Mike. I will appreciate your comments - The strotegy in cutting the pudget is to ask for an afordable amount of Alaso the correspondence which I would Proposal to Rockefeller Foundation - Draft

Libr seturned Then ks

CCRMA, John M. Chowning - director Department of Music Stanford University December 4, 1980

The technological riches which accrue to our society as a result of rapid developments in the semi-conductor industry do not necessarily find easy application in music. While the technical barriers are often formidable and expensive to overcome, the barriers which exist because of inadequate scientific knowledge about sound and perception are as great. Nonetheless, through the acquisition of technical insight and persistent study of the physical nature, of sound and its perceptual correlates, composers and scientists working together with unprecedented cooperation have made extraordinary achievements using the new digital technology.

Since 1964, Stanford University's CCRMA has been actively using technology in music composition, synthesis, and related research. Through aways compelling compositons its "break throughs" in applications have become known world-wide to the extent that the unique potential of computers is of ever increasing interest to both composers and audiences. CCRMA has become an international resource through which composers from all over the world (see apendix 2) have learned about and composed with computers and from which students have graduated to form and advise other major facilities, e.g. University of California San Diego, IRCAM - Paris, Colgate University, YAMAHA, George Lucas Films.

Funding Requested:

(jut gom Vict 2. 5 sindin!

Stanford University requests from the Rockefeller Foundation a grant \$87,500 to augment its own contribution and contributions acquired from both private and industry sources to maintain the position of CCRMA both at the forefront of teaching music and technology and as a major contributor to the development of contemporary musical arts.

Background of Funding Need:

Until November 1979 CCRMA shared a computing facility with the Computer Science Department. Because of space and usage constraints it became longer feasible to maintain this relationship and CCRMA was obliged find the funds to purchase an independent system. With the help of the university, private gifts, and a royalty advance from YAMAHA with whom Stanford has a licensing agreement for a patent developed here, CCRMA is acquiring and implementing a system with which to continue its work.

Funds acquired for CCRMA system:

Yamaha \$ 51,667
Stanford:
General Funds 50,833
Private Gifts 27,000
Fromm Foundation 2,000

total 131,500

Requested from the Rockefeller Foundation \$87,500

37, 500 why len?

Total cost of CCRMA computer system

\$219,000

The granting of this request will allow major advances in the work at CCRMA:

1. Real-time Performance-

The recent developments in miniaturized technology together with the years of experience in synthesis, composition, and control now allow the effective interaction of performers with computers.

2. Music Manuscripting-

The automatic printing of music notation is of major importance to music publishing, contemporary composition, and academic publications. The quality of CCRMA's graphic output is as good as engraved notation and in the case of modern notation even more accurate.

3. Digital Recording, Editing, and Mixing-

The use of digital technology in this domain brings together under a single system and processes both musique concrete and synthesized sound. Already far along in development at CCRMA, digital recording and processing programs offer powerful techniques for purposes of both archiving and commercial recording in addition to composition.

4. Compositional Algorithms-

A powerful computer system together with its associated languages suggests new ways of thinking about musical structure. CCRMA has made contributions through the use of deterministic programming which have generated great interest in both this country and abroad (see appendix 3).

Other Funding Sources:

The breadth of CCRMA's activities are in part reflected in its funding history: NEA, NSF, industry, and private individuals. Unlike most musical organizations such as orchestras and opera companies, CCRMA has been able breach the traditional funding boundaries because its work represents a unique intersection of music, mathematics, psychology, and computer technology. Since 1975 CCRMA has received \$1,000,000 in NSF research contracts. For the year 1980-81 two contracts have been granted totaling \$130,000. This money is used to support graduate students, research staff, and associated costs.

appendices

- 1. Overview
- 2. Guests US and foreign
- 3. Commissions conferences (Boulez April 1980, IRCAM feb. 1981)
- 4. current users
- 5. Manuscript example how many copies to Rock??