



State University of New York
99 Washington Avenue
Albany, New York 12246

Office of the Vice Chancellor
for Educational Services

August 3, 1977

Mrs. Steina Vasulka
257 Franklin Street
Buffalo, NY 14202

Dear Steina:

I'm delighted you've agreed to be the featured artist for SUNY's 1977-78 The Moving Image/The Maker program. It's been an excellent series, and your participation will assure its quality and take us in an important new direction.

I've written up the poster copy and have enclosed it for your records. As soon as the poster is designed and printed, it will be distributed to the campuses, and we can expect to receive requests for dates by mid-September. My assistant Nancy Brown will handle the booking details and will be in touch with you as requests come in.

We've budgeted for ten campus visits. If we receive more requests and our funds can be stretched to accommodate additional engagements, we'll consult with you about accepting a few more. Last year there were thirteen visits. However, as you and I discussed, this is the first year for video, and we may find less campus interest for video than for film. I hope not!

To review what we discussed: you'll be at each participating campus from about noon of the first day until noon of the second, varying this plan to suit particular campus needs. While on campus, your schedule should include a public showing of your work and that of other artists you want to include; seminars with classes or informal groupings of students to discuss your work and the tools and techniques you employ; a visit to campus media centers to consult about equipment at hand and its use; informal times with interested students and faculty to talk about the field.

We'll talk to each sponsor to assure a well-planned schedule, and I think you should do the same. We've found that advance planning, and suggestions from the artist about what should be included in the visit, helps a great deal.

Mrs. Vasulka
August 3, 1977
Page 2

In terms of equipment, we'll ask host campuses to provide you with 3/4 or 1/2 inch playback equipment plus at least one color monitor, or more if the space requires it. Will you bring any equipment with you at all to demonstrate what you've developed? We discussed this, but I can't recall what you said.

You'll receive \$400 per visit, inclusive of your travel expenses. My office will pay half the portion of the fee, or \$200, and will need your social security number to process checks. Campuses are asked to provide you with overnight housing.

I think it would be helpful for us to have a list and description of the tapes you'll show so we can talk about the program intelligently with potential hosts. When you have an idea of a program, please call Nancy and me, and we'll take copious notes and can type up a tentative program to send to sponsors.

Finally, do you have a photo of yourself that can be used at campuses for advance publicity?

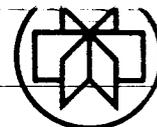
Again, I'm looking forward to working with you this year and am very happy your work will be seen at our colleges across the state. Regards to Woody--talk to you soon.

Sincerely,



Patricia Kerr Ross
Director, University-wide
Programs in the Arts

PKR:ss



December 18, 1979

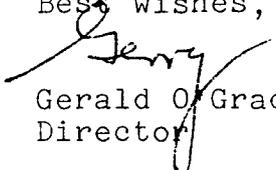
Mr. Ron Schultz
KOY-3 Productions Apt. #9
3356 Rowena Avenue
Los Angeles, CA 90027

Dear Ron:

I am sending you in a separate package the cassette of Bob Creeley's reading by Steina and Woody Vasulka. It is my understanding that you will make a copy from the original and that you will return the original to me at 207 Delaware Avenue, Buffalo, New York 14202. I shall then return it to the Vasulkas. Ownership of the physical materials of the original resides with the Vasulkas. Rights to the distribution or transmission in any form resides with Bob Creeley.

It is also my understanding that you have Bob Creeley's permission to use this tape on your Los Angeles public access program, The Poet's Voice.

Best wishes,


Gerald O. Grady
Director

go'g:mwk
cms

cc: Bob Creeley
✓ Woody and Steina Vasulka

Application for Research Funds

Date March 15, 1977

B. Woody Vasulka Center for Media Study 310 Wende Hall
 Name of applicant Dept., School Campus Address

Associate ProfessorAcademic rank (print as it appears on your appointment form)Research in 8-Bit Micro Processor Subsystem for videographic, character generation, and image processingTitle of Project

One Year June 1, 1977 June 1, 1978
 Duration of Project: Beginning date Ending date

Have you received previous awards from university-wide funds, including this committee, during or since Spring 1973? NO

If so, give amount _____

Have you submitted a final report on that grant? _____

Have you applied or received any outside support as a result of that grant? _____

If so, list: Agency _____
 Amount _____
 Date _____

Budget Summary:

Wages and/or salaries Graduate students working part-time in employment beneficial to students educational goal and are either registered for 9 credits or more, are grad. asst. registered for 6 credits or more or registered for and working full-time on thesis or independent study, do not have staff benefits charged. _____
Undergraduates or non-students (21% staff benefits charged) _____
Travel Domestic or foreign - specify coach rate _____
Supplies Including copying, under \$100 _____
Equipment Over \$100 \$3,390.00
Special Needs Subject fees, etc., explain in budget justification _____
 TOTAL \$3,390.00

Classify project in one of the following groupings: (check one)

 New regular - never tried at SUNYAB Regular - new to SUNYAB but now being continued X New pilot - never tried anywhere Continuation pilot - new pilot in its first or second year

This information is necessary to complete our annual report.

Description of project: On an accompanying sheet concisely describe your project. Set forth your hypothesis or problem, indicate its significance, show how you plan to gather and analyze the data, and how you will report results. Justify your budget in terms of the operations you expect to perform. You will do the committee a favor if you confine your description to 1,000 words or less. REFER TO GUIDELINES

Donald L. O'Grady
 Signature of Dept. Chairperson



IMPORTANT: CAREFULLY READ THE INSTRUCTIONS BEFORE COMPLETING THIS FORM.

SUNY / RESEARCH FOUNDATION APPLICATION

RETAIN ONE COPY AND FORWARD REMAINING COPIES TO UNIVERSITY AWARDS COMMITTEE

FOR COMMITTEE USE ONLY

1. ENTER REVIEW CATEGORY USING LISTING ON OPPOSITE PAGE	NAME	NUMBER	CHART OF ACCTS.
Other		86	

REVIEWER	SUB-COMMITTEE CHAIRMAN
CONTROL NO.	PROGRAM CHANGE YEAR

2. PLEASE CHECK ONLY ONE OF THE FOLLOWING TYPES OF AWARDS		AMOUNT REQUESTED
<input type="checkbox"/> PROGRAM 1	FACULTY RESEARCH FELLOWSHIP*	\$
<input checked="" type="checkbox"/> PROGRAM 2	GRANT-IN-AID	\$ 3,400
<input type="checkbox"/> PROGRAM 3	FACULTY RESEARCH FELLOWSHIP* AND GRANT-IN-AID	\$

* AMOUNT CONTINGENT ON BUDGETARY APPROPRIATION

3. <input type="checkbox"/> DR. <input checked="" type="checkbox"/> MR. <input type="checkbox"/> MISS <input type="checkbox"/> MRS. <input type="checkbox"/> MS.	11. IF THIS PROJECT IS TO BE EXECUTED IN COOPERATION WITH OTHER INVESTIGATORS, SUBMITTING SEPARATE APPLICATIONS, LIST NAMES, CAMPUSES, AND SOCIAL SECURITY NUMBERS.
4. PRINCIPAL INVESTIGATOR (LAST, FIRST, INITIAL) Vasulka, Bohuslav Woody	
5. ACADEMIC TITLE Assoc Professor, Tenured	
6. DEPARTMENT Center for Media Study	
7. CAMPUS NAME AND ADDRESS SUNY/Buffalo	
8. SOCIAL SECURITY NUMBER	9. THIS PROJECT WILL BE CARRIED OUT: <input type="checkbox"/> ON CAMPUS <input checked="" type="checkbox"/> OFF CAMPUS

10. HOME ADDRESS 257 Franklin St	STREET	CITY & STATE Buffalo NY	ZIP CODE 14202
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12. DEGREES HELD	INSTITUTION	YEAR	13. PROFESSIONAL POSITIONS HELD BY PRIN. INVEST.	DATES
see vita attached			see vita attached	

14. TITLE OF PROJECT (MUST NOT EXCEED 80 DIGITS, INCLUDING SPACES AND PUNCTUATION):
Art Exploration of Computer Languages

15. BRIEF SUMMARY OF PROJECT, INCLUDING OBJECTIVES, SIGNIFICANCE, AND GENERAL PROCEDURES (LIMIT TO THIS PAGE).
Background: In the realm of science and industry there exists a developed knowledge of computer sciences, specifically certain programs and languages analyzing and synthesizing the conditions of space, two dimensional frame structures and other time/energy concepts. Not enough of that computer knowledge has become the tool of arts such as cinema, video, and electronic music. Purpose: To examine, analyze, catalog and report on existing computer languages and programs for possible use as tools for artistic creation. Method: 1) By further research of literature, the PI will identify selected scientific/industrial programs such as speech synthesis, tonal structure analysis and generation, behavioral models such as stress waves, pressure conditions in plasmas, and images as data-structures; 2) based on these identifications, the PI will travel to at least 5 computer centers such as Bell Labs, Los Alamos, NASA/Houston, G.E. Visual Labs, and Salt Lake to gather programs; 3) these programs will be run on the large computer at SUNY/Buffalo w/ unmodified output capabilities to identify active components useful for arts/creative applications (if the SUNY computer is unavailable, the experiment will be fully conclusive carried out at the PI's personal computer); 4) the isolated components of programs will be examined more fully on PI's own PDP11-03 with modified output devices to determine in more detail their content, textures and potentials. Conditions: The problem to be examined is not a singular event in the PI's history of image and sound experimentation, but an evolutionary step in acquisition and use of new systems by the arts. Result: The method will generate a set of basic practical programs usable as personal creative tools, mainly in the area of electronic image and sound communication.

<input type="checkbox"/> ONE SET OF ATTACHMENTS	<input type="checkbox"/> ATTACHMENTS TO BE RETURNED	ATTACHMENTS CONSIST OF	AWARD	CLASS
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16. PROPOSED BUDGET

IF YOU ARE APPLYING FOR A FACULTY RESEARCH FELLOWSHIP UNDER PROGRAM 1, ENTER STIPEND REQUESTED. IF YOU ARE APPLYING FOR A GRANT-IN-AID UNDER PROGRAM 2, ITEMIZE ALL BUDGET ENTRIES IN DETAIL. IF YOU ARE APPLYING FOR A COMBINATION OF A FACULTY RESEARCH FELLOWSHIP AND GRANT-IN-AID UNDER PROGRAM 3, ENTER BOTH STIPEND REQUESTED AND ITEMIZE BUDGET IN DETAIL. UNDER PROGRAM 2 AND PROGRAM 3, FAILURE TO ITEMIZE BUDGET ENTRIES IN DETAIL MAY RESULT IN THEIR AUTOMATIC DELETION. IN ADDITION, JUSTIFY ALL ITEMS OF SUPPLIES AND EQUIPMENT EXCEEDING \$100, USING A SEPARATE SHEET, AS REQUIRED.

STIPEND (APPLICABLE ONLY UNDER PROGRAMS 1 AND 3) AMOUNT CONTINGENT ON BUDGETARY APPROPRIATION	\$
PAYROLL (SPECIFY SALARIES AND FRINGE BENEFITS, THIS CATEGORY NOT TO INCLUDE THOSE FOR APPLICANT.)	
Graduate assistant stipends: \$5/hr, 20 hrs/wk, 10 weeks	TOTAL SALARIES \$ 1,000
	TOTAL FRINGE BENEFITS AT CURRENT COST RATE \$
CONSULTANT SERVICES	
Computer programmers	\$ 150
TRAVEL (ITEMIZE TRAVEL, FOOD, LODGING, ETC.) 5 trips, \$250/trip per diem @ \$30/day, 10 days	
<input type="checkbox"/> FOREIGN <input checked="" type="checkbox"/> DOMESTIC	\$ 1,550
CONSUMABLE SUPPLIES	
Data disketts Paper tape	\$ 450
EQUIPMENT	\$
MISCELLANEOUS	
Design and engineering modifications of equipment: certain programs will require changes in the character of output materials (sound/image).	\$ 250
	GRAND TOTAL REQUESTED \$ 3,400

USE ADDITIONAL SHEETS AS REQUIRED FOR QUESTIONS 17 - 28. ANSWER IN NUMERIC ORDER.

17. WILL YOU USE THIS PROJECT IN WORK LEADING TO A DEGREE? YES NO

18. IS THIS YOUR FIRST APPLICATION TO UAC? YES NO

19. LIST ANY APPLICATIONS CURRENTLY UNDER CONSIDERATION BY SPONSOR(S) OUTSIDE THE UNIVERSITY. SPECIFY SPONSOR(S), PROJECT TITLE(S) AND AMOUNT(S). IF YOU HAVE RECEIVED A PREVIOUS UNIVERSITY AWARD(S) AND ARE NOW REQUESTING MORE THAN \$1,000, ATTACH FACE SHEET AND ABSTRACT OF THE PROPOSAL(S) AND OBTAIN SIGNATURE REQUIRED IN ITEM 35. IF THESE APPLICATIONS WERE NOT SUBMITTED THROUGH YOUR LOCAL CAMPUS RESEARCH OFFICE, ATTACH OTHER EVIDENCE OF SUBMISSION. IF YOU HAVE NOT SOUGHT SUPPORT ELSEWHERE, EXPLAIN WHY YOU HAVE NOT DONE SO.

none
 FACE SHEET AND ABSTRACT ATTACHED

20. LIST ALL PROJECTS FOR WHICH YOU HAVE RECEIVED SUPPORT FROM ANY SOURCE, INCLUDING UAC, WITHIN THE LAST FIVE YEARS. SPECIFY SOURCES, AMOUNTS, TITLES AND DATES.

See attached list

21. IF YOU ARE A PREVIOUS RECIPIENT OF A UNIVERSITY AWARD(S), APPEND A REPORT SUMMARIZING ACCOMPLISHMENTS UNDER THE LAST AWARD RECEIVED, ALONG WITH CONFIRMING EVIDENCE SUCH AS AN ARTICLE, MONOGRAPH, CRITICAL REVIEW, PHOTOGRAPHS, ETC. FAILURE TO DO SO WILL DISQUALIFY YOUR APPLICATION.

REPORT ATTACHED.

22. IF THIS PROJECT OR A SIMILAR ONE HAS BEEN SUBMITTED TO A PRIOR SERIES, YOU MAY WISH TO INDICATE HOW THIS PROJECT DIFFERS.

Not directly related

23. DESCRIBE STATE UNIVERSITY FACILITIES AVAILABLE FOR THIS PROJECT (INCLUDE HERE ANY INDICATION OF ASSISTANCE IN THE FORM OF EQUIPMENT, SPACE, SUPPLIES, ETC., WHICH MIGHT BE PROVIDED BY A SUNY INSTITUTION IN THE EVENT ACTION UPON THIS REQUEST IS FAVORABLE).

See statement under Method, page 2, item 3) in the attached proposal

24. DESCRIBE NON-STATE UNIVERSITY FACILITIES OR RESOURCES REQUIRED FOR THE PROJECT (THE BURDEN IS ON YOU TO ASSURE THE COMMITTEE AS TO THE ACCESSIBILITY AND AVAILABILITY OF ANY SPECIAL RESOURCES OR FACILITIES WHICH MAY BE REQUIRED IN THE CONDUCT OF YOUR STUDY).

See statement under Method, page 2, item 3) in attached proposal

25. INDICATE ANY PLANS FOR EXHIBITION, PERFORMANCES, PUBLICATIONS, ETC. OF THE RESULTS OF THIS PROJECT.

See statement under Results, page 4, attached proposal

26. LIST PERFORMANCES, EXHIBITIONS, COMMISSIONS, COLLECTIONS, AWARDS, GRANTS, CRITICAL REVIEWS, AND, IF APPROPRIATE, PUBLICATIONS. SUBMIT EXAMPLES OF YOUR CREATIVE WORK SUCH AS SCORES, TAPES, RECORDINGS, MANUSCRIPTS, PUBLISHED WORKS. WITH THE APPLICATION FOR PAINTING, SCULPTURE, CRAFTS AND MIXED MEDIA, SUBMIT 10 TO 18 SLIDES OR PHOTOGRAPHS OF RECENT WORKS. IF YOU WISH, YOU MAY INCLUDE DIFFERENT VIEWS OF INDIVIDUAL PIECES. LABEL EACH SLIDE AS TO DIMENSION AND PRESENT LOCATION. IN FILM AND PHOTOGRAPHY, YOU MAY SUBMIT EXAMPLES OF WORK IN THE ORIGINAL FORM. SINCE INDICATION OF THE RECEPTION OF YOUR CREATIVE WORK BY OUTSIDE SOURCES WOULD BE HELPFUL, YOU MAY WISH TO INCLUDE COPIES OF CRITICAL REVIEWS, CITATIONS, CATALOGUES, ETC.

See vita

27. PROVIDE A DETAILED DESCRIPTION OF THE PROJECT INCLUDING BACKGROUND, CURRENT STATUS, TIME UTILIZATION DURING THE FELLOWSHIP PERIOD AND THE RELATION OF THE PRESENT PROJECT TO YOUR OWN PREVIOUS WORK IN THIS AREA. (PLEASE LIMIT TO ONE PAGE, IF POSSIBLE).

See attached proposal

28. PROVIDE A BIOGRAPHICAL SKETCH INCLUDING YOUR RELEVANT PERSONAL HISTORY, SUCH AS DATE OF BIRTH, EDUCATION, PROFESSIONAL BACKGROUND AND OTHER QUALIFICATIONS, BUT EXCLUDING INFORMATION CONTAINED ON THE FIRST PAGE OF THIS APPLICATION FORM.

See vita

29. REFERENCES

PLEASE REFER TO OUTSIDE REFERENCES IN SUPPORT OF A PAST PROJECT SUBMITTED TO UAC (FALL 1973, 1974 AND 1975).

NAME

LOCATION

I WILL OBTAIN NEW REFERENCES IN SUPPORT OF THIS PROJECT.

NAME	LOCATION
Dr. Kenneth Knowlton	Bell Laboratories
Dr. Robert Jungels	Assoc Prof/ R.I. School of Design
Daniel Sandine	Assoc Prof/ U. of Ill, Chicago Circle
Gerd Stern	Intermedia Systems Corp./ Cambridge
Dr. Joel Chadabe	Prof/ University Center, Albany

30., 31., AND 32. (NOT APPLICABLE TO CREATIVE PROJECTS IN THE FINE ARTS.)

33. AGREEMENT BETWEEN APPLICANT AND THE JOINT AWARDS COUNCIL/UNIVERSITY AWARDS COMMITTEE

IT IS UNDERSTOOD AND AGREED BY THE APPLICANT:

- THAT THE AWARD MAY BE REVOKED IN WHOLE OR IN PART AT ANY TIME BY THE JOINT AWARDS COUNCIL/UNIVERSITY AWARDS COMMITTEE OF STATE UNIVERSITY OF NEW YORK SHOULD THE RECIPIENT'S RELATIONSHIP WITH THE STATE UNIVERSITY CEASE TO EXIST, PROVIDED THAT SUCH REVOCATION SHALL NOT INCLUDE ANY AMOUNT OBLIGATED PREVIOUS TO THE EFFECTIVE DATE OF REVOCATION IF SUCH OBLIGATIONS WERE MADE SOLELY FOR THE PURPOSES SET FORTH IN THE APPLICATION;
- THAT THE GENERAL TERMS AND CONDITIONS OF THIS PROPOSAL AS STATED IN THE APPLICATION FORM, PROGRAM ANNOUNCEMENTS, GUIDELINES AND POLICIES FOR SUNY/RESEARCH FOUNDATION AWARDS AND ELSEWHERE HAVE BEEN READ AND ACCEPTED;
- THAT ANY FUNDS GRANTED AS A RESULT OF THIS APPLICATION ARE TO BE EXPENDED FOR THE PURPOSE OUTLINED HEREIN, AND ANY FUNDS NOT EXPENDED FOR THIS PURPOSE SHALL REVERT TO THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK UPON COMPLETION OF THE PROJECT OR TERMINATION DATE OF THE AWARD, WHICHEVER IS EARLIER;
- THAT THE POLICIES GOVERNING INCOME FROM TEACHING OR OTHER SERVICES DURING THE PERIOD OF THIS AWARD HAVE BEEN READ AND ACCEPTED AS PUBLISHED IN THE PROGRAM ANNOUNCEMENTS AND GUIDELINES AND POLICIES FOR SUNY/RESEARCH FOUNDATION AWARDS;
- THAT ANY MAJOR CHANGES IN THE ORIGINAL BUDGET OR PROJECT DIRECTION WILL REQUIRE PRIOR JOINT AWARDS COUNCIL/UNIVERSITY AWARDS COMMITTEE APPROVAL.

34. ASSURANCE HEREBY GIVEN THAT SUPPORT IN THIS PARTICULAR FORM WILL BE SUFFICIENT TO CARRY OUT THIS PROJECT:

APPLICANT SIGNATURE:

DATE 02/13/76

IMPORTANT - OBTAIN LOCAL ADMINISTRATIVE APPROVAL BEFORE SUBMISSION TO THE UNIVERSITY AWARDS COMMITTEE

35. CERTIFICATION BY CAMPUS INSTITUTION WHERE HUMAN SUBJECTS ARE INVOLVED:

INDEPENDENT REVIEW BY APPLICANT'S INSTITUTION HAS BEEN AND WILL CONTINUE TO BE MADE TO INSURE ADEQUATE PROTECTION OF : (1) THE RIGHTS AND WELFARE OF THE INDIVIDUALS INVOLVED; (2) THE APPROPRIATENESS OF THE METHODS USED TO OBTAIN INFORMED CONSENT, AND (3) THE RISKS AND POTENTIAL MEDICAL BENEFITS OF THE INVESTIGATION.

CAMPUS CERTIFICATION

NAME	TITLE	DATE
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36. CAMPUS CERTIFICATION OF PROPOSAL(S) SUBMITTED FOR OUTSIDE SUPPORT, IF APPLICABLE:

APPLICATIONS FOR SUPPORT OF THIS PROJECT WERE FORWARDED TO SPONSORS OUTSIDE THE UNIVERSITY THROUGH THE APPROPRIATE OFFICE ON THIS CAMPUS.

CAMPUS CERTIFICATION

NAME	TITLE	DATE
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37. THIS PORTION TO BE COMPLETED FOR ALL APPLICATIONS: APPROVED FOR SUBMISSION

CAMPUS OFFICIAL SIGNATURE

NAME	TITLE	DATE
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APPLICATIONS CANNOT BE PROCESSED WITHOUT APPROPRIATE SIGNATURES

MAIL COMPLETED APPLICATION TO: UNIVERSITY AWARDS COMMITTEE THE RESEARCH FOUNDATION OF SUNY P. O. BOX 9 ALBANY, NEW YORK 12201

During the past decade, the use of electronic computers has begun to change the arts -- and especially those associated with such media of mass communication as film, video and sound -- as profoundly as it has effected every other aspect of production and distribution in our society.

At the same time, two factors have inhibited the growth of computer use in the arts. First of all, the cost of large computer systems has thus far kept them primarily in the hands of large corporations, public institutions and government agencies. Since time-sharing is fundamentally unsuited to real-time composition and execution in the arts, because it is bound to introduce discontinuity into the flow of the work, only a few artists have been able to work sporadically in large facilities, such as those at Bell Laboratories, that can be dedicated, at least for continuous periods of several hours to creative work in the media arts; moreover, that these few facilities are, at the present time, largely obsolescent.

However, with the advent of micro-computers during the past two years, hardware costs have fallen so rapidly that it is now possible for an individual artist to own a complete small computer system with considerable flexibility for well under \$5,000.

Secondly, existing software (computer languages and programs) have mitigated against the use of the computer as a tool for the arts. While the electronic computer is in no way inherently better suited to scientific and business application than to other uses, most existing software has been developed to meet the needs of the communities that could afford them; the writing of a computer language is an intricate and lengthy task, and therefore, in one sense or another, costly.

It is to this latter problem, then, that the proposed research addresses itself.

Goal of the Research:

The goal of the research is to define criteria for, and design in outline, a new high-level computer language for the arts. In its implementation, it is assumed that such a language must meet at least four requirements:

- 1) That it shall run in small stand-alone systems, affordable by individual and small groups;
- 2) that it shall interface with, and be capable of controlling, the largest possible variety of existing media arts tools. (For example, music and video synthesizers, film animation devices, typewriters, X-Y plotter drawing machines.)
- 3) That it shall generate and control data for all sensory parameters (especially speech, music, written language, and moving visual imagery in full color, texture, and perspective); simultaneously, in real time, through a single parsimonious structure of commands; and
- 4) that it shall be highly interactive, querying the user-artist ...who is not assumed to be a trained programmer...from a standard TV or teletype terminal.

Significance of the Research:

To the knowledge of the investigator, the design criteria for such a high-level language have never been defined. At its completion, the project proposes to place in the hands of individual artists, the full power of the electronic computer as a creative tool.

Manner of Performing the Research:

The work will be undertaken in continuous consultation with at least one colleague (Associate Professor Hollis Frampton, Center for Media Study) and with a number of graduate students, who will receive credit for their participation in either or both of two graduate courses, descriptions of which are attached (or in independent study)...and in an environment that permits constant hands on use of a small computer system for program development. This environment will also have access to the creative media studies existing hardware resources in film and video.

Manner of Reporting Results:

A written report will be prepared embodying the results of this research. This report will be submitted to the appropriate Special Interest Groups of the Association for Computing Machinery, and to other professional organizations, with a view to publication and conference presentation. Software and documentation will be made available to all interested parties for the cost of duplication and shipping.

Period during which research will be performed:

June 1, 1977 to June 1, 1978

Request for Funds:

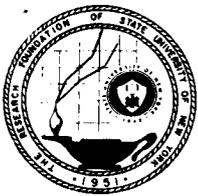
Funds are requested for purchasing of equipment (a small computer system for software development) an itemized list of which is attached. This equipment will also be available to qualified graduate students in Center for Media Study for work on other projects.

8-Bit Micro Processor Subsystem for videographic, character generation, and image processing

The following is a list of hardware and software for an 8-bit subsystem intended for interfacing with a Digital Equipment Corporation LSI 11/45, 16-Bit Minicomputer Specifications are for items that are plug- and signal-compatible with the so-called L-100 computer bus system; operating systems and utility software are written for, or are fully compatible with, the instruction set of the Zilog Corporation's Z-80 Microprocessor. In all cases, appropriate driver software and Input/Output routines are included in hardware prices.

With the exception of the Video Monitor and Audio Cassette Recorder, both of which are standard items that must be dedicated to this application, all the listed hardware and software are available direct from Process Technology, 6200 Hollis Street, Emeryville, California 94608.

1 @ SOL-20 Terminal Computer	\$1450.00
1 @ SOLOS Operating System Firmware Module	100.00
1 @ ALS-8 Resident Assembly Language Module	425.00
1 @ SIM-1 Resident Interpretive Simulator	95.00
1 @ TXT-2 Resident Text Editor	95.00
2 @ 8-KRA 8192 -Byte Static Ram Module @ \$375	750.00
1 @ 4-KRA 4096-Byte Static Ram Module	175.00
1 @ 12-inch black-and-white video monitor	150.00
1 @ Audio-cassette recorder Monaural	<u>150.00</u>
TOTAL	\$3390.00



UNIVERSITY AWARDS COMMITTEE

c/o THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK
P.O. Box 7126, Albany, New York 12224



DECEMBER 15, 1974

MR. BOHUSLAV W. VASULKA
ASSISTANT PROFESSOR
DEPARTMENT OF CENTER FOR MEDIA STUDY
STATE UNIVERSITY OF NEW YORK
AT BUFFALO
BUFFALO, NEW YORK 14214

DEAR PROFESSOR VASULKA,

AS YOU PROBABLY KNOW, EACH YEAR THE COMMITTEE RECEIVES MANY MORE APPLICATIONS THAN CAN BE SUPPORTED. IN ADDITION, YOUR APPLICATION WAS IN SEVERE COMPETITION WITH THOSE OF YOUR COLLEAGUES IN THE UNIVERSITY.

YOUR APPLICATION FOR THE PROJECT, 'GRAMMAR OF ELECTRONIC IMAGE', WAS PLACED IN THE CATEGORY, SUPPORTABLE BUT NOT FUNDABLE, WHICH INCLUDES THOSE PROPOSALS WHICH HAVE THE COMMITTEES ENDORSEMENT, BUT WHERE FISCAL LIMITATIONS PREVENTED FUNDING.

THE ADMINISTRATION ON YOUR CAMPUS HAS BEEN INFORMED OF THIS ACTION IN THE HOPES OF THE POSSIBILITY THAT OTHER SOURCES OF FUNDS MIGHT BE AVAILABLE.

ON BEHALF OF YOUR FACULTY COLLEAGUES ON THE COMMITTEE AND OTHERS CONCERNED, WE HOPE THAT THE COMMITTEES RECOMMENDATION WILL BE OF SOME ASSISTANCE IN OBTAINING OTHER SUPPORT FOR YOUR PROJECT.

FOR THE JOINT AWARDS COUNCIL

Mort Grant

MORT GRANT
RECORDER

SECTION II - GENERAL

- A. LIMITATIONS:** Use of the rate(s) contained in this agreement is subject to any statutory or administrative limitations and is applicable to a given grant or contract only to the extent that funds are available. Acceptance of the rate(s) agreed to herein is predicated on the conditions: (1) that no costs other than those incurred by the grantee/contractor were included in its indirect cost pool as finally accepted and that such costs are legal obligations of the grantee/contractor and allowable under the governing cost principles, (2) that the same costs that have been treated as indirect costs are not claimed as direct costs, (3) that similar types of costs have been accorded consistent accounting treatment, and (4) that the information provided by the grantee/contractor which was used as a basis for acceptance of the rate(s) agreed to herein is not subsequently found to be materially incomplete or inaccurate.
- B. ACCOUNTING CHANGES:** If a fixed or predetermined rate(s) is contained in this agreement, it is based on the accounting system in effect at the time the proposal was prepared and the agreement was negotiated. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this rate(s) require the prior approval of the authorized representative of the cognizant negotiation agency. Such changes include but are not limited to changes in the charging of a particular type of cost from indirect to direct. Failure to obtain such approval may result in subsequent cost disallowances.
- C. FIXED RATES:** If a fixed rate is contained in this agreement, it is based on an estimate of the costs which will be incurred during the period to which the rate applies. When the actual costs for such period have been determined, an adjustment will be made in a subsequent negotiation to compensate for the difference between the costs used to establish the fixed rate and actual costs.
- D. FOR DHEW AWARDS ONLY:** Indirect cost reimbursement on all DHEW awards made subsequent to June 30, 1971 will be determined based upon the indirect cost rates established for the fiscal period in which the applicable direct expenditures are incurred. For grants awarded prior to 7/1/71 the institution elected rate alternative number one.
- E. USE BY OTHER FEDERAL AGENCIES:** The rate(s) contained herein was negotiated in accordance with the authority set forth in General Services Administration Federal Management Circular 73-6 and should be applied, to the extent provided in such Circular, to grants and contracts to which General Services Administration Federal Management Circular 73-6 applies. Copies of this document may be provided to other federal agencies as a means of notifying them of the agreement contained herein.
- F. The cost categories designated by an asterisk below are normally treated as direct costs by this institution when such costs can be identified specifically with a Government award, an instructional activity, or any other direct institutional activity, or when they can be directly assigned to such activities relatively easily with a high degree of accuracy.**

- * 1. Salaries and wages, including vacation, holiday and sick leave pay.
- * 2. Overtime premium.
- * 3. Consultant costs.
- * 4. Employee fringe benefits related to direct salaries and wages. (Also see Sec. 1)
- * 5. Material, supplies, and equipment.
- * 6. Communications costs such as long distance telephone calls, mailing, cablegrams, etc.
- * 7. Travel expenses.
- * 8. Freight charges.
- * 9. Other: None

G. SPECIAL REMARKS:

- (1) All activities conducted in facilities not owned or rented by the institution are considered off-campus.
- (2) These indirect cost rates apply when grants or contracts are awarded jointly to the Research Foundation of SUNY and SUNY-Buffalo.

By the Institution
 The Research Foundation of
 State University of New York /s/

Stanley G. Hickok

Name Stanley G. Hickok
 Associate Treasurer

Title _____

Date July 27, 1976

Date _____

By the Cognizant Negotiation Agency
 On Behalf of the Federal Government

Dept. of Health, Education & Welfare
 Agency

James L. Keene /s/

James L. Keene

Name Chief, Grantee Liaison & Tech. Asst.
 Div. Office of ARD/Management & Finance
 Title _____

Date June 30, 1976

Negotiated by C. Sparano

Telephone (212) 264-2069



State University of New York
State University Plaza
Albany, New York 12246

Office of the Vice Chancellor for
Academic Programs, Policy and Planning

Office of Programs in the Arts
518/473-4962

May 7, 1985

Mr. Woody Vasulka
Route #6 Box 100
Santa Fe, New Mexico 87501

Dear Woody,

This original synchronizer was working pretty well towards the end of the installation. As you know from our phone conversation a few weeks ago, we had to take it all down a week before scheduled because the Chancellor wanted the gallery for a different purpose, so there wasn't time for us to test the new synchronizer.

Here is my worry: that we'll get the show to the Neuberger Museum at Purchase and there will be a problem with the new box. I was feeling comfortable knowing we had a back-up synchronizer, but in returning this to you, we've lost that, so the system is now untested. Can you get it back to me by June 24th so I'll have it for Purchase in case there's a problem?

I'm sending the case handles back to you also, for we didn't need them with the kind of crates made by the Gallery Association.

See you in July? I'll be in Arizona from July 2 to July 17.

Love to you both,

Sincerely,


Patricia Kerr Ross
Director
Programs in the Arts

PKR:cr

I. APPLICANT ORGANIZATION <small>(name and address with zip)</small> The Research Fdtn. of SUNY for State University of New York at Albany P.O. Box 9 Albany, New York 12201	PROJECT GRANT APPLICATION NATIONAL ENDOWMENT FOR THE ARTS WASHINGTON, D. C. 20506																
II. PROGRAM UNDER WHICH SUPPORT IS REQUESTED Special Projects	III. PERIOD OF SUPPORT REQUESTED <table style="width:100%; text-align: center;"> <tr> <td>START</td> <td><u>9</u></td> <td><u>1</u></td> <td><u>77</u></td> <td>END</td> <td><u>8</u></td> <td><u>31</u></td> <td><u>78</u></td> </tr> <tr> <td></td> <td>MONTH</td> <td>DAY</td> <td>YEAR</td> <td></td> <td>MONTH</td> <td>DAY</td> <td>YEAR</td> </tr> </table>	START	<u>9</u>	<u>1</u>	<u>77</u>	END	<u>8</u>	<u>31</u>	<u>78</u>		MONTH	DAY	YEAR		MONTH	DAY	YEAR
START	<u>9</u>	<u>1</u>	<u>77</u>	END	<u>8</u>	<u>31</u>	<u>78</u>										
	MONTH	DAY	YEAR		MONTH	DAY	YEAR										

IV. SUMMARY OF PROJECT DESCRIPTION (COMPLETE IN SPACE PROVIDED. DO NOT CONTINUE ON ADDITIONAL PAGES.)

This is a proposal for developing computer programs that will model different approaches to realtime interactive systems in video and music. The successful completion of the project will result in (1) the definition of a new way of thinking about using small computer systems in the arts, (2) easily understood documentation of the software programs developed, (3) the possibility of technical assistance to others who would like to use the programs, and (4) many music and video compositions that demonstrate the concepts of the programs.

The project will have three stages. During the first stage a categorization of basic systems will be defined, from which important examples will be selected for elaboration. Completion of this stage will involve interaction of the project's core staff as well as with consultants. In the second stage the selected software programs will be encoded, loaded into computers, tested and revised. Finished compositions for performance or exhibition will be the outcome of the third stage.

The project will be directed by Joel Chadabe, Associate Professor of Music and Director of the Electronic Music Studio at SUNY/Albany. Collaborating in the effort will be Woody Vasulka, Professor of Media Studies at SUNY/Buffalo, and Burt Levy, Assistant Professor of Music at SUNY/Albany.

V. ESTIMATED NUMBER OF PERSONS EXPECTED TO BENEFIT FROM THIS PROJECT several hundred in the near future

VI. SUMMARY OF ESTIMATED COSTS (RECAPITULATION OF BUDGET ITEMS ON PAGES 2 AND 3)		TOTAL COSTS OF PROJECT <small>(rounded to nearest ten dollars)</small>
A. DIRECT COSTS		
SALARIES & WAGES		\$ 22,790
FRINGE BENEFITS		5,552
SUPPLIES & MATERIALS		-0-
TRAVEL		3,000
SPECIAL		-0-
OTHER		6,000
TOTAL DIRECT COSTS		\$ 37,342
B. INDIRECT COSTS		14,175
TOTAL PROJECT COSTS		\$ 51,517

VII. TOTAL AMOUNT REQUESTED FROM NEA \$ 33,189

VIII. ORGANIZATION TOTAL FISCAL ACTIVITY	ACT. MOST RECENT FISCAL PD.	EST. FOR NEXT FISCAL PD.
A. EXPENSES	1. \$ <u>100 million</u>	2. \$ <u>110 million</u>
B. REVENUES GRANTS & CONTRIBUTIONS	1. \$ <u>100 million</u>	2. \$ <u>110 million</u>

DO NOT WRITE IN THIS SPACE

Eval. of prior year(s) project(s) 1 2 3 4 PYS \$ _____ CPS \$ _____ Audit Report 1 2

IX. BUDGET BREAKDOWN OF TOTAL ESTIMATED COSTS OF PROJECT AS SUMMARIZED ON PAGE 1 (continued)

4. Special (list each item separately)
 DETAIL NOT REQUIRED WHEN REQUESTING \$10,000 OR LESS ON A PROJECT OF \$20,000 AND LESS.

	Amount
	\$
Total Special	\$ -0-

5. Other (list each major type separately)
 THIS SECTION MUST BE COMPLETED ON EVERY APPLICATION.

	Amount
Consultants	\$ 6,000
\$100/day x 60 days	
Total Other	\$ 6,000

B. Indirect Costs

	Amount
1. Rate established by attached indirect cost allocation plan	
Rate _____ % Base \$ _____	\$ _____
2. Rate established by attached rate negotiation agreement with Federal agency	
Rate <u>62.2</u> % Base \$ <u>22,790</u>	<u>\$ 14,175</u>

X. CONTRIBUTIONS, GRANTS, AND REVENUES (FOR THIS PROJECT)

A. Contributions

	Amount
1. Cash (do not include direct donations to NEA)	
	\$ _____
2. In-kind Contributions (list each major item)	
J. Chadabe, 50% released time plus related fringe benefits and indirect costs	18,328
Total Contributions	\$ 18,328

B. Grants (do not list anticipated grant from NEA)

	Amount
	\$ _____
Total Grants	\$ _____

C. Revenues

	Amount
	\$ _____
Total Revenues	\$ _____

Total Contributions, Grants, and Revenues **\$ 18,328**

XI. STATE ARTS AGENCY NOTIFICATION

The National Endowment for the Arts urges you to inform your State Arts Agency of the fact that you are submitting this application.

Have you done so? X Yes No

XII. CERTIFICATION

We certify that the information contained in this application, including all attachments and supporting materials, is true and correct to the best of our knowledge.

AUTHORIZING OFFICIAL(S)

JS Signature Nathan Gutierrez Date Signed 4 12 77
month day year
Telephone: AC 518 457 6868

JS Signature _____ Date Signed _____
month day year
Telephone: AC 518 457 4634

PROJECT DIRECTOR

JS Signature J. C. Archer Date Signed 4 12 77
month day year
Telephone: AC 518 457 7641

PAYEE (if other than authorizing official) (to whom grant payments will be sent)

WH Signature _____ Date Signed _____
month day year

CHECK LIST

1. Have you attached a copy of your organization's Federal Tax exemption letter or a document identifying the organization as a part of State or local government?
2. Have you summarized the project description in the space provided?
3. Have you completed the summary of estimated cost on page 1, also provided all detail required on pages 2 and 3, and attached all documentation required to substantiate proposed travel cost, purchase of equipment, and indirect cost?
4. Have you provided required detail under Other Support section?
5. Has the application been signed and dated in appropriate places?

A negative response to any of the above questions will cause delay in the consideration of this application and will increase the cost of processing.

PLEASE DETACH THE INSTRUCTION SHEET BEFORE SUBMITTING THIS APPLICATION

THE UNIVERSITY AT ALBANY

SOFTWARE DESIGN FOR INTERACTIVE COMPUTER SYSTEMS IN MUSIC AND VIDEO,

a project proposal submitted by Joel Chadabe,

January 27, 1977

The context and need for the project

The easy availability of inexpensive microprocessors is having a profound consequence for the arts: computer systems are coming to be within the reach of any individual artist who needs one. It is an important development because it means that the use of technology in the arts is becoming independent from institutions and laboratory atmospheres and that conditions are beginning to exist that offer the promise of a widespread flowering of ideas in computer music and video.

But while much attention has been paid to hardware design in recent years, relatively little attention has been paid to what we feel is a more significant and urgent problem, the design of software. As a consequence, the problem of how effectively to use small, portable computer systems has remained largely unsolved. Many artists and musicians who own or have access to small computer systems are at a disadvantage in knowing how to think about using them.

We feel that a prototypical project along the lines described in this proposal will go a long way towards defining the landscape within which computer video and music programs can be designed and the equipment used, and that this will directly benefit the many artists, musicians, teachers, and students working in the field. It will, of course, indirectly benefit the general public.

Our proposal

We are interested in developing a variety of computer programs which will model different approaches to realtime interactive systems in video and music.

Although we are concentrating in video and music, the project will apply to and involve artists working with film, computer graphics, lighting, and indeed every medium where an electronic signal can control change and where the design of control systems is important.

The successful completion of the project will result in (1) the definition of a new way of thinking about using small computer systems in the arts, (2) easily understood documentation of the programs we have

developed, (3) the possibility of additional technical assistance to others who would like to use the programs, and (4) many music and video compositions which demonstrate the concepts of the programs.

Procedures

We feel that the diversity of orientation and expertise to be found among various artists working in different mediums will greatly enrich the results of the project. Also, there is an enormous overlapping of interests between video and music (and other fields) in software design, particularly in the design of control systems. Consequently, we plan to approach the problem of software development as an interactive group consisting of the Project Director, Associate Project Director, Researcher, Programmers, and Consultants. The project will be coordinated primarily at the Electronic Music Studio at SUNY/Albany, although meetings might be scheduled at various locations.

The equipment to be used in the project is already available in both Albany and Buffalo. We do not foresee the need for any additional equipment.

We plan to approach the problem in three stages. First, in the context of current research in software design and systems theory, and in contact with work done by others in computer music, video and other fields, we intend to define, in intuitively clear language, a categorization of basic systems from which we will choose important examples for elaboration. We will proceed -- from a correlation of work done by others to the formulation of principles for differentiating, categorizing and selecting system models -- via (1) individual work done by the Researcher and (2) frequent meetings between the Project Directors, Researcher, Programmers, and Consultants. The Researcher, skilled and experienced in dealing with systems concepts, will, interactively with other members of the group, do the basic investigative groundwork, synthesize fundamental ideas from the many ideas presented, and shape the final statements. The Consultants are foreseen to be either software or systems experts in other fields, or artists who have made significant contributions to this way of thinking or who can offer substantial and concrete help in a certain aspect of the project. We are eager that this project proceed in such a way that it is participatory among all those in the profession who can offer something to it or gain something from it.

The second stage will be the technical implementation of the programs, which means encoding them and loading them into the machines, trying them out, and making revisions based on practical experience.

The third stage is to finish compositions and to perform or exhibit them through normal channels.

Brief Biographies of key people

Joel Chadabe, Project Director. Associate Professor, Music, and Director of Electronic Music Studios, SUNY Albany. Composer, working primarily with electronic music. A.B., 1959, U. of N. Carolina at Chapel Hill; M.M., 1962, Yale University; student of Elliott Carter. Music published by Carl Fischer and Composer/Performer Edition. Recordings on Opus One, Folkways and CP2 Records. Music performed widely in this country, Europe, Japan and Australia. Grants from SUNY Research Foundation, Ford Foundation, CAPS, NEA. Articles in various periodicals, including Musique en Jeu, Melos, Perspectives of New Music, and in The Development and Practice of Electronic Music (Prentice Hall, 1975).

Woody Vasulka, Associate Project Director. Professor, Media Studies, SUNY Buffalo. Video Artist. Graduate of Film Academy, Prague, Czechoslovakia, 1964. Began work in video in 1969. Co-founder, with Steina Vasulka, of The Kitchen, an electronic arts performance theatre at the Mercer Arts Center in New York City, and co-Directed the Kitchen from 1971 to 1973. Grants from NEA, NYSCA, CAPS. Participated in video exhibits in Venezuela, Paris, London, New York, Tokyo, and other places. Several articles on video and film, including "Didactic Video" in Afterimage.

Burt Levy, Researcher. Assistant Professor, Music, SUNY Albany. Theorist-composer, with particular interest in systems theory, modelling, and interdisciplinary music/science connections. A.B., 1958, Temple U.; M.M., 1960, U. of Oregon; D.M.A., 1972, U. of Illinois. Dissertation: "A Systems Approach to Musical Analysis." Music published by American Composers' Edition and Smith Publishing Co. Articles in Perspectives of New Music. Recorded on Nonesuch Records. Performances in this country, Europe, Canada, Central America. Grants from the SUNY Research Foundation.

Internal Revenue Service
Washington, DC 20244



Date:

11-29-72

In reply refer to:

THE RESEARCH FOUNDATION OF STATE
UNIVERSITY OF NEW YORK
P O BOX 7176
ALBANY, N Y

1277

Gentlemen:

Based on the information you recently submitted, we have classified you as an organization that is not a private foundation as defined in section 509(a) of the Internal Revenue Code.

Your classification is based on the assumption that your operations will be as stated in your notification. Any changes in your purposes, character, or method of operation must be reported to your District Director so he may consider the effect on your status.

Sincerely yours,

Chief, Rulings Section
Exempt Organizations Branch

FORM 11-0714 (3-70) (CONTINUOUS)

NEGOTIATION AGREEMENT

ORIGINAL

Colleges And Universities
FHC 73-6 Negotiation

INSTITUTION: Research Foundation of State
 University of New York
 Albany
 P.O. Box 9
 Albany, New York

DATE June 30, 1976

FILING REF.: This replaces
 Negotiation Agreement
 dated September 26, 1976

The indirect cost rate(s) contained herein is for use on grants and contracts with the Federal Government subject to the conditions contained in Section II.

SECTION I: RATES

Type	Effective Period		Rate*	Locations	Applicable To
	From	To			
Fixed	7-1-76	6-30-77	62.2% (2)	On-Campus (1)	Research
Fixed	7-1-76	6-30-77	27.4%	Off-Campus	Research
Fixed	7-1-76	6-30-77	38.0%	On-Campus	Training
Fixed	7-1-76	6-30-77	37.7%	Off-Campus	Training
Fixed	7-1-76	6-30-77	23.8%	Space Astronomy Lab	All
Provisional	7-1-77 Until Amended:		Same as FYE	6-30-77	

- (1) See special remarks for explanation of Off-Campus Rates.
- (2) See special remarks for explanation of use of Joint Rates.

*BASE: Direct salaries and wages including vacation, holiday and sick pay but excluding other fringe benefits.

Treatment of Fringe Benefits: Fringe benefits applicable to direct salaries and wages are treated as direct costs.

Bohuslav Vasulka - University Awards Committee Application

Sections 19-30:

19. Proposal for "Art Exploration of Computer Languages" submitted to the New York State Council on the Arts on April 11, 1977, for \$5000, with the Vasulka Foundation as sponsor. The grant was not awarded.

Proposal for "Services to the Field, Art Exploration of Computer Languages" submitted to Media Arts Program of the National Endowment for the Arts, on August 15, 1977, for \$5000, with the Vasulka Foundation as sponsor. The decision is pending. Face Sheet of application is attached.

20. The pending application to NEA is for support of complementary aspects of the project described in this present application. The present proposal to UAC can be fully carried out on the budget requested here. Funding from NEA would allow continuation and some expansion of the project. The budget requested from NEA includes: Salary for the artist: \$4000; videotape/audiotape/film: \$900; Polaroid film: \$50; small electronic components: \$50.
21. I have not received previous funding from the UAC.
22. This project differs from the previous submission only in that I have accomplished more research into the relevant computer language literature.
23. If computer time is available, I will use the SUNY/Buffalo large computer to identify programs for further investigation. If computer time is not available, see 24.
24. I have my own computer facility with a PDP11-03 computer system and extensive optical and electronic image and sound hardware which I will use for most of the project. If time is not available on the SUNY/Buffalo large computer for identification of programs, I can accomplish the same work on my own system; the operation will simply require more time.
25. See attached vita.
26. The results of this project will be distributed through Electronic Arts Intermix, in New York City, my usual distributor; I will also distribute the results privately. In addition, I am regularly invited to national, regional, and international exhibitions and the results of this project will be shown through these appearances.
27. See attached project description.
28. See attached vita.
29. Not applicable.
30. New letters of reference: Nam June Paik, Video Artist, New York City
Ralph Hocking, Cinema Studies, SUNY/Binghamton
Joel Chadabe, Electronic Music, SUNY/Albany

See letter on file, Series 1974, from Gerald O'Grady, Center for Media Study,
SUNY/Buffalo

31. AGREEMENT BETWEEN APPLICANT AND THE JOINT AWARDS COUNCIL/UNIVERSITY AWARDS COMMITTEE

IT IS UNDERSTOOD AND AGREED BY THE APPLICANT:

1. THAT THE AWARD MAY BE REVOKED IN WHOLE OR IN PART AT ANY TIME BY THE JOINT AWARDS COUNCIL/UNIVERSITY AWARDS COMMITTEE OF STATE UNIVERSITY OF NEW YORK SHOULD THE RECIPIENT'S RELATIONSHIP WITH THE STATE UNIVERSITY CEASE TO EXIST, PROVIDED THAT SUCH REVOCATION SHALL NOT INCLUDE ANY AMOUNT OBLIGATED PREVIOUS TO THE EFFECTIVE DATE OF REVOCATION IF SUCH OBLIGATIONS WERE MADE SOLELY FOR THE PURPOSES SET FORTH IN THE APPLICATION;
2. THAT THE GENERAL TERMS AND CONDITIONS OF THIS PROPOSAL AS STATED IN THE APPLICATION FORM, PROGRAM ANNOUNCEMENTS, GUIDELINES AND POLICIES FOR SUNY/RESEARCH FOUNDATION AWARDS AND ELSEWHERE HAVE BEEN READ AND ACCEPTED;
3. THAT ANY FUNDS GRANTED AS A RESULT OF THIS APPLICATION ARE TO BE EXPENDED FOR THE PURPOSE OUTLINED HEREIN, AND ANY FUNDS NOT EXPENDED FOR THIS PURPOSE SHALL REVERT TO THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK UPON COMPLETION OF THE PROJECT OR TERMINATION DATE OF THE AWARD, WHICHEVER IS EARLIER;
4. THAT THE POLICIES GOVERNING INCOME FROM TEACHING OR OTHER SERVICES DURING THE PERIOD OF THIS AWARD HAVE BEEN READ AND ACCEPTED AS PUBLISHED IN THE PROGRAM ANNOUNCEMENTS AND GUIDELINES AND POLICIES FOR SUNY/RESEARCH FOUNDATION AWARDS;
5. THAT ANY MAJOR CHANGES IN THE ORIGINAL BUDGET OR PROJECT DIRECTION WILL REQUIRE PRIOR JOINT AWARDS COUNCIL/UNIVERSITY AWARDS COMMITTEE APPROVAL.

32. ASSURANCE IS HEREBY GIVEN THAT SUPPORT IN THIS PARTICULAR FORM WILL BE SUFFICIENT TO CARRY OUT THIS PROJECT:

APPLICANT SIGNATURE:

DATE 7-0CT-77

IMPORTANT - OBTAIN LOCAL ADMINISTRATIVE APPROVAL BEFORE SUBMISSION TO THE UNIVERSITY AWARDS COMMITTEE

33. CERTIFICATION BY CAMPUS INSTITUTION WHERE HUMAN SUBJECTS ARE INVOLVED; INDEPENDENT REVIEW BY APPLICANT'S INSTITUTION HAS BEEN AND WILL CONTINUE TO BE MADE TO INSURE ADEQUATE PROTECTION OF : (1) THE RIGHTS AND WELFARE OF THE INDIVIDUALS INVOLVED; (2) THE APPROPRIATENESS OF THE METHODS USED TO OBTAIN INFORMED CONSENT, AND (3) THE RISKS AND POTENTIAL MEDICAL BENEFITS OF THE INVESTIGATION.

CAMPUS CERTIFICATION

NAME	Not applicable.	TITLE	DATE
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34. CAMPUS CERTIFICATION OF PROPOSAL(S) SUBMITTED FOR OUTSIDE SUPPORT, IF APPLICABLE: APPLICATIONS FOR SUPPORT OF THIS PROJECT WERE FORWARDED TO SPONSORS OUTSIDE THE UNIVERSITY THROUGH THE APPROPRIATE OFFICE ON THIS CAMPUS.

CAMPUS CERTIFICATION

NAME	Not applicable - submitted through the Vasulka Foundation.	TITLE	DATE
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35. THIS PORTION TO BE COMPLETED FOR ALL APPLICATIONS: APPROVED FOR SUBMISSION

CAMPUS OFFICIAL SIGNATURE

NAME	TITLE	DATE
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APPLICATIONS CANNOT BE PROCESSED WITHOUT APPROPRIATE SIGNATURES

MAIL COMPLETED APPLICATION WITH ATTACHMENTS TO:

UNIVERSITY AWARDS COMMITTEE
THE RESEARCH FOUNDATION OF
STATE UNIVERSITY OF NEW YORK
P. O. BOX 9
ALBANY, NEW YORK 12201

27. Project Description: Exploration of Computer Languages for Use in Electronic Arts

Background: While a highly developed knowledge of computer sciences presently exists and is widely utilized in science and industry, relatively little of that knowledge is as yet readily available to the electronic artist for the creation of work. Specific computer programs and languages capable of analyzing and synthesizing the conditions of space, two-dimensional frame structures, and other time/energy concepts are parallel and relevant to the processes of exploration and expression in cinema, video and electronic music, as well as in interactive behavioral models, compositional structures, and other forms of artistic expression. The Purpose of this project is to systematically examine, analyze, catalogue, and report on existing computer languages and programs and to generate model demonstrations of their potential for utilization by artists. The computer itself will be used to accommodate certain kinds of cultural concepts and elements (e.g., speech synthesis, text editing, sound and image generation, etc.), and the 'product' will consist of series of interactive sequences of those cultural concepts or elements which will demonstrate the potential uses of the programs and languages. These series will be the record of the process of examining computer language and will make possible the practical critical evaluation of both the method of investigation and the resultant aesthetic language. The Method: By continuing research of the available literature, the Project Artist will identify selected scientific/industrial programs that are potentially useful to the artist; these programs will include speech synthesis, tonal structure analysis and generation, behavior models such as stress wave and pressure conditions in plasmas, and images as data-structures. Having identified these programs, the artist will then travel to five computer center sites to observe the programs in use. The sites will be the Bell Laboratories in New Jersey, Los Alamos Scientific Laboratory, NASA/Houston, the G.E. Visual Laboratory in Syracuse, and Salt Lake City. The artist considers the personal investigation of these facilities essential to the project since there are currently few established direct channels of communication between artists and scientific/industrial computer staffs and since it is largely this lack which has so far deprived the artist of access to programs as tools. Too, there is no commonly recognized aesthetic computer language, and because of the peculiarities in programming any computer language, the artist regards personal contact with computer technicians and programmers at their sites as necessary and highly desirable for the most productive examination and understanding of the potentials. The programs thus identified and observed will then be run by the artist on SUNY/Buffalo's large computer with unmodified output capabilities in order to identify the active components of the programs, those of most interest for creative application. If this large computer is not available, the programs will be run at the

27. Project Description - continued

artist's personal computer facility; the results will be fully conclusive in either case, but the latter alternative will require more time. The artist will then examine in detail the content, textures, and potentials of these isolated active components using his PDP11-03 computer system with modified output devices and his extensive optical and electronic image and sound hardware. This project is part of the artist's extensive and on-going exploration of electronic image and sound generation, and will depend, as has previous work, because of its scope and scale, on the employment of talented graduate assistants with computer experience for data collection, comparative analysis, and reporting. The Results will be the generation of a set of basic, practical programs useful as personal creative tools primarily for electronic image and sound composition. Specifically, 1) the artist's own creative work will be substantially furthered; 2) the research and resulting programs will be compiled and recorded for use by all electronic artists as well as other computer users; and 3) the results will constitute a formal and fundamental advancement in curricular method and tool development in the teaching of electronic arts for the university and for the field.

VITA

B. WOODY VASULKA

Born: Brno, Czechoslovakia January 20, 1937

Address: 257 Franklin Street, Buffalo, New York 14202

Telephone: 716/856-3385 Social Security Number:

Married: Steina Vasulka

EDUCATION: School of Engineering, Brno - Graduated 1958
Film Academy of Prague - Graduated 1965

ACTIVITIES: 1964-65 Studio of Documentary Films in Prague - included production
in Iceland, Algeria, Czechoslovakia

1965 Emigrated to USA

1966-69 Woods and Ramirez, Architects - Multiscreen Exhibit
for Expo '67, Montreal - Film Editor

Film Editor with Francis Thompson

Harvey Lloyd Productions - Industrial Exhibits -
Multimedia Designer-Editor

Exploration of stroboscopic projection of moving image,
light-activated screens and 360° space recording

Independent Films:

Aimless People - 3-5 screens 16 mm

Orbit - 3 screens 16 mm

Three Documentaries 3 screens 16 mm 360° space
recording

1970 Exploration of Electronic image and sound

1971 Founder/Director of "The Kitchen," an electronic media
theater, Mercer Art Center, New York

since 1972 Development of electronic art tools in cooperation
with George Brown, Eric Siegel and Steve Rutt with
the support of the New York State Council on the Arts

Film/TV/Media Panel Member of the New York State Council
on the Arts

Associate Professor, Center for Media Study, State
University of New York at Buffalo

Computer controlled video image research with Lewis
James and Don McArthur

WORKS:

100 hours of video materials including:

Evolution	The West
Black Sunrise	Golden Voyage
Key Snow	Home
Elements	Vocabulary
Spaces I	Sound-Gated Images
Spaces II	Explanation

12 hours of audio materials including 4 channel environments

The West	Circle
Magic Mushroom	Schizo
Seascapes	D-Track
Mother and Child	Trivia

ENVIRONMENTS AND INSTALLATIONS:

Three Nights of Different Video - at Max's Kansas City Steak House
Live Video Performances - for a year at "The Kitchen" in New York
Circle Environment - at New York Avant Garde Festival, 69th Street Armory
Horizontal Matrix - at New York Avant Garde Festival, New York Harbor
The Row - for WBAI, Judson Memorial Church, New York City
Transmitted Environment - Experimental Television Center, Binghamton, N.Y.
Street Show - Academy Theater, New Paltz, New York
Continuous Environment - University Union Activities Board and Act V, Buffalo
Video - University-Wide Celebration on the Arts, SUNY System, Fredonia

GROUP SHOWS:

Video Exchange - Merce Cunningham Studio, Westbeth Bldg., New York City
Video Free America - Berkeley Art Museum, California
Video - Whitney Museum of American Art, New York City
Open Circuits - Museum of Modern Art, New York City
Video - Everson Museum, Syracuse
 Ann Arbor, Michigan
 Baltimore Museum of Art, Maryland
 MIT, Arttransition Conference, Boston, Massachusetts
 Institute of Contemporary Art, Philadelphia, Pennsylvania
 The Contemporary Art Center, Cincinnati, Ohio
 The Museum of Contemporary Art, Chicago, Illinois
 The Wadsworth Atheneum, Hartford, Connecticut
 Corcoran Gallery, Washington, D.C.
 Collective for Living Cinema, New York City

INTERNATIONAL SHOWS:

Paris, France
Guelph, Canada
Montreal, Canada
Toronto, Canada
Tokyo, Japan
Munich, Germany
Berlin, Germany
Koln, Germany

Bucharest, Romania
Caracas, Venezuela
Reykjavik, Iceland
Brussels, Belgium
Oslo, Norway
Stockholm, Sweden
Sao Paulo, Brazil
London, England

ARTIST IN RESIDENCE:

National Center for Experiments in Television, KQED, San Francisco
The Television Laboratory, WNET, New York City
Art Park, Lewiston, New York
WNED/Channel 17, Buffalo, New York

GRANTS:

Creative Artists Public Service
National Endowment for the Arts
New York State Council on the Arts

TEACHING AND WORKSHOPS:

Antioch, Baltimore, Maryland
USIS, Washington, D.C.
Media Study/Buffalo, Buffalo, New York
Alfred University, Alfred, New York
Rhode Island School of Design, Rhode Island
State University College at New Paltz, New York
Alternate Media Center, New York City
Global Village, New York City
New York University, School of Continuing Education, New York City
Department of Arts and Humanities, New York State Department of
Education, Albany, New York
Banff Art Center, Alberta, Canada
Center for Media Study, State University of New York at Buffalo
Ontario College of Arts, Toronto, Canada
New England Center for Continuing Education, New Hampshire
Governors State University, Illinois
Rice University, Houston, Texas

DISTRIBUTORS:

Electronic Arts Intermix, 84 Fifth Avenue, New York, New York 10011
From the artist, 257 Franklin Street, Buffalo, New York 14202

Additional Activities:

Showing and discussion, Hamilton, Ontario, February, 1977.

Showing and discussion, Chicago Institute of Art, March, 1977.

Showing and discussion, Center for the Humanities, University of Southern California, March 8, 1977.

Showing, discussion and exhibition, Maison des Beaux Arts, Paris, February 2, 1977.

Participant, Conference organized by the Office de la Creation Cinematographique, U.N.E.S.C.O., Paris, February 1-4, 1976.

Participant, Conference, Film, Theater, Video, Center for the 20th Century Studies, University of Wisconsin, Milwaukee, February 16-19, 1977.

Participant, Conference, The Video Revolution in America, directed by Gene Youngblood, Annenberg School of Communications, University of Southern California, February 19-20, 26-27, 1977.

Participant, Public Television Seminar, sponsored by International Film Seminars, May, 197-.

Participant, Sumposium, T.V. as an Open System, with Walter J. Ong, SUNY at Buffalo, October 18-20, 1976.

Artist-in-Residence, Public Television Station WNED-TV, Channel 17, Buffalo New York, 1976-1977.

New Works:

Twelve Fragments: Re-Coded Images, 1976-77, 16mm, B&W, 45 min.

Portions of the Continuous Development of Images Composed through a Computer, videotape, 1 hour.

Grants Received:

From the National Endowment for the Arts for work on film, Re-Coded Images, \$10,000.

From the Corporation for Public Broadcasting and the National Endowment for the Arts for six one-hour tapes on the development of electronic imagemaking, \$40,000.

**Project Grant Application
National Endowment for the Arts**

Applications must be submitted in triplicate and mailed to the Grants Office (Mail stop 500), National Endowment for the Arts, Washington, D.C. 20506

**I. Applicant organization
(name and address with zip)**

The Vasulka Corporation
257 Franklin Street
Buffalo, New York 14202

II. Media Arts: Film/Radio/Television

Category under which support is requested: Services to the field

III. Period of support requested

Starting 1 1 78 Ending 1 1 79
month day year month day year

IV. Summary of project description (complete in space provided. Do NOT continue on additional pages.)

The purpose of the grant is to set up the experiment, to examine, analyze, catalogue and report on existing computer languages and programs. The computer itself will be used to accommodate certain kinds of cultural concepts (speech synthesis, text editing, sound and image generation, etc.) and the product will consist of interactive sequences of those cultural elements realized through the tool of computer languages and programs. The output will provide practical critical evaluation of the language and the method used to examine the language.

V. Estimated number of persons expected to benefit from this project 30-40 artists & researchers (see attachment)

VI. Summary of estimated costs (recapitulation of budget items in Section IX)

A. Direct costs

Salaries and wages	_____	Total costs of project (rounded to nearest ten dollars)	\$ 4,000.00
Fringe benefits	_____		
Supplies and materials	_____		1,000.00
Travel	_____		
Special	_____		
Other	_____		

Total direct costs \$ _____

B. Indirect costs

Total project costs \$ 5,000.00

VII. Total amount requested from the National Endowment for the Arts

\$ _____

VIII. Organization total fiscal activity

Actual most recent fiscal period

Estimated for next fiscal period

A. Expenses

1. \$ 35,000.00

2. \$ 25,000.00

B. Revenues, grants & contributions

1. \$ 35,000.00

2. \$ 25,000.00

Do not write in this space

Evaluation of prior year(s)' projects

1 2 3 4

Pys \$ _____ Cps \$ _____

Audit report

1 2

LETTER OF REFERENCE

F 372-777

MAIL COMPLETED REPORT TO:
 UNIVERSITY AWARDS COMMITTEE
 THE RESEARCH FOUNDATION OF
 STATE UNIVERSITY OF NEW YORK
 P. O. BOX 9, ALBANY, N. Y. 12201

ALTHOUGH LETTERS OF REFERENCE ARE OPTIONAL, THIS IS THE SUGGESTED FORMAT TO USE IF YOU CHOOSE TO SUBMIT THEM.

- TO BE COMPLETED BY APPLICANT -

NAME OF APPLICANT Bohuslav Vasulka		TITLE OF APPLICANT Associate Professor	
DEPARTMENT Center for Media Study		INSTITUTION SUNY/Buffalo	
APPLYING FOR:	<input type="checkbox"/> PROGRAM 1	<input checked="" type="checkbox"/> PROGRAM 2	<input type="checkbox"/> PROGRAM 3

TITLE OF PROJECT:
 Exploration of Computer Languages for Use in Electronic Arts

(ATTACH A SEPARATE DESCRIPTION OF PROJECT OR COPY OF FRONT PAGE OF APPLICATION AND SEND TO REFERENCE .)

- TO BE COMPLETED BY REFERENCE -

- ASSOCIATION WITH APPLICANT _____
- ACQUAINTED WITH THE APPLICANT'S PROFESSIONAL WORK DURING PERIOD FROM _____ TO _____
 (YEAR) (YEAR)
- THIS SPACE IS PROVIDED FOR COMMENTS REGARDING THE APPLICANT AND THE PROPOSED PLAN OF STUDY AND RESEARCH. MATTERS YOU MAY WISH TO COMMENT ON MAY BE THE APPLICANT'S MASTERY OF KNOWLEDGE IN HIS OR HER FIELD, TECHNICAL SKILL, ORIGINALITY, COMPETENCE TO PLAN SIGNIFICANT RESEARCH, ABILITY TO MAKE SOUND JUDGMENTS, FEASIBILITY AND SIGNIFICANCE OF THE PROJECTED STUDY, AS WELL AS OTHER STRENGTHS AND WEAKNESSES OF THE APPLICANT AND THE PROJECT. PLEASE USE ADDITIONAL PAGES AS NECESSARY.

TYPED NAME AND TITLE	RESPONDENT'S INSTITUTION
RESPONDENT'S SIGNATURE	DATE



SUNY / RESEARCH FOUNDATION APPLICATION FOR

CREATIVE PROJECTS IN THE FINE ARTS

FORWARD ORIGINAL AND THREE PHOTOCOPIES TO UAC

F362-777

FOR COMMITTEE USE ONLY	
REVIEWER	SUB-COMMITTEE CHAIRMAN
CONTROL NO.	PROGRAM CAPS (YEAR)

1. ENTER REVIEW CATEGORY USING LISTING ON OPPOSITE PAGE	NAME OTHER	NUMBER 80	CHART OF ACCTS.
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2. PLEASE CHECK ONLY ONE OF THE FOLLOWING TYPES OF AWARDS:	AMOUNT REQUESTED
<input type="checkbox"/> PROGRAM 1 FACULTY RESEARCH FELLOWSHIP*	\$
<input checked="" type="checkbox"/> PROGRAM 2 GRANT-IN-AID	\$ 3,800.00
<input type="checkbox"/> PROGRAM 3 FACULTY RESEARCH FELLOWSHIP* AND GRANT-IN-AID	\$

* AMOUNT CONTINGENT ON BUDGETARY APPROPRIATION AND SUBJECT TO JOINT AWARDS COUNCIL DETERMINATIONS

3. MR. MISS MRS. MS. 4. SOCIAL SECURITY NUMBER

5. APPLICANT'S NAME (LAST, FIRST, MIDDLE INITIAL)
Vasulka, Bohuslav Woody

6. ACADEMIC TITLE
Associate Professor, Tenured

7. DEPARTMENT
Center for Media Study

8. CAMPUS NAME AND ADDRESS
SUNY/Buffalo, New York 14214

9. HOME ADDRESS STREET CITY & STATE ZIP CODE
257 Franklin Street, Buffalo, New York 14202

F362-777

17. BRIEF SUMMARY OF PROJECT, INCLUDING OBJECTIVES, SIGNIFICANCE, AND GENERAL PROCEDURES (LIMIT TO THIS SPACE).
Background: While a highly developed knowledge of computer sciences presently exists & is widely utilized in science & industry, relatively little of that knowledge is as yet readily available to the electronic artist for the creation of work. Specific computer programs & languages capable of analyzing and synthesizing the conditions of space, two-dimensional frame structures, & other time/energy concepts are parallel & relevant to the processes of exploration & expression in cinema, video & electronic music, & in interactive behavioral models, compositional structures, & other forms of artistic expression. **Purpose** of project is to examine, analyze, catalog & report on existing computer languages & programs for possible use as tools for artistic creation. **Method:** by research of the literature, the artist will identify selected scientific/industrial programs such as speech synthesis, tonal structure analysis & generation, behavioral models such as stress waves, pressure conditions in plasmas, & images as data-structures; based on these identifications, the artist will travel to 5 computer centers: Bell Labs, Los Alamos, NASA/Houston, G.E. Visual Labs, & Salt Lake City to gather programs; artist will run these programs on SUNY/Buffalo's large computer with unmodified output capabilities to identify active components useful for creative arts application; if this computer is not available, programs will be run on artist's own PDP11-03 computer; isolated components will be examined on PDP11-03 w/ modified outputs to determine in detail content, textures & potentials. **Results:** The method will generate a set of basic practical programs usable as personal creative tools, mainly in the area of electronic image and sound composition.

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18. IF YOU ARE APPLYING FOR A FACULTY RESEARCH FELLOWSHIP UNDER PROGRAM 1, ENTER STIPEND REQUESTED. IF YOU ARE APPLYING FOR A GRANT-IN-AID UNDER PROGRAM 2, ITEMIZE ALL BUDGET ENTRIES AND EXPLAIN IN DETAIL. IF YOU ARE APPLYING FOR A COMBINATION OF A FACULTY RESEARCH FELLOWSHIP AND A GRANT-IN-AID UNDER PROGRAM 3, ENTER BOTH STIPEND REQUESTED AND ITEMIZE AND EXPLAIN BUDGET IN DETAIL. FOR EXAMPLE, IN THE PAYROLL CATEGORY, EXPLAIN THE ROLE OF EACH INDIVIDUAL (INCLUDING STUDENTS) IN THE PROJECT AND SPECIFY THE PERIOD OF EMPLOYMENT OF EACH; IN SUPPLIES AND EQUIPMENT, JUSTIFY ALL ITEMS EXCEEDING \$100.00; AND IN TRAVEL, CLEARLY EXPLAIN THE NECESSITY FOR ANY FUNDS REQUESTED AS WELL AS THE BASIS FOR YOUR CALCULATION OF THE SPECIFIED AMOUNT. FAILURE TO EXPLAIN BUDGET ENTRIES IN DETAIL FOR A GRANT-IN-AID UNDER EITHER PROGRAM 2 OR PROGRAM 3 MAY RESULT IN THEIR AUTOMATIC DELETION.

STIPEND (APPLICABLE ONLY UNDER PROGRAMS 1 AND 3) AMOUNT CONTINGENT ON BUDGETARY APPROPRIATION AND SUBJECT TO JOINT AWARDS COUNCIL DETERMINATIONS	\$
PAYROLL (SPECIFY SALARIES AND FRINGE BENEFITS, THIS CATEGORY NOT TO INCLUDE THOSE FOR APPLICANT.)	
1 Computer Programmer Assistant \$5/hr X 20 hrs/wk X 12 weeks = \$1200	TOTAL SALARIES \$ 1,600.00
1 Computer Sciences Graduate Asst. Special Student	TOTAL FRINGE BENEFITS \$
Supplement: \$100/wk X 4 weeks = \$400	AT CURRENT COST RATE XXX
CONSULTANT SERVICES None	\$
TRAVEL (ITEMIZE TRAVEL, FOOD, LODGING, ETC.) Air travel from Buffalo rndtrp: Syracuse/New Jersey/Los Alamos, NM/Houston <input type="checkbox"/> FOREIGN <input checked="" type="checkbox"/> DOMESTIC and Salt Lake City \$1060 Lodging/Food/Grnd Transp: \$30/day - 10 days = \$300	\$ 1,360.00
CONSUMABLE SUPPLIES 1) three boxes, ten each box, Data Disketts - @\$75 = \$225.00 2) paper punch tape/print out paper \$165.00	\$ 390.00
EQUIPMENT None	\$
MISCELLANEOUS Certain programs will require design and engineering modifications of visual and audio output devices: hardware components: \$250/engineering fee: \$200	\$ 450.00
GRAND TOTAL REQUESTED	\$ 3,800.00