action arose."

CROSS REFERENCES

Exclusive rights of copyright owner, 17 USCS §§ 106–118.
Nonsimultaneous secondary transmissions by cable systems, 17 USCS § 111(e).
Principle of divisibility of copyright ownership, 17 USCS § 201(d).
Remedies for alteration of programming by cable systems, 17 USCS § 510.
This section referred to in 17 USCS §§ 111, 115, 116, 411, 510, 602.

RESEARCH GUIDE

Am Jur:

18 Am Jur 2d, Copyright and Literary Property §§ 97, 98, 104, 134, 137–141, 144, 146, 147, 150, 154.

58 Am Jur 2d, Newspapers, Periodicals, and Press Associations § 35.

Am Jur Trials:

Copyright Infringement Litigation, 9 Am Jur Trials, p. 293.

Forms:

6 Federal Procedural Forms L Ed, Copyrights §§ 17:51–17:54, 17:119.

Annotations:

Liability as "Vicarious" or "Contributory" infringer under Federal Copyright Act. 14 ALR Fed 825.

Law Review Articles:

Copyright Symposium, 22 New York Law School Law Review 193.

INTERPRETIVE NOTES AND DECISIONS

I. IN GENERAL (notes 1–7)
II. WHAT CONSTITUTES INFRINGEMENT [17 USCS § 501(a)]
A. In General (notes 8–12)
B. Reproduction of Copies (as specified in 17 USCS § 106(1))
1. In General (notes 13–25)
2. Similarity (notes 26–40)
3. Reproduction of Particular Features (notes 41–50)
C. Derivative Works (as specified in 17 USCS § 106(2)) (notes 51–58)
D. Distributions (as specified in 17 USCS § 106(3)) (notes 59–63)
E. Performance (as specified in 17 USCS § 106(4)) (notes 64–67)
F. Display (as specified in 17 USCS § 106(5)) (notes 68–70)
G. Importation (as specified in 17 USCS § 602) (note 71)
III. CABLE TELEVISION [17 USCS § 501(c,d)] (note 72)
IV. DEFENSES [17 USCS § 501(b)] (notes 73–84)
V. PRACTICE AND PROCEDURE
A. In General (notes 85–87)
B. Parties
1. Plaintiffs (notes 88–96)
2. Defendants (notes 97–102)
C. Pleadings (notes 103–113)
D. Discovery (notes 114–116)
E. Summary Judgment (notes 117–119)
F. Trial
1. In General (notes 120–123)
2. Evidentiary Matters (notes 124–130)
3. Judgment (notes 131–132)
G. Appeal (notes 133–134)

I. IN GENERAL

1. Generally
2. Federal law applicability
3. State law applicability
4. Equity considerations
5. Jurisdictional considerations
6. Relationship to other causes of action, generally
7. —Copyright infringement as tort

II. WHAT CONSTITUTES INFRINGEMENT [17 USCS § 501(a)]

A. In General

8. Generally
9. Intent to infringe
10. Loss of remuneration as infringement consideration
11. Separate or multiple infringements
12. Threatened infringement

B. Reproduction of Copies (as specified in 17 USCS § 106(1))

1. In General

13. Generally
14. Access as relevant to copying
15. Amount copied as affecting infringement, generally
16. —Motion pictures
17. —Musical works
18. Common source material, generally
19. —Art works
20. —Musical works
21. Independent creations
22. Memorized material
23. Phonorecord reproduction
24. Public domain material
25. Reprints

2. Similarity

26. Generally
27. Error reproduction
28. Ordinary observation or impression as measure of similarity, generally
29. —Literary works
30. —Musical works
31. —Visual works
32. Paraphrasing
33. Similarity to copyrighted work as affecting infringement, generally
34. —Jewelry
35. —Labels or prints
36. —Musical works
37. Similarity in works as relating to similar subject matter, generally
38. —Legal publications
39. —Plans, systems and ideas
40. Trivial variations

3. Reproduction of Particular Features

41. Generally
42. Characterization
43. Design features
44. Format or arrangement
45. Graphics or illustrations
46. Incidents or episodes
47. Literary style
48. Name or title
49. Plans, ideas, or subject matter
50. Plot or theme

C. Derivative Works (as specified in 17 USCS § 106(2))

51. Generally
52. Art work reproductions
53. Burlesque, parody, or satire
54. Dramatizations, generally
55. —Plot or theme appropriation
56. Musical work arrangements
57. Synopsis or outline
58. Translations

D. Distributions (as specified in 17 USCS § 106(3))

59. Generally
60. Distribution of phonorecords

A P P E N D I X

B

PHONE CALL GUIDELINE
TO OTHER AGENCIES

UPON THE INITIAL CALL TO THE RECEPTIONIST

Hello, my name is Kathy Foley. I am with the Riverside County Building and Safety department. May I please speak with someone in your organization who is responsible for data processing, specifically the personal computers. (Get their name and title).

If they do not have any computers, thank them for their time.

WHEN TRANSFERRED TO THE APPROPRIATE PERSON

Hello, my name is Kathy Foley. I am with the Riverside County Building and Safety department. Our organization is in the process of writing a software policy for personal computer use. **EXPLAIN WHAT MIGHT BE IN A SOFTWARE POLICY. Ask them if they have a few minutes to talk with you about this subject. Start with the first question.**

A P P E N D I X

C

POLICY QUESTIONAIRE

AGENCY: *DATE:* *CONTACT:*

QUESTIONS

1. Do you have personal computers (micro computers) in any of the departments in your city?

   If yes:
   a. How many personal computers do you have?

   b. What applications do you maintain on the computers?

   If no: GO TO # 8.

Describe what a software policy contain might contain.

2. Have you implemented a software policy?

   a. Do you allow employees to bring software to work from home?

   b. Do you allow employees to take software home for their own use or to perform work at home?

   If no to # 2:
   c. Do you think you need a policy or any controls on what employees are allowed to do with software purchased by your organization?

   If yes to c., what would you include in a policy?
   If no to c., why not?

3. How long has your policy been in place?

   If longer than six months:
   a. How often do you update the policy (or plan on updating the policy)?

4. Is your policy centralized?

5. Why did you implement a software policy?

6. Who wrote the policy or is responsible for maintaining it?

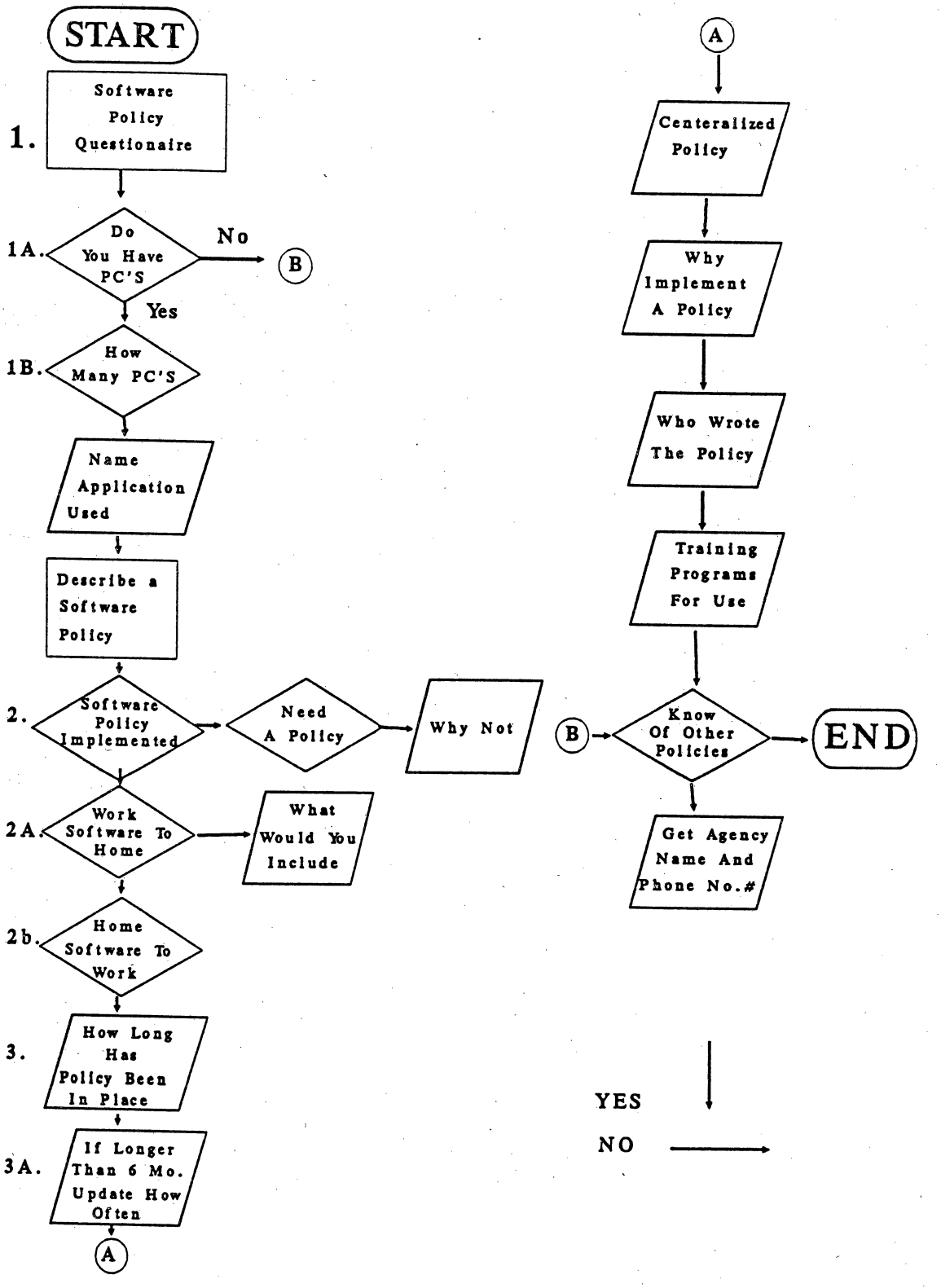
7. Do you include software use in any training programs?

8. Do you know of any government agencies who have implemented a software policy?

A P P E N D I X

D

POLICY QUESTIONNAIRE FLOWCHART



A P P E N D I X

E

GOVERNMENT AGENCIES SURVEYED

COUNTY OR DEPT.	CITY	POLICY	RECEIVED COPY	SHOWED INTEREST	WANTED A COPY	VERBAL POLICY	CONTACT	PHONE #
Riverside	Banning	no	N/A	yes	yes	no	Woody Edvalson	714-922-0443
	Beaumont	no	N/A	yes	yes	yes	Ronney Wong	714-845-1171
	Blythe	no	N/A	no	no	no	Jeanine Manly	619-922-6161
	Cathedral City	yes	no				Dan Perkinson	619-324-8388
	Coachella	no	N/A	yes	yes	no	Stewart Robinson	619-398-3502
	Corona	yes	yes				Cherly Anderson	714-736-2372
	Desert Hot Springs	no	N/A	no	no	yes	Colleen Nichol	619-329-6411
	Hemet	no	N/A	yes	yes	yes	Tom Aronson	714-765-2300
	Indian Wells	no	N/A	yes	no	yes	Mel Windsor	619-346-2489
	Indio	no	N/A	no	no	no	Adager Redarde	619-342-6580
	La Quinta	no	N/A	no	no	no	Unknown	619-564-2246
	Lake Elsinore	no	N/A	no	no	no	Larry Russell	714-674-3124
	Moreno Valley	no	N/A	yes	yes	yes	John Hines	714-243-3000
	Norco	no	N/A	no	no	no	Marcie McIntosh	714-735-3900
	Palm Desert	no	N/A	no	no	no	Janet Moore	619-346-0611
	Palm Springs	no	N/A	no	no	no	Tom Harness	619-323-8215
	Perris	no	N/A	yes	no	no	Johnny McCloud	714-943-6100
	Rancho Mirage	no	N/A	yes	yes	yes	John Uribarri	619-324-4511
	Riverside	no	N/A	yes	yes	yes	Mark Dykman	714-782-5508
	San Jacinto	no	N/A	yes	yes	no	Anna Vega	714-654-7337
San Bernardino	Adelanto	no	N/A	no	no	no	Cindy Herrera	619-246-8606
	Barstow	no	N/A	no	no	no	Richard Ptak	619-256-3531
	Big Bear Lake	no	N/A	yes	yes	no	Marilyn Warren	714-866-5831
	Chino	yes	no				Kathleen Shaputis	714-627-7577
	Colton	no	N/A	yes	no	yes	Gloria Adame	714-370-5076
	Fontana	no	N/A	no	no	no	Bea VanDenberg	714-350-7600
	Grand Terrace	no	N/A	no	no	no	Phil Bush	714-824-6621
	Loma Linda	no	N/A	no	no	no	Debra Ditgs	714-799-2800
	Montclair	no	N/A	yes	no	yes	Ed Starr	714-626-8571
	Needles	no	N/A	no	no	no	Genevive	619-326-2113
	Ontario	no	N/A	yes	no	no	Bill Bracken	714-986-1151
	Rancho Cucamonga	yes	yes				Bob Trammell	714-989-1851
	Redlands	no	N/A	no	no	no	Tony Sharmano	714-798-7510
	Rialto	no	N/A	yes	yes	no	Diane Schilling	714-820-2525
	San Bernardino	no	N/A	no	no	no	Mark	714-384-5211
	Upland	yes	yes				Paula Chamberlai	714-982-1352
	Victorville	no	N/A	yes	yes	no	Jean Bracey	619-245-3411
San Diego Count	San Diego	yes	yes				Unknown	Unknown
Riverside Depart.	Administrative Office	no	N/A	yes	yes	no	Brandon Simpson	714-275-1111
	Agricultural Commissioner	no	N/A	yes	no	no	John Schneider	714-275-3000
	Assessor's Office	no	N/A	no	no	no	Steve Goodrich	714-275-6263
	Auditor-Controller	yes	yes				Russ Smith	714-275-3800
	Building & Safety	yes	yes				Katherine Foley	714-275-7810
	Clerk-Board of Supv.	no	N/A	no	no	no	Bonnie May	714-275-1066
	Community Action	no	N/A	no	no	yes	Kathy Smith	714-275-8900
	Coroner	no	N/A	no	no	no	Karen Rhoades	714-275-1500
	County Clerk & Recorder	no	N/A	yes	no	no	Lynn Dang	714-275-1997
	County Counsel	no	N/A	no	no	no	Karen Christensen	714-275-6318
	County Service Area Info.	no	N/A	no	no	no	Sandy Gonzalez	714-275-1100
	District Attorney's Office	no	N/A	yes	yes	yes	Cindy MacDonald	714-275-5400
	Economic Development Agency	no	N/A	no	no	yes	Peggy Sanchez	714-275-8916
	Fire Department	yes	yes				Daniel Lim	714-657-3183
	Fleet Services	no	N/A	no	no	no	Sherry Robles	714-275-4650
	Flood Control	yes	yes				Ed Gallagher	714-275-1200
	General Hospital	no	N/A	yes	yes	no	Sue Duerst	714-275-3710
	Health Department	no	N/A	yes	yes	no	Don Cavalo	714-358-5165
	Historical Comm./Parks	no	N/A	no	no	no	Bill VanMill	714-275-4310
	Housing Authority	no	N/A	yes	no	yes	Jim Backum	714-351-0824
	Information Services	no	N/A	no	no	no	Robyn Rogers	714-275-3613
	Library	no	N/A	no	no	yes	Karen Morris	714-782-5589
	Local Agency Form. Comm.	no	N/A				George	714-369-0631
	Mental Health/Public Guard.	no	N/A	no	no	no	Unknown	714-358-4500
	Mosquito Abatement	no	N/A	no	no	no	Tina	714-681-2900
	Municipal/Superior Court	yes	no				Curtis Bachelder	714-275-5550
	Office on Aging	no	N/A	no	no	no	Al Christensen	714-275-8940

GOVERNMENT AGENCIES SURVEYED

COUNTY OR DEPT.	CITY	POLICY	RECEIVED COPY	SHOWED INTEREST	WANTED A COPY	VERBAL POLICY	CONTACT	PHONE #
	Personnel Department	no	N/A	yes	yes	no	Jim Berger	714-275-3500
	Planning Department	no	N/A	yes	yes	no	Bob Weaver	714-275-3200
	Probation Department	no	N/A	no	no	no	Bob Beach	714-275-2805
	Public Administrator	no	N/A	yes	yes	no	Jackie Cannon	714-275-1552
	Public Defender	no	N/A	yes	yes	no	Ron McCaskell	714-275-6000
	Public Social Services Dept.	yes	yes				Cecilia Jiminez	714-358-3760
	Purchasing, Printing, Supply	no	N/A	yes	yes	no	Billy Cornett	714-275-4931
	Registar of Voters	no	N/A	no	no	no	Sue	714-275-8700
	Riverside County Office of Ed.	yes	no				Bert Bell	714-788-6522
	Safety Division/Risk Mgmt.	no	N/A	no	no	no	Anita Moore	714-275-3542
	Sheriff's Depatment	no	N/A	yes	yes	no	Jan Conklin	714-275-2400
	Transportation	no	N/A	yes	yes	no	Pat Egetter	714-275-6867
	Treasurer & Tax Collector	no	N/A	no	no	yes	Gary Cotteral	714-275-3969
	Veteran's Services	no	N/A	no	no	no	Rebecca	714-275-8960
	Waste Management	yes	yes				Ron Sinclair	714-275-1370
	Worker's Comp. Div.	no	N/A				Vicki or Sue	714-275-3530
State Govt.	**Motor Vehicles Department**	yes	yes				Joel Langois	714-782-4100
	Senator Robert Presley	no	mini	yes	no	no	John Harland	714-782-4111
Federal Govt.	**Congressman Al McCandless**	no	N/A	yes	no	no	Page Hines	714-682-7127
	Congressman George E. Brown	no	N/A	no	no	no	Unknown	714-686-8863
	Federal Bureau of Investigation	yes	TopSecret				Brad Mirimam	213-477-6565
	Department of the Air Force	yes	yes				John Winkler	714-382-5325

TOTAL Organizations WITH Policies	*17*	*13*
TOTAL Organizations Surveyed	*87*	*87*
% of Organizations With Policies	*20%*	*15%*

OF THOSE WHO DID NOT HAVE A POLICY

those that showed interest	*33*
% of TOTAL Orgs. showing interest	*38%*
those that requested a copy	*23*
% of TOTAL Orgs. requesting policy	*26%*
those that had a verbal policy	*16*
% of TOTAL Orgs. with verbal policy	*18%*

A P P E N D I X

F

COUNTY OF RIVERSIDE
PERSONAL COMPUTER
SOFTWARE POLICY

I. OBJECTIVE

To provide policy and procedures concerning purchased personal/micro computer (PC) software packages/programs. A software package includes the original floppy disks, documentation, and registration.

II. APPLICABILITY

This policy applies to software programs installed on all PCs operated by any employee in all departments in Riverside County whether the PC was purchased, leased, or on loan. A software package consists of the software program (usually stored on a floppy disks), manuals for installation and use of the program, a registration card, and other miscellaneous information. Software (by its serial number) will be assigned to a PC (by its serial number) as one unit.

III. POLICY

1. **All employees in Riverside County shall strictly adhere to the United States Copyright Law (amended in 1980 to include computer programs) and vendor licensing agreements as described on material provided with purchased software.** Some examples of major restrictions for such licenses and agreements usually include the following:

   A. Only one backup or working copy of the original floppy disks is allowed to be made beyond those copies expressly allowed in the vendor's license agreement.

   B. Software shall not be used concurrently on more than one computer, unless allowed in the license agreement by the vendor.

   C. Software shall not be loaded on more than one computer's hard drive unless allowed in the license agreement by the vendor. It is the employee's responsibility to read the software vendor's licensing agreement and follow it. (For instance, WordPerfect recently announced a new licensing agreement. Any employee may take a copy of the word processing program home and place it on one PC hard drive--as long as the program only executes on

one PC at a time. Lotus Development Corporation only allows one copy of Lotus 1-2-3 to be placed on a PC hard drive.)

D. Purchased software user manuals and other documentation provided with the product shall not be copied.

E. Software programs loaded on Local Area Network (LAN) hard drives shall not be copied to floppy disks or workstation hard drives.

2. Public domain, shareware, bulletin board, and demonstration software shall not be used unless approved by the department's employee responsible for PC software/hardware.

A. All software programs shall be tested for viruses before loaded or executed on any PC hard drive or file server hard drive.

B. All software programs shall be tested and operate in a single user environment on a stand-alone PC successfully before implementation on a file server hard drive.

C. All software programs shall be registered upon receipt of product according to department standard.

3. The use of personally owned software is not allowed unless proof can be provided by the employee that the vendor supports a copy on more than one hard drive or the software is not loaded on any other PC.

A. All policy statements in paragraph III. 1. and 2. apply.

B. Use of the software must be temporary until the department purchases or erase the software.

C. The employee who loads his/her software on the PC hard drive at work shall satisfy the person responsible for PCs that the following requirements are documented:

1) Available software cannot meet the employee's needs.

2) Provide proof that using the software at work will not violate the vendor's licensing agreement.

3) Provide a brief plan to show how use of the software will be phased out as the department purchases a copy.

D. No software application shall be developed (in DBase, Paradox, or the like) such that an individual's job would be impossible or extremely difficult to perform without the employee's copy of the owned software. Otherwise, highly dependent software applications must be developed with county owned products only.

4. All application software developed for county use must be documented. The documentation must include application (files and programs) and user manuals.

IV. PROCEDURES

1. Every department and each division within the department shall comply with this policy within 60 days of the effective date. It will be the responsibility of the department head to:

A. Prepare an inventory of the software for which proof of ownership is available and which PC central processing unit (CPU) it is assigned to (is operating on). One method for proof of ownership is the invoice. Another is the serial number for each product.

B. Compare, the software contents for each computer's hard drive in each department, to their original floppy disks for which proof of ownership is available. (One method of obtaining a list of the programs on the hard drive is to use Software Publisher's Association's (SPA) Audit Kit. This product can be obtained from SPA at no cost. A copy of the kit should be attached to this policy.)

C. Request users of the PC to help assist in locating any additional proofs of ownership, possibly by the original floppy disk or the vendor invoice.

D. Inform all users of PCs with software who do not have any type of proof of ownership that the software will be deleted. Inform the user that they should immediately obtain a legal copy, through the proper channels, if the illegal used software is required.

2. Every department shall maintain an inventory of legally obtained software and keep it readily available.

   A. Designate a central, secure, storage location or assign the software to the PC's CPU by serial numbers and make the user responsible through a type of receipt process.

   B. Add newly purchased software to the storage location and/or the receipt for the user.

3. Every department shall, after paragraphs IV. 1. and 2. are completed, maintain a self audit on file to ensure that the policy continues to be followed. (This shall be accomplished with SPA's Audit Kit or a product comparable to it.) The audit listing shall include the PC equipment and the software programs that are loaded on the hard drive.

4. The designated LAN administrator for each department shall ensure that this policy is complied with for the file server hard drives.

   A. Acquire or develop software which will alert the system administrator if more than the licensed number of users are accessing a software program concurrently.

   B. Establish a procedure to notify the user who exceeds the number of licenses that the software is not available.

   C. Implement network security procedures to disallow copying software on the file server hard drives to individual floppy disks or PC hard drives.

   D. Monitor software loaded on the network hard drives to assure the policy is adhered to.

V. SANCTIONS

1. Employees who fail to follow this software policy may be subject to disciplinary action and;

2. Any employee who chooses not to abide by the copyright law when using PC computer software places Riverside County in a position of liability. Violation of the copyright law is a federal offense. Riverside County is not legally required to provide representation to anyone sued or prosecuted for illegally copying software, or to indemnify such persons

against civil damages. Civil damages can be $100,000 or more and criminal penalties include fines and imprisonment.

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Exercise Preference and Social Identity

A Thesis

Presented to the

California State University,

San Bernardino

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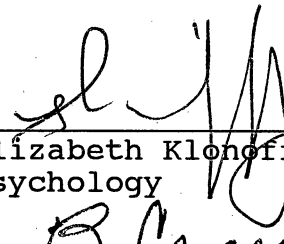
by

Misty Sherman

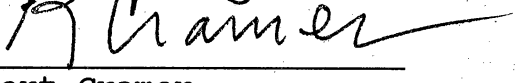
June 1991

Approved:

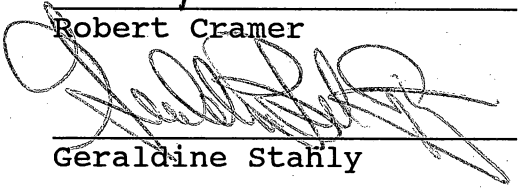


Elizabeth Klonoff, Chair
Psychology

6/3/91
Date



Robert Cramer



Geraldine Stahly

ABSTRACT

The purpose of the present investigation was to examine the relationship between exercise preference and social identity. In an effort to explore this relationship, the current study was conducted in two parts and attempted to determine the extent to which individuals with a specific exercise preference are associated with a set of stereotypical personality characteristics. In the first study, subjects consisted of 180 male and female University students who were asked to rate the participants of five different methods of exercise on 70 personality and identity dimensions. the five methods of exercise were as follows: bodybuilding, jogging, aerobics, swimming, and racquet ball. In the second study, subjects consisted of 90 male and female University students currently enrolled in a physical education class falling under the heading of one of the above listed methods of exercise. Subjects were asked to rate themselves according to the same list of personality descriptors as that used above. Results of the first study indicated that stereotypes ar associated with individuals engaging in some forms of exercise but not others. Results of the second study indicated that actual exercise participants associate themselves with differing sets of stereotypical personality characteristics. Subject ratings of hypothetical exercise participants differed from the self

ratings of actual exercise participants. Suggestions for further research as well as practical implications are discussed.

TABLE OF CONTENTS

ABSTRACT iii

LIST OF TABLES vi

INTRODUCTION 1

STUDY 1. 12

Subjects. 12

Procedure 12

Results 13

STUDY 2. 18

Subjects. 18

Procedure 18

Results 18

DISCUSSION 24

APPENDIX A: Five Hypothetical Exercise Participants. 36

APPENDIX B: Written Information Administered to Subjects. 37

APPENDIX C: List of Bipolar Adjectives. 38

APPENDIX D: Written Information Administered to Subjects. 40

REFERENCES 41

LIST OF TABLES

Table

1 Varimax Factor Loadings Graduate than .50 for Stereotypes Associated with Method of Exercise. 14

2 Subjects' Mean Rating of the Five Hypothetical Exercise Participants. 17

3 Subjects Mean Self Ratings. 21

INTRODUCTION

People choose to exercise for a variety of reasons, the most apparent of which are weight reduction and physical fitness. Today's health clubs offer the public a wide variety of exercise methods from which to choose. Although it is not clear what motivates an individual to choose one form of exercise over another it is suggested here that this choice may be jet another way of establishing and maintaining an aspect of ones personal and social identity. The underlying assumption is that there is a stereotypical set of characteristics associated with the participants of each particular method of exercise. Thus, an individual may choose a method of exercise that is associated with those characteristics that not only validate their image of self, but also conform to their desired social identity (Sadalla, Linder, and Jenkins, 1988).

Choosing a particular form of exercise could be said to fall within the realm of self-presentation. "Self-presentation" is being employed here in the sense that it is an attempt to control appearances (consciously and/or unconsciously) with the underlying goal of being viewed positively by others and by oneself (Weary & Arkin, 1981). This view of self-presentation has also been referred to as "impression management" or "ingratiation" (Baumeister, 1982). A vast body of literature exists in which self-

presentational motives are shown to be related to a wide range of social behaviors. Self-presentation has been investigated in relation to conformity. task performance, helping behavior, attributional statements, aggression, and much more (e.g. Brown, 1968; Deutsch & Gerard, 1955; Paulus & Murdock, 1971; Satow, 1975; Weary, 1980).

Although individuals who exercise do not have a clearly defined audience as do sport participants (Mumford, 1934), exercising in a health club cannot be viewed as a totally anonymous event. It is a setting where there is ample opportunity to observe others, be observed, and to engage in social interaction. In terms of self-presentation, behavior can be employed as a method of communicating information about self to others (Weary & Arkin, 1981). Moreover, one of the primary motives for engaging in self-presentation is to create an image in the eyes of the public that closely resembles one's ideal sense of self (Baumeister, 1982). Hence, an individual may choose a particular form of exercise as a means of providing themselves with a positive self-image and communicating this desired image to and audience (Schlenker, 1985).

Of further significance is the investigative trend toward exploring the self-presentational aspects of attribution. The question frequently raised is to what extent do individuals present themselves with the goal of controlling attributions made by self and others (Harvey,

Ickes, & Kidd, 1978)? It has been suggested that self-perception and perception-of-self by others are similar in that both utilize overt behavior for making attribution (Bem, 1972; Weary & Arkin, 1981). In other words, individuals may gain insight into themselves by observing their own behavior. Therefore, overt behaviors may play an important role not only in how people are perceived by others, but also in how they perceive themselves. This becomes important in view of exercise being an overt behavior. If an individual is viewed engaging in a particular method of exercise, his/her perception of self and how he/she is perceived by his/her audience may be affected.

Unfortunately, it is difficult to determine whether people choose to engage in certain behaviors as a result of their already existing characteristics, or because they wish to be associated with those characteristics. The issue of whether people possess an underlying set of enduring personality traits or acquire characteristics through learning/behavior, has yet to be resolved (Bierhoff, 1989; Harvey, Ickes, & Kidd, 1978; Weary & Arkin, 1981). On the one hand, an individual may desire the characteristics associated with the participants of a particular method of exercise. Thus, by engaging in that method he/she is able to observe his/her own behavior and attribute the desired characteristics to him/herself, and have those character-

istics attributed to him/her by others (Bem, 1972). Hence, his/her self-perception is altered as a result of the new behaviors. In contrast, it may be that the individual already possesses the desired characteristics and chooses to engages in a method of exercise because of its compatibility with how he/she perceives him/herself and as a means for validating this already established sense of self (Baumeister, 1982).

Moreover, this debate continues in the sport psychology literature and is commonly referred to as the "skeptical-credulous" dichotomy (Alderman, 1974; Carron, 1980; Cox, 1990; LeVnes & Nation, 1989). Proponents of the "skeptical" viewpoint reject the "trait" approach in the study of sport and minimize the value of personality assessment as a predictive tool (Gill, 1986; Kroll, 1970; Singer, 1980). In contrast, supporters of the "credulous" perspective support the idea that accurate predictions can be made regarding sport participants from personality profiles based on measured traits (Kane, 1980; Morgan, 1980). Thus, it would seem that at present there is little agreement as to what determines sport preference/ performance. The idea that we can get to know someone by observing their behavior is not a new one. It has been suggested that an individual's conduct is one among many clues that can aid an observer in predicting present and future behaviors. An additional clue is an individuals self-description. We can often gain

insight into people by listening to the way in which they describe themselves (Weary & Arkin, 1981). These clues allow the observer to make assumptions based on prior experiences with similar individuals, as well as to apply untested stereotypes to the person (Goffman, 1959). Thus, an individual who includes in his/her self description information regarding exercise preference may be providing the observer with a base from which to make assumptions and apply stereotypes.

Although there is a scarcity of literature regarding stereotypes associated with the participants of different forms of exercise, research looking at the stereotypes associated with sport participation is becoming more readily available (e.g. Clingman & Hilliard, 1988; Eby & Van Gyn, 1987; Meyers, Sterling, & LeVnes, 1988). Moreover, a recent investigation examining housing appears to be relevant to the current topic. In their study of identity symbolism in housing, Sadalla, Vershure, and Burroughs (1987) employed a model based on role theoretical and symbolic interactionist frameworks. Subjects consisted of 12 homeowners who rated themselves according to 36 personality traits listed in a 9-point, bipolar scale format. Slides of the interior and exterior of each participant's house were shown to 99 undergraduate students at Arizona State University. The students were then asked to rate the homeowners according to the same set of 36 personality and identity dimensions.

Results indicated a correspondence between homeowner self-identity ratings and student ratings of the homeowners. This suggests that housing choice may be a means for self-identification and self-presentation.

Much of the research in the area of sport participation has been aimed at identifying the general personality characteristics of different athletic groups. Eby and Van Gyn (1987) investigated the relationship between the occurrence of Type A personality traits (e.g. obsessiveness, punctuality, aggressiveness) and participation in varsity athletics. The Bortner 14-item Self-Rating Scale was administered to 513 male and female University students and 135 male and female varsity athletes. Subjects in the athlete group were participants in one of the following seven sports: volleyball, basketball, rowing, field hockey, soccer, rugby, or cross-country running. Results revealed a significantly higher incidence of the Type A behavior pattern in varsity athletes as compared to the normal student population. Occurrence of the Type A pattern did not differ as a function of sport or gender.

Clingman and Hilliard (1987) examined certain general personality characteristics in athletes who were participants in either a swimming meet, a bicycle race, a running race, or a triathlon. Jackson's Personality Research Form was administered to 227 males and 63 females participating in the above listed athletic events. Results

revealed significant differences among groups in terms of general personality characteristics (e.g. aggression, autonomy, harm avoidance). Although personality characteristics differed as a function of sport and gender, many similarities were observed as well. A comparison between the athletes as a group and the general population revealed significant differences in associated personality characteristics (e.g. achievement, aggression, autonomy).

Furthermore, Meyers, Sterling, and LeVnes (1988) compared the psychological characteristics of collegiate rodeo athletes with previous research on elite athletes, collegiate athletes in other sports, and established college norms. Subjects consisted of 34 male and female members of the National Intercollegiate Rodeo Association who were administered the Eysenck Personality Inventory and the Profile of Mood States. Results indicated that intercollegiate rodeo contestants possess significantly different characteristics (e.g. extraversion, vigor, depression, conformity) than those of the college norms. Rodeo athletes were found to have similar scores to those obtained in studies with football players, body builders, cyclists, and runners. Comparisons made among the different rodeo events revealed that female rodeo performers scored significantly higher in neuroticism than males. Comparisons with prior research indicated that rodeo participants may be similar to those athletes judged as successful.

Moreover, Clingman and Hilliard (1988) conducted a two part study in which the self-perceptions of athletes were compared to the non-athlete perceptions of hypothetical sport participants. In the first phase of the study, 216 male and female University undergraduates were given the opportunity to rate the description of a stimulus person according to a list of characteristics. The stimulus persons were described as triathlon participants who finished in either the bottom, middle, or top third of the competition. Only those subjects who did not engage in regular exercise were included in the study. Results revealed that the most successful triathletes were viewed as being more competitive, health, happy, compulsive, and selfish than the less successful triathletes.

In the second phase of the study, 118 male and female triathlon participants rated themselves according to the same dimensions as employed in the above study. The self-ratings were divided in terms of the triathletes' actual finish time in the Tampa Bay Triathlon (i.e. bottom, middle, or top third). Results revealed no variation in athletes' self-perceptions as a function of level of success. Triathletes self-ratings were compared with the evaluations made of the hypothetical triathletes. Significant differences were found between the self-perceptions of those who participate and the judgements made about them by those who do not. For example, hypothetical participants who

finished in the top third of the race were rated as being the happiest and most competitive. In contrast, actual participants viewed themselves as being happy and competitive regardless of finishing position.

The research that has been done regarding the stereotypes associated with exercise participants appears to be confined primarily to the realm of bodybuilding. Freeman (1988) conducted two experiments designed to investigate the stereotypical characteristics associated with bodybuilders. In the first study, 97 male and female college students were provided with a brief description of a person and were asked to fill out a 26-item questionnaire in which they estimated the probability of the individual engaging in gender-related role behaviors and possessing gender-related characteristics. The description of the person was varied according to gender and whether they engaged in bodybuilding. Results suggested that the label of bodybuilder influenced subjects' ratings with regard to gender-related characteristics. Both male and female bodybuilders were associated with masculine role behaviors and were rated as less likely to engage in feminine occupations.

In the second study conducted by Freeman (1988), 70 male and female college students were asked to rate the photographs of three women in bathing suits. The three women had previously been designed as either high attractive, less attractive, or bodybuilder. Subjects rated

the photographs in terms of physical attractiveness, socially desirable personality traits, and life success. Results indicated that the female bodybuilder was viewed as significantly less attractive and as possessing less socially desirable personality characteristics (e.g. insensitive, awkward, boring) than the non-bodybuilder who was high in attractiveness. Moreover, she was expected to have less happiness in marriage than both the high attractive and less attractive non-bodybuilders.

Finally, Sadalla, Linder, and Jenkins (1988) investigated the relationship between sport preference and social identity utilizing the same theoretical model as presented in the Sadalla et. al. (1987) study. In the first phase of the study, a list of 70 bipolar personality descriptors was developed through the use of Kelly's Repertory Grid Methodology. Each of 150 male and female undergraduate students were presented with the preferred sports of five hypothetical individuals. They were asked to compare three of the individuals at a time describing a way in which two were alike and different from a third. Through this methodology, each subject generated a total of five personality descriptors.

In the second phase of the study, 250 male and female Introductory Psychology students from Arizona State University served as subjects. Five groups were formed and each was given the description of a hypothetical person who

was said to be a participant in one of five sports: golf, bowling, tennis, motocross, racing, or snow skiing. Each participant was then asked to rate the hypothetical person according to the list of 70 bipolar personality descriptors arranged in a 5-point scale format. Findings indicated that participants in each sport were associated with differing sets of identity characteristics (e.g. honesty, calmness, attractiveness).

The purpose of the present investigation was to determine whether specific personality characteristics are associated with individuals who are described as participating in a particular method of exercise. In order to study this phenomenon, the current investigation employed a methodology similar to Sadalla, Linder, and Jenkins (1988). However, in addition to substituting exercise for sport, the present investigation conducted a second study in which actual exercise participants were given the opportunity to rate themselves as was done in the Clingman and Hilliard (1988) study. Because of the obvious similarities between exercise and sport, the list of 70 bipolar adjectives developed by Sadalla et. al. (1988) were employed. Based on the results of prior research, it was predicted that subjects would associate specific personality characteristics with individuals involved in a particular method of exercise. For example, the findings of Freeman (1988) suggest that bodybuilders would be associated with

more masculine characteristics. It was further predicted that actual exercise participants would rate themselves as possessing characteristics congruent with those obtained above.

STUDY 1

Subjects

Subjects consisted of 198 male and female Introductory Psychology students form California State University, San Bernardino. The mean age of the population sampled was 21 with a standard deviation of 6. In an effort to establish equal sample sizes for all groups, 18 of the original 198 subjects were randomly dropped from consideration. This resulted in a sample consisting of 180 (62 male and 118 female) subjects for the final analysis. This procedure was implemented in order to avoid the disadvantages inherent in running statistical procedures on heterogeneous samples (for a more thorough discussion see Rosenthal & Rosnow, 1984).

Procedure

Each subject was given a brief description of a participant in a particular method of exercise. Five randomly assigned groups were formed each of which differed in terms of the method of exercise with which the individual in the description was said to be associated. The five methods of exercise were as follows: aerobics, bodybuilding, swimming, jogging, and racquet ball. The descriptions of the five hypothetical individuals are

presented in Appendix A.

Participants were administered written information including instructions as well as the general purpose of the task (see Appendix B for written information). Along with this information, subjects were provided with the list of 70 personality descriptors developed by Sadalla et. al., (1988). Each subject rated one hypothetical individual according to a five-point scale format. The bipolar adjectives are listed in Appendix C.

Results

A principle components analysis (PCA) employing a varimax rotation to orthogonal coordinates was performed to determine the personality characteristics associated with the five different categories of exercise. The PCA grouped 45 of the personality dimensions into 14 smaller sets of related variables accounting for 68% of the total variance. The first five of the original factors were maintained as they contained 32 personality dimensions and accounted for 50% of the total variance. Those dimensions not associated with the first five factors were dropped from consideration. The five factors and the dimensions contributing to each factor are presented in Table 1 along with the factor loadings greater than .50.

Table 1

Varimax Factor Loadings Graduate than .50 for Stereotypes Associated with Method of Exercise

Item	Trustworthy 1	Daring-Innovative 2	Athletic-Outdoorsy 3	Courageous-Masculine 4	Attractive-Romantic 5
1. Trustworthy	.81				
2. Honest	.80				
3. Respectful	.72				
4. Sincere	.67				
5. Religious	.58				
6. Mature	.58				
7. Open-Minded		.71			
8. Innovative		.68			
9. Imaginative		.68			
10. Flexible		.67			
11. Witty		.62			
12. Friendly		.55			
13. Exciting		.55			
14. Daring		.54			
15. Energetic			.76		
16. In-Shape			.76		
17. Active			.69		
18. Coordinated			.65		
19. Athletic			.62		
20. Outdoorsy			.62		
21. Shapely			.56		
22. Tough				.78	
23. Macho				.78	
24. Dominant				.67	
25. Strong				.66	
26. Masculine				.61	
27. Courageous				.56	
28. Aggressive				.55	
29. Sexy					.73
30. Attractive					.71
31. Good Looking					.61
32. Romantic					.51

Factor 1 (Trustworthy) accounted for 26% of the total variance and contains characteristics such as maturity and honesty. The second factor (Daring-Innovative) accounting for 13% of the total variance, contains items such as

imaginative, exciting and open-minded. Factor three (Athletic-Outdoorsy) accounted for 5% of the total variance and contains characteristics such as active, in-shape, and energetic. Factor four (Courageous-Masculine), accounting for 4% of the total variance, contains items such as dominant, strong, and macho. The fifth factor (Attractive-Romantic) accounted for 2.9% of the total variance and contains characteristics such as good looking, sexy, and romantic.

In order to determine whether subjects associated specific personality characteristics with the five hypothetical exercise participants, a 5(exercise type) x 5(factors) MANOVA was performed, which was significant [Hotelling's $T^2=137.436$; $\chi^2(16.818)=117.88, p<.001$]. Univariate Analyses were then computed for each factor. Only differences among factors four (Courageous-Masculine) and five (Attractive-Romantic) were significant [$F(4,175)=9.94, p<.001$ and $F(4,175)=4.14, p<.003$, respectively]. Planned tests using Tukey's HSD method revealed that subjects rated the hypothetical bodybuilders as possessing significantly more of the characteristics along the Courageous-Masculine dimension that aerobics participants ($^qHSD=2.96, M_D=6.00, p<.05$), joggers ($^qHSD=2.96, M_D=5.25, p<.05$), racquet ball players ($^qHSD=2.96, M_D=4.83, p<.05$), and swimmers ($^qHSD=2.96, M_D=4.75, p<.05$). The hypothetical description of an individual engaging in

aerobics was rated as possessing significantly more of the characteristics along the Attractive-Romantic dimension than both joggers ($^{q}HSD=1.81, M_D=2.50, p<.05$) and racquet ball players ($^{q}HSD=1.81, M_D=1.89, p<.05$). Subjects mean ratings of the five hypothetical exercise participants are presented in Table 2.

In summary, subjects rated the hypothetical body-builders as possessing significantly more of the characteristics along the Courageous-Masculine dimension than the remaining four exercise groups. The hypothetical description of an individual engaging in aerobics was rated as possessing more of the characteristics along the Attractive-Romantic dimension than both joggers and racquet ball players.

Table 2

Subjects' Mean Ratings of the Five Hypothetical Exercise Participants

	Method of Exercise				
Descriptors	Aerobics	Bodybuilding	Jogging	Racquet Ball	Swimming
Trustworthy					
Trustworthy	3.03	2.89	2.86	2.67	2.61
Honest	2.97	2.86	2.72	2.69	2.64
Respectful	2.75	3.03	2.61	2.50	2.44
Sincere	2.86	3.08	2.69	2.64	2.72
Religious	3.39	3.22	3.11	3.06	2.83
Mature	2.69	2.83	2.47	2.39	2.58
Daring-Innovative					
Open-minded	2.69	3.25	2.67	2.81	2.94
Innovative	2.75	3.03	2.86	2.75	2.75
Imaginative	2.72	3.14	3.11	2.86	3.14
Flexible	2.17	3.11	2.42	2.39	2.81
Witty	2.56	3.19	2.92	2.58	2.72
Friendly	2.28	2.72	2.36	2.28	2.28
Exciting	2.33	2.75	2.81	2.56	2.69
Daring	2.61	2.19	2.78	2.61	2.81
Athletic-Outdoorsy					
Energetic	1.58	1.64	1.61	1.58	1.53
In Shape	1.64	1.50	1.61	1.67	1.44
Active	1.75	1.89	1.58	1.78	1.72
Coordinated	1.81	2.22	2.08	1.94	1.67
Athletic	1.89	1.78	1.78	1.64	1.67
Outdoorsy	2.25	2.39	1.92	2.25	2.00
Shapely	1.89	1.86	1.97	2.03	1.92
Courageous-Masculine					
Tough	2.69	1.72	2.39	2.58	2.47
Macho	2.81	1.58	2.72	2.53	2.58
Dominant	2.42	1.78	2.53	2.44	2.61
Strong	2.28	1.58	2.17	2.25	1.94
Masculine	3.14	1.81	2.53	2.50	2.53
Courageous	2.58	2.22	2.47	2.61	2.44
Aggressive	2.25	1.67	2.36	2.08	2.31
Attractive-Romantic					
Sexy	2.17	2.50	2.89	2.78	2.39
Attractive	1.97	2.42	2.64	2.33	2.58
Good Looking	2.25	2.64	2.94	2.72	2.47
Romantic	2.56	3.17	2.97	3.00	2.56

Note. Mean values shown are from 5-point bipolar scales. A scale value of 1.00 refers to the anchor descriptor listed in the table.

STUDY 2

Subjects

Subjects consisted of 99 male and female students enrolled in physical education classes at California State University, San Bernardino. The mean age of the population sampled was 21 with a standard deviation of 6. Subjects were drawn from classes falling under the heading of one of each of the five categories of exercise employed in the first study. In an effort to establish equal sample sizes for all five groups, 9 subjects were randomly dropped from consideration resulting in a sample consisting of 90 (35 male and 55 female) subjects for the final analysis. This procedure was implemented in order to avoid the disadvantages inherent in running statistical procedures on heterogeneous samples (for a more thorough discussion see Rosenthal & Rosnow, 1984).

Procedure

Participants were administered written information including instructions as well as the general purpose of the task (written information is included in Appendix D). As in the first study, subjects were provided with the list of 70 personality descriptors developed by Sadalla et. al. (1988). Participants were asked to rate themselves on a 5-point scale according to the list of bipolar adjectives.

Results

A principle components analysis (PCA) employing a

varimax rotation to orthogonal coordinates was performed to determine the personality characteristics associated with the five different categories of exercise. The PCA performed on actual exercise participant ratings yielded an uninterpretable pattern of results. Thus, in order to determine whether the actual exercise participants rated themselves as possessing a stereotypical set of characteristics, a 5(exercise type) x 5(factors) MANOVA was performed using the five factors obtained in Study 1. The MANOVA yielded significant results [Hotelling's $T^2=54.0608$, $\chi^2(13.934)=38.13, p<.001$]. Univariate analyses were then computed for each factor. Significant differences were obtained for factors two (Daring-Innovative), three (Athletic-Outdoorsy), four (Courageous-Masculine), and five (Attractive-Romantic) [$F(4,85)=4.43, p<.003$; $F(4,85)=4.03, p<.005$; $F(4,85)=4.86, p<.001$; and $F(4,85)=2.92, p<.03$, respectively]. Planned tests using Tukey's HSD method revealed that subjects enrolled in the swimming class rated themselves as possessing significantly more of the characteristics along the Daring-Innovative dimension than did joggers ($_qHSD=3.42, M_D=4.39, p<.05$), racquet ball players ($^qHSD=3.42, M_D=3.50, p<.05$), and aerobics participants ($^qHSD=3.42, M_D=4.39, p<.05$). Swimmers also rated themselves as possessing more of the qualities contained in the athletic-Outdoorsy factor than did individuals enrolled in the aerobics class ($^qHSD=4.02, M_D=5.34, p<.05$.). Both swimmers

and bodybuilders rated themselves as possessing more of the Courageous-Masculine characteristics than did individuals engaging in aerobics (^{q}HSD=3.92,M_D=5.11,$p<.05$ and M_D=5.11, $p<.05$, respectively). Finally, the swimming group rated themselves as possessing more of the Attractive-Romantic characteristics than subjects in the racquet ball group (^{q}HSD=2.52,M_D=2.94,$p<.05$). Subjects' mean self-ratings on the above discussed factors are presented in Table 3.

In summary, subjects enrolled in the swimming class rated themselves as possessing more of the characteristics along the Daring-Innovative dimension than did the remaining four groups. Swimmers also rated themselves as possessing more of the qualities contained in the Athletic-Outdoorsy factor than did individuals enrolled in the aerobics class. Both swimmers and bodybuilders rated themselves as possessing more of the Courageous-Masculine characteristics than did individuals engaging in aerobics. Finally, the swimming group rated themselves as possessing more of the Attractive-Romantic characteristics than subjects in the racquet ball group.

Table 3

Subjects Mean Self Ratings

Descriptors	Aerobics	Bodybuilding	Jogging	Racquet Ball	Swimming
Trustworthy					
Trustworthy	1.33	1.28	1.33	1.61	1.44
Honest	1.39	1.28	1.39	1.56	1.83
Respectful	1.72	1.83	1.67	1.39	1.61
Sincere	1.50	1.67	1.61	2.00	1.78
Religious	2.44	2.83	2.50	2.44	2.72
Mature	1.78	1.61	1.83	1.89	1.78
Daring-Innovative					
Open-minded	1.89	1.89	1.78	2.00	1.33
Innovative	2.56	2.44	2.39	2.22	1.78
Imaginative	2.06	2.00	2.78	1.94	1.67
Flexible	2.44	1.94	2.17	2.33	1.83
Witty	2.33	1.89	2.17	1.89	1.67
Friendly	1.67	1.61	1.94	1.56	1.28
Exciting	2.17	2.11	2.44	2.22	1.61
Daring	2.61	2.39	2.56	2.67	2.17
Athletic-Outdoorsy					
Energetic	2.33	2.17	1.89	2.11	1.94
In Shape	2.89	2.33	2.39	3.17	2.06
Active	2.22	1.94	2.00	2.44	1.39
Coordinated	2.67	1.89	1.89	1.89	2.00
Athletic	3.28	2.33	2.44	2.33	1.89
Outdoorsy	2.56	2.39	2.17	2.50	2.11
Shapely	2.72	2.33	2.28	2.56	1.94
Courageous-Masculine					
Tough	3.28	2.28	2.67	2.44	2.28
Macho	2.72	2.67	2.94	2.89	2.78
Dominant	2.61	2.44	2.83	2.28	2.39
Strong	2.78	1.94	2.50	2.39	1.94
Masculine	4.17	2.67	3.00	3.50	2.61
Courageous	2.44	2.17	2.33	2.44	2.00
Aggressive	2.83	2.28	2.78	2.61	2.44
Attractive-Romantic					
Sexy	2.28	2.33	2.28	2.83	2.00
Attractive	2.44	2.39	2.17	2.50	1.83
Good Looking	2.67	2.61	2.17	2.78	1.78
Romantic	1.61	2.00	1.94	2.11	1.67

Note. Mean values shown are from 5-point bipolar scales. A scale value of 1.00 refers to the anchor descriptor listed in the table.

In an effort to determine whether the self-ratings of subjects enrolled in the physical education classes differed from ratings applied to the hypothetical exercise participants in the first study, a 2(actual exercise participants vs. hypothetical participants) x 5(factors) MANOVA was performed for each method of exercise. For aerobics, the MANOVA was significant [Hotelling's T^2 =92.7512, $F(5,48)=17.12, p<.001$]. Univariate ANOVA's were significant for factors one (Trustworthy) and three (Athletic-Outdoorsy) [$F(1,52)=38.94, p<.001$ and $F(1,52)=12.96, p<001$, respectively], with the actual aerobics participants rating themselves as possessing more of the Trustworthy characteristics and less of the Athletic-Outdoorsy characteristics than was attributed to the hypothetical exercise participants. For bodybuilding, the MANOVA was significant [Hotelling's $T^2=98.477, F(5,48)$ $=18.18, p<.001$]. Univariate ANOVA's revealed significant differences for factors one (Trustworthy), two (Daring-innovative), and four Courageous-Masculine) [$F(1,52)=45.93, p<.001$; $F(1,52)=17.28, p<.001$; and $F(1,52)=$ $9.27, p<.004$, respectively], with the actual bodybuilders rating themselves as possessing more of the Trustworthy and Daring-Innovative characteristics, and less of the Courageous-Masculine characteristics than was the case for the hypothetical participant ratings. for jogging, the MANOVA was significant [Hotellings' $T^2=68.212$, $F(5,48)=$

12.59,p<.001]. Univariate ANOVA's were significant for factors one (Trustworthy), two (Daring-Innovative), three (Athletic-Outdoorsy), and five (Attractive-Romantic) [F(1,52=47.90,p<.001; F(1,52=8.07,p<.006; F(1,52)=5.00, p<.03; and F(1,52)=14.66,p<.001, respectively], with the actual joggers rating themselves as possessing more of the Trustworthy, Daring-Innovative, and Attractive-Romantic characteristics, and less of the Athletic-Outdoorsy characteristics than was attributed to hypothetical joggers. For racquet ball, the MANOVA was significant [Hotelling's T^2 =63,556,F(5,48)=11.73,p<.001]. Univariate ANOVA's were significant for factors one (Trustworthy), two (Daring-Innovative), and three (Athletic-Outdoorsy) [F(1,52)=32.05,p<.001; F(1,52=9.23,p<.004; and F(1,52) =10.72,p<.002, respectively], with the actual racquet ball players rating themselves as possessing more of the Trustworthy and Daring-Innovative characteristics, and less of the Athletic-Outdoorsy characteristics than was the case for hypothetical participant ratings. For swimming, the MANOVA was significant [Hotelling's T^2=65.595,F(5,48)=12.00, p<.001]. Univariate ANOVA's were significant for factors one (Trustworthy), two Daring-Innovative), and five (Attractive-Romantic) [F(1,52)=16.95,p<.001; F(1,52)=33.13, p<.001; and F(1,52)=15.97,p<.001, respectively], with the actual swimmers rating themselves as possessing more of the characteristics along the Trustworthy, Daring-Innovative,

and Attractive-Romantic dimensions than was attributed to the hypothetical swimmers (see Table 2 and Table 3 for mean ratings).

In summary, results revealed significant differences between groups for all five factors. All five of the actual exercise groups rated themselves as possessing more of the qualities contained in the Trustworthy factor than was found in subjects ratings of hypothetical exercise participants. The actual bodybuilders, swimmers, racquet ball players, and joggers rated themselves as being more Daring-Innovative than was the case for the hypothetical participant ratings. Individuals engaging in aerobics, jogging, and racquet ball rated themselves as being less Athletic-Outdoorsy than hypothetical participant ratings. Subjects rated the hypothetical bodybuilders as possessing more of the Courageous-Masculine characteristics than actual body-builders attributed to themselves. Finally, individuals in the swimming and jogging groups rated themselves as more Attractive-Romantic than was the case for ratings of hypothetical swimmers and joggers.

DISCUSSION

The results of the present investigation can be construed as only partially supporting the hypothesis that specific personality characteristics are associated with individuals engaging in different forms of exercise. Subjects clearly associated a stereotypical set of charac-

teristics with individuals described as engaging in bodybuilding. These hypothetical exercise participants were viewed as possessing significantly more of the characteristics along the Courageous-Masculine dimension than individuals engaging in the four remaining methods of exercise. Although individuals described as engaging in aerobics, jogging, racquet ball, and swimming received similar ratings along the Courageous-Masculine dimension, aerobics participants received the lowest rating overall for these characteristics. Thus, they were viewed as being least like bodybuilders in terms of stereotypical characteristics.

Further evidence of stereotyping was found for individuals engaging in aerobics in that they were rated as possessing more of the characteristics along the Attractive-Romantic dimension than both joggers and racquet ball players. Joggers received the lowest ratings along the Attractive-Romantic dimension. Bodybuilders and swimmers were rated similarly along the Attractive-Romantic dimension and did not differ significantly from aerobics participants.

Hence, the present results suggest that stereotypes exist for some methods of exercise but not others, and only in relation to two out of the five obtained factors. Moreover, it could be inferred that individuals participating in different methods of exercise are perceived as being more alike than not. Aside from the significant differences

already discussed, individuals engaging in the five forms of exercise were given similar ratings for factors one (Trustworthy), two Daring-Innovative), and three (Athletic-Outdoorsy). These findings clearly differ from those of Sadalla, Linder, and Jenkins (1988). Results of their investigation revealed significant differences among sport participants along all five obtained factors. Thus, associated stereotypes differed as a function of sport preference for all five exercise participant groups. Due to the nature of the obtained results, the present investigation is unable to make a similar statement.

With regard to the hypothesis predicting that actual exercise participants would rate themselves as possessing characteristics similar to those attributed to the hypothetical exercise participants, findings are somewhat mixed. Out of the five exercise groups, only bodybuilders rated themselves as possessing characteristics congruent with those obtained in the first study. These individuals rated themselves as being more aggressive, strong, masculine, courageous, tough, macho, and dominant than did people engaging in aerobics, jogging, and racquet ball. However, subjects rated the hypothetical bodybuilders as possessing more of the Courageous-Masculine characteristics than actual bodybuilders attributed to themselves. Therefore, the actual bodybuilders did not associate themselves as strongly with these characteristics as was the case in

the hypothetical participant ratings.

Furthermore, results of the multivariate analysis comparing the two groups revealed significant differences for all five factors. Although this finding was in the predicted direction, it is congruent with the results of Clingman and Hilliard (1988). They also found significant differences between athletes' self-ratings and ratings of hypothetical participants. Thus, actual exercise participants appear to perceive themselves as being associated with distinctly different characteristics than subjects attributed to the hypothetical exercise participants. However, it should be noted that results also suggest an interesting amount of overlap between actual and hypothetical participants. Significant differences were not obtained for all five groups on all five factors. Thus, if viewed from this perspective, it would appear that the present hypothesis is supported to a large degree.

Viewing the above finding from the perspective of self-presentation, it would appear that the relationship here is not a simple one. It was suggested earlier that choosing a form of exercise may serve the dual purpose of enhancing the participants image of self as well as communicating this desired image to an audience (Schlenker, 1985). However, it could be inferred from the present results that self-perception and perception-of-self by others may be two entirely different phenomena in the realm of exercise. In

other words, the self-image the exercise participant holds may not be what they are communicating to their audience. Moreover, it is difficult to determine which perspective would motivate their choice of exercise to begin with, that of the participant or the observer. It has been suggested that differences exist between attributions made by actors and those made by observers (Harvey, Ickes, & Kidd, 1978). One of the primary differences indicated is that actors tend to attribute their actions to situational requirements, whereas observers are more likely to attribute the same actions to stable personal dispositions (Bierhoff, 1989). Based on this idea, it could be inferred that the exercise participant would differ from the observer in terms of attributions made.

With regard to the present results, subjects rated the hypothetical joggers as possessing least of the characteristics along the Attractive-Romantic dimension. In contrast, the actual joggers rated themselves as possessing more of the characteristics along the Daring-Innovative and Trustworthy dimensions. With this in mind, it is difficult to imagine that an individual would choose jogging as their method of exercise if viewing it from the non-participant perspective. On the other hand, if the individual already perceives joggers from the participants perspective, their desire to engage in that form of exercise would make much more sense. As for whether this desired self-image would be

communicated to an audience, this would appear to be contingent upon whether or not that audience consisted of fellow joggers.

Whether a person is drawn to a particular form of exercise because they already possess the associated characteristics, or because they wish to acquire those characteristics is difficult to determine. As was suggested earlier, this is a controversy that is far from being resolved (Bierhoff, 1989; Harvey, Ickes, & Kidd, 1978; Weary & Arkin, 1981). An individual who perceives themselves as possessing certain personality characteristics may choose to engage in activities that serve to validate their perception of self (Baumeister, 1982). Research suggests that this may be accomplished not only through choice of sport, but also through preferences for food, beverage, and housing (Sadalla, Linder, & Jenkins, 1988). The present findings revealed that actual swimmers rated themselves as possessing more of the characteristics along the Attractive-Romantic, Daring-Innovative, Athletic-Outdoorsy, and Courageous-Masculine dimensions. It could be hypothesized that these individuals chose to engage in swimming because they already perceived themselves as possessing many of the desirable qualities of a swimmer. In this case, their choice would be based not only on an already established sense of self, but also on a desire to have that sense of self validated by others. Although the results obtained through subject

ratings of hypothetical participants provide little support for the existence of exercise stereotypes, actual exercise participants appear to share many common characteristics with individuals in their own exercise group. Thus, it could be speculated that these actual participants may have been drawn to, and chosen, a method of exercise that would validate an already existing sense of self.

Of further significance is the finding that subjects associated clear stereotypes with the hypothetical participants of aerobics and bodybuilding. The three remaining exercise groups were rated similarly in terms of the obtained factors. One important issue to be considered is the idea that both of these methods of exercise tend to be highly gender related. Bodybuilding has traditionally been a male dominated form of exercise and aerobics has typically been more popular with women. Thus, the finding that bodybuilders are stereotyped as more Courageous-Masculine and aerobics participants as more Attractive-Romantic may be the result of emerging gender-role stereotypes.

An additional explanation for the stereotypes applied to aerobic and bodybuilding participants is that subjects may have had more opportunity to observe individuals engaging in these forms of exercise. Aerobics is a popular form of exercise and is a common feature at most health clubs and on college campuses. Even if a person has never

participated in an aerobics class, they are likely to have had the opportunity to observe one. As for bodybuilders, by very nature of the exercise they engage in, they are more readily recognized by observable changes in body physic. And as with aerobics, bodybuilding is a common feature at most health clubs and on college campuses. Because exercise is an overt behavior, it could be said to be a means for making attributions about self and others (Bem, 1972); Weary & Arkin, 1981). As these two forms of exercise could be highly available to public scrutiny, it may be that individuals have had more opportunity to observe them and make attributions. Hence, this is one possible explanation for the distinctive stereotypes applied to individuals engaging in both aerobics and bodybuilding.

Because of the scarcity of research in the area of exercise preference, there are many avenues yet to be explored. As this study was restricted to a college student sample, generalizability of results is somewhat limited. In addition, although the present investigation chose to eliminate gender as a variable through the use of gender-neutral vignettes, this would appear to be an important variable in that some forms of exercise may be more gender-role stereotyped than others. Moreover, University students enrolled in physical education classes may not be representative of individuals who exercise in the general population. Their motive for taking the class may be merely

to fulfill the physical education requirement. Research evidence indicates that motives for participation in a competitive sport differ are a function of age (Brodkin & Weiss, 1990). The same may hold true for exercise participation. In addition, years of experience and overall dedication to exercise are also factors to be considered. A logical next step in the investigation of exercise stereotypes would be to go to the health clubs themselves. The five methods of exercise included in this investigation were chosen because they are made available in many modern health clubs. One such club in California offers facilities not only for racquet ball, swimming, and jogging, but also for aerobics and bodybuilding. Therefore, it would be interesting to determine whether the self-ratings of health club members are congruent with those of the current college student sample.

It has been suggested that stereotypical attributions may vary with the knowledge and attitudes of the observers (Salalla, et.al., 1988). Moreover, the stereotypes that people hold may be influenced by their own group affiliations (Babad, Birnbaum, & Benne, 1983). These would appear to be a reasonable assumptions in light of the fact that an individual who engages in a particular form of exercise on a regular basis has had more opportunity to interact with and observe fellow participants. This provides a plausible explanation for the significant

differences found between actual exercise participant self-ratings and subject ratings of hypothetical participants. The actual participants are likely to have had much more opportunity to interact, gain knowledge, and formulate attitudes regarding fellow participants. Furthermore, it may be that someone devoted to a single form of exercise holds less positive attitudes toward participants of alternate methods. Therefore, it would also be of interest to examine how health club members rate individuals who prefer a different method of exercise than their own. Finally, including a non-exercise group as was done in the Clingman and Hilliard (1988) study may prove to be informative. It may be that individuals who choose not to exercise hold different attitudes regarding those who do exercise.

A further methodological issue to be considered in the present investigation is that of sample size. Because this study employed a five group design, the number of subjects per cell was greatly reduced. Moreover, the use of a 70-item checklist suggests that a much larger sample size may have proven beneficial. These are significant limitations in terms of attempting to make valid interpretations from obtained results. A final consideration pertains to the use of the adjective checklist developed by Sadalla et.al., (1988). This rating scale was developed for use with sport participants. It may be that a scale of this nature was not

sensitive in terms of measuring stereotypes associated with exercise participants. Thus, future investigations may benefit from the use of an alternative measure developed specifically for exercise participants.

Continued research in this area could be beneficial in that it may result in practical applications. For example, health clubs may be able to maintain memberships for a longer period of time if they had a means of directing new members into the form of exercise that would best suit them. Moreover, it has been suggested that based on an individuals self-description, an observer can apply untested stereotypes and make assumptions based on prior experiences with similar individuals (Goffman, 1959). This becomes particularly significant in light of the fact that many employment and college applications include a section that asks for a description of outside activities. It is here that applicants have the opportunity to list the form of exercise in which they engage. Given this information, the reviewer of the application may make certain assumptions about the individual in addition to associating them with certain stereotypical characteristics. Furthermore, as was suggested by Sadalla et.al., (1988), the applicant may choose to leave this information out if they expect a negative reaction from the reviewer, or they may modify it in such a way as to enhance their desired image (e.g. claim a high degree of expertise or dedication). This, of course,

may apply to other daily interactions as well. Finally, it is hoped that the present investigation adds to the growing body of research devoted to examining the role of self-presentation in everyday life.

Appendix A

Five Hypothetical Exercise Participants

1. __X__ is a member of a local health club and engages in bodybuilding on a daily basis. __X__ subscribes to a couple of bodybuilding magazines and generally socializes with other bodybuilders.

2. __X__ is a member of a local health club and engages in aerobic classes on a daily basis. __X__ subscribes to a couple of aerobic magazines and generally socializes with other people who do aerobics.

3. __X__ is a member of a local health club and uses the club pool to swim laps on a daily basis. __X__ subscribes to a couple of swimming magazines and generally socializes with other swimmers.

4. __X__ is a member of a local health club and goes there to play racquet ball on a daily basis. __X__ subscribes to a couple of racquet ball magazines and generally socializes with other racquet ball players.

5. __X__ is a member of a local health club and uses the club track to jog on a daily basis. __X__ subscribes to a couple of jogging magazines and generally socializes with other joggers.

Appendix B

Written Information Administered to Subjects

Department of Psychology

California State University, San Bernardino

Participation Consent

I am a graduate student at CSUSB and am currently conducting research in an effort to fulfill the thesis requirement for the M.S. degree in counseling psychology. I am interested in understanding the relationship between exercise involvement and other personality characteristics. The central question being asked here is whether knowing someone engages in a particular method of exercise tell s us anything about their personality. You will be provided with a brief description of a person involved in one method of exercise. Please read the description carefully and then circle the personality rating in a way that you think best describes the person. Although some of the questions may seem to have little relation to exercise involvement, please answer them all as best you can.

The questionnaire will take approximately 15 minutes to complete. Your responses will be anonymous, and your participation is voluntary. You are free to discontinue participation in this study at any time. Upon completion of your participation additional explanations of this study may be obtained by contacting Misty Sherman at (714) 422-0642.

Your participation in this project is greatly appreciated.

Appendix C

List of Bipolar Adjectives

athletic-nonathletic
aggressive-passive
good taste-poor taste
sexy-not sexy
honest-dishonest
fast-slow
tactful-tactless
friendly-unfriendly
cultured-uncultured
formal-informal
relaxed-tense
mature-immature
patient-impatient
careful-careless
calm-nervous
young-old
confident-timid
macho-wimpy
courageous-fearful
wealthy-poor
sensual-ascetic
witty-boring
masculine-feminine
shapely-unshapely
energetic-lazy
imaginative-unoriginal
dominant-submissive
traditional-faddish
outdoorsy-homebody
strong-weak
flexible-rigid
tough-delicate
brave-coward
sincere-insincere
attractive-plain
in shape-out of shape
exciting-dull
active-passive
refined-crude
modest-boastful

Appendix C (cont.)

List of Bipolar Adjectives

daring-conservative	extrovert-introvert
happy-unhappy	natural-artificial
white collar-blue collar	respectful-disrespectful
romantic-unromantic	coordinated-uncoordinated
spontaneous-predictable	independent-conformist
innovative-not innovative	even tempered-hot temp
trustworthy-not trustworthy	sophisticated-unsophisticated
conventional-unorthodox	intelligent-unintelligent
openminded-closeminded	competent-incompetent

Appendix D

Written Information Administered to Subjects

Department of Psychology

California State University, San Bernardino

Participation Consent

I am a graduate student at CSUSB and am currently conducting research in an effort to fulfill the thesis requirement for the M.S. degree in counseling psychology. I am interested in understanding the relationship between exercise involvement and other personality characteristics. The central question being asked here is whether knowing someone engages in a particular method of exercise tell s us anything about their personality. You will be provided with a form asking you a few general questions about yourself. After competing the general information form, you will be asked to turn the page and rate your own personality on the additional forms provided. Although some of the questions may seem to have little relation to exercise involvement, please answer them all as best you can.

The questionnaire will take approximately 15 minutes to complete. Your responses will be anonymous, and your participation is voluntary. You are free to discontinue participation in this study at any time. Upon completion of your participation additional explanations of this study may be obtained by contacting Misty Sherman at (714) 422-0642.

Your participation in this project is greatly appreciated.

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SOFTWARE PILFERAGE

IN

GOVERNMENT AGENCIES

A Project

Presented to the

Faculty of

California State University,

San Bernardino

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by

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March 1992

Approved by:

Brian Watts, Chair	March 17, 1992 Date
Clifford Young	3/17/92 Date
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TABLE OF CONTENTS

INTRODUCTION

The Plan 1

Riverside County 1

Why This Is A Problem 3

How To Research This Project 5

ISSUES

The Law 6

Cases 7

Problems

People Steal Software 10

Why This Is A Problem In Riverside County . . . 11

Why This Is A Problem Everywhere 14

Economic Implications 15

Policies 16

Centralized Policy 17

Decentralized Policy 17

Conclusion 18

METHODS

Introduction 19

Survey Method 19

Survey Selection 20

Survey Questions 22

Conclusion 24

FINDINGS

Policy Review 25

Evaluation of Policies 28

United States Government Agencies

Department of the Air Force 29

State Government Agencies

Department of Motor Vehicles 30

County Government Agencies

Riverside County Auditor Controller 31

Riverside County Building and Safety 31

Riverside County Fire Department 33

Riverside County Flood District 33

Riverside County Public Social Services 34

Riverside County Transportation Department . . 35

Riverside County Waste Management 35

San Diego County 35

City Government Agencies

City Of Corona 36

City Of Rancho Cucamonga 37

City Of Upland 38

Conclusion 39

RECOMMENDATIONS

Policy Development 40

Procedure 40

Policy Content 42

Education 44
Purchasing Recommendation 45
Budget Recommendations 45
Recommendations Conclusion 46
CONCLUSION 47
Appendices
Appendix A United States Code of the Law of the United States of America, Title 17, Chapter 5 51
Appendix B Phone Call Guideline to Other Agencies 59
Appendix C Policy Questionnaire 61
Appendix D Policy Questionnaire Flowchart . . . 63
Appendix E Government Agencies Surveyed 65
Appendix F County of Riverside Personal Computer Software Policy 68
References 74

LIST OF ILLUSTRATIONS

List of Figures

Figure 1 Government Agencies Software Policy Survey Results 26

Figure 2 Government Agency Software Component Comparison Chart 29

INTRODUCTION

THE PLAN

The purposes of this project are to determine if there is a need to develop a centralized policy for software use in Riverside County and, if there is, to propose that policy. This study will identify policies created by other government agencies, the ethical, legal, and financial issues of software pilferage, and information for the development of a centralized software policy that might help promote honesty and integrity among employees.

The study of software pilferage in government agencies will be accomplished by surveying city, county, state, and federal agencies in the Inland Empire. The survey will question whether or not each agency has a software policy in place. Software development companies will be contacted for information on sanctions that might be enforced when a violator of the law is caught. A policy will be created if this study proves there is a need.

RIVERSIDE COUNTY

On May 9, 1893, Riverside County was formed from portions of San Bernardino and San Diego Counties. It became the fifty-third county of California. As of January 1, 1990, there were over one million residents, making Riverside the seventh largest county in California by population. It is the fourth largest county by area with seven thousand two hundred

square miles. This county stretches one hundred eighty four miles from the Colorado River to ten miles from the Pacific Ocean. There are currently more than fifty departments within the county infrastructure, employing approximately eleven thousand employees.[1] Preliminary research with many of the departments indicates, most employees do not know anything about computer software laws.

This project will identify existing software policies, providing a guideline for development of a generic policy in Riverside County, if necessary. For this paper, a software policy is defined as a document that details:

- the laws,
- county responsibilities and liabilities,
- employee responsibilities, and
- sanctions or the consequences for not adhering to the policy.

There are many processes a new policy needs to move through before being presented to the Board of Supervisors for its approval. The policy needs to be developed and approved by the Security Standards Sub-Committee. Then the policy needs to be approved by the Security Standards Committee and the Management Council. The policy is then forwarded to the Board of Supervisors. If the policy is formally adopted by the

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[1]County Administrative Office, Presentation to Rating Agencies (County of Riverside, May 1990), p.1.

Board, implementation will be required in every department in Riverside County.

WHY THIS IS A PROBLEM

Personal computers (PCs) have become an increasingly important tool in both private and public sectors. PCs were first introduced as a viable working tool in the late 1970s by Apple, Commodore, Tandy, and others. An article in the Press Enterprise stated, "'In one decade, the personal computer has become a commodity item,'...It's unlikely that any technology in history had ever undergone commercial development and gained such widespread adoptions so quickly."[2] As a consequence of emerging technology, PCs will probably be used as much in the future as the telephone is currently utilized. There will likely be a PC on every employee's desk and at least one in every home.

With the use of PCs growing at a fast pace, the proper (legal) use of the computer software becomes increasingly important. Computer software is necessary to operate the PC. It is the fuel that makes the hardware function by allowing data to be entered and reports to be printed. Hardware and software are equal and integral parts that enable the computer to function.

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[2]"Personal Computers have come a long way in a Decade," Press Enterprise, 6 August 1991, sec. C, pp. 1, 3.

Computers are popular because they usually take less time and provide accurate computations. Tasks are achieved better and faster on a PC than with pen and paper. Usually, software is placed on the PC by copying from a floppy disk onto the PCs internal hard disk. For this reason, software and how it is utilized is the important issue of this research paper.

For the past ten years, PCs have been a major part of my life. I have seen people copy software illegally--especially in Riverside County. Many individuals copy programs and freely give them to anyone who asks. This is because some people simply do not:

- know the copyright law;
- read the user responsibilities included with a software package; or
- abide by the copyright law.

It is ethically and legally wrong for anyone, including those working for a government agency, to steal software programs.[3] The organization is responsible for educating employees on the copyright law and software use; the employee is responsible to abide by the laws and policies.

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[3]Kathy Foley, "I have a personal bias on this subject because I have been developing personal computer software since 1982," December 1991.

HOW TO RESEARCH THIS PROJECT

There are seven steps to complete this project:

1. Research what has already been done through the library, oral surveys, and oral interviews;
2. Determine if there is a need for a policy (if there is no need, the project ends);
3. Assuming there is a need for a policy, determine which of the existing policies are effective;
4. Write a draft policy and submit it to the Security Standards Sub-Committee, the Security Standards Committee, and the Management Counsel;
5. Refine the draft policy;
6. Submit policy to Board of Supervisors; and
7. Implement the policy.

One method of creating a software policy is to see what else is being done by other agencies. This will be accomplished by surveying Riverside and San Bernardino Counties, state agencies in California, and federal government agencies. Telephone calls will be placed to all incorporated cities in both counties and all departments in Riverside County. The state and federal agencies will be randomly selected from the Riverside telephone book.

A telephone questionnaire will be used to ask questions of the agency. A copy of the software policy will be requested if any agency has one. Each policy will be analyzed

and the most important components will be documented so a comprehensive policy can be created.

ISSUES

THE LAW

The Copyright Act of 1976 protects an author's work until fifty years after his death. According to Morgan,[4] there was much doubt about whether the Act would cover software. This was because PCs were just beginning to surface. Legal reporting terminology did not include words like software piracy or pilferage. The act was modified in 1980 to include computer software.

In the United States Code of the Laws of the United States of America, Title 17, Chapter 5,

> Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 118 [17 USCS && 106-118], or who imports copies or phonorecords into the United States in violation of section 602 [17USCS& 602], is an infringer of the copyright.

An amendment added on December 12, 1980, stated: "A 'computer program' is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result."[5] See Appendix A for a partial copy of Title 17 and its amendments.

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[4]Malcolm J. Morgan and Diane J. Ruskell, "Software Piracy--The Problems," Industrial Management and Data Systems, March/April 1987, p.10.

[5]U.S. Code of the Laws of the United States of America, Title 17-Copyrights, Section 501, 1978, p.231.

According to Malcolm J. Morgan and Diane J. Ruskell,[6] it is important to distinguish between pilferers and pirates. A person who makes unauthorized copies of software for his own use is a pilferer (called pilferage). Someone illegally reselling software is a pirate (called piracy). Most of the industry refers to the illegal copying of software as simply piracy not pilferage. The terms are inaccurately used in the media and through day-to-day conversation among colleagues. For this paper, the term of pilferage will be used for illegally copying software programs for personal use and not for sale.

CASES

On February 28, 1991, the Software Publishers Association (SPA) submitted a press release announcing, "...the completion of a court ordered raid on Parametrix Corporation, an engineering consulting firm with offices in Bellevue, Sumner and Bremerton, Washington, and Portland, Oregon."[7] Through the raid many illegal copies of software were found. The raid was done on Parametrix Corporation because a disgruntled employee called and reported software abuses. The SPA performed the surprise raid for Ashton-Tate Corporation, Lotus

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[6]Malcolm J. Morgan and Diane J. Ruskell, "Software Piracy--The Problems," Industrial Management and Data Systems, March/April 1987, p.8.

[7]Software Publishers Association, "Publishers Raid Seattle-Based Engineering Firm: Find Illegal Software," Press Release, February 28, 1991, p.1.

Development Corporation, Microsoft Corporation, and WordPerfect Corporation by using an *ex parte* writ of seizure and temporary restraining order from the U.S. District Court, Western District of Washington.[8]

On May 7, 1991, a settlement was reached between SPA and Parametrix. Parametrix paid $350,000 plus attorneys' fees to settle the case. The president of Parametrix stated that, "This has been a very difficult situation for us because it happened due to our own carelessness...we simply copied existing software for use with our new computers. We had no policy regarding the use of our software and simply didn't control what was happening...."[9]

Three other lawsuits involving the Software Publishers Association need to be mentioned (although there are many cases that have been settled or are in the process of settlement.) The first case was filed against the University of Oregon Continuation Center. This lawsuit was filed in the United States District Court in Portland on February 26, 1991. The University of Oregon Continuation Center provided software training in their microcomputer laboratory for many businesses in Portland, Oregon. The suit alleged that the University violated the United States copyright law by making

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[8]Ibid.

[9]Software Publishers Association, "Software Publishers Association and Parametrix Reach Settlement," Press Release, May 7, 1991, p.1.

unauthorized copies of software on the PCs. The settlement between SPA and the University of Oregon was as follows:

- the University paid $130,000 to SPA,
- a national conference had to be organized and hosted in Portland on copyright law and software use, and
- the University had to provide an assurance contract that it would develop policies and procedures in compliance with software products.[10]

The second case that needs mentioning is between the SPA and Healthline Systems, Incorporation. A lawsuit was filed for illegally copying commercial software on August 6, 1991 in the United States District Court for the Southern District of California in San Diego. On December 19, 1991 a monetary settlement was reached (the amount was not disclosed) between the two organizations. Healthline also had to agree to stop illegal copying of software.[11]

The last case was filed on December 12, 1991, against Viasoft, Inc. in Phoenix, Arizona. This lawsuit was filed in the United States District Court in Phoenix. Viasoft operated illegally by using many copies of unlicensed software.

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[10]Software Publishers Association, "University of Oregon Center--Software FIrms Settle Lawsuit," Press Release, August 21, 1991, p.1.

[11]Software Publishers Association, "Settlement Reached in Copyright Infringement Suit Against Healthline Systems, Inc.," Press Release, December 19, 1991, p.1.

Through this lawsuit, Viasoft agreed to distribute policies prohibiting illegal software copying. "LeRoy Ellison, the President of Viasoft, Inc. stated, 'Viasoft remains committed to its policy of compliance with software license agreements and has redoubled its efforts to avoid inadvertent or unauthorized use of unlicensed products."[12]

The above cases are just a few that point out that the copyright law amended in 1980 to include software is enforced. "Reproducing computer software without authorization violates the U.S. Copyright Law. It is a Federal Offense."[13] And the SPA is going to continue their campaign until all companies comply with the law.

PROBLEMS

PEOPLE STEAL SOFTWARE

Computer software was probably pilfered years ago because of high costs. Now, software has become reasonably priced and cost may not be a good excuse anymore. For instance, word processing software such as WordPerfect and WordStar cost approximately $500 each in the past five to seven years. These software packages can now be purchased at approximately $250 for higher level versions and $100 for lower level

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[12]Software Publishers Association, "Computer Software Firms Settle Action Against Viasoft, Inc." Press Release, December 12, 1991, p.1.

[13]Automated Data Processing Service Organization (ADAPSO), Thou Shalt Not Dupe, 1984.

versions. Shareware programs for word processing cost as little as $15 and public domain versions are free.

So why would anyone steal software?

> Most software thieves are otherwise honest professionals. Most...would not think of shoplifting even a small item from a store; they would never consider falsifying data in a research project. Yet these same individuals commit what is technically a felony by stealing software. Most know that stealing software is illegal...The process erodes the integrity of the individuals and the institutions for which they work...Software theft is particularly prevalent in universities, which constitute one of our largest markets.[14]

WHY THIS IS A PROBLEM IN RIVERSIDE COUNTY

It is against the law to copy a software program to place on another PC. (Unless an exception is granted by the copyright owner, a copy of the software can be made on another floppy for backup or archival purposes only.) "Infringement of a registered copyright exposes the violator to criminal penalties...In addition to civil penalties, damages up to $250,000 have been awarded, and violators have received jail terms of up to five years."[15]

Many employees in the Riverside County Building and Safety Department have placed unauthorized software programs on other PCs--including PCs in their home. (Recently, a

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[14]Victor Rosenberg, "Software Theft And Copy Protection," Library Journal, February 1, 1989, p.47.

[15]George E. Biles and Sarah B. Swanson, "The Wages of Software Piracy," Information Strategy; The Executive's Journal, Spring 1988, p.5.

procedure was implemented to educate the employees on the copyright law and guidelines for computer software use.) Illegal software duplication is not unique to just the Building and Safety Department; it is happening in many of the departments throughout the county.

This fact has come about through conversation this past year with data processing department heads and their employees. There is a meeting once every month called the PC Users Group Meeting. Any employee in Riverside County and City departments may attend. Many of them have expressed concerns about software pilferage in their departments in addition to other PC problems. Another reason the software duplication problem is well known is by working in and with the departments.

Some people are not able to get enough copies of the many software programs that are on the market today. For instance, one Riverside County employee revealed he had five word processing programs, three spreadsheet programs, and many other programs. All of these programs on an internal hard drive totaling one hundred and fifty million characters of space. He admits he will never use all five word processing programs. Once a person finds a program he likes, he will not usually switch between them. This is because there is a significant time factor involved to learn the new keystrokes and function keys to perform similar tasks.

One important reason that software duplication problems surfaced in Riverside County is computer viruses. Viruses are transported from one computer to another with software programs. A virus can bring a PC down for weeks. It can damage a software program and data files forever. Many departments confessed experiencing virus attacks on their PCs at one of the PC User Group Meetings. Most people at these meetings have expressed a concern for stopping viruses. One way to stop them is to eliminate software pilferage.

Other reasons that software pilferage is a problem in Riverside County are software standardization and software development. When users were illegally making a copy of WordStar to put on one PC, WordPerfect for another, and Microsoft Word for a third, documents could not be easily transferred between the programs. If one of the PCs breaks, the backup copy of the file could not be retrieved on another PC because the program file formats were incompatible.

Software development is when an employee uses a software program to create a unique system to perform a task. For instance, an employee brings in an illegal copy of Pascal and installs it on his PC at work. (Pascal is a software development tool.) That employee creates an inventory system. The system is used by the department for two years successfully. The employee quits, but erases Pascal and the inventory system before leaving. The department has no

recourse. It cannot prosecute the employee because the product and its result were illegally used. The department loses a good product and the cost of employee hours to develop the product that no longer exists.

WHY THIS IS A PROBLEM EVERYWHERE

The issue of software pilferage in the personal computer industry is not new. It has been around since software was first developed. Software developers used to program the copy protections on their disk so only one, two, or three copies could be made. Lotus Development Corporation is one company that had a copy protection on their product. It could only be copied three times then the original floppy disks could no longer be fully copied. If a hard drive needed replacement, a customer had to call the software developer to get another copy of the original software. This resulted in lost sales from many users and organizations, so most developers removed the copy protections. Rosenberg found that copy protections were hard to maintain because up to thirty percent of the customer service phone calls were copy protection problems.[16] In addition to the problems copy protections cause, Central Point created a software program that would copy a program with copy protections!

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[16]Victor Rosenberg, "Software Theft And Copy Protection," Library Journal, February 1, 1989, p.47.

Jin H. Im points out that agencies and their employees are liable for illegally copying software. For instance, a university employee caught making illegal copies of software places many people in jeopardy: the purchasing agent, the employee, the supervisor, and the university could be prosecuted.[17]

ECONOMIC IMPLICATIONS

If management and the employees in organizations continue to ignore software pilferage, there might be economic and development implications. Software developers might not create new programs because of their profit loss. Small software development companies could possibly close their business because of the loss of sales due to piracy or pilferage. Large software development companies would survive, but prosecute violators and increase prices. According to the Vice President of Law and Corporate Affairs for Microsoft Corporation,

> ...it hurts end users as well as software publishers. Users of illegal software don't get full utility from their software because they often don't have manuals. They also are not eligible for product support or the reduced-price upgrades that are frequently offered to those who have genuine product. In addition, unauthorized copying deprives software publishers of revenue that could be channeled into the research and

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[17]Jin H. Im and Clifford Koen, "Software Piracy and Responsibilities of Educational Institutions," Information and Management (Netherlands), April 1990, p.193.

development of improved products. In short, everyone loses.[18]

Two other events could occur. First, many organizations that depend on software to obtain management reports could lose excellent tools for automation. Second, unemployment could go up if the developers close their doors. Morgan believes, "The unauthorized duplication of software may be siphoning billions a year in sales from software publishers, distributors, and dealers, according to industry estimates. Software publishers say that for every package sold there may be between two and fifteen unauthorized copies made."[19]

POLICIES

Webster's definition of a policy is "A plan or course of action, as of a government, political party, or business, designed to influence and determine decisions, actions, and other matters."[20] A policy can be written or verbal. A written policy is formal and more binding. The written policy is necessary for legal matters as well as standards for guidance. Policies can be decentralized, where each department within an agency creates and maintains its own.

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[18]Software Publishers Association, "Publishers Raid Seattle-Based Engineering Firm: Find Illegal Software," Press Release, February 28, 1992, p.1.

[19]Malcolm J. Morgan and Diane J. Ruskell, "Software Piracy--The Problems," Industrial Management and Data Systems, March/April 1987, p.8.

[20]The American Heritage Dictionary, Second College Edition (1982), s.v. Houghton Mifflin Company, p.959.

Centralized policies are written for all departments in an agency with one department responsible for creating and maintaining it. In order to decide whether to create centralized or decentralized policies, the advantages and disadvantages must be considered.

CENTRALIZED POLICY

A centralized policy is usually written by an employee with expertise in the topic field. There are many advantages to a centralized policy. Since the policy is the same for all departments, employees know the policy when transferred within the agency. The Board of Supervisors and Auditor Controller can be assured of consistency. Standards for procedures can be established across the board. Disadvantages to a central policy include resentment from employees over the central control issue and lack of compliance by employees who do not feel the policy is justified.

DECENTRALIZED POLICY

Decentralized policies exist when each department within an agency writes its own version. Decentralized policies provide many views on a subject because of different levels of expertise from the employees of the departments from which the policy is created. A policy written specifically for a department will be unique to that department's needs. Changes can be made quickly and easily. Employees might accept a

decentralized policy over a centralized policy because it was created within their department.

An important disadvantage to consider when decentralizing policy development is that it may never be written. If an employee transfers from one department to another, he has to learn a new policy for procedures that could have been standardized.

CONCLUSION

The issues in this section are law and ethics and how each is addressed in Riverside County and throughout the world. It is against the Copyright Act of 1976 (amended in 1980 to include computer software) to copy software illegally. There is no justification for anyone to break this law. The SPA, BSA, and other corporate inspectors do not accept excuses such as: 1) there is no money in the budget, 2) we did not know our employees were illegally copying software, and 3) we did not understand the law or the vendor's licensing agreement.

Ethically, many people do know the software use rules. Many times a person reads the licensing agreement that the software is sealed in when a product is purchased as he is installing it on a hard drive. The disadvantages to software pilferage (fines and imprisonment) outweigh the advantages (software vendors get exposure.)

METHODS

INTRODUCTION

What are other government agencies doing about software pilferage? Has some type of policy detailing guidelines for an employee's use been implemented for purchased software? Research was done among some selected government agencies to determine the answers to these questions.

SURVEY METHOD

There are three major types of research methods: survey research, experimental research, and field research. Survey research is done to study attitudes and behaviors of a selected population by questioning them and analyzing their responses. Experimental research is performed with a controlled group that reacts to experimental conditions. Field research is conducted when a researcher places himself in an environment while observing a situation.[21] The experimental and field research methods were not adequate for reviewing other organization's policies. Experimental research does not apply to this study and field research would have taken years to complete. The survey research method was used to obtain information on existing software policies in government agencies.

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[21]Therese L. Baker, Doing Social Research, McGraw Hill, Inc., 1988, pp.15,16.

Two types of surveys could have been performed, written or telephone. The written survey would have included:

- preparing a questionnaire,
- mailing it to each agency with self-addressed, stamped envelopes, and
- follow-up phone calls for non-returned questionnaires.

The problem with this method was that it would have been time consuming, costly, the mailings could have been lost or ignored, and there could be a loss of the personal touch. The telephone survey was an excellent method for the following reasons:

- The selected population sample was small enough;
- It was fast;
- Contact was ensured for 100% of the selected population; and
- Validity of the response was assured over a mailed in questionnaire by the sound of the respondent and the way he answered the questions.

SURVEY SELECTION

A stratified cluster method of sampling was used. This method allows selecting a group--the cluster (Inland Empire government agencies) that is stratified (just the incorporated cities of each county). Telephone surveys regarding PC use and policy implementation were conducted for Riverside and San

Bernardino Counties--including their incorporated cities, selected state and Federal agencies. In Riverside and San Bernardino Counties, there was a 100% survey of the incorporated cities. A list of these cities is provided in Appendix E.

Every department in Riverside County was surveyed providing a 100% sample in a government agency where software pilferage is known to occur.[22] This portion of the research helped to determine whether an adequate software policy already existed in any of the departments. State and federal agencies were selected from the Riverside telephone book. The objective of this portion of the survey was to obtain information from this range of government agencies providing software policies to peruse.

As each department in Riverside County or agency was contacted, the following information was documented:

- the agency,
- contact person,
- date,
- phone number,
- did the agency have a policy, and
- would the agency provide a copy for this survey.

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[22]Through conversation with employees and data processing department heads over the past year software pilferage have often been brought to my attention.

The contact person was preferably responsible for policy implementation or data processing standards. A copy of what was said through the telephone conversation is in Appendix B.

SURVEY QUESTIONS

The survey questions were complete enough to provide accurate information for this project. The questions were precise. Each question was understandable by the respondent to have the same meaning and was asked in a way that the respondents wanted to answer them.[23] See Appendix C for a complete list of these questions and Appendix D for a flowchart.

A combination of open-ended and contingency questions were formed for this survey. The most important question (contingency) was the first one, "Do you have personal computers?" If the agency did not have PCs, there was no reason to ask about software policies. Even if the agency had a mini or mainframe computer, software pilferage would not be an issue. This is because the contact would not have that type of software or want it. More importantly it is not the subject of this research project. The majority of employees will not own this type of computer at home. The user usually would not want to steal the software.

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[23]Therese L. Baker, Doing Social Research, McGraw Hill, Inc., 1988, pp.171,172.

Two questions were asked if the agency had PCs. The first question was the number of PCs in the organization. The second question referred to the types of applications purchased for each organization. A description of what a generic software policy might contain was addressed to ask the second important question. "Have you implemented a software policy?"

A software policy was described as a document that details:

- the objective,
- the copyright law including the 1980 amendment adding software,
- the agency's responsibility to uphold the law and keep employees educated,
- the employee's responsibility to abide by the law, and
- sanctions for employees who do not abide by the policy.

Agencies that had software policies in place were asked approximately eight questions depending on how some of them were answered. The last question was, "May I please have a copy of your policy?"

Some individuals who were contacted by telephone and had some type of software policy also had a lot of information to offer. For instance, some policies detailed an area of

concern that was not addressed by others. An interview was then arranged to discuss and obtain a copy of the policies.

The questionnaire was pre-tested on three departments in Riverside County. These departments had experts who gave critical responses before I contacted the other respondents. The questionnaire was modified and the first attempt at contacting all agencies was completed by October 31, 1991. Individuals who were unavailable during this first contact and did not return calls were contacted a second time between November 4, and November 8. The contacts whose policies were not received were contacted a second time. On November 16, 1991, all policies that were received were analyzed and documented.

CONCLUSION

Through the data analysis, the Riverside County Auditor Controller's policy was identified as the policy to start with for Riverside County. Using the results of the data analysis, it was possible to develop a detailed software policy. It is now in the process of coordination through the proper channels for approval. Once approved by all necessary committee members, the policy will be distributed to all the departments in Riverside County. The policy can then be made available for other local government agencies on request.

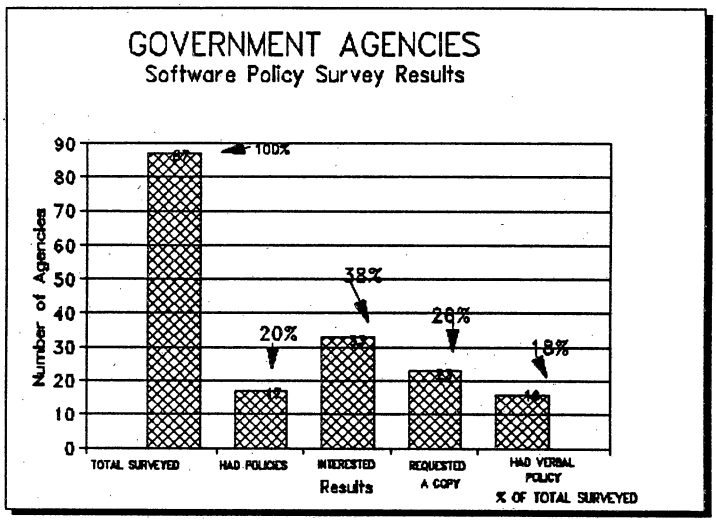
FINDINGS

The purposes of this project were to determine if a countywide centralized policy for software use in Riverside County was essential and, if it was, to propose that policy. The literature provided many examples for the need to maintain control over software purchases and implementation. There are too many organizations who perform surprise raids on large agencies. Companies get caught many times from disgruntled employees. The costs are high when caught, but the embarrassment from press coverage is unbearable.

POLICY REVIEW

The survey research identified organizations who had policies in place. Many organizations who did not have software policies expressed an interest in the subject. (See Appendix E for a list of agencies, their contacts, and policy information. See Figure 1 for a graphical view of the survey results.)

Eighty-seven agencies--federal, state, and local governments--were contacted by telephone to discuss software use and policies. Of the eighty-seven, seventeen agencies (20%) indicated they had policies. Software policy information could not be obtained from two agencies because the contact people were unavailable. Because of time constraints, none of the unavailable contacts were telephoned again. The remaining agencies surveyed provided the following



GOVERNMENT AGENCIES SOFTWARE POLICY SURVEY RESULTS
Figure 1

results:

- Thirty-eight percent showed an interest in the subject of PCs and software pilferage.
- Twenty-six percent requested a copy of a completed policy if one was developed. (Some of these already had policies and wanted to improve them.)
- Eighteen percent mentioned they had a verbal policy and believed it was adequate for their organization.

The seventeen agencies who indicated they had software policies said they would send a copy. Only fourteen of the policies were received. The three agencies who did not send policies were contacted again for a copy. One contact said she could not find it and did not know where to get a copy.

Another contact decided he did not want to send a copy. The other contact did not respond to follow-up calls.

Thirty-eight percent of the people who were contacted showed an interest in this survey, but did not have a policy in place. All the contacts who did have a policy in place also demonstrated an interest. There was positive feedback from everyone. Many did not want to stop talking. There were many questions regarding the contents of a software policy, the law, auditing procedures, etc. Many wanted the researcher's phone number to keep in touch. There was a lot of inter-action between the researcher and the contacts in the oral survey that would not have been obtained through written responses. For instance, many people were pleased to discuss the issue of software policies, software pilferage in the agencies, and the importance of the subject.

Policies were obtained from thirteen government agencies to see what the content was. There were specific areas that were looked for in these policies. An effective software policy should contain all five areas. The specific areas were:

- Did the agency state the objective of the policy?
- Did the agency quote the copyright law and its amendment in 1980 adding computers?
- Were the agency's responsibilities and liabilities defined?

- Were the employee's responsibilities defined?
- Did the agency define sanctions for employees who did not comply?

The only common issue for all policies surveyed was the objective and the employee's responsibilities. Some policies were in memo form consisting of one or two pages. Most of the policies had an outline format with a table of contents. Only one agency, Riverside County Building and Safety, defined and quoted the copyright law with its 1980 computer amendment.

EVALUATION OF POLICIES

See Figure 2 for a comparison chart on each agency's policy components. The following breakdown (in alphabetical order by branch of government) comes from an examination of the components for each policy received. Two areas were analyzed: the policy format and content.

The format was examined to obtain ideas on how to prepare a template for the proposed policy; the content was analyzed to include important components. A rating was given to the policy content on a scale of one to ten; ten being the most complete.

One point was given to the agency for having a policy and another for addressing software use. Additional points were given according to how much the software pilferage issue was addressed and what was mentioned about it. The highest rated policies were analyzed for county implementation.

ORGANIZATION	OBJECTIVE	LAW	AGENCY RESPON.	EMPLOYEE RESPON.	SANCTIONS	SCALE (1-10)
UNITED STATES GOVERNMENT AGENCIES						
Department of the Air Force	yes	no	no	yes	no	3
STATE GOVERNMENT AGENCIES						
Department of Motor Vehicles	yes	no	yes	yes	yes	2
COUNTY GOVERNMENT AGENCIES						
Riverside County Auditor Controller	yes	no	no	yes	no	9
Riverside County Building and Safety	yes	yes	no	yes	yes	8
Riverside County Fire Department	yes	no	no	yes	yes	7
Riverside County Flood District	yes	no	no	yes	yes	4
Riverside County Public Social Services	yes	no	yes	yes	no	6
Riverside County Transportation Depart	no	no	no	yes	yes	2
Riverside County Waste Management	yes	no	no	yes	no	4
San Diego County	yes	no	no	yes	yes	3
CITY GOVERNMENT AGENCIES						
City of Corona	yes	no	yes	yes	no	5
City of Rancho Cucamonga	yes	no	no	yes	yes	5
City of Upland	yes	no	yes	yes	no	1
TOTAL YES RESPONSES	12	1	4	13	7	

GOVERNMENT AGENCY SOFTWARE COMPONENT COMPARISON CHART
Figure 2

UNITED STATES GOVERNMENT AGENCIES

DEPARTMENT OF THE AIR FORCE

FORMAT

The Air Force policy was a professional looking document. The first page had a table of contents identifying paragraphs and pages. It was organized by sections within chapters such as acquisition, installation, operations, maintenance, and other areas for computer use.

CONTENT

Very little was mentioned regarding the software policy and the information was scattered according to the section it

applied. Each department was responsible for all software and related documentation. Personally owned software was discouraged. All software developed for the organization by an employee was required to contain documentation, source listings, and software updates. The policy stated that copying software illegally was not allowed. For further information a legal officer should be contacted.

RATING - 3

STATE GOVERNMENT AGENCIES

DEPARTMENT OF MOTOR VEHICLES

FORMAT

The Department of Motor Vehicles had a policy like the Air Force. The policy was sectioned according to areas of concern with a table of contents preceding it. The two main sections were the policy overview and procedures.

CONTENT

The policy stated that if software was stolen or someone violated the PC software copyright, it would be reported to a division chief or manager. The division chief would notify the police in certain cases. The policy focused on security issues much more than software pilferage.

RATING - 2

COUNTY GOVERNMENT AGENCIES

RIVERSIDE COUNTY AUDITOR CONTROLLER

FORMAT

The Auditor Controller's software policy was prepared in a simple outline format. The main headings were purpose, applicability, policy, and procedure.

CONTENT

The purpose of the Auditor's document was to provide policy and procedures for PC software and accompanying documentation. This policy addressed software issues in every section, paragraph, and sentence. Nothing was mentioned about hardware, security, backup, and the like. The auditor's policy was strictly a software policy.

Many important software issues were covered in this policy. Under the policy section, there was a statement that all employees will abide by the copyright laws and licensing agreements. Then the detail was listed on how this would be accomplished. This policy addressed shareware, public domain software, personally owned software, and procedures on how to follow the policy guidelines.

RATING - 9

RIVERSIDE COUNTY BUILDING AND SAFETY

FORMAT

The Building and Safety policy was formatted like a package. The employee must sign a receipt for the package.

The package included:

- a detailed explanation on the history of PCs and its use,
- personal computer hardware/software guidelines that describe the system, employee responsibilities, and sanctions,
- a receipt listing all hardware/software components and the serial numbers (a copy of this is signed by the employee and placed in their personnel file), and
- a copy of the Thou Shalt Not Dupe book explaining the copyright law and how it applies to software--including fines and imprisonment.

CONTENT

Most of the Building and Safety PC package was educational. A lot of explanation was given about PCs, software and the history. The personal computer hardware/software guidelines addressed the employee's responsibility when using his PC and accompanying software. It detailed the established standards for all Building and Safety PCs.

RATING - 8

RIVERSIDE COUNTY FIRE DEPARTMENT

FORMAT

The Riverside County Fire Department's policy was prepared in a simple format. Sections were numbered sequentially with paragraphs about each subject. The policy covered hardware and software issues. There were two appendices to this policy. The first appendix was a trouble sheet for users to complete before contacting data processing. The second appendix was a memo stating that an employee's job was at risk if he did not abide by the copyright law.

CONTENT

This document started with a statement that employees are expected to follow this personal computer policy. The first section described the PC as a county fixed asset. The second section listed the standard hardware components for a PC. The third section discussed software legalities. The standard software was identified and the copyright law was addressed. The Fire Department also addressed shareware, public domain software, and personally owned software.

RATING - 7

RIVERSIDE COUNTY FLOOD DISTRICT

FORMAT

The policy submitted by the Flood District was one page in length. The subject was software duplicating. There were two sections: definition and policy.

CONTENT

The Flood Department's policy was for software use only. The policy simply stated that an employee would not duplicate software or violations would be dealt with appropriately. The fact that software copyright violation is a serious offense was mentioned. The definition section detailed the three types of software: public domain, shareware, and purchased.

RATING - 4

RIVERSIDE COUNTY PUBLIC SOCIAL SERVICES

FORMAT

The Public Social Services Department's software usage policy was presented in an outline format. There was a table of contents on the first page. The policy had six sections: 1) Introduction, 2) Licensed Department Software, 3) Computer Viruses and Unauthorized Software, 4) Department Standard, 5) Request for Software, and 6) Software Maintenance/Duplication.

CONTENT

This policy described the legal use of software on the first page in the first paragraph. The policy covered computer viruses and types of software such as shareware, public domain, and purchased. The standard software used in the department was listed. Games are not allowed.

RATING - 6

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT

FORMAT

The Personal Computer Policy prepared by Transportation was one page in an outline format.

CONTENT

This policy mixed hardware and software use. A statement was included discussing the copyright law and disciplinary actions when violated. PC software audits were mentioned. Public domain software was allowed with approval from Information Services.

RATING - 4

RIVERSIDE COUNTY WASTE MANAGEMENT

FORMAT

The PC hardware and software policy at Waste Management was a simple memo with one long paragraph. The user must sign, date, and return it to the computer manager.

CONTENT

The objective and employee responsibility are defined. All users were told that software was licensed to one PC only.

RATING - 2

SAN DIEGO COUNTY

FORMAT

The San Diego County virus and software protection policy specifically addressed software. Hardware use was not

mentioned. There was a table of contents with nine sections listed. The document had an outline format.

CONTENT

San Diego County's policy detailed software as a security issue. Virus protection and the safety of data were the biggest concern. The information regarding software use was scattered among the different sections. For instance, in the stand-alone section, the statement "no unlicensed software was allowed to be installed" was mentioned. Software audit practices were in the Network PC section. Very little was mentioned about illegally copying of software, except that it was not allowed.

RATING - 3

CITY GOVERNMENT AGENCIES

CITY OF CORONA

FORMAT

Corona's one page policy was called "Personal Software Usage Employee Agreement." The policy was mailed to all city departments with a memo. The memo detailed the city's objective, the law, and the employee's responsibilities. There were two pages attached to the memo. The first page was a request to have software installed on a PC. The second was an employee agreement that had to be signed by an employee and returned.

CONTENT

Corona's memo to all city departments stated that copying software illegally was a violation of the copyright law. The city would not tolerate it as it placed them at legal and financial risk. The attached agreement stated four facts:

1. The city would not condone illegal duplication of software.
2. Misuse by the employee would be reported to office automation representative or department manager.
3. Personal software packages that were allowed to be used.
4. A statement that the employee was aware of the policy and agreed to uphold it.

RATING - 5

CITY OF RANCHO CUCAMONGA

FORMAT

Rancho Cucamonga's "Computer Policy" was a detailed document addressing many issues with a table of contents in front. Some issues were hardware, software, security, maintenance and repairs. There was a two page software licensing guideline section that detailed the software policy. The last page of the computer policy was the employee acknowledgement form.

CONTENT

With proper authorization, Rancho Cucamonga allows employees to take software home. The policy stated that games and personal software may not be installed at work--even if the employee only wanted to use them at lunch. In the summary of the policy, the city stated it would only allow approved and purchased software on the computers.

The acknowledgement form at the end of the policy was signed and returned by the employee. This form stated that the employee agreed to the city policy, would abide by it, and understood that disciplinary action, including termination and legal action, could occur.

RATING - 5

CITY OF UPLAND

FORMAT

Upland's policy was in an outline format with two sections. The first section was one paragraph on the city background. The second section was the policy. The policy section was divided into computers, printers, electronic mail, records management, telecommunications, and duplication/copiers.

CONTENT

The mailed copy of the policy did not discuss software pilferage. Through discussions on the telephone with the contact person, the city has added software use to a draft

policy. It states that the city does not condone illegal copying of software.

RATING - 1

CONCLUSION

There were four outstanding policies among those that were reviewed. The four policies had the highest rating on the scale in Figure 2 on page 34 and the information provided on software issues was comprehensive. The four policies were from Riverside County's: 1) Auditor Controller, 2) Building and Safety, 3) Fire Department, and 4) Public Social Services.

The Auditor Controller for Riverside County had the most complete software policy of all agencies surveyed. It did not, however, quote the law, define responsibilities of the agency and employee, or define sanctions. It addressed the employee's responsibilities and the objective better than the other policies.

RECOMMENDATIONS

The principle recommendation is for a centralized personal computer software policy to be written for the County of Riverside. There are three supporting recommendations in addition to developing a policy. One recommendation is to establish classes to train management and their employees about the copyright law and proper software use. Another recommendation is to educate management to plan for software program acquisitions in the budget every year. The final

recommendation is to educate purchasing to analyze the requisitions that are received from each department for software acquisitions when a PC is requested.

POLICY DEVELOPMENT

The development of a software policy is a result of the literature review and the oral survey of public entities (federal, state, and local). The research of the current literature indicated a severe lack of discipline in the handling of computer software by the PC users resulting in legal and financial ramifications. The survey of existing software policies within government entities showed very little commonality and a lack of concise direction (even between departments within the same agency). The absence of policy does not justify writing one, but the costly penalties for illegal software use supports the immediate requirement.[24] The procedure for ensuring the adoption and use of the software policy is described in the following paragraphs.

PROCEDURE

Sometimes timing is the key to getting what you want. The timing could not have been better for the development of this policy. On June 19, 1990, Riverside County's Board of Supervisors enacted Policy Number A-38 regarding information technology. It states that information technology is

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[24]A survey of various departments that had software policies in place resulted in a significant amount of adherence to the copyright law.

encouraged to improve the delivery of service to the public by, "Encouraging the creation and maintenance of shared information files except where legal, operational or ethical constraints require redundancy."[25]

A committee was formed in March 1991 (The Security Standards Sub-Committee) to ensure that information technology is addressed through the creation of many needed policies. Some of the policies will address standards for data security, information backups, hardware use, and software use.

Selected members of the committee draft the policies. All members of the committee must approve the new policies. The members include an employee from the Administrative Office, Building and Safety, Information Services, the Sheriff's Department, and other county departments. Some employees were included for a specific purpose. For example, Information Services was included because it is responsible for hardware and software support for all county departments. The Administrative Office was included because it must be knowledgeable in all policies submitted to the Board of Supervisors. The signed policy is then presented to the Management Council for review and approval. With its approval, the policy is submitted to the Board of Supervisors.

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[25]County of Riverside, California; Board of Supervisors Policy, Number A-38, June 19, 1990.

A draft policy was written and submitted to the Security Standards Sub-Committee for approval. The Auditor-Controller's software policy (see page 36) is the ideal template from which to work. The format was within county guidelines; the content included important issues regarding software use.

The Auditor Controller's policy was reworded. Some important issues were added and some unnecessary sentences were removed. This policy then became the draft for presentation as the Software Policy for the County of Riverside. If this policy is accepted by the committee, the policy will then move through the above process until it is presented to the Board of Supervisors.

POLICY CONTENT

Appendix F is a completed copy of the draft copy for the County Of Riverside Personal Computer Software Policy. This policy is sectioned by objective, applicability, policy, procedures, and sanctions. The most important issue in this policy is that all employees must abide by the United States Copyright Law and the vendor licensing agreement. This statement is important because the vendor licensing agreement might allow an organization's employees to take one copy of the software program home with them. The licensing agreements vary from one vendor to another. The agreement might allow

the user to have other rights such as making duplicate disks for backup purposes.[26]

There will be three items attached to the policy when it is distributed to every department. The three items are an SPAudit kit, literature regarding software use and the Copyright Law, and a blank form to order a video about getting caught breaking the law. The SPAudit kit is a software program provided by the SPA to inventory software on an employee's PC. A person simply puts the disk in a floppy drive and executes a program. A listing can be printed for each PC showing all software products, the number of copies on the hard drive, and whose PC the audit was performed on. This tool will be provided with the policy to give each department a method of ensuring that it will abide by the policy.

Educational pamphlets will be attached to the policy. The pamphlets explain the Copyright Law, how it applies to computer software, and answers many common questions that users ask. The third attachment to the policy is a blank form to order a video tape called "Are You Taking Unnecessary Business Risks?" The video costs $10.00. This video is twelve minutes running and educates users about the copyright law and the legal use of software.

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[26]WordPerfect Corporation announced a new licensing agreement in its Winter 1991 report. An employee may take one copy of the program home to place on his PC as long as it does not execute at work and at home during the same time.

EDUCATION

Riverside County has an Affirmative Action Plan (AAP) that requires every employee obtain education on sexual harassment. This policy protects employees from discrimination. Every department in the county **must** create its own policy and send **every** employee in its department to Personnel's sexual harassment class. The recommendation is to create a class on the copyright law and software pilferage issues to protect the county from illegal actions of its' employees. This would cover software use, every department enforcing the policy addressing the issue, and sending each employee to a software use class.

Classes must be created that explain the proper use of software. Copies of the copyright law and its amendment in 1980 adding software will be distributed as it is discussed. Positive and negative examples of software use will be demonstrated. All aspects of each example will be explained. Court cases on agencies that were prosecuted will be discussed. The legal liability of both the county and the employee will be detailed. There must be special mention if the county does not act (once an employee has the knowledge, he can be prosecuted.) Some of the standard software package warnings will be presented and discussed. All questions from the employees must addressed. These classes will be implemented by the same agency responsible for maintaining the

policy--preferably Information Service's End User Computing department. This department is responsible for consulting, training, and implementation of personal computers for all departments in the county.

PURCHASING RECOMMENDATION

Another educational process must be implemented in the purchasing department. The buyer responsible for computer hardware and software purchase orders must analyze the requisitions. He will be looking for a software requisition in addition to any hardware requisition. If a software requisition is not located, the buyer must contact the department who requested a purchase order. He must request information for the software products that the department is planning to operate on the new equipment. If the department does not plan on purchasing legal copies of software to operate on the PC, the buyer should not process the requisition. The department might not realize it has requested personal computer hardware without legal copies of software.

BUDGET RECOMMENDATIONS

One method of eliminating software pilferage is to budget for software expenditures. The departments in Riverside County need to budget for legal copies of software programs for every additional PC purchased. New software products on the market need to be budgeted for with existing PCs in each

department. With budget constraints, obtaining necessary software will be a difficult task. Analysis must be made regarding exactly which employees need particular software products to perform their jobs. The only products purchased will be for the PCs that the software will operate on.

Another budget consideration is software upgrades. An upgrade becomes available from a vendor when the software is modified and problems are fixed. Then the upgrade is made available to the public. Software upgrades can be available once a year and sometimes two to three times in one year. Upgrades can cost between fifty and one hundred dollars per user. Budgeting for computer purchases and upgrades will keep the county in compliance with the law.

RECOMMENDATIONS CONCLUSION

Providing the software policy with its attachments to each department will ensure immediate adherence to the law, education, and a procedure to assist each department head. The policy will be submitted to the Riverside County Board of Supervisors in February, 1992. Once the policy is approved, training on software pilferage and budgeting for software acquisitions will be established.

The educational process must start with top management. If management does not support the software policy, the employees will not either. Education must be ongoing to be

effective. New employees hired into the county will be educated on this subject through the orientation process.

CONCLUSION

The two objectives of this project were: 1) to determine if there was a need to develop a centralized policy for software use in Riverside County and 2) if there was a need, to create a model policy for proposal. A study was performed on government agencies in the Inland Empire. Through a telephone survey, agencies were questioned on software use and existing policies they might have in place. Agencies who had policies were requested to mail a copy.

Riverside County has over ten thousand employees. The issue of legal software use is important to the employee and the county. It is against the United States Copyright Act of 1976 (which was amended in 1980 to include computer software) to violate the rights of the copyright owner. Employees must abide by the licensing agreement provided by the software vendor when using computer programs. If the employee chooses to break the copyright law, Riverside County is liable and many people can be prosecuted--the purchasing agent, the employee, the supervisor, and the county. There are many organizations who perform corporate raids comparing invoices to software residing on PC hard drives. For companies with illegal software, this can be a very costly experience (and possibly imprisonment.)

The cost of purchasing software products is used as an excuse not to pay for them. The cost of not purchasing the products, but illegally copying software on more than one machine would be a much higher expense if caught. The SPA charges an organization for every copy of illegal software it finds on each PC, plus the organization must purchase each copy of the software that was found. This is like paying for the software twice.

A telephone survey was conducted with local, state, and federal government agencies. Seventeen of eighty-seven agencies (20%) had software policies. Twenty percent is a small number considering the liabilities a company can face. Especially since software raids are published in computer magazines and newspapers as they occur. Through conversations in the telephone survey and the literature review, most of management and their employees were unaware of the copyright law. Everyone needs to be educated. Some people who knew the law did not realize the fines and penalties involved. Most people did not know that raids were actually performed in organizations to audit software use. The potential for a lawsuit is too great to ignore the subject of software pilferage.

Fourteen policies were received. The policies were rated according to how well software use and the copyright law were addressed. Only two policies covered software use in a policy

format that was acceptable to me. The two policies were from Riverside County's Auditor Controller and Riverside County's Building and Safety Departments. The Auditor Controller's policy had the best format and good information. Building and Safety's policy described the law and employee sanctions.

The literature review and the telephone survey of public agencies justified the need to develop a centralized software policy. In addition to a software policy, there are three recommendations:

1. Establish classes to train all employees on the copyright law and software use.
2. Educate management to budget for upgrades to existing software and new software.
3. Educate purchasing to match hardware requisitions to software requisitions before issuing purchase orders for PCs.

The software policy needs to be created and put in place before the other three recommendations can be addressed. A complete software policy should be sectioned by: objective, applicability, policy, procedures, and sanctions. The employee and agency responsibilities should be defined along with the copyright law and how it applies to vendor licensing agreements.[27]

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[27]A policy was created combining the Auditor Controller's policy information and Building and Safety's special policy features. The policy was approved by the Riverside County

The issue of the Copyright Law, how it applies to computer software, and the illegal use of software in government agencies is important and must be addressed. No organization should expose itself to the liability if caught (besides the ethical issues involved.) Only one disgruntled employee needs to dial 1-800-388-PIR8 and the SPA shows up with an *ex parte* writ. A software policy will deter theft, but it cannot eliminate pilferage altogether. In addition to an effective software policy, continuous education for software use will help keep some employees honest, making Riverside County number one in its attempts to abide by the law.

Security Standards Sub-Committee in December, 1991. It is currently being approved by the Security Standards Committee.

A P P E N D I X

A

115. Scope of exclusive rights in nondramatic musical works: Compulsory license for making and distributing phonorecords
116. Scope of exclusive rights in nondramatic musical works: Public performances by means of coin-operated phonorecord players
117. Scope of exclusive right: Use in conjunction with computers and similar information systems
118. Scope of exclusive rights: Use of certain works in connection with noncommercial broadcasting

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Other provisions:

Effective Date. Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598, provided that: "This Act [which appears generally as 17 USCS §§ 101 et seq.; for full classification of this Act, consult USCS Tables volumes] becomes effective on January 1, 1978, except as otherwise expressly provided by this Act, including provisions of the first section of this Act [section 101 of Act Oct. 19, 1976, which appears as 17 USCS §§ 101 et seq.]. The provisions of sections 118, 304(b), and chapter 8 of title 17 [17 USCS §§ 118, 304(b), 801 et seq.], as amended by the first section of this Act, take effect upon enactment of this Act [enacted Oct. 19, 1976]."

Lost and expired copyrights; recording rights. Section 103 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2599, provided that: "This Act [which appears generally as 17 USCS §§ 101 et seq.; for full classification of this Act, consult USCS Tables volumes] does not provide copyright protection for any work that goes into the public domain before January 1, 1978. The exclusive rights, as provided by section 106 of title 17 [17 USCS § 106] as amended by the first section of this Act [section 101 of Act Oct. 19, 1976, which appears as 17 USCS §§ 101 et seq.], to reproduce a work in phonorecords and to distribute phonorecords of the work, do not extend to any nondramatic musical work copyrighted before July 1, 1909."

Authorization of appropriations. Section 114 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2602, provided that: "There are hereby authorized to be appropriated such funds as may be necessary to carry out the purposes of this Act [which appears generally as 17 USCS §§ 101 et seq.; for full classification of this Act, consult USCS Tables volume].

Separability of provisions. Section 115 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2602, provided that: "If any provision of title 17 [17 USCS §§ 101 et seq.], as amended by the first section of this Act [section 101 of Act Oct. 19, 1976, which appears as 17 USCS §§ 101 et seq.] is declared unconstitutional, the validity of the remainder of this title [17 USCS §§ 101 et seq.] is not affected."

CROSS REFERENCES

USCS Administrative Rules, Rules of Copyright Office (Library of Congress) 37 CFR Parts 201, 202; USCS Administrative Rules, Universal Copyright Convention.

§ 101. Definitions

As used in this title [17 USCS §§ 101 et seq.], the following terms and their variant forms mean the following:

An "anonymous work" is a work on the copies or phonorecords of which no natural person is identified as author.

"Audiovisual works" are works that consist of a series of related images which are intrinsically intended to be shown by the use of machines or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.

The "best edition" of a work is the edition, published in the United States at any time before the date of deposit, that the Library of Congress determines to be most suitable for its purposes.

A person's "children" are that person's immediate offspring, whether legitimate or not, and any children legally adopted by that person.

A "collective work" is a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.

A "compilation" is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works.

"Copies" are material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.

"Copyright owner", with respect to any one of the exclusive rights comprised in a copyright, refers to the owner of that particular right.

A work is "created" when it is fixed in a copy or phonorecord for the first time; where a work is prepared over a period of time, the portion of it that has been fixed at any particular time constitutes the work as of that time, and where the work has been prepared in different versions, each version constitutes a separate work.

A "derivative work" is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a "derivative work".

A "device", "machine", or "process" is one now known or later developed.

To "display" a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.

A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title [17 USCS §§ 101 et seq.] if a fixation of the work is being made simultaneously with its transmission.

The terms "including" and "such as" are illustrative and not limitative.

A "joint work" is a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole.

"Literary works" are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.

"Motion pictures" are audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion, together with accompanying sounds, if any.

To "perform" a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.

"Phonorecords" are material objects in which sounds, other than those accompanying a motion picture or other audiovisual work, are fixed by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "phonorecords" includes the material object in which the sounds are first fixed.

"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, technical drawings, diagrams, and models. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

A "pseudonymous work" is a work on the copies or phonorecords of which the author is identified under a fictitious name.

"Publication" is the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending. The offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display, constitutes publication. A public performance or display of a work does not of itself constitute publication.

To perform or display a work "publicly" means—

(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or

(2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

"Sound recordings" are works that result from the fixation of a series of musical, spoken, or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the nature of the material objects, such as disks, tapes, or other phonorecords, in which they are embodied.

"State" includes the District of Columbia and the Commonwealth of Puerto Rico, and any territories to which this title [17 USCS §§ 101 et seq.] is made applicable by an Act of Congress.

A "transfer of copyright ownership" is an assignment, mortgage, exclusive license, or any other conveyance, alienation, or hypothecation of a copyright or of any of the exclusive rights comprised in a copyright, whether or not it is limited in time or place of effect, but not including a nonexclusive license.

A "transmission program" is a body of material that, as an aggregate, has been produced for the sole purpose of transmission to the public in sequence and as a unit.

To "transmit" a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.

The "United States", when used in a geographical sense, comprises the several States, the District of Columbia and the Commonwealth of Puerto Rico, and the organized territories under the jurisdiction of the United States Government.

A "useful article" is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey

information. An article that is normally a part of a useful article is considered a "useful article".

The author's "widow" or "widower" is the author's surviving spouse under the law of the author's domicile at the time of his or her death, whether or not the spouse has later remarried.

A "work of the United States Government" is a work prepared by an officer or employee of the United States Government as part of that person's official duties.

A "work made for hire" is—

(1) a work prepared by an employee within the scope of his or her employment; or

(2) a work specially ordered or commissioned for use as a contribution to a collective work, as a part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test, as answer material for a test, or as an atlas, if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire. For the purpose of the foregoing sentence, a "supplementary work" is a work prepared for publication as a secondary adjunct to a work by another author for the purpose of introducing, concluding, illustrating, explaining, revising, commenting upon, or assisting in the use of the other work, such as forewords, afterwords, pictorial illustrations, maps, charts, tables, editorial notes, musical arrangements, answer material for tests, bibliographies, appendixes, and indexes, and an "instructional text" is a literary, pictorial, or graphic work prepared for publication and with the purpose of use in systematic instructional activities.

(Added Oct. 19, 1976, P.L. 94-553, Title I, § 101, 90 Stat 2541.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598, provided that this section "becomes effective on January 1, 1978".

RESEARCH GUIDE

Am Jur:

18 Am Jur 2d, Copyright and Literary Property §§ 34, 37, 66, 77.

Annotations:

Exhibition of picture as publication. 52 L Ed 208.

Application of "works for hire" doctrine under Federal Copyright Act (17 USCS §§ 1 et seq.). 11 ALR Fed 457.

What constitutes publication of architectural plans, drawings, or designs, so as to result in loss of common-law copyright. 77 ALR2d 1048.

Law Review Articles:

Copyright Symposium, 22 New York Law School Law Review 193.

INTERPRETIVE NOTES AND DECISIONS

1. Generally
2. Best edition
3. Compilation
4. Copies
5. Derivative work
6. Display
7. Joint work
8. Motion pictures
9. Perform
10. Publication, generally
11. —Extent of publication, generally
12. ——Limited publication
13. —Public performance, generally
14. ——Drama
15. ——Lecture or speech
16. ——Music
17. —Sale, generally
18. ——Exhibition or delivery for prospective sale
19. Sound recordings
20. Works made for hire

1. Generally

Phrase "works of an author, of which copies are not reproduced for sale", as used in predecessor statute, was intended to modify "lecture," "dramatic composition" and "musical composition." Universal Film Mfg. Co. v Copperman (1914, DC NY) 212 F 301, affd (CA2 NY) 218 F 577, cert den 235 US 704, 59 L Ed 433, 35 S Ct 209.

"Component parts," as used in predecessor statute, does not mean subdivision of rights, licenses, or privileges, but refers to separate chapters, subdivisions, acts, and like of which most works are composed. New Fiction Pub. Co. v Star Co. (1915, DC NY) 220 F 994.

2. Best edition

Where only one edition of book has been published, copies thereof deposited with register of copyrights are of best edition although book might not be suitable for inclusion in "library" collection for public use. Bouve v Twentieth Century-Fox Film Corp. (1941) 74 App DC 271, 122 F2d 51, 50 USPQ 338.

Cutting out and depositing pages containing article in bound volume of encyclopedia is sufficient compliance with "best edition" provision of predecessor statute. Black v Henry G. Allen Co. (1893, CC NY) 56 F 764.

3. Compilation

"Composite works", defined in predecessor statute, are those which contain distinguishable parts which are separately copyrightable. Markham v A. E. Borden Co. (1953, CA1 Mass) 206 F2d 199, 98 USPQ 346.

Book containing comic strips printed on one side of paper only and bearing notice of copyright on title page, although each item in book bears separate copyright notice and most of items bear later release date on which date newspapers are first authorized to use material is "composite work" as defined in predecessor statute. King Features Syndicate, Inc. v Bouve (DC Dist Col) 48 USPQ 237.

"Composite work," by definition in predecessor statute, cannot also be "work made for hire," since latter presupposes that contributors are employees who are not entitled under Copyright Act to renew copyright registrations as "authors"; composite work permits both proprietor of original copyright in composite, as well as individual contributing authors, to apply for renewal. 43 OAG 2.

4. Copies

"Copy" is that which ordinary observation would cause to be recognized as having been taken from or reproduction of another. King Features Syndicate v Fleischer (1924, CA2 NY) 299 F 533.

Photograph of copyrighted piece of statuary is "copy" within predecessor statute. Bracken v Rosenthal (1907, CC Ill) 151 F 136.

5. Derivative work

Extremely brief epitomes of plots of copyrighted operas are not "a version" of copyrighted work. G. Ricordi & Co. v Mason (1913, CA2 NY) 210 F 277.

TV dramatization of copyrighted script is "derivative work." Gilliam v American Broadcasting Co. (1976, CA2) 192 USPQ 1.

6. Display

Exhibition of painting at private academy to limited number of persons subsequent to copyright thereof, but without notice of copyright, is not such publication as will constitute abandonment of owner's exclusive rights therein. Werckmeister v American Lithographic Co. (1904, CA2 NY) 134 F 321.

Exhibition of painting in art salon would not be publication unless public were permitted to make copies thereof. Werckmeister v Springer Lithographing Co. (1894, CC NY) 63 F 808.

Public exhibition of original painting, without copyright notice, is publication. Werckmeister v American Lithographic Co. (1902, CC NY) 117 F 360.

Copyright upon large figure of elk built in city street was defeated by its free public exhibition

108	603
109	603
110	Repealed. See 28 USCS § 1338
111	Repealed. See 28 USCS § 1400
112	502
113	502
114	502
115	507
116	505
201	701(a)
202	701(a)
203	708(c)
204	Repealed.
205	701(c)
206	701(b)
207	702
208	705
209	407, 410
210	707
211	707
212	705
213	704
214	704
215	708(a), (b)
216	703

TABLE OF CONTENTS

Chapter

9. Protection of Semiconductor Chip Products ..... Beginning Section 901

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1984. Act Nov. 8, 1984, P. L. 98-620, Title III, § 303, 98 Stat. 3356, amended the Table of Contents by adding the item relating to chapter 9.

CHAPTER 1. SUBJECT MATTER AND SCOPE OF COPYRIGHT

Section

106A. Rights of certain authors to attribution and integrity

116. Scope of exclusive rights in nondramatic musical works: Compulsory licenses for public performances by means of coin-operated phonorecord players

116A. Negotiated licenses for public performances by means of coin-operated phonorecord players

117. Limitations on exclusive rights: Computer programs

119. Limitations on exclusive rights: Secondary transmissions of superstations and network stations for private home viewing

120. Scope of exclusive rights in architectural works

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1988. Act Oct. 31, 1988, P. L. 100-568, § 4(b)(2), 102 Stat. 2857, effective as provided by § 13 of such Act, which appears as 17 USCS § 101 note, amended the analysis of this chapter by substituting item 116 for one which read: "116. Scope of exclusive rights in nondramatic musical works: Public performances by means of coin-operated phonorecord players"; and added item 116A.

Act Nov. 16, 1988, P. L. 100-667, Title II, § 202(6), 102 Stat. 1958 effective and terminated as provided by §§ 206 and 207 of such Act, which appear as 17 USCS § 119 note, amended the analysis of this chapter by adding item 119.

1990. Act Dec. 1, 1990, P. L. 101-650, Title VI, § 603(b), 104 Stat. 5130, effective 6 [illegible] § 106A note, amended the analysis of this chapter by adding item 120.

Title VII, § 704(b)(1) of such Act further, applicable as provided by § 706 of such Act, which appears as 17 USCS § 101 note, amended the analysis of this chapter by adding item 120.

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§ 101. Definitions

[Introductory matter unchanged]

["Anonymous work" unchanged]

An "architectural work" is the design of a building as embodied in any tangible medium of expression, including a building, architectural plans, or drawings. The work includes the overall form as well as the arrangement and composition of spaces and elements in the design, but does not include individual standard features.

["Audiovisual works" unchanged]

The "Berne Convention" is the Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 9, 1886, and all acts, protocols, and revisions thereto.

A work is a "Berne Convention work" if—

(1) in the case of an unpublished work, one or more of the authors is a national of a nation adhering to the Berne Convention, or in the case of a published work, one or more of the authors is a national of a nation adhering to the Berne Convention on the date of first publication;

(2) the work was first published in a nation adhering to the Berne Convention, or was simultaneously first published in a nation adhering to the Berne Convention and in a foreign nation that does not adhere to the Berne Convention;

(3) in the case of an audiovisual work—

(A) if one or more of the authors is a legal entity, that author has its headquarters in a nation adhering to the Berne Convention; or

(B) if one or more of the authors is an individual, that author is domiciled, or has his or her habitual residence in, a nation adhering to the Berne Convention; or

(4) in the case of a pictorial, graphic, or sculptural work that is incorporated in a building or other structure, the building or structure is located in a nation adhering to the Berne Convention.

(5) in the case of an architectural work embodied in a building, such building is erected in a country adhering to the Berne Convention.

For purposes of paragraph (1), an author who is domiciled in or has his or her habitual residence in, a nation adhering to the Berne Convention is considered to be a national of that nation. For purposes of paragraph (2), a work is considered to have been simultaneously published in two or more nations if its dates of publication are within 30 days of one another.

["Best edition" through "compilation" definitions unchanged]

A "computer program" is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

["Copies" and "copyright owner" definitions unchanged]

The "country of origin" of a Berne Convention work, for purposes of section 411 [17 USCS § 411], is the United States if—

(1) in the case of a published work, the work is first published—

(A) in the United States;

(B) simultaneously in the United States and another nation or nations adhering to the Berne Convention, whose law grants a term of copyright protection that is the same as or longer than the term provided in the United States;

(C) simultaneously in the United States and a foreign nation that does not adhere to the Berne Convention; or

(D) in a foreign nation that does not adhere to the Berne Convention, and all of the authors of the work are nationals, domiciliaries, or habitual residents of, or in the case of an audiovisual work legal entities with headquarters in, the United States;

(2) in the case of an unpublished work, all the authors of the work are nationals, domiciliaries, or habitual residents of the United States, or, in the case of an unpublished audiovisual work, all the authors are legal entities with headquarters in the United States; or

(3) in the case of a pictorial, graphic, or sculptural work incorporated in a building or structure, the building or structure is located in the United States.

Convention work is not the United States.

["Work is 'created' " through "phonorecords" definitions unchanged]

"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

["Pseudonymous work" through "widow" or "widower's" definitions unchanged]

A "work of visual art" is—

(1) a painting, drawing, print, or sculpture, existing in a single copy, in a limited edition of 200 copies or fewer that are signed and consecutively numbered by the author, or, in the case of a sculpture, in multiple cast, carved, or fabricated sculptures of 200 or fewer that are consecutively numbered by the author and bear the signature or other identifying mark of the author; or

(2) a still photographic image produced for exhibition purposes only, existing in a single copy that is signed by the author, or in a limited edition of 200 copies or fewer that are signed and consecutively numbered by the author.

A work of visual art does not include—

(A)(i) any poster, map, globe, chart, technical drawing, diagram, model, applied art, motion picture or other audiovisual work, book, magazine, newspaper, periodical, data base, electronic information service, electronic publication, or similar publication;

(ii) any merchandising item or advertising, promotional, descriptive, covering, or packaging material or container;

(iii) any portion or part of any item described in clause (i) or (ii);

(B) any work made for hire; or

(C) any work not subject to copyright protection under this title.

["Work of the United States Government" and "work made for hire" definitions unchanged]

(As amended Dec. 12, 1980, P. L. 96-517, § 10(a), 94 Stat. 3028; Oct. 31, 1988, P. L. 100-568, § 4(a)(1), 102 Stat. 2854; Dec. 1, 1990, P. L. 101-650, Title VI, § 602, Title VII, § 702, 104 Stat. 5128, 5133.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1980. Act Dec. 12, 1980, added "A 'computer program' is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.".

1988. Act Oct. 31, 1988 (effective as provided by § 13 of such Act, which appears as 17 USCS § 101 note) added the definitions beginning "The 'Berne Convention' . . ." and "The 'country of origin' . . .", and, in the definition of "pictorial, graphic, and sculptural works", substituted "diagrams, models, and technical drawings, including architectural plans" for "technical drawings, diagrams, and models".

1990. Act Dec. 1, 1990 (effective 6 months after enactment as provided by § 610 of such Act, which appears as 17 USCS § 106A note) added the definition beginning "A 'work of visual art' ".

Such Act further (applicable as provided by § 706 of such Act, which appears as a note to this section), added the definition beginning "An 'architectural work' "; and in the definition of "Berne Convention work", in para. (3)(B), deleted "or" following the semicolon, in para. (4), substituted "; or" for the concluding period and added para. (5).

Short titles:

Act Oct. 4, 1984, P. L. 98-450, § 1, 98 Stat. 1727, effective upon enactment on Oct. 4, 1984, as provided by § 4(a) of such Act, which appears as 17 USCS § 109 note, provides: "This Act may be cited as the 'Record Rental Amendment of 1984'.". For full classification of such Act, consult USCS Tables volumes.

Act Oct. 31, 1988, P. L. 100-568, § 1, 102 Stat. 2853, effective as provided by § 13 of such Act, which appears as a note to this section, provides: "This Act may be cited as the 'Berne Convention Implementation Act of 1988'.".

Act Nov. 16, 1988, P. L. 100-667, Title II, § 201, 102 Stat. 3949, effective Jan. 1, 1989 through Dec. 31, 1994, as provided by §§ 206 and 207 of such Act, which appear as 17 USCS § 119 note, provides: "This title may be cited as the 'Satellite Home Viewer Act of 1988'.".

'Copyright Fees and Technical Amendments Act of 1989'.". For full classification of this Act, consult USCS Tables volumes.

Act July 3, 1990, P.L. 101-319, § 1, 104 Stat. 290, provides: "This Act may be cited as the 'Copyright Royalty Tribunal Reform and Miscellaneous Pay Act of 1989'." For full classification of this Act, consult USCS Tables volumes.

Act Nov. 15, 1990, P. L. 101-553, § 1, 104 Stat. 2749, provides: "This Act may be cited as the 'Copyright Remedy Clarification Act'.". For full classification of this Act, consult USCS Tables volumes.

Act Dec. 1, 1990, P. L. 101-650, Title VI, § 601, 104 Stat. 5128, effective 6 months after enactment as provided by § 610 of such Act, which appears as 17 USCS § 106A note, provides: "This title may be cited as the 'Visual Artists Rights Act of 1990'.". For full classification of such Title, consult USCS Tables volumes.

Act Dec. 1, 1990, P. L. 101-650, Title VII, § 701, 104 Stat. 5133, provides: "This title may be cited as the 'Architectural Works Copyright Protection Act'.". For full classification of such Title, consult USCS Tables volumes.

Act Dec. 1, 1990, P. L. 101-650, Title VIII, § 801, 104 Stat. 5134, effective on enactment as provided by § 804 of such Act, which appears as 17 USCS § 109 note, provides: "This title [amending 17 USCS § 109; enacting 17 USCS § 205 note] may be cited as the 'Computer Software Rental Amendments Act of 1990'.".

Other provisions:

Congressional declarations. Act Oct. 31, 1988, P. L. 100-568, § 2, 102 Stat. 2853, effective as provided by § 13 of such Act, which appears as a note to this section, provides:

"The Congress makes the following declarations:

"(1) The Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 9, 1886, and all acts, protocols, and revisions thereto (hereafter in this Act [for full classification consult USCS Tables volumes] referred to as the 'Berne Convention') are not self-executing under the Constitution and laws of the United States.

"(2) The obligations of the United States under the Berne Convention may be performed only pursuant to appropriate domestic law.

"(3) The amendments made by this Act [for full classification consult USCS Tables volumes], together with the law as it exists on the date of the enactment of this Act, satisfy the obligations of the United States in adhering to the Berne Convention and no further rights or interests shall be recognized or created for that purpose.".

Construction of the Berne Convention. Act Oct. 31, 1988, P. L. 100-568, § 3, 102 Stat. 2853, effective as provided by § 13 of such Act, which appears as a note to this section, provides:

"(a) Relationship with domestic law. The provisions of the Berne Convention—

"(1) shall be given effect under title 17, as amended by this Act [for full classification consult USCS Tables volumes], and any other relevant provision of Federal or State law, including the common law; and

"(2) shall not be enforceable in any action brought pursuant to the provisions of the Berne Convention itself.

"(b) Certain rights not affected. The provisions of the Berne Convention, the adherence of the United States thereto, and satisfaction of United States obligations thereunder, do not expand or reduce any right of an author of a work, whether claimed under Federal, State, or the common law—

"(1) to claim authorship of the work; or

"(2) to object to any distortion, mutilation, or other modification of, or other derogatory action in relation to, the work, that would prejudice the author's honor or reputation.".

Works in the public domain. Act Oct. 31, 1988, P. L. 100-568, § 12, 102 Stat. 2860, effective as provided by § 13 of such Act, which appears as a note to this section, provides: "Title 17, United States Code, as amended by this Act [for full classification consult USCS Tables volumes], does not provide copyright protection for any work that is in the public domain in the United States.".

Effective date of Act Oct. 31, 1988; effect on pending cases. Act Oct. 31, 1988, P. L. 100-568, § 13, 102 Stat. 2861, provides:

"(a) Effective date. This Act and the amendments made by this Act [for full classification, consult USCS Tables volumes] take effect on the date on which the Berne Convention (as defined in section 101 of title 17, United States Code) enters into force with respect to the United States.

"(b) Effect on pending cases. Any cause of action arising under title 17, United States Code, before the effective date of this Act shall be governed by the provisions of such title as in effect when the cause of action arose.".

First amendment application. Act Dec. 1, 1990, P. L. 101-650, Title VI, § 609, 104 Stat. 5132, effective 6 months after enactment as provided by § 610 of such Act, which appears

§ 412. Registration as prerequisite to certain remedies for infringement

In any action under this title [17 USCS §§ 101 et seq.], other than an action instituted under section 411(b) [17 USCS § 411(b)], no award of statutory damages or of attorney's fees, as provided by sections 504 and 505 [17 USCS §§ 504 and 505], shall be made for—

(1) any infringement of copyright in an unpublished work commenced before the effective date of its registration; or

(2) any infringement of copyright commenced after first publication of the work and before the effective date of its registration, unless such registration is made within three months after the first publication of the work.

(Added Oct. 19, 1976, P. L. 94-553, Title I, § 101, 90 Stat. 2583.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598 provided that this section "becomes effective on January 1, 1978".

CROSS REFERENCES

Statutory damages for infringement, 17 USCS § 504(c).

Costs and attorney's fees as element of damages for infringement, 17 USCS § 505.

RESEARCH GUIDE

Annotations:

Requirements as to deposit of copies of work in copyright office under § 13 of Federal Copyright Act (17 USCS § 13) as prerequisite to infringement action. 16 ALR Fed 595.

CHAPTER 5. COPYRIGHT INFRINGEMENT AND REMEDIES

Section
501. Infringement of copyright
502. Remedies for infringement: Injunctions
503. Remedies for infringement: Impounding and disposition of infringing articles
504. Remedies for infringement: Damages and profits
505. Remedies for infringement: Costs and attorney's fees
506. Criminal offenses
507. Limitations on actions
508. Notification of filing and determination of actions
509. Seizure and forfeiture
510. Remedies for alteration of programing by cable systems

§ 501. Infringement of copyright

(a) Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 118 [17 USCS §§ 106–118], or who imports copies or phonorecords into the United States in violation of section 602 [17 USCS § 602], is an infringer of the copyright.

(b) The legal or beneficial owner of an exclusive right under a copyright is entitled, subject to the requirements of sections 205(d) and 411 [17 USCS §§ 205(d) and 411], to institute an action for any infringement of that particular right committed while he or she is the owner of it. The court may require such owner to serve written notice of the action with a copy of the complaint upon any person shown, by the records of the Copyright Office or otherwise, to have or claim an interest in the copyright, and shall require that such notice be served upon any person whose interest is likely to be affected by a decision in the case. The court may require the joinder, and shall permit the intervention, of any person having or claiming an interest in the copyright.

(c) For any secondary transmission by a cable system that embodies a performance or a display of a work which is actionable as an act of infringement under subsection (c) of section 111 [17 USCS § 111(c)], a television broadcast station holding a copyright or other license to transmit or perform the same version of that work shall, for purposes of subsection (b) of this section, be treated as a legal or beneficial owner if such secondary transmission occurs within the local service area of that television station.

(d) For any secondary transmission by a cable system that is actionable as an act of infringement pursuant to section 111(c)(3) [17 USCS § 111(c)(3)], the following shall also have standing to sue: (i) the primary transmitter

whose transmission has been altered by the cable system; and (ii) any broadcast station within whose local service area the secondary transmission occurs.

(Added Oct. 19, 1976, P. L. 94-553, Title I, § 101, 90 Stat. 2584.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Section 102 of Act Oct. 19, 1976, P. L. 94-553, 90 Stat. 2598 provided that this section "becomes effective on January 1, 1978".

Other provisions:

Causes of actions arising before January 1, 1978. Act Oct. 19, 1976, P. L. 94-553, Title I, § 112, 90 Stat. 2600, provided: "All causes of action that arose under title 17 [former 17 USCS §§ 1 et seq.] before January 1, 1978, shall be governed by title 17 [former 17 USCS §§ 1 et seq.] as it existed when the cause of action arose."

CROSS REFERENCES

Exclusive rights of copyright owner, 17 USCS §§ 106–118.
Nonsimultaneous secondary transmissions by cable systems, 17 USCS § 111(e).
Principle of divisibility of copyright ownership, 17 USCS § 201(d).
Remedies for alteration of programming by cable systems, 17 USCS § 510.
This section referred to in 17 USCS §§ 111, 115, 116, 411, 510, 602.

RESEARCH GUIDE

Am Jur:

18 Am Jur 2d, Copyright and Literary Property §§ 97, 98, 104, 134, 137–141, 144, 146, 147, 150, 154.

58 Am Jur 2d, Newspapers, Periodicals, and Press Associations § 35.

Am Jur Trials:

Copyright Infringement Litigation, 9 Am Jur Trials, p. 293.

Forms:

6 Federal Procedural Forms L Ed, Copyrights §§ 17:51–17:54, 17:119.

Annotations:

Liability as "Vicarious" or "Contributory" infringer under Federal Copyright Act. 14 ALR Fed 825.

Law Review Articles:

Copyright Symposium, 22 New York Law School Law Review 193.

INTERPRETIVE NOTES AND DECISIONS

I. IN GENERAL (notes 1–7)
II. WHAT CONSTITUTES INFRINGEMENT [17 USCS § 501(a)]
A. In General (notes 8–12)
B. Reproduction of Copies (as specified in 17 USCS § 106(1))
1. In General (notes 13–25)
2. Similarity (notes 26–40)
3. Reproduction of Particular Features (notes 41–50)
C. Derivative Works (as specified in 17 USCS § 106(2)) (notes 51–58)
D. Distributions (as specified in 17 USCS § 106(3)) (notes 59–63)
E. Performance (as specified in 17 USCS § 106(4)) (notes 64–67)
F. Display (as specified in 17 USCS § 106(5)) (notes 68–70)
G. Importation (as specified in 17 USCS § 602) (note 71)
III. CABLE TELEVISION [17 USCS § 501(c,d)] (note 72)
IV. DEFENSES [17 USCS § 501(b)] (notes 73–84)
V. PRACTICE AND PROCEDURE
A. In General (notes 85–87)
B. Parties
1. Plaintiffs (notes 88–96)
2. Defendants (notes 97–102)
C. Pleadings (notes 103–113)
D. Discovery (notes 114–116)
E. Summary Judgment (notes 117–119)
F. Trial
1. In General (notes 120–123)
2. Evidentiary Matters (notes 124–130)
3. Judgment (notes 131–132)
G. Appeal (notes 133–134)

I. IN GENERAL

1. Generally
2. Federal law applicability
3. State law applicability
4. Equity considerations
5. Jurisdictional considerations
6. Relationship to other causes of action, generally
7. —Copyright infringement as tort

II. WHAT CONSTITUTES INFRINGEMENT [17 USCS § 501(a)]

A. In General

8. Generally
9. Intent to infringe
10. Loss of remuneration as infringement consideration
11. Separate or multiple infringements
12. Threatened infringement

B. Reproduction of Copies (as specified in 17 USCS § 106(1))

1. In General

13. Generally
14. Access as relevant to copying
15. Amount copied as affecting infringement, generally
16. —Motion pictures
17. —Musical works
18. Common source material, generally
19. —Art works
20. —Musical works
21. Independent creations
22. Memorized material
23. Phonorecord reproduction
24. Public domain material
25. Reprints

2. Similarity

26. Generally
27. Error reproduction
28. Ordinary observation or impression as measure of similarity, generally
29. —Literary works
30. —Musical works
31. —Visual works
32. Paraphrasing
33. Similarity to copyrighted work as affecting infringement, generally
34. —Jewelry
35. —Labels or prints
36. —Musical works
37. Similarity in works as relating to similar subject matter, generally
38. —Legal publications
39. —Plans, systems and ideas
40. Trivial variations

3. Reproduction of Particular Features

41. Generally
42. Characterization
43. Design features
44. Format or arrangement
45. Graphics or illustrations
46. Incidents or episodes
47. Literary style
48. Name or title
49. Plans, ideas, or subject matter
50. Plot or theme

C. Derivative Works (as specified in 17 USCS § 106(2))

51. Generally
52. Art work reproductions
53. Burlesque, parody, or satire
54. Dramatizations, generally
55. —Plot or theme appropriation
56. Musical work arrangements
57. Synopsis or outline
58. Translations

D. Distributions (as specified in 17 USCS § 106(3))

59. Generally
60. Distribution of phonorecords

A P P E N D I X

B

PHONE CALL GUIDELINE
TO OTHER AGENCIES

UPON THE INITIAL CALL TO THE RECEPTIONIST

Hello, my name is Kathy Foley. I am with the Riverside County Building and Safety department. May I please speak with someone in your organization who is responsible for data processing, specifically the personal computers. (Get their name and title).

If they do not have any computers, thank them for their time.

WHEN TRANSFERRED TO THE APPROPRIATE PERSON

Hello, my name is Kathy Foley. I am with the Riverside County Building and Safety department. Our organization is in the process of writing a software policy for personal computer use. **EXPLAIN WHAT MIGHT BE IN A SOFTWARE POLICY. Ask them if they have a few minutes to talk with you about this subject. Start with the first question.**

A P P E N D I X

C

POLICY QUESTIONAIRE

AGENCY: *DATE:* *CONTACT:*

QUESTIONS

1. Do you have personal computers (micro computers) in any of the departments in your city?

   If yes:
   a. How many personal computers do you have?

   b. What applications do you maintain on the computers?

   If no: GO TO # 8.

Describe what a software policy contain might contain.

2. Have you implemented a software policy?

   a. Do you allow employees to bring software to work from home?

   b. Do you allow employees to take software home for their own use or to perform work at home?

   If no to # 2:
   c. Do you think you need a policy or any controls on what employees are allowed to do with software purchased by your organization?

   If yes to c., what would you include in a policy?
   If no to c., why not?

3. How long has your policy been in place?

   If longer than six months:
   a. How often do you update the policy (or plan on updating the policy)?

4. Is your policy centralized?

5. Why did you implement a software policy?

6. Who wrote the policy or is responsible for maintaining it?

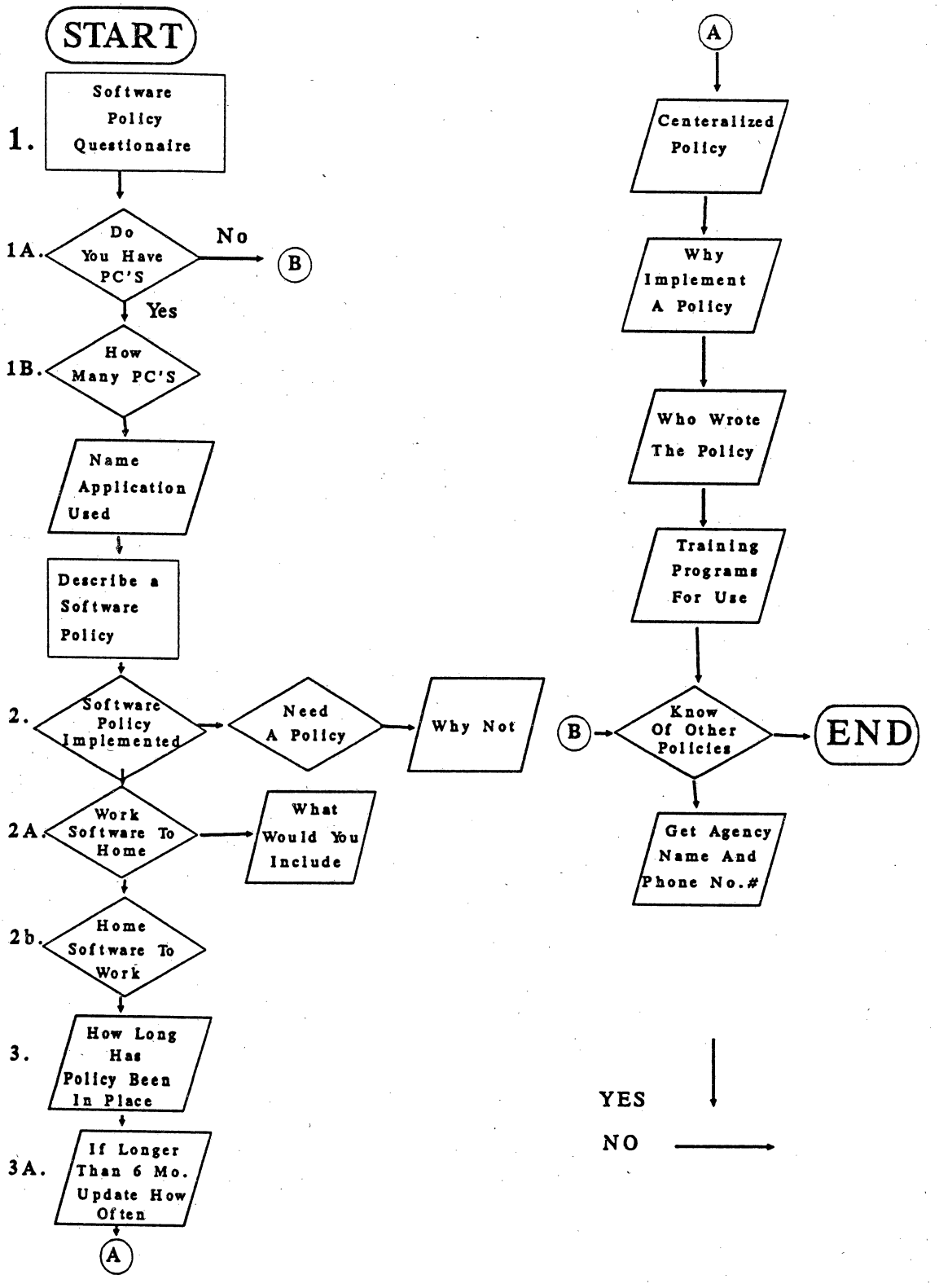
7. Do you include software use in any training programs?

8. Do you know of any government agencies who have implemented a software policy?

A P P E N D I X

D

POLICY QUESTIONNAIRE FLOWCHART



A P P E N D I X

E

GOVERNMENT AGENCIES SURVEYED

COUNTY OR DEPT.	CITY	POLICY	RECEIVED COPY	SHOWED INTEREST	WANTED A COPY	VERBAL POLICY	CONTACT	PHONE #
Riverside	Banning	no	N/A	yes	yes	no	Woody Edvalson	714-922-0443
	Beaumont	no	N/A	yes	yes	yes	Ronney Wong	714-845-1171
	Blythe	no	N/A	no	no	no	Jeanine Manly	619-922-6161
	Cathedral City	yes	no				Dan Perkinson	619-324-8388
	Coachella	no	N/A	yes	yes	no	Stewart Robinson	619-398-3502
	Corona	yes	yes				Cherly Anderson	714-736-2372
	Desert Hot Springs	no	N/A	no	no	yes	Colleen Nichol	619-329-6411
	Hemet	no	N/A	yes	yes	yes	Tom Aronson	714-765-2300
	Indian Wells	no	N/A	yes	no	yes	Mel Windsor	619-346-2489
	Indio	no	N/A	no	no	no	Adager Redarde	619-342-6580
	La Quinta	no	N/A	no	no	no	Unknown	619-564-2246
	Lake Elsinore	no	N/A	no	no	no	Larry Russell	714-674-3124
	Moreno Valley	no	N/A	yes	yes	yes	John Hines	714-243-3000
	Norco	no	N/A	no	no	no	Marcie McIntosh	714-735-3900
	Palm Desert	no	N/A	no	no	no	Janet Moore	619-346-0611
	Palm Springs	no	N/A	no	no	no	Tom Harness	619-323-8215
	Perris	no	N/A	yes	no	no	Johnny McCloud	714-943-6100
	Rancho Mirage	no	N/A	yes	yes	yes	John Uribarri	619-324-4511
	Riverside	no	N/A	yes	yes	yes	Mark Dykman	714-782-5508
	San Jacinto	no	N/A	yes	yes	no	Anna Vega	714-654-7337
San Bernardino	Adelanto	no	N/A	no	no	no	Cindy Herrera	619-246-8606
	Barstow	no	N/A	no	no	no	Richard Ptak	619-256-3531
	Big Bear Lake	no	N/A	yes	yes	no	Marilyn Warren	714-866-5831
	Chino	yes	no				Kathleen Shaputis	714-627-7577
	Colton	no	N/A	yes	no	yes	Gloria Adame	714-370-5076
	Fontana	no	N/A	no	no	no	Bea VanDenberg	714-350-7600
	Grand Terrace	no	N/A	no	no	no	Phil Bush	714-824-6621
	Loma Linda	no	N/A	no	no	no	Debra Ditgs	714-799-2800
	Montclair	no	N/A	yes	no	yes	Ed Starr	714-626-8571
	Needles	no	N/A	no	no	no	Genevive	619-326-2113
	Ontario	no	N/A	yes	no	no	Bill Bracken	714-986-1151
	Rancho Cucamonga	yes	yes				Bob Trammell	714-989-1851
	Redlands	no	N/A	no	no	no	Tony Sharmano	714-798-7510
	Rialto	no	N/A	yes	yes	no	Diane Schilling	714-820-2525
	San Bernardino	no	N/A	no	no	no	Mark	714-384-5211
	Upland	yes	yes				Paula Chamberlai	714-982-1352
	Victorville	no	N/A	yes	yes	no	Jean Bracey	619-245-3411
San Diego Count	San Diego	yes	yes				Unknown	Unknown
Riverside Depart.	Administrative Office	no	N/A	yes	yes	no	Brandon Simpson	714-275-1111
	Agricultural Commissioner	no	N/A	yes	no	no	John Schneider	714-275-3000
	Assessor's Office	no	N/A	no	no	no	Steve Goodrich	714-275-6263
	Auditor-Controller	yes	yes				Russ Smith	714-275-3800
	Building & Safety	yes	yes				Katherine Foley	714-275-7810
	Clerk-Board of Supv.	no	N/A	no	no	no	Bonnie May	714-275-1066
	Community Action	no	N/A	no	no	yes	Kathy Smith	714-275-8900
	Coroner	no	N/A	no	no	no	Karen Rhoades	714-275-1500
	County Clerk & Recorder	no	N/A	yes	no	no	Lynn Dang	714-275-1997
	County Counsel	no	N/A	no	no	no	Karen Christensen	714-275-6318
	County Service Area Info.	no	N/A	no	no	no	Sandy Gonzalez	714-275-1100
	District Attorney's Office	no	N/A	yes	yes	yes	Cindy MacDonald	714-275-5400
	Economic Development Agency	no	N/A	no	no	yes	Peggy Sanchez	714-275-8916
	Fire Department	yes	yes				Daniel Lim	714-657-3183
	Fleet Services	no	N/A	no	no	no	Sherry Robles	714-275-4650
	Flood Control	yes	yes				Ed Gallagher	714-275-1200
	General Hospital	no	N/A	yes	yes	no	Sue Duerst	714-275-3710
	Health Department	no	N/A	yes	yes	no	Don Cavalo	714-358-5165
	Historical Comm./Parks	no	N/A	no	no	no	Bill VanMill	714-275-4310
	Housing Authority	no	N/A	yes	no	yes	Jim Backum	714-351-0824
	Information Services	no	N/A	no	no	no	Robyn Rogers	714-275-3613
	Library	no	N/A	no	no	yes	Karen Morris	714-782-5589
	Local Agency Form. Comm.	no	N/A				George	714-369-0631
	Mental Health/Public Guard.	no	N/A	no	no	no	Unknown	714-358-4500
	Mosquito Abatement	no	N/A	no	no	no	Tina	714-681-2900
	Municipal/Superior Court	yes	no				Curtis Bachelder	714-275-5550
	Office on Aging	no	N/A	no	no	no	Al Christensen	714-275-8940

GOVERNMENT AGENCIES SURVEYED

COUNTY OR DEPT.	CITY	POLICY	RECEIVED COPY	SHOWED INTEREST	WANTED A COPY	VERBAL POLICY	CONTACT	PHONE #
	Personnel Department	no	N/A	yes	yes	no	Jim Berger	714-275-3500
	Planning Department	no	N/A	yes	yes	no	Bob Weaver	714-275-3200
	Probation Department	no	N/A	no	no	no	Bob Beach	714-275-2805
	Public Administrator	no	N/A	yes	yes	no	Jackie Cannon	714-275-1552
	Public Defender	no	N/A	yes	yes	no	Ron McCaskell	714-275-6000
	Public Social Services Dept.	yes	yes				Cecilia Jiminez	714-358-3760
	Purchasing, Printing, Supply	no	N/A	yes	yes	no	Billy Cornett	714-275-4931
	Registar of Voters	no	N/A	no	no	no	Sue	714-275-8700
	Riverside County Office of Ed.	yes	no				Bert Bell	714-788-6522
	Safety Division/Risk Mgmt.	no	N/A	no	no	no	Anita Moore	714-275-3542
	Sheriff's Depatment	no	N/A	yes	yes	no	Jan Conklin	714-275-2400
	Transportation	no	N/A	yes	yes	no	Pat Egetter	714-275-6867
	Treasurer & Tax Collector	no	N/A	no	no	yes	Gary Cotteral	714-275-3969
	Veteran's Services	no	N/A	no	no	no	Rebecca	714-275-8960
	Waste Management	yes	yes				Ron Sinclair	714-275-1370
	Worker's Comp. Div.	no	N/A				Vicki or Sue	714-275-3530
State Govt.	**Motor Vehicles Department**	yes	yes				Joel Langois	714-782-4100
	Senator Robert Presley	no	mini	yes	no	no	John Harland	714-782-4111
Federal Govt.	**Congressman Al McCandless**	no	N/A	yes	no	no	Page Hines	714-682-7127
	Congressman George E. Brown	no	N/A	no	no	no	Unknown	714-686-8863
	Federal Bureau of Investigation	yes	TopSecret				Brad Mirimam	213-477-6565
	Department of the Air Force	yes	yes				John Winkler	714-382-5325

TOTAL Organizations WITH Policies	*17*	*13*
TOTAL Organizations Surveyed	*87*	*87*
% of Organizations With Policies	*20%*	*15%*

OF THOSE WHO DID NOT HAVE A POLICY

those that showed interest	*33*
% of TOTAL Orgs. showing interest	*38%*
those that requested a copy	*23*
% of TOTAL Orgs. requesting policy	*26%*
those that had a verbal policy	*16*
% of TOTAL Orgs. with verbal policy	*18%*

A P P E N D I X

F

COUNTY OF RIVERSIDE
PERSONAL COMPUTER
SOFTWARE POLICY

I. OBJECTIVE

To provide policy and procedures concerning purchased personal/micro computer (PC) software packages/programs. A software package includes the original floppy disks, documentation, and registration.

II. APPLICABILITY

This policy applies to software programs installed on all PCs operated by any employee in all departments in Riverside County whether the PC was purchased, leased, or on loan. A software package consists of the software program (usually stored on a floppy disks), manuals for installation and use of the program, a registration card, and other miscellaneous information. Software (by its serial number) will be assigned to a PC (by its serial number) as one unit.

III. POLICY

1. **All employees in Riverside County shall strictly adhere to the United States Copyright Law (amended in 1980 to include computer programs) and vendor licensing agreements as described on material provided with purchased software.** Some examples of major restrictions for such licenses and agreements usually include the following:

   A. Only one backup or working copy of the original floppy disks is allowed to be made beyond those copies expressly allowed in the vendor's license agreement.

   B. Software shall not be used concurrently on more than one computer, unless allowed in the license agreement by the vendor.

   C. Software shall not be loaded on more than one computer's hard drive unless allowed in the license agreement by the vendor. It is the employee's responsibility to read the software vendor's licensing agreement and follow it. (For instance, WordPerfect recently announced a new licensing agreement. Any employee may take a copy of the word processing program home and place it on one PC hard drive--as long as the program only executes on

one PC at a time. Lotus Development Corporation only allows one copy of Lotus 1-2-3 to be placed on a PC hard drive.)

D. Purchased software user manuals and other documentation provided with the product shall not be copied.

E. Software programs loaded on Local Area Network (LAN) hard drives shall not be copied to floppy disks or workstation hard drives.

2. Public domain, shareware, bulletin board, and demonstration software shall not be used unless approved by the department's employee responsible for PC software/hardware.

A. All software programs shall be tested for viruses before loaded or executed on any PC hard drive or file server hard drive.

B. All software programs shall be tested and operate in a single user environment on a stand-alone PC successfully before implementation on a file server hard drive.

C. All software programs shall be registered upon receipt of product according to department standard.

3. The use of personally owned software is not allowed unless proof can be provided by the employee that the vendor supports a copy on more than one hard drive or the software is not loaded on any other PC.

A. All policy statements in paragraph III. 1. and 2. apply.

B. Use of the software must be temporary until the department purchases or erase the software.

C. The employee who loads his/her software on the PC hard drive at work shall satisfy the person responsible for PCs that the following requirements are documented:

1) Available software cannot meet the employee's needs.

2) Provide proof that using the software at work will not violate the vendor's licensing agreement.

3) Provide a brief plan to show how use of the software will be phased out as the department purchases a copy.

D. No software application shall be developed (in DBase, Paradox, or the like) such that an individual's job would be impossible or extremely difficult to perform without the employee's copy of the owned software. Otherwise, highly dependent software applications must be developed with county owned products only.

4. All application software developed for county use must be documented. The documentation must include application (files and programs) and user manuals.

IV. PROCEDURES

1. Every department and each division within the department shall comply with this policy within 60 days of the effective date. It will be the responsibility of the department head to:

A. Prepare an inventory of the software for which proof of ownership is available and which PC central processing unit (CPU) it is assigned to (is operating on). One method for proof of ownership is the invoice. Another is the serial number for each product.

B. Compare, the software contents for each computer's hard drive in each department, to their original floppy disks for which proof of ownership is available. (One method of obtaining a list of the programs on the hard drive is to use Software Publisher's Association's (SPA) Audit Kit. This product can be obtained from SPA at no cost. A copy of the kit should be attached to this policy.)

C. Request users of the PC to help assist in locating any additional proofs of ownership, possibly by the original floppy disk or the vendor invoice.

D. Inform all users of PCs with software who do not have any type of proof of ownership that the software will be deleted. Inform the user that they should immediately obtain a legal copy, through the proper channels, if the illegal used software is required.

2. Every department shall maintain an inventory of legally obtained software and keep it readily available.

   A. Designate a central, secure, storage location or assign the software to the PC's CPU by serial numbers and make the user responsible through a type of receipt process.

   B. Add newly purchased software to the storage location and/or the receipt for the user.

3. Every department shall, after paragraphs IV. 1. and 2. are completed, maintain a self audit on file to ensure that the policy continues to be followed. (This shall be accomplished with SPA's Audit Kit or a product comparable to it.) The audit listing shall include the PC equipment and the software programs that are loaded on the hard drive.

4. The designated LAN administrator for each department shall ensure that this policy is complied with for the file server hard drives.

   A. Acquire or develop software which will alert the system administrator if more than the licensed number of users are accessing a software program concurrently.

   B. Establish a procedure to notify the user who exceeds the number of licenses that the software is not available.

   C. Implement network security procedures to disallow copying software on the file server hard drives to individual floppy disks or PC hard drives.

   D. Monitor software loaded on the network hard drives to assure the policy is adhered to.

V. SANCTIONS

1. Employees who fail to follow this software policy may be subject to disciplinary action and;

2. Any employee who chooses not to abide by the copyright law when using PC computer software places Riverside County in a position of liability. Violation of the copyright law is a federal offense. Riverside County is not legally required to provide representation to anyone sued or prosecuted for illegally copying software, or to indemnify such persons

against civil damages. Civil damages can be $100,000 or more and criminal penalties include fines and imprisonment.

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