T E X C O N C O R P O R A T I O N

ALLEGRO MENTOR

A New Business Venture



TEXCON
corporation

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Business Plan

of

TEXCON CORPORATION

The Allegro Mentor

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Control No.

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T E X C O N C O R P O R A T I O N

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REPRESENTATIONS AND WARRANTIES OF ACCURACY AND FITFULNESS OF PURPOSE

This business plan has been prepared as a management tool. Its purpose is to define corporate objectives and goals as well as to provide a complete, integrated, action plan which when followed should allow the defined goals to be met.

Although primarily meant for the corporation's internal management, this business plan may, from time to time, be distributed to persons or institutions of various types, outside of Texcon Corporation as one means by which such persons or institutions may judge the corporation and assess its potential. In this case, the business plan will be distributed only to persons, institutions or representatives thereof who have expressed an interest in acquiring more information regarding the corporation and of a nature as contained herein. Such persons or institutions may include, but are not necessarily limited to, management consultants, financial and/or lending institutions, professional firms such as legal and accounting services, major vendors and major subcontractors.

This business plan has been written and assembled by Texcon Corporation's management and represents, in whole, an in-house undertaking. All information contained herein is beleived to be accurate and has been derived from exhaustive investigation, research and analysis. Where appropriate, information as compiled has been reviewed by recognized expert consultants. Specific areas of such review are: Educational concepts and theories, marketing and industry related statistics, engineering and design requirements, and manufacturing operations.

It is the opinion of Texcon Corporation's management that the action plan presented herein is viable and based on sound business planning and judgment. This opinion, Texcon's management believes,

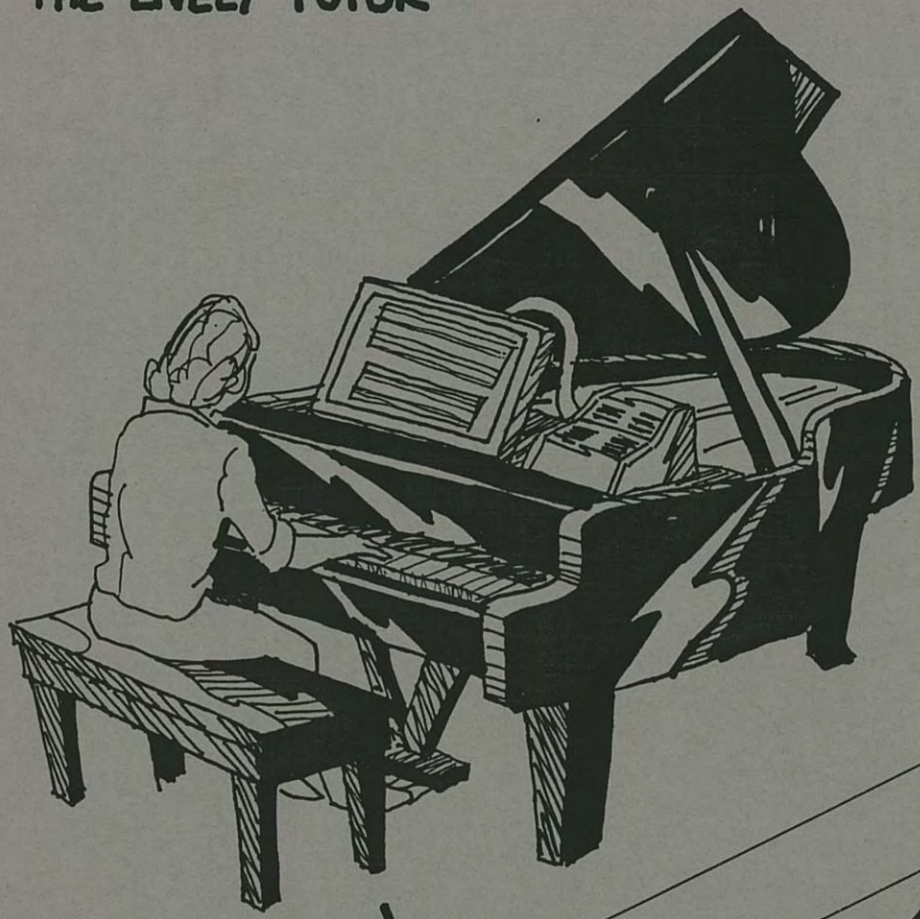
is substantiated by the historical evidence of successful start up, high technology, ventures over the last fifteen (15) years.

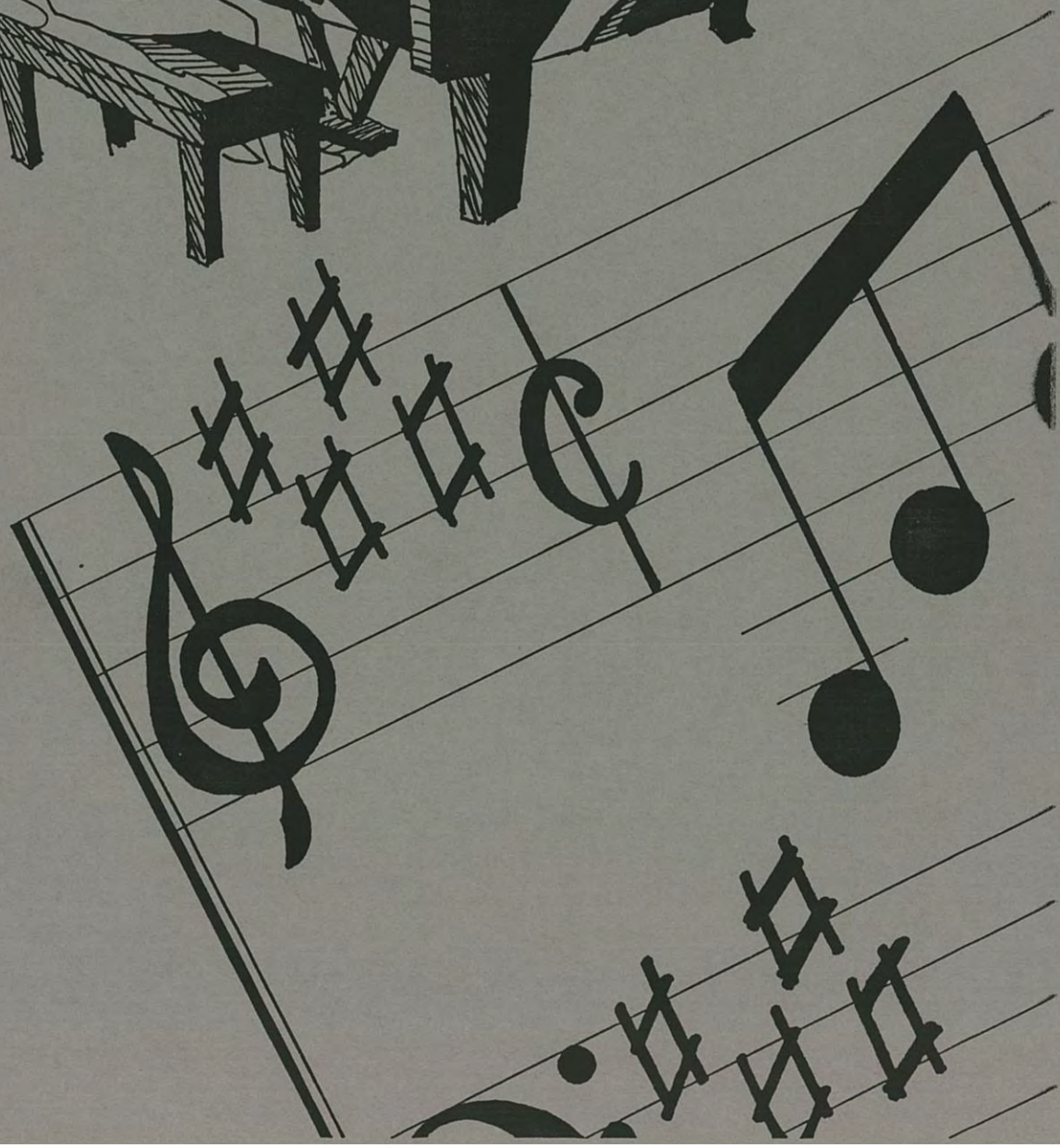
This business plan has been written by the President of Texcon Corporation and has received the valued contributions of Texcon's executive officers. Final responsibility for the business plan and its production is assumed by the President of the corporation. HOWEVER, IN NO EVENT, will the corporation, its President or management assume any liabilities with respect to damages incurred by outside persons or institutions through the reliance on information contained herein, except in the case of fraud or misrepresentation.

TEXCON CORPORATION

ALLEGRO MENTOR

"THE LIVELY TUTOR"





EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Texcon Corporation is:	An Arizona Corporation organized by the principals and founders, Mr. Thomas Thorpe, Mr. Donald Stapley, Jr., and Mr. Charles M. Thomas.
Their Business is:	The design, manufacture, and distribution of a computer based, consumer oriented, piano and organ teaching system known as Texcon's ALLEGRO MENTOR.
Their Short-Term Goals are:	To raise five hundred thousand ($500,000.00) dollars with which the company will complete the design, engineering and preproduction tooling aspects of the ALLEGRO MENTOR's development.
Their Medium-Term Goals are:	To develop positive cash flow by aggressively marketing the ALLEGRO MENTOR product line.
Their Long-Term Goals are:	To develop a series of consumer and institutional oriented educational products which are easy and fun to use by children and adults alike. Areas such as math skills, sciences, languages, typing, and interpersonal relations are all targeted future areas for growth.
Their Immediate Needs are:	Five hundred thousand ($500,000.00) dollars which will be used for completion of preproduction engineering and initial marketing.
Financial Success is:	Forecast to be twenty-eight (28) percent pre tax for the second full year of production and on projected sales of twelve million ($12,000,000.00) dollars.

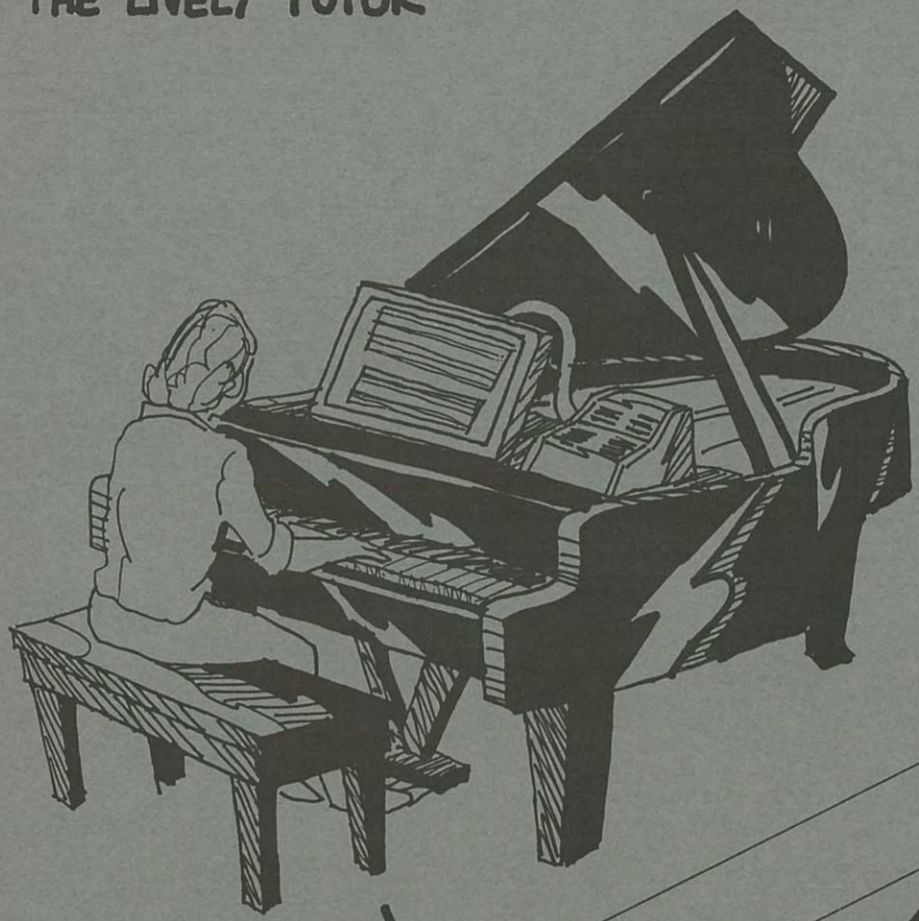
Business Success is Assured by:	By the principals' proven leadership and experience in management and effective managerial technique with small firms and large corporations, by their thorough design of sophisticated intercompany management processes and procedures, by their exhaustive analysis and complete understanding of the targeted market and proper marketing techniques, and by their recognized technical expertise.

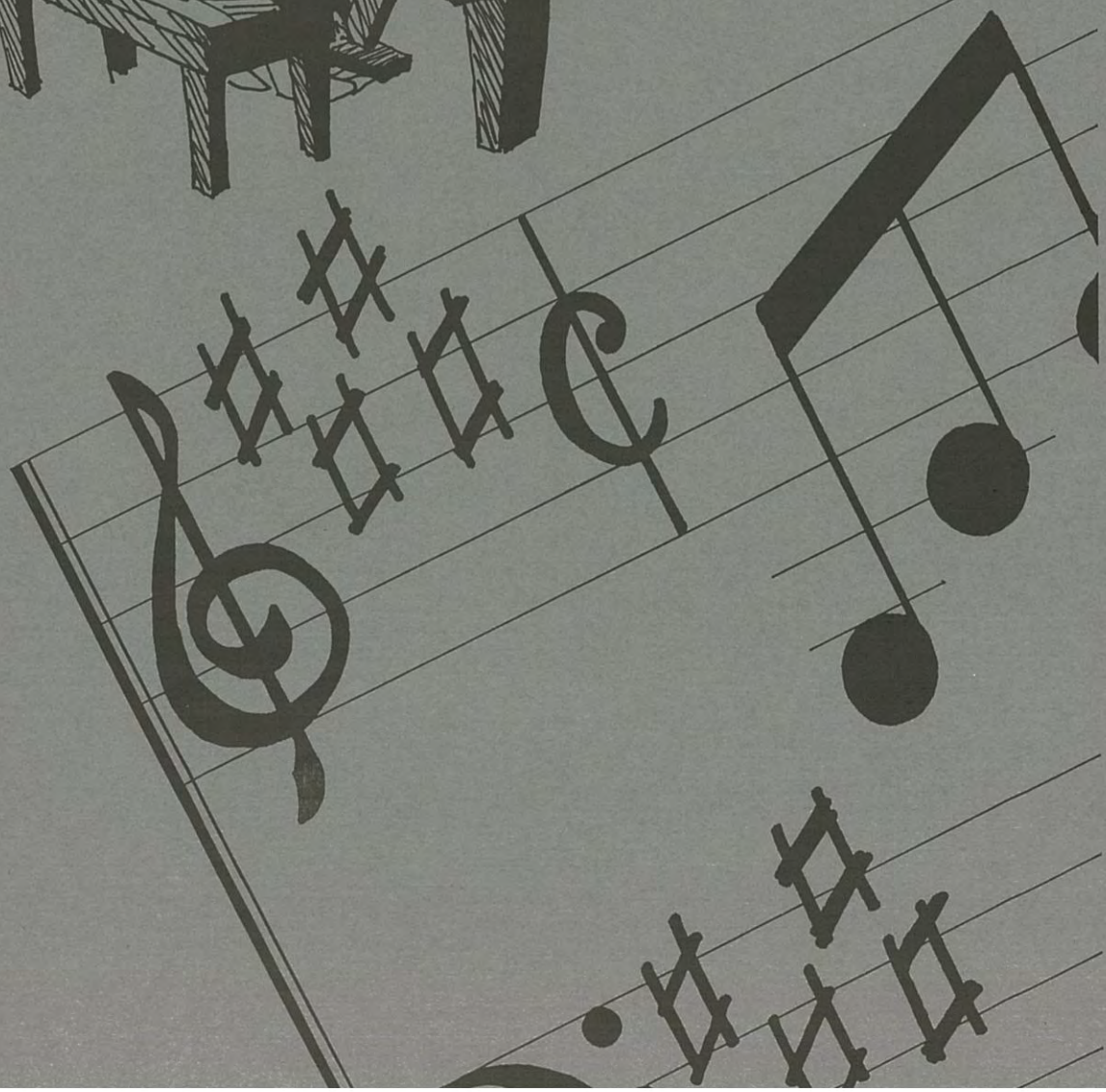
ALLEGRO MENTOR
DEVELOPMENT PLAN

Complete, October, 1982	To be Completed, August, 1983	Begins September, 1983 and Continues throughout Product Life Cycle
Conceptual	**Product Development and Initial Market Cultivation**	**Production and Distribution**
Activities: Concept Design Initial prototypes built and tested Market research and analysis Demonstration of devices to customers and investors Contact with leading piano method authors and publishers Contact with leading piano manufacturers and retailers Solicitation of Phase II research and development; marketing funds	**Activities:** * Product design and engineering * Reliability analysis * Service department/dealer preparation * Manufacturing engineering * Production tooling, electronic * Custom IC and/or MASKS * Mechanical tooling * ATE design * Production purchase orders, contracts * Production facilities preparation * Start marketing plan * Book advance orders * Negotiate phase III financing * Begin cultivation of OEM Contracts	**Activities:** * Full-scale production * Build-up of distribution network * Continue active marketing * Design and introduce new products 1. Add on options to Allegro Mentor 2. New product line members 3. New product families * Continued growth expansion * Financial stability and security * Pursuit of world-wide marketing plan
Goals: Significant marketing interest Completion of demonstration system Raise ($500,000) for Phase II	**Goals:** * Completion of all engineering sufficient to enable production * Visit 75 targeted cities for marketing presentation * Book advance orders * Complete financial arrangements for Phase III	**Goals:** * To become a leader in the field of education systems during the second half of the 1980's. * To become a 50 million dollar a year company by 1987 * To protect the Corporate Imperative of continued growth and good financial health * To become an industry leader in terms of providing a climate attractive to the most talented professionals, and staff.
Phase I	Phase II	Phase III

ALLEGRO MENTOR

"THE LIVELY TUTOR"





THE FUTURE FOR TEXCON

THE FUTURE OF TEXCON

The ancient Greeks had a dream of a comprehensive organization of all knowledge. The first encyclopedists who shared this dream, attempted to classify and organize all knowledge in order to be able to discern the relationships between things—for the pursuit of truth, to help solve human problems, and to increase virture and happiness.

Such efforts, however, have always been seriously limited by time, space, and other human factors. At times, we seemed to be moving farther from the dream as frustration over the "knowledge explosion" led to increasing specialization and fragmentation. But now, the computer may make the dream at last possible. A long line of tools—including writing materials, printing presses, books, and libraries—has extended the human potential. The computer is at least as powerful as any of these; it will tie all the previous inventions together in a way which will increase man's capacity to think, to organize thoughts and facts, and to manage the knowledge explosion. A process has started which will reshape the way man thinks, organizes knowledge, and does research.

The technology of the emerging information age is drawing together all of today's reference books, scholarly journals, research reports, specialized encyclopedias, atlases, lexicony, and so forth, into one system. Two encyclopedias are already commercially on-line—available in continually revised data banks which computers can access. The ultimate results will be a great comprehensive electronic encyclopedia (GCEE) which may be accessed by scholars, researchers, school children, and consumers working in their own homes.

The industrial revolution, the reformation, and the use of science and democracy were facilitated and accelerated by the invention of printing. We now stand on the threshold of an era of electronic technology that can again empower new movements and transform society. Boundaries are likely to be destroyed, not only between nations, ideologies, and scholarly disciplines, but also between the scientist-scholar and the average person. Citizens will be empowered by this new technology, not only to be more involved and responsible in politics, but also to assume a share in the advancement of knowledge. The Japanese, who plan to place a computer in the hands of every five-year-old, dream of a "society with highly intellectual creativity where people may draw future designs upon an invisible canvas."

During the rest of this century, and more so in the next, less than 20 years away, you will be able, via computer terminals, to consult reference books that are increasingly comprehensive and complex. Information will be provided which is far more accurate, up-to-date, and useful than can now be obtained from the best libraries. With a small hand-held computer that may be carried anywhere, almost any sort of information may be obtained.

From a commercial standpoint, a revolution every bit as important and far reaching as the industrial revolution will take place. Commercial exploitation of the technologies and business related thereto will generally fall within the following four (4) catagories which are the major components of such a glamorous interactive data-communications network.

1. Acquisition and organization of information.

2. Hardware and software associated with the massive central-data bank.

3. Worldwide-communication system consisting of satellite, microwave, and long-wire networks which will interconnect the central-data bank to individual users.

4. Individual terminal hardware and local network interfaces.

Each of these areas represent commercial areas of business which by the mid 1990's will exceed fifty (50) billion dollars of yearly sales volume in the aggregate. Large existing computer manufacturing firms with the heavy capital resources necessary to finance the research and development of such system components will certainly address number 2, while today's large communications companies will be available to fill the needs required by number 3. Numbers 1 and 4, however, may best be served by university groups and smaller high-technology oriented companies who are capable of developing equipment addressed at specific markets centered around specific fields of applications. It is to the service of these needs that TEXCON CORPORATION aspires.

As a prelude to the inevitable, today's market is becoming flooded by various "home-computer systems" most of which are supported by "educational-related" software. It is a common sight today to see young children gathered around a computer terminal, both in the school as well as at home. Nobel Prize winner Herbert Simon has pointed out that:

> "Before our eyes, the new information systems are changing the meaning of the verb 'to know'. We grew up in schools that taught us that we 'knew' something when we had facts memorized, when from our minds we could recall information on an examination. Now, however, 'to know' no longer refers to facts stored in the human memory, but to the ability to access facts. Education is changing from memorizing to reflecting upon

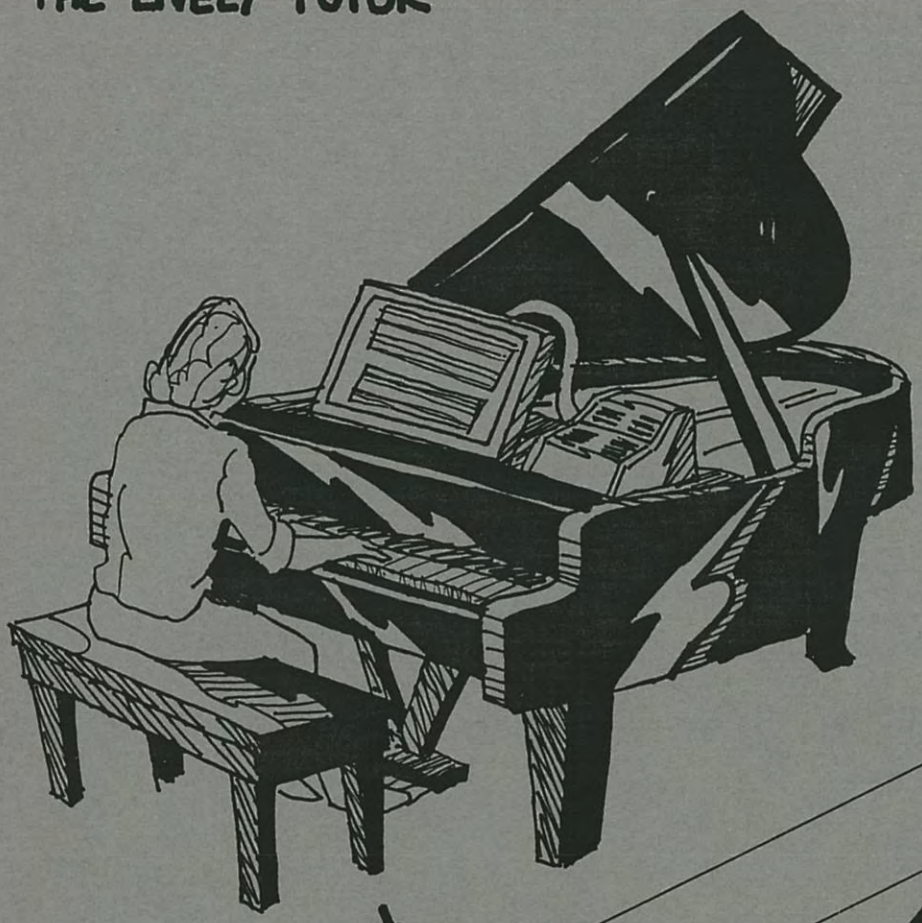
the meaning, use, and organization of information. Even elementary school pupils, whose approach to math was radically changed by the small electronic calculator in their hands, will carry with them a similar vest-pocket sized instrument that can give them access to all the world's knowledge through the GCEE."

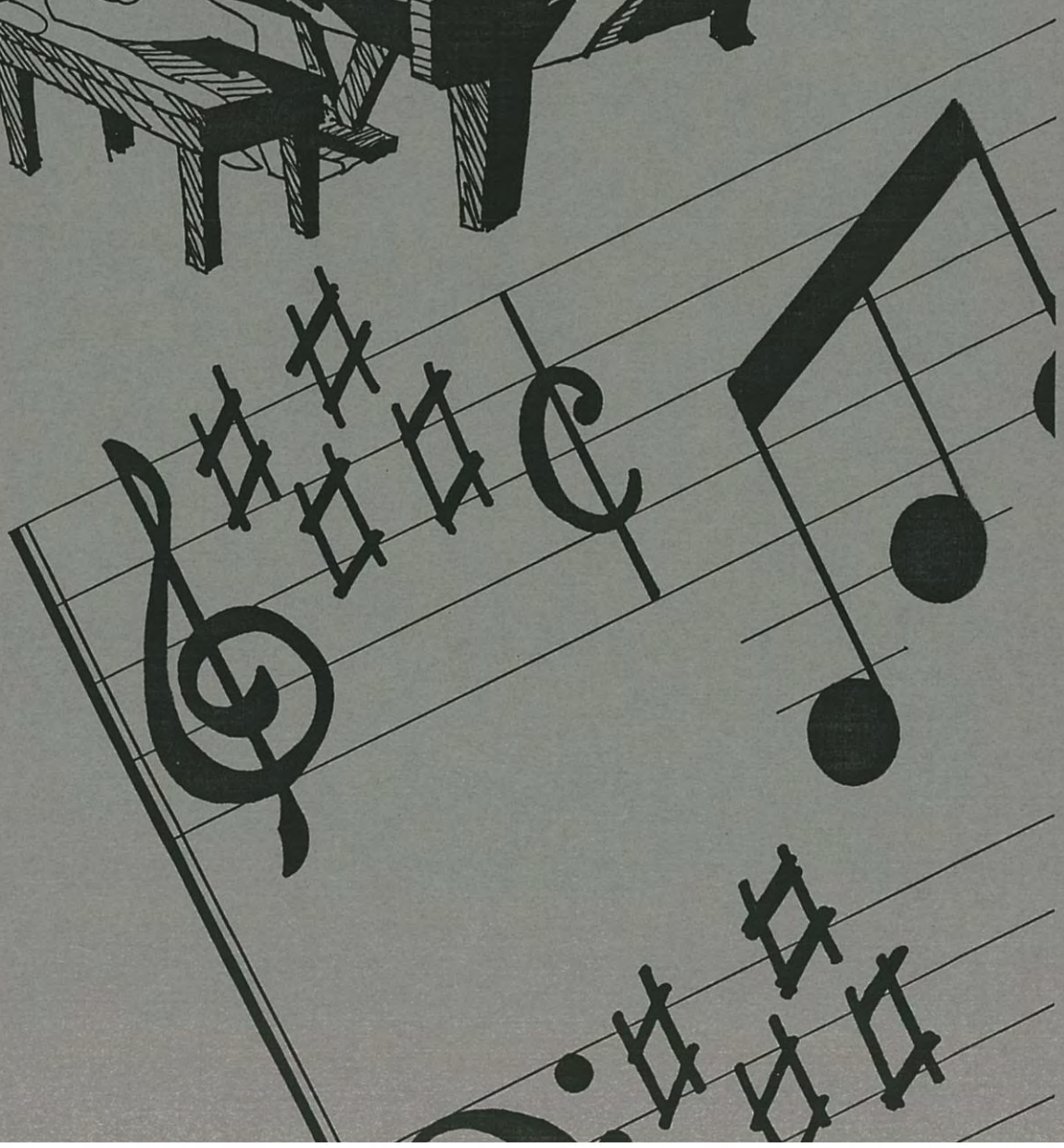
Texcon plans to meet its future aspirations through growth by commitment to goals which, in part, keep within the context of education and information dissemination, and propagation. Initially, products meeting the immediate needs of established markets in a cost-effective manner will be developed and taken to market. Strategically, Texcon has elected to first address the music market.

The balance of this presentation forms Texcon Corporation's "business plan"—its roadmap to future success.

ALLEGRO MENTOR

"THE LIVELY TUTOR"





A. Texcon Corporation

Texcon Corporation is a three-year-old research, development, and manufacturing company with principal offices located in Mesa, Arizona. Thomas Thorpe formed the company with the general purpose of providing state-of-the-art computer engineering services to a wide variety of industrial based accounts. Texcon's history of engineering includes a variety of projects for the OEM and consumer markets including energy management applications, professional office specific small business computers, specialized automatic computer controlled test equipment, computerized consumer audio-stereo equipment, and educational devices. The company's prime interests and targeted future growth is in the field of computerized educational devices and systems geared for both the consumer and institutional markets.

Texcon is a privately-held corporation with Thomas Thorpe serving as President. Mr. Thorpe has had a long history of technical innovation and managerial leadership. The company is structured in a unique fashion allowing for future growth by acquisition, and incorporating innovative management procedures and organizations which greatly enhance productivity and profitability due to employee motivation and strong management by objectives leadership.

B. Market Opportunity

During 1981-1982, Texcon Corporation has been closely studying the field of music education and specifically keyboard (piano and organ) instrument teaching to

1) determine the current condition and needs of the teaching community in this field, and 2) to determine the potential of a market for computerized devices which would greatly accelerate and enhance an individual's learning of such a keyboard instrument technique. During the course of this study, Texcon Corporation has worked closely with 1) the largest keyboard instrument retail distributor in the southwest United States, 2) the second largest musical publishing company in the world, 3) the largest two piano and organ manufacturers in the United States, and 4) two professors of music and specifically piano pedagogy, both of whom have given public piano performances, written instructional books and materials relating to the piano, and who in the aggregate have over fifty (50) years of keyboard teaching experience and at all age levels including postgraduate level.

Texcon Corporation has learned that in the year 1980, over 240,000 pianos were sold domestically and over 140,000 organs were sold domestically. Analysis has shown that over thirty (30) percent of these instruments were sold to people who could not play them or were purchased by a family for children who could not play. In 1980 there were 18,188,000 amateurs playing the piano, of whom twenty-one (21) percent were male and seventy-nine (79) percent were female with a medium age of 28. Of those, over five (5) percent were actively seeking instruction from a teacher. The instructive alternatives are three in number: 1) music instruction in schools (primary, secondary, community college, or university); 2) private music instructor who generally works out of the home or travels to the student's home; 3) a commercial private music studio whose business is solely the teaching of musical instrument techniques. A fourth alternative is emerging in popularity which is a class piano or organ concept held at the musical instrument dealer's store. Nationally there are well over 120,000 piano

teachers or people who claim to be actively teaching piano. The average length of instruction is four (4) years.

In addition to those people obtaining instruction from a teacher, a great number of people are attempting to master the instrument through self-study. Indeed, the number of adults pursuing this alternative is so large that no less than six (6) major music publishing companies and countless smaller ones are producing materials such as EZ Playing and Piano Playing Made Simple. The two (2) major domestic piano manufacturers both offer such materials under their name as well.

As yet, there is no company offering an interactive audio-visual teaching device, either as a self-study course or to be used in conjunction with a teacher. Several large companies, including the Baldwin Company, manufacture classroom teaching systems which consist of a number of electronic pianos connected to a "master console" monitored by the teacher. In some cases, the electronic pianos have colored (red and green) light-emiting diodes located above and at right angles to the keys. Teaching, however, still takes place by the ordinary means. The primary advantage of the electronic systems approach is that each student may practice without disturbing the other students, while at the same time, the teacher may selectively monitor any of the practicing students. An interesting commercial adaptation of this electronic piano network concept has appeared throughout the country under the name Wiz Vid. The Wiz Vid approach uses a standard class piano teaching approach; however, the lessons given by the teacher are augmented by a 35 mm slide presentation displayed on a screen in front of the room. The teaching material or curriculum is contained in narrative on audio-cassette tapes and this same audio

tape controls or prompts the slide projector, thus allowing a specific slide to be projected with the accompanying appropriate narrative.

The Wiz Vid approach has been implemented by many piano and organ dealers around the country as a means to attract customers who might not otherwise buy a keyboard instrument due to an inability to play. The Wiz Vid has been copyrighted and is available on an exclusive territory franchise basis.

Additionally, there are several audio-cassette tape with book packages available in the general marketplace. Most are centered around the development of sight-reading skills. None of these have been commercially successful and no major publisher is currently producing such a package.

As stated above, there are approximately 18,188,000 amateur piano players in the United States, and of those, five (5) percent currently are actively seeking instruction. Thusly computed, there are approximately 909,500 people in the United States who are currently receiving piano instruction. The average length of instruction is four (4) years, thus each year sees approximately 227,400 people phased into and out of this market group.

Texcon has learned through its relationships with piano manufacturers and piano retailers that many, in fact the majority, of those people taking instruction are to a large degree frustrated by the amount of time required to develop even a minimum of piano proficiency. In today's world of jet air travel, television communications, and accelerated audio-cassette learning programs, our society is becoming more and more conditioned to want, in fact, expect things to happen quickly. People's attention and concentration

spans have been reduced and, where motivation is not high, people generally do not invest their time and energies for they have for the most part lost the patience to wait. Regarding the mastery of a keyboard instrument, the problem takes on the characteristic of a double-edge sword. For not only do people want to learn rapidly, they want to learn to play well. In today's affluent and better educated society, increasing numbers of people have been exposed to keyboard artistry of the highest order. Over the last fifteen years, sales of classical music records has risen out of proportion to all other forms of music. Today, virtually anyone can hear Alfred Brendel playing a Beethoven piano sonata. Thus, in general, people are setting a higher standard of performance for themselves.

These factors have combined and contributed greatly to the existence of a market for a magical approach to the learning of the mastery of keyboard instruments. Unfortunately, there is no magic in our world. There are, however, optimum teaching methodologies and ways of presenting these optimal methodologies in highly efficient fashions—naturally, computer-aided instruction.

There has traditionally been a decoupling of learning theory and music theory or technique. Most music is taught through approaches which have been long in existence and which were developed by musicologists, not educators. As a result, the teaching approaches are sound from a musical theory and technique standpoint; however, from a learning efficiency viewpoint, they suffer many weaknesses.

Texcon has completed a conceptual design for a computerized system to aid the keyboard instrument student in his quest for quick and proficient learning. In addition, Texcon's staff of musicologists have written a modular piano course

for both youngsters (4 to 12) and adults (12 and above) which is both musically sound and educationally well designed. The courses are designed to be programmed into the computer. A demonstrable prototype of the system is available for view; currently Texcon is in the process of testing and fine tuning the system approach.

Texcon has named its computerized keyboard instrument teaching device the "Allegro Mentor" or Lively Tutor. Although the device could conceivably be purchased and subsequently used by an individual without the ongoing use of a teacher, this is discouraged. The device will unquestionably be most effective when used with the supervision of a teacher. Since there are over 120,000 people in the United States who are "teaching" piano, the piano teaching community presents itself as one ideal marketing network through which the Allegro Mentor products may be sold.

The Allegro Mentor has been designed to meet the educational requirements of both young students and adults. The system is capable of being priced at a level which the market will support and will provide the profits associated with these add-ons.

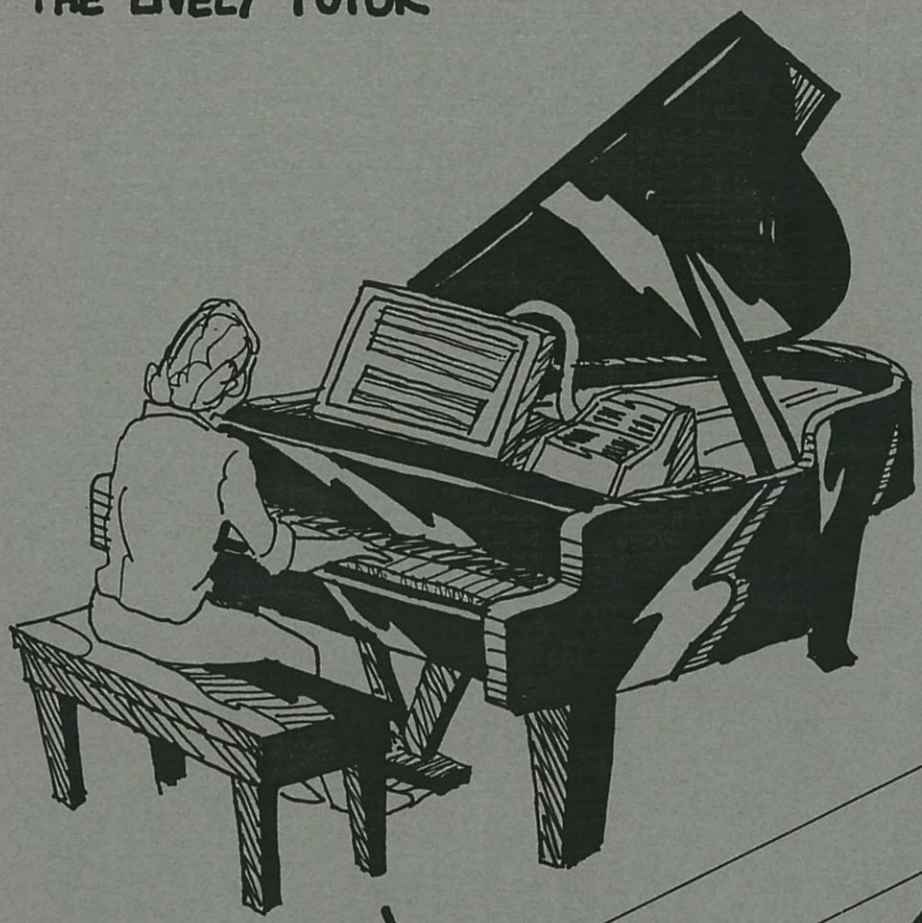
The marketing concept involves a major music publishing company who has 3,150 retail outlets worldwide, and who maintains a mailing list of most music teachers operating in the United States, as well as several of the major domestic piano manufacturers and their retail outlets. In addition, a users club will be created with a newsletter as a vehicle for end users to communicate and exchange interests, ideas, and progress as well as motivational (rewards, etc.) materials for children. This users music club will become an individual profit center and a means of generating additional sales through add-ons, programs, music, and recorded materials.

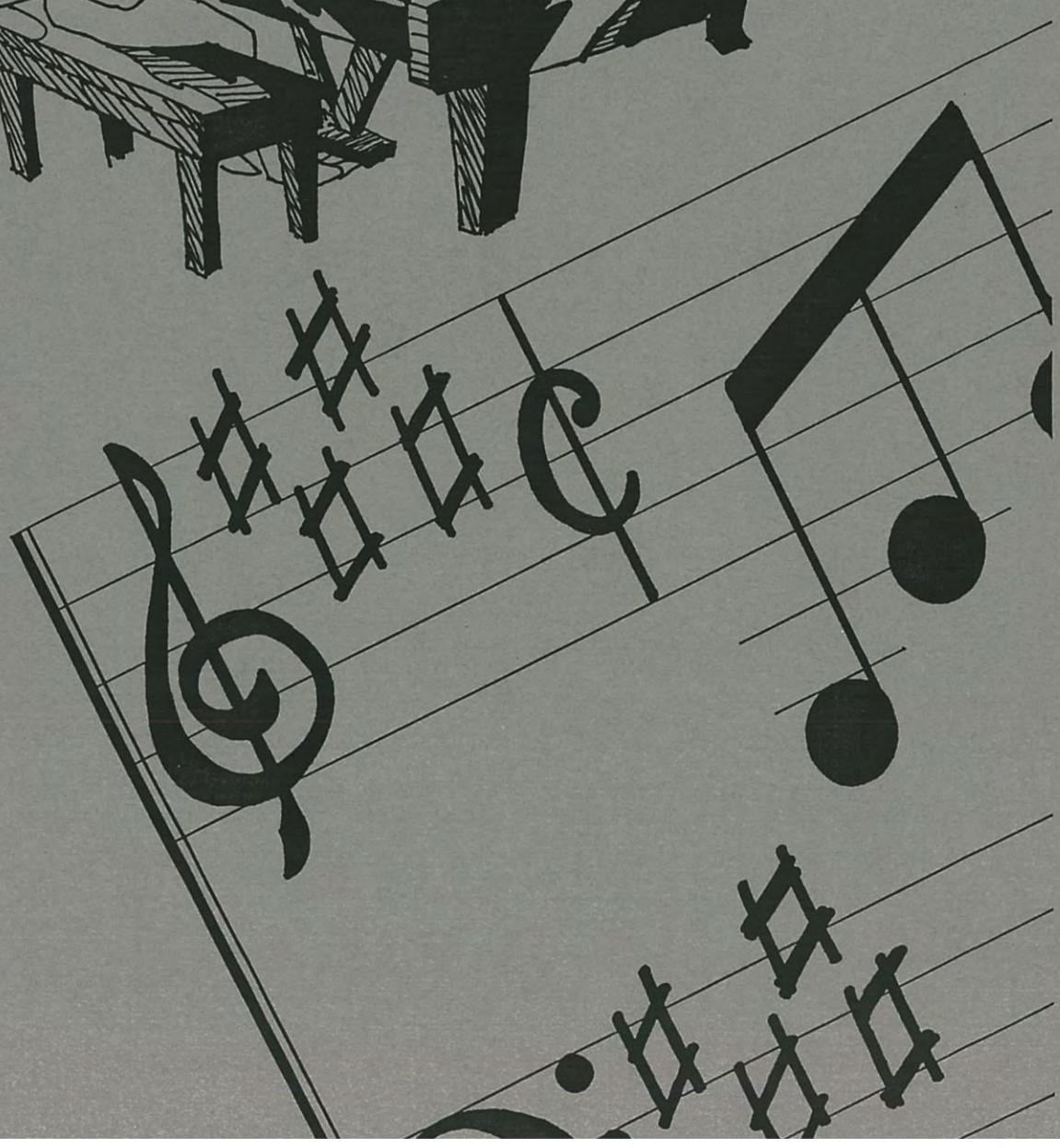
C. Business Plan Objectives

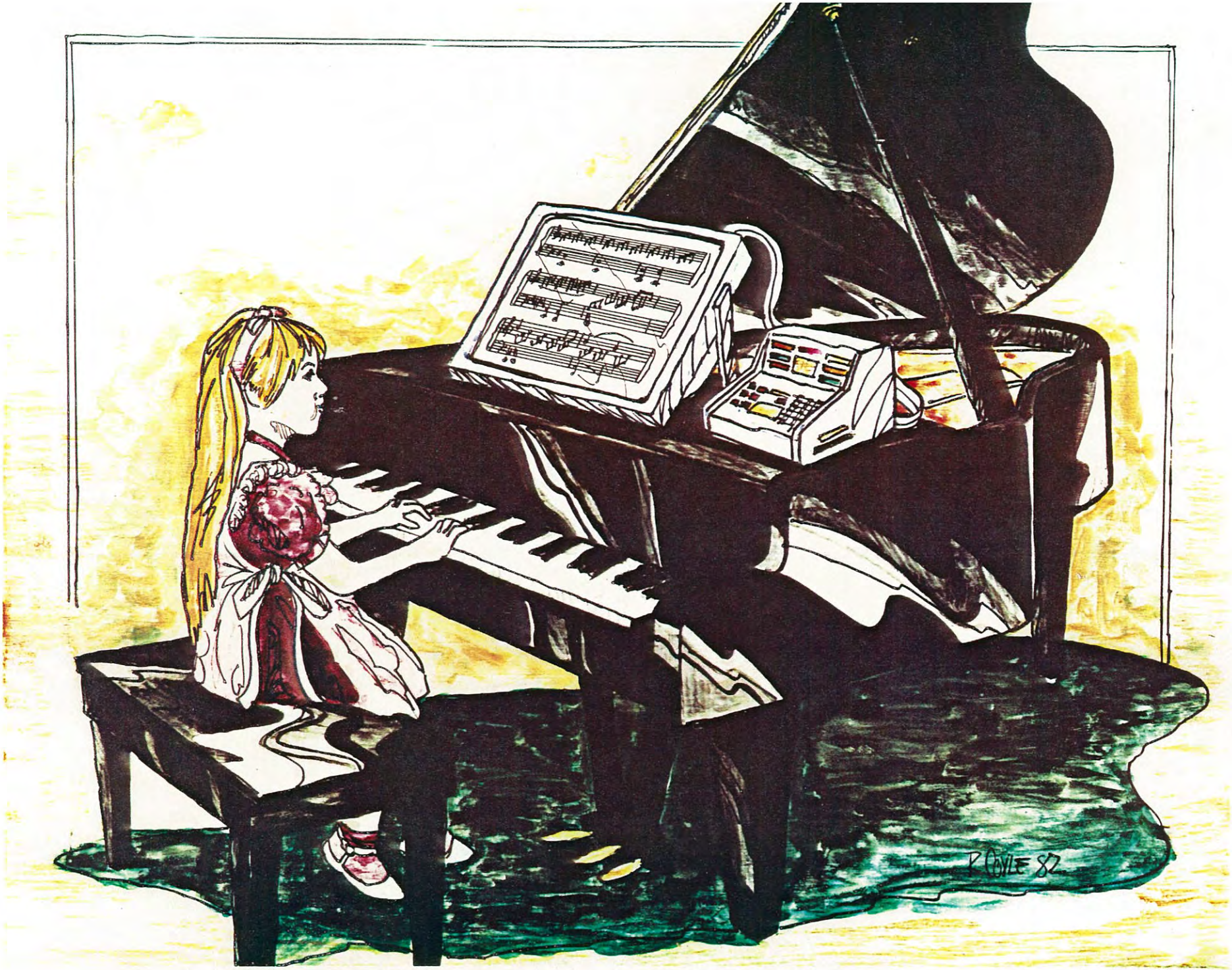
The intent of the plan is to raise funds through the formation of an R and D partnership and, utilizing the talent of Texcon, develop the Allegro Mentor product line, and to initiate the cultivation of the market. This plan covers the entire cycle from design through marketing and manufacturing, to final delivery of the product. Pro-forma sales projections and financial statements provide the first five (5) years' business forecasts for your evaluation.

ALLEGRO MENTOR

"THE LIVELY TUTOR"







Artist's Illustration of the Allegro Mentor

THE ALLEGRO MENTOR PRODUCT

DESCRIPTION

The Allegro Mentor is a teaching and drill device meant to be used by students of all age groups who are studying various musical instruments. From a strategical standpoint, the first-generation Mentor products will be targeted to the keyboard instrument market, specifically piano; however, this is a strategic move and is not one imposed by technical considerations. For purposes of discussion within this business plan, we are assuming that the device will be used for instruction of and in conjunction with pianos. Once on the market, Mentor devices will be developed and introduced for other instruments as well.

It should be noted, that as the name suggests, the Mentor product is not necessarily an automatic self-contained piano teaching system. To realize the full benefit of the Mentor System, the student should seek the counsel of a professional instructor. This is an important consideration from a marketing perspective, and one which will be fully addressed in a future section of this business plan.

In the product's basic form, it consists of a micro-computer-based electronic console which is connected to a standard television set. In addition, an external sensing device is placed inside the piano, and this device measures which piano key(s) is pressed, and transmits this information to the console which, in turn, interprets and uses the information. The console contains the circuit hardware which 1) generates the patterns displayed on the monitor television, and 2) generates the various operational modes; i.e., stimulus-stimulus, stimulus-response, counting, dynamic, or standard metronome. These modes represent the various redundant ways of teaching specifics such as note reading, rhythm,

phrasing, etc.

The Mentor console is a small tabletop unit which consists of a built-in matrix tactile keyboard, a single printedcircuit board, and connectors. The Mentor console housing will be a two-piece, injection molded cabinet consisting of a base and top cover. The keyboard and printedcircuit board will be mounted on the base, and the top cover will fasten to the base with four machine screws. The top cover will be configured with openings for the insertion of program modules as well as external connectors. The openings will be equipped with spring-loaded metal doors for RF shielding.

The keyboard will be a sixteen-key tactile array manufactured by one of several vendors, and which will be connected to the PCB through a flex-circuit connector.

A visual cueing panel will be located adjacent to the keyboard. The purpose of this visual display is to aid the user in the set up and keystroke entry of the unit.

At the heart of the system is a Motorola 6809 microprocessor; 8K of ROM will provide the operating system for the 6809, and 16K of RAM will provide 6K of memory for the video display and 10K for program use. Also, resident on the PCB will be the video generator, internal power supply, keyboard and monitor connectors, and the RF modulator. On the right side of the PCB, within the console, will be an edge connector which will be used to insert future add-on program capability through program cartridges.

The Mentor's piano keyboard interface is designed to be inserted into any acoustical piano near the piano's action. The sensor is designed to be 1) universal and usable in any type of piano, and 2) easily installed by any piano tuner or technician. The

mechanism of the key sensor is electro-optical, thus, no damage is inflicted upon the piano or its action, and no change in the "feel of the" key is made. The key sensor may be installed at the home or at the dealer's shop at the time an instrument is purchased.

The Mentor has one communications port which allows the device to be connected into a system network for class piano instruction. As an add-on feature, a slow-speed telephone interface is available which allows the device to be interconnected with the teacher's over phone lines, thus establishing a master-slave relationship between the respective network components. Thus, information such as how long the student practiced, what he practiced, and how well he did, could be sent to the teacher at the end of the student's practice period automatically without effort required from either teacher or student.

Texcon's approach to the software assumes that the machine is entirely dedicated in function, and that total control is exercised via internal machine-level software comprising the unit's operating system; thus, the product will be extremely easy to operate. No need exists for the operator to have any software or computer knowledge whatsoever. The machine is turned on with the proper cartridges inserted, and the cueing panel guides the user through its operation from there.

THEORY OF OPERATION

The Allegro Mentor or "Lively Tutor" cannot replace the teacher or instructor. Rather, the Mentor becomes an extension of the instructor who is available to the student in the privacy of his home, 24 hours a day, seven days a week. The Mentor insures that the student practices reasonably in accordance to the schedule given by the instructor, both in terms of time, consistency of time, and material practiced.

Learning theory shows that every person is somewhat unique in the way he learns. Secondly, material is assimilated and "learned" by different types of mental processes depending on the age of the individual. It is unreasonable to think that a child of age six can internalize such music theory governing the note structure of scales; however, a child of six can be given a simple melodic line, learn to play it in the scale of C major and then, when asked, play the same melodic line in say the key of F major assuming he learns to play the same melodic line in the F major key.

There is too, a great variance in the way different adults learn depending upon their cultural background, their educational backgrounds, and experiences through life. Thus, clearly it can be seen that several different approaches or methods of teaching the instrument, of necessity, must exist, and of these, the more successful will be those which allow for flexibility or "fine tuning" to a specific individual. Indeed, there are many approaches to learning keyboard instrument proficiency. A recent survey of a large music store serving primarily the piano teachers' market showed the existence of over thirty different piano "courses" which are currently in popular demand.

The Allegro Mentor is capable of operating in conjunction with any of the various piano courses on the market. The specific course curriculum, with the permission of its author and/or publisher, is simply entered into a master-program encoding device, at Texcon's factory, and the program cassettes may be henceforth copied.

The computerized nature of the Mentor, however, makes the Mentor well suited to an extremely logical, sequentially progressive, learning approach. The typical problems of a student's reluctance to drill, his dislike of repetitive exercises,

and his rebellion to the teacher's selected course outline are overcome by the Mentor. A student typically performs for a teacher in the way he feels the teacher expects of him. At home during practice sessions, it is a different matter. The Mentor, however, is effectively an extension of the teacher and thus such latitude in the student's habits and performances simply is not allowed.

As noted, virtually any piano course material could be used with the Mentor. Texcon's staff of musicologists have evaluated all of the commercially available piano course literature and although the successful materials all have their merits, no existing material was judged to be optimally suited for use with the Mentor. As noted before, Texcon's musical staff has had many years of teaching experience and with students of all age groups. This staff, composed of successful artist-teachers has completed an exceptionally fine course of piano study which, through its modular construction, may be applicable to all age groups and backgrounds. This course material has taken six years to complete; portions have been used by the professors at local colleges in the Phoenix area and with outstanding success. This material has been formulated for use with the Mentor and is currently copyright protected and under exclusive license to Texcon Corporation.

At the beginning of a course through the Mentor, sight-reading skills are developed. The concept of line and space is first reinforced and is then followed by note identification and value. Through a process of stimulus-stimulus and stimulus-response drill, aided by positive reinforcement consistent with the age of the student, sight-reading skills are developed rapidly.

With the development of sight-reading skills under way, the student learns to make the correlation between the written musical notations and its relative key position; that is to say, he learns which

key corresponds to which note. This concept sounds simple, however, complex learning functions are involved. The traditional flash card approach to musical notation learning is somewhat deficient because it requires the student to correlate a note on paper to a quantitative value and then, as an additional step, the student must correlate that value with a key on the instrument. The Mentor allows direct position identification transfer to take place early in the student's ability development.

Further command of greater portions of the keyboard is mastered far more rapidly than through conventional methods. As an example, several of the more popular conventional piano courses adapt the "middle C approach." In most of these courses, the student is confined to music literature written within one octave above and below middle C for his first and perhaps even second year of study.

Use of the Mentor System by the student allows for a far more rapid development of tactile-keyboard familiarity which includes far greater topography than that covered by traditional means. Further, the student acquires conditioned spatial reflexes which will allow him to play without looking at his hands, thus enabling him to keep his eye on the music page (or Mentor screen) which is the first rule in sight-reading.

At this point, the student has been developing his sight-reading skills; many leading piano scholars believe this to be critical, if not the most important, aspect of developing keyboard proficiency. At the same time, he is developing his sight-reading abilities, he is conditioning certain series of muscles located in the wrist, hand, and fingers. This is accomplished through the constant repetitive exercise material used throughout the sight-reading development portion of the program and which force consistent exercises in both the "closed" and "extended" hand position.

The student is now in a position to begin a series of scale and arpeggio exercises designed to increase technique and build a foundation of musical theory.

One key to the Mentor's success is a unique combination of traditional sight-reading and kinesthetic materials, exercises, and ear training. The Mentor's computer programs are, in part, contained in cassette tapes. These cassettes contain audio information such as instructional narrative and actual music; music played as the student should play it. Thus, a student may listen to a short motif several times, then he may play the motif, listen again, and then play, continuing for several such cycles. As the music is played by the Mentor, the corresponding musical notes are displayed on the Mentor screen and then, when the student plays the notes, they are displayed in the student response (lower) section of the Mentor's screen. The Mentor's internal computer will check the student's results by comparing his response with the actual music. If a mistake is present, the student must compare the notes displayed resultant from his playing to those of the actual music as displayed above, and he must find his mistake. After locating his mistake(s) he must identify them to the computer by disintegrating the incorrect note as displayed with the cartoon rocket missile (a la video game) and then play the correct note on the piano which will now correctly appear on the student grand staff.

As the student progresses and learns note values (whole, half, quarter, eighth, etc.) the Mentor's computer is capable of interpeting a note (or chord) played by the student in terms of its time value and displaying it accordingly. In this mode, the same general format described above is used to grade performance and guide the student through the identification and correction of his mistake(s), if any. In the event the student's performance is totally correct, a positive reward (cartoon display, point offering, etc.) is given to the student

via the display.

As the student progresses, such technical considerations as arm weight and wrist movement may be interpreted by the Mentor through their physical manifestations. Legato or Staccato touch may be monitored as well as piano forte dynamics (the loudness of playing). Pedalling too is monitored.

At the conclusion of a practice session, a summary of materials covered during the session is provided to the student as well as his performance regarding each specific piece, exercise, or study performed. In the case of children, a point system may be incorporated, and the number of merit points earned is displayed as well.

The information above, as well as the length of the practice session and specific portions thereof are transferred, via telephone line, to the teacher's master system, or in the case of a classroom network system, direct wires may couple the individual student's unit to the teacher's master unit.

The master unit belonging to the teacher is in all respects identical to the student's from a display and function standpoint; however, the master system has several functions and optional accessories which are not available to the student. An outline of these follows:

1. Small business computer capability which performs the following overhead functions:

    A. Maintains student performance profile.

    B. Maintains student billing records.

    C. Prepares student billing statements.

D. Maintains income, expense, and inventory records for the teacher.

E. Is capable of printing music, on paper, transferred over phone lines from a central music source or from one teacher to another teacher.

The Allegro Mentor product line will be designed to include all of these capabilities internally. It will be a matter of strategic business planning, however, as to the number of different models comprising the product line, and the relative performance and cost of each articulated model as well as the market positioning of each model and the time it is introduced to the market place.

UNIQUE FEATURES OF THE MATERIALS USED
FOR THE ALLEGRO MENTOR

By: Alvin E. Marcus
Audrey Marcus

1. The entire thrust is to teach music reading. Music literacy is the primary and underlying goal of the Music Mentor System. The materials presented develop in a logical system. Nothing is assumed on the part of the student. Each concept is learned from drill with immediate feedback. It is in the acquisition of note, rhythmic and expressive skills that the student is motivated on an ongoing basis toward higher degrees of music literacy.

2. The Mentor Music System utilizes various learning theories primarily based on the Gestaldt and Skinner psychologies of learning. Greater emphasis is given in the children's series on Skinnerian (stimulus-response) than in the adult's series. Conceptual learning, however, is consistently emphasized for both age levels.

3. Motivation for writing the series was based on discoveries of the coauthors, each with piano teaching experience of over twenty-five years to all age levels. It has been the experience of both authors that method books did not pace materials to produce music literacy without great use of additional materials. Much repetition is required on the part of the student to acquire a musical concept.

4. The sequential development of materials is based on fundamental skills. A thorough understanding of the keyboard of one octave below and above middle C is mastered with five-finger closed hand position in both hands before introduction of different keys are presented. Extended-hand positions in

both hands are introduced only after the mastery of: closed five-finger skills in both hands. Note reading is confined to notes centered in both staffs with much drill on C down to G in the F clef and C through one octave C in the G clef are used to develop finger dexterity as well as independence of hands in accordance with progressive note reading skills.

5. Selections for the Mentor are from popular, folk and art forms in the beginning series. The purpose of the selections is to maintain high interest for the student and at the same time to broaden musical tastes.

6. The Music Mentor System is teacher orientated. There is little need for the teacher to provide supplementary materials. If the student does not progress at the rate expected, there is additional material provided in the series to overcome any deficiency in a concept.

7. The materials presented are visually attractive. Each page and/or screen is not cluttered to overwhelm the student.

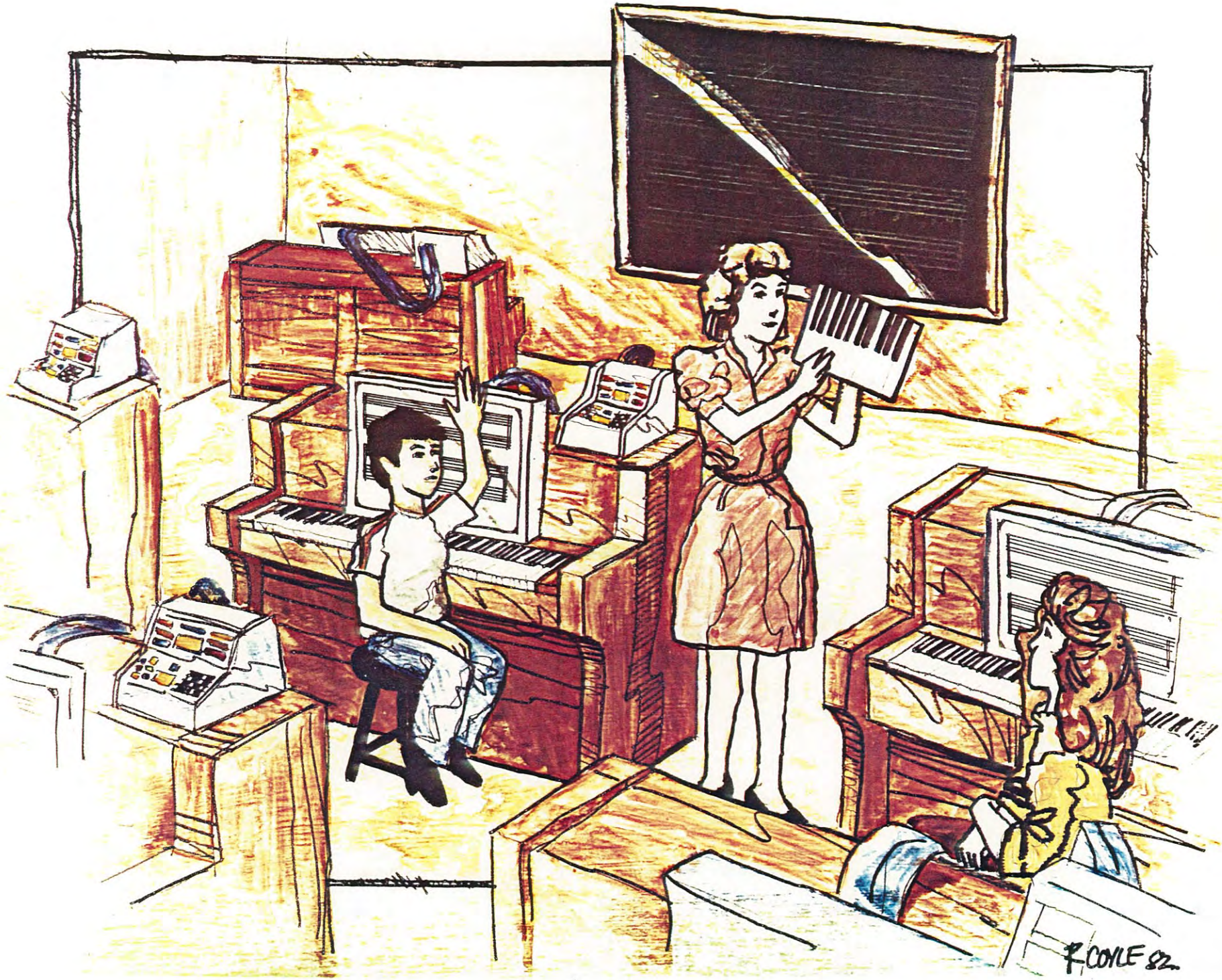
8. Selections incorporate ensemble playing. Few books offer duets, trios, and quartets. It is essential that the student have the experience of playing ensemble music. It develops an overall musicianship since it draws from sight-reading and rhythmical skills. This is especially useful for class piano instruction

The following artist's illustration shows the teacher's system in use. A printer allows printing of music as well as the printing of accounting statements and monthly student invoices.

The teacher's system communicates with the student's system, bi-directionally and over the teacher's existing telephone line; hence the proximity of the telephone instrument to the Allegro Mentor and piano.

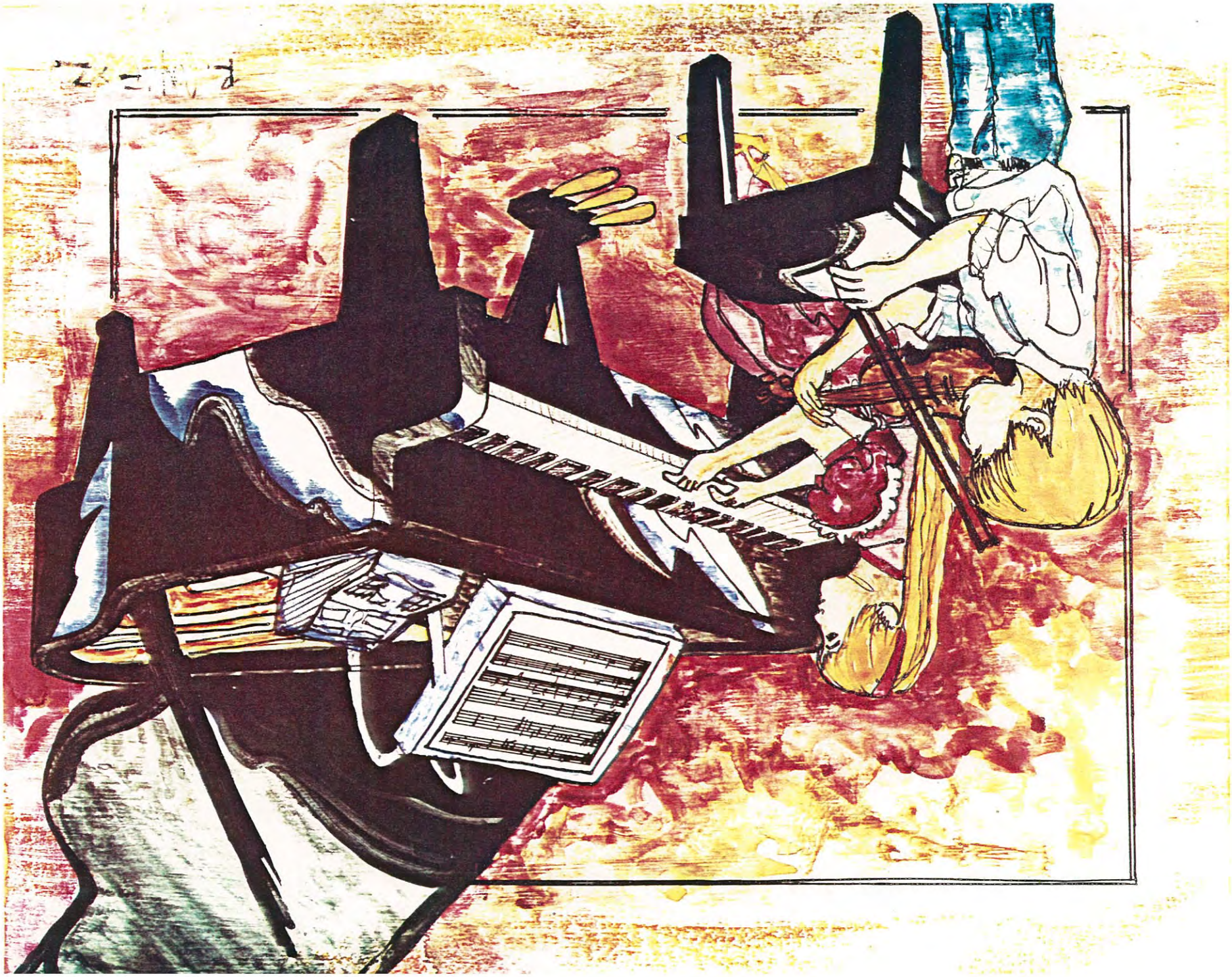


The following artist's illustration shows the Allegro Mentor in a class piano situation such as might be seen at a music studio, retail piano outlet or community education-work-recreation facility.


P. COYLE 82.

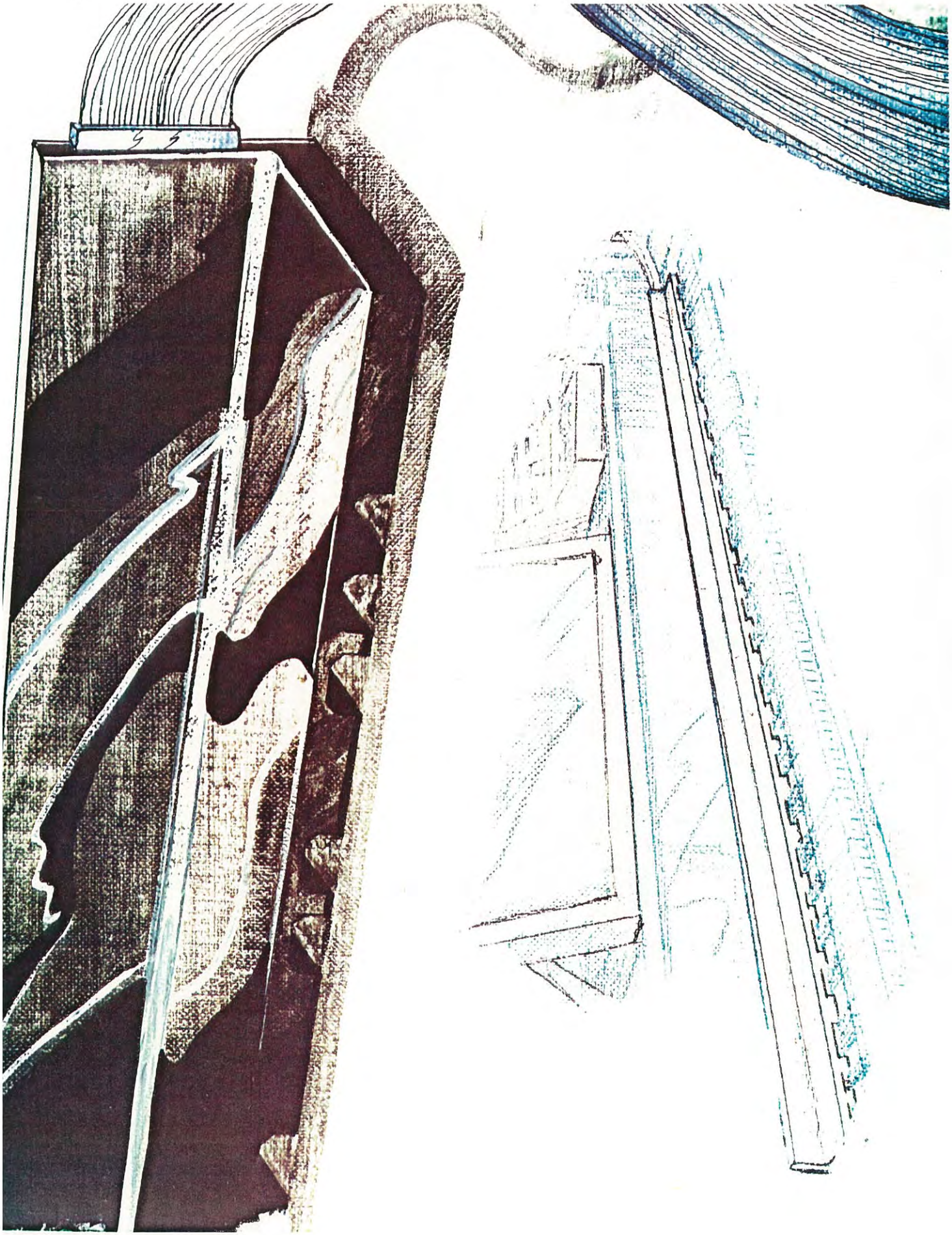
The following artist's illustration depicts the use of the Allegro Mentor by two (2) students performing in ensemble. Here, the Bach Minuet in G, as written for piano and violin by S. Suzuki, is seen displayed on the Mentor's screen.

The Allegro Mentor, due to its enormous graphics capabilities, is particularly well suited for ensemble use.



The following artist's illustration represents the keyboard interface adapter unit which allows any acoustical piano to electronically communicate with the Allegro Mentor's computer.

The flat blueish ribbon-like object extending from the upper-right corner of the illustration is the electronic cable (flat-ribbon tape) which connects the interface unit to the Allegro Mentor console.



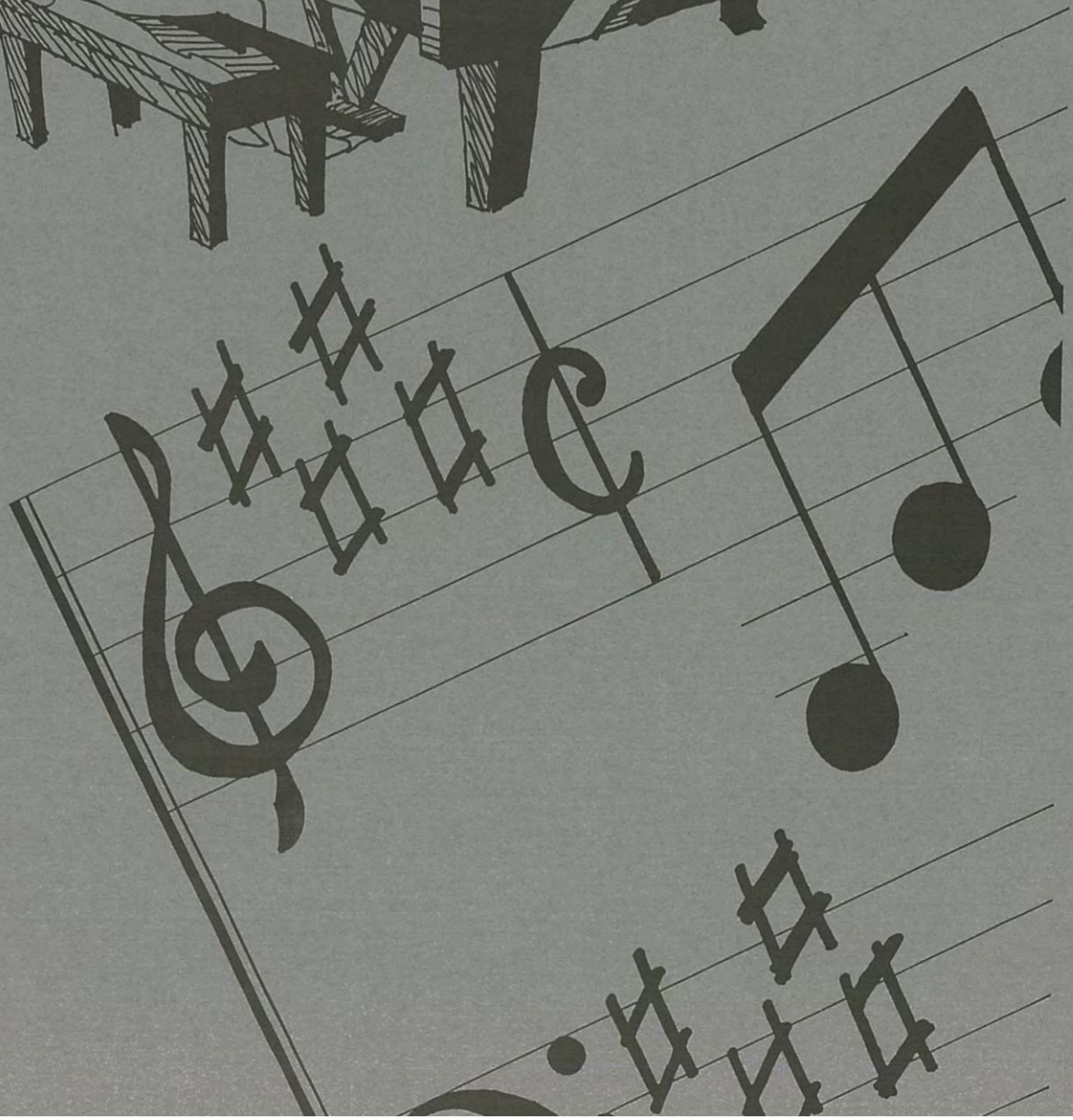
The following artist's illustration depicts young students gathered around one of the network terminals used in Texcon's institutional oriented classroom systems.


RDOYLE 97

ALLEGRO MENTOR

"THE LIVELY TUTOR"





LETTER OF PRODUCT ENDORSEMENT

Institute for Environmental Education
Co-sponsored by the School of Architecture and Planning and the College of Education
University of New Mexico, 2414 Central S.E., Albuquerque, N.M., 87106 (505) 277-2903

September 10, 1982

TO WHOM IT MAY CONCERN

I am writing this letter as an endorsement for the ALLEGRO MENTOR product system.

I am a professor in the School of Architecture and Planning, co-director of the Institute for Environmental Education. For the past twelve years, I have been doing research on the effects of the physical environment on learning and behavior of children and adults -- I am a classical and jazz musician, play in chamber music groups and have studied music at the Eastman School of Music in Rochester, New York. I also have a long history in the teaching field, teaching training, curriculum development toy design and computer aided instruction. There are many ways to teach music, rote memory, improvisation sight methods and so forth. The unique aspects of the Allegro Mentor, its interactive audio-visual capabilities, its quick facilitation of musical learning, compatibility with computerized instruction yet reinforcement of teacher interaction makes it unique in the field of child, adult piano instruction. The mentor acts as an extension and reinforcement to the teacher. The eventual price of the Allegro Mentor will make it possible and within reach of most piano afficionados. Its autotelic capabilities make it an extremely valuable and self motivating teaching tool. A child or adult can learn at his/her own pace, thus eliminating pressure of competition and support sound theories of individualized discovery learning. (Piaget, Montessori, Brunei and others.) The micro-computer capability makes the device appealing to today's contemporary learning mode, and one which is definitely compatible with the future of technological learning. It also combines the sense of sight and sound in an unusual way feedback method.

I have known Tom Thorpe, the Allegro Mentor inventor for fifteen years. He probably is a genius in his knowledge of circuitry and electronics. Coupled with his technical know how is his love and understanding of children, how they learn perceptual, build concepts and knowledge from concrete to abstract principles. He is also very dedicated to this idea and committed to its fruition.

As president of School Zone Inc., and Director of the Institute for Environmental Education I can heartily endorse the Allegro Mentor as an educationally sound piano teaching tool. I also am willing to give this product the School Zone Seal of Approval (an endorsing trademark similar to the Good Housekeeping Seal of Approval) as a top grade educational teaching tool for efficient musical learning.

I wish Tom and his colleagues the best of luck with this project.

Sincerely,

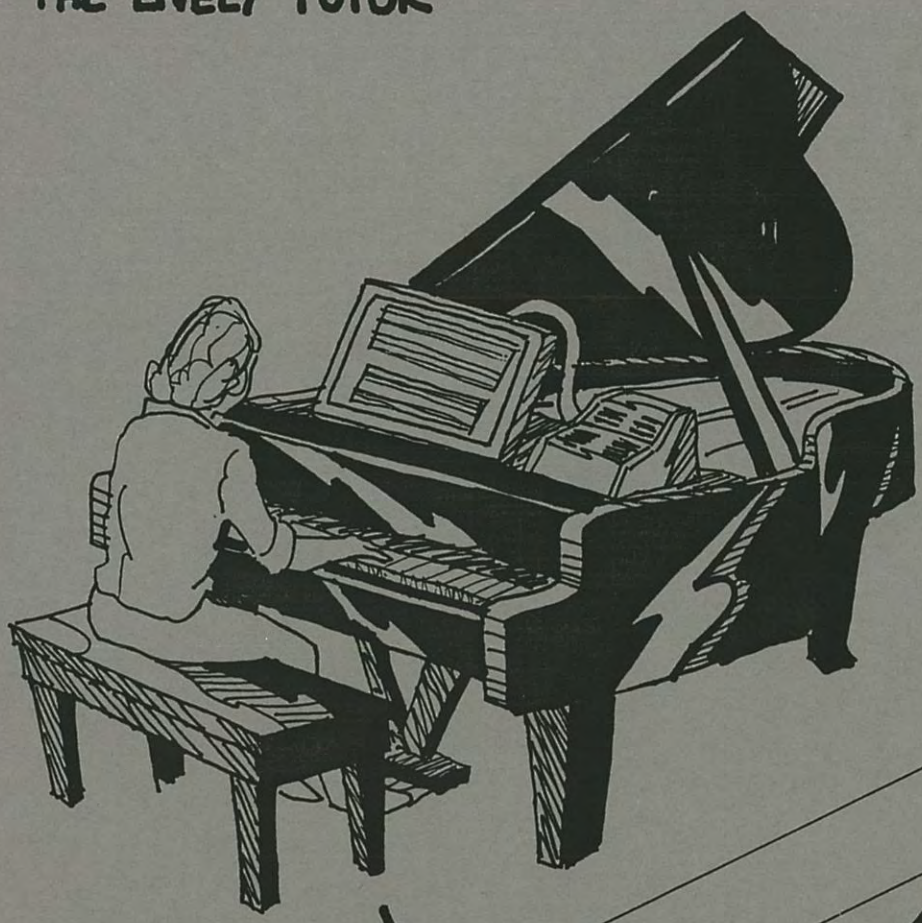
Anne Taylor

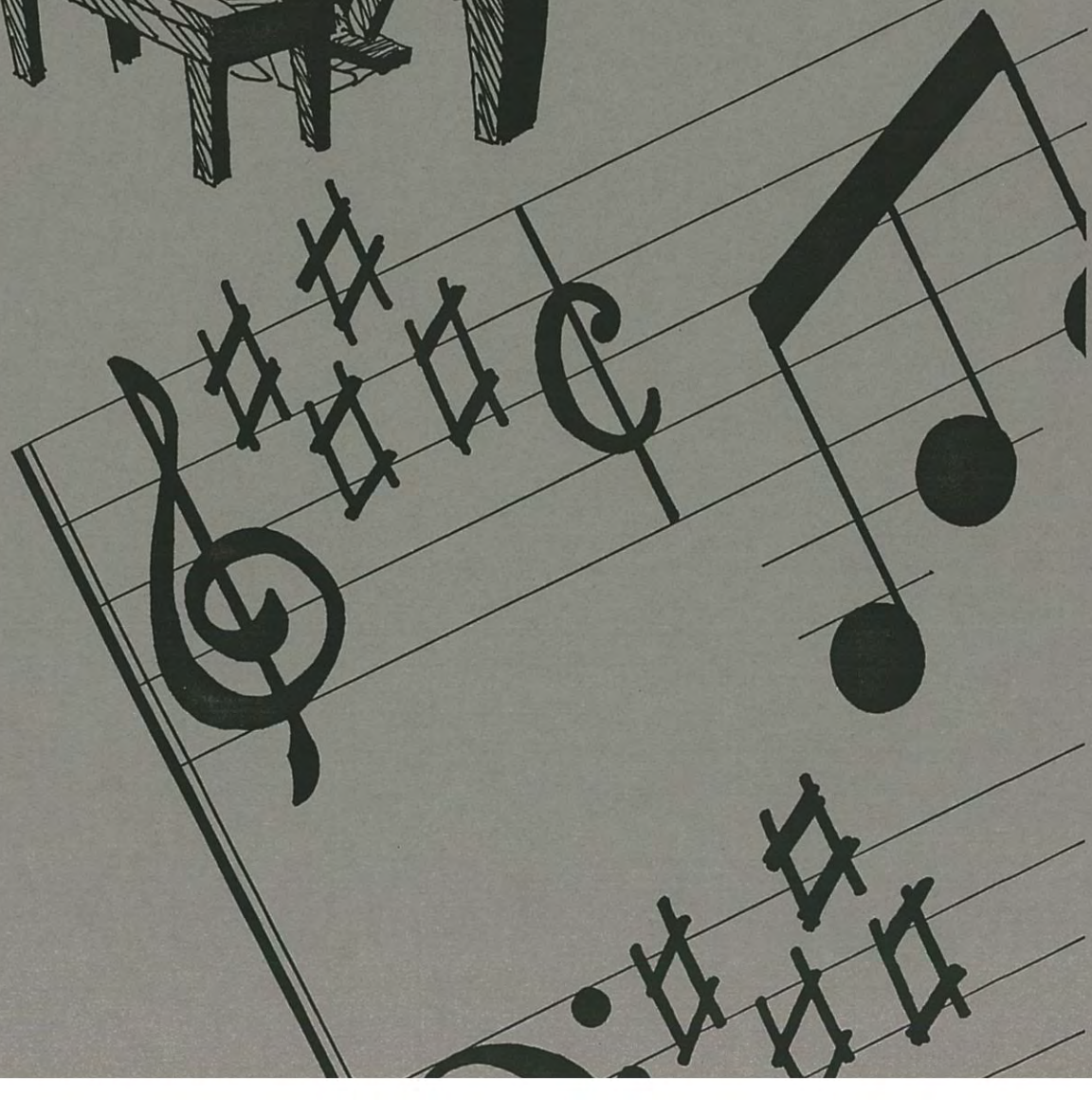
Anne Taylor, PhD
Co-Director
Institute for Environmental Education

AT:rs

ALLEGRO MENTOR

"THE LIVELY TUTOR"





MARKET POTENTIAL:
RESEARCH, EVALUATION AND PLAN

The following statements appeared in the November, 1980, Small Business Report. "Companies do not compete against other companies, nor do products compete against products. Managements are measured against managements, and strategies compete against strategies. Business is a contest of one management teams' ability pitted against anothers'. The losers of the 1980's will have failed because of a poorly developed and implemented marketing strategy. The winning team is the one that can best select the right facts, then weld these into a marketing plan and winning strategy."

The above has been quoted because it is the feeling of Texcon's management that along with the research and development phase of its Mentor product program, a formal marketing plan based on much solid empirical research must be completed.

Texcon has completed a good deal of market research as indicated previously herein which when coupled with management's personal visits to the major domestic keyboard instrument manufacturers, retailers, and the major music publishing companies, clearly indicate the presence of a market opportunity of a type and magnitude herein further described. Potential markets, their relative size, and the required resources to capture them have been defined. A formal analysis and subsequent plan will yield the necessary details to most effectively launch the Mentor product line as is consistent with profitability, efficiency, and cash-flow constraints.

The formal marketing plan, when completed, will identify precisely, the most promising business opportunities in terms of product specification and function mix versus market stratification. It will outline tasks and resources needed to success-

fully penetrate, capture and maintain desired positions in identified markets. The marketing plan will specify by product line and member thereof, and by targeted market, a complete list of MBO planned tasks, monitors, and time constraints which when properly delegated, executed, and monitored by the Texcon marketing department will accomplish the corporate sales goals. In part, the marketing plan will:

* Stimulate thinking within the department to better utilize company resources.

* Assign responsibilities and schedule work accordingly.

* Coordinate and unify efforts.

* Facilitate control and allow for the management's evaluation of the results of all activities.

* Create awareness of potential problems and/or obstacles to be overcome.

* Provide an authentic marketing information source for current and future reference.

* Facilitate progressive advancement toward corporate goals.

Among major topics to be included in the marketing plan are:

1. Corporate and divisional goals.

2. Corporate and divisional strengths and weaknesses.

3. The product.

A. Overview

B. Features, functions, benefits

C. Derivative (new product) potential

4. New product development; strategic planning

5. The market:

A. Precise demographic analysis of key customers.

B. Analysis of current (if any) competitors in terms of management, financing, track record to date, and potential threat.

C. Analysis of companies who have marketing channels or technologies which are allied to those of Texcon Corporation, and who might become swift future competitors.

6. Marketing objections:

A. Concentration on results yielding best cashflow consequences.

B. Long-term needs

C. Short-term needs

7. Marketing strategies

8. Marketing programs

9. Schedules and delegated assignments

10. Resource requirements

    A. Human resource requirements

    B. Budget

11. Risk

12. Controls

Appendix I to this section provides the reader with a schedule of market research activities and an analysis of costs relating thereto.

The following outline of market potential, research, evaluation and the plan, provides the basis and justification for the continuation of the project, both in terms of continued and increased expenditures, as well as the financial proformas as projected in a future section herein.

MARKET POTENTIAL

The potential of the Mentor product line may best be considered after reviewing the need for music in man's environment and a short synopsis of music education in the United States.

Need for Music:

Music activates our senses. One perceives the world through our senses: touch, sight, hearing, smelling. The quality of life that is an individual's to possess is dependent upon his refinement of his various senses. The refinement of our senses is developed through education and thoughtful reflection upon experiences. Music incorporates all of the senses, in various degrees, whether we find ourselves in the role of listener, performer, creator or artist. Music is the only art form (the possible exception being culinary art) to incorporate all of the senses. As an example:

Touch: The feeling of the vibrations comprising sound.

Sight: The viewing of a performer(s) in action.

Hearing: Listening to the sounds of the music.

Smelling: The smell of rosin when sitting close to a string quartet.

Music "is" and reflects culture. One major difference of a man compared to an animal is that man has a culture to enjoy and pass on to his offspring. All cultures have some uniqueness of self-expression. There are similarities as well as differences from one culture to another.

Music developes a respect for self-discipline. Whatever role we identify for our involvement with music—performer, listener, critic or creator—these roles require concentration through our senses.

Music is an AESTHETIC EXPERIENCE. The degree we react to an art object is directly proportionate to the degree we perceive it. Perception requires understanding through education and experience gained through participation.

Music Education in the United States:

Lowell Mason was responsible for music becoming part of the school curriculum in 1838 by teaching singing in the Boston schools. During the next two decades other cities followed. Early music education used the methods of the privately operated singing schools which flourished in many parts of the United States from the early 18th century into the 19th. Music in higher-education institutions during this period continued on an extracurriculum basis.

After the civil war, music education increased rapidly. Between 1865 and 1868, six (6) major conservatories were established. In 1870, music became a recognized course of study at Harvard University; professorships and college departments of music began to multiply at a fast pace. Teacher colleges began to train music teachers for careers within the public school sector.

The development of private music teaching as a profession is reflected in the founding of the Music Teachers' National Association in 1876. Emphasis in schools in the last quarter of the 19th century was given to sight-reading and the development of new teaching methods.

With the development of psychology as a science, early in the 20th century, educational procedures were re evaluated and re-constructed. There was a shift from artificial sight-reading

exercises to the "song approach"—the reading of notes learned through the reading of and listening to songs. Comprehensive high school level music courses were developed offering the student credits both for school activities and private study. During this time, too, the music appreciation movement developed as a consequence of the invention of the phonograph. Class instruction for violin expanded to other instruments. Many school administrators became supportive of instrumental music within the school after the first performance of the National High School Orchestra in 1926. In the 1920's and 1930's, the contest-festival movement helped establish performance standards for chorus, bands, orchestras, small ensembles, and soloists. The National Association of Schools of Music, as formed in 1924, served to further standardize performance and curriculum in schools.

Among educators who had considerable influence on music education, Hollis Donn influenced a generation of choral teachers at New York University; Peter Dyhema (Wisconsin and Columbia) and Karl Behrdens (Oberlin) contributed to music pedagogy; and James Mursull (Columbia) applied insight from the psychology disciplines. In post war years, educators from Europe and Japan have greatly influenced our approach to music education. Orff and Dalcroge have contributed to rhythmic and creative activities while Kodaly developed ear training techniques around the use of folk materials and Suzuki developed his method of teaching the violin to very young children.

Of late, socioeconomic changes in American life which have provided the individual with greater amounts of leisure time, have and continue to favor the growth of adult musical education and encourage the recreational use of music. Extension courses in music appreciation and other aspects of music, as well, are sponsored by colleges and community organizations all through the United States and all are quite popular. Group lessons in

piano, organ, guitar, recorder, and other instruments are available through the vast community college network nationwide. Adults take part widely in non-professional community orchestras, concert bands, choral societies, operettas, vocal and instrumental ensembles. Public libraries provide record listening facilities, maintain vast record libraries and lend records in the same way as books. There is a trend appearing which tends to influence more students toward the pleasures of music and musical knowledge as opposed to concentrating on ensembles in which relatively few are involved. Music education is seen, by the profession, as being in need of a logical and continuous plan through the decade and into the next. This is an encouraging sign for it indicates an awareness within the profession of the need for a continuous monitoring and re evaluation of means and objectives.

Current Market Opportunity:

Unfortunately, a paradox exists relating to the increased amount of leisure time individuals have today and the general socio-economic state of the country. Indeed, man now has more time which he can, in fact should, devote to the arts and the pursuit of AESTHETIC experiences. The economic base leading to the development and propagation of the technologies giving man this increased leisure time, however, is currently strained and will in all likelihood remain that way for the next several years. As a result, federal, state, and corporate budgets are being trimmed of all excess which is seen by some as fat. Generally speaking, within the context of budget analysis, the arts are the first to be perceived as such. Right now record numbers of music teachers are being let go from their public sector teaching positions while corporations are being forced to re evaluate their support of the arts. As is always the case though, every downside has an accompanying upside for those who are perceptive.

The upsides which serve to further ripen the Allegro Mentor as a viable, profitable, product, suitable for commercial

exploitation are:

1. Institutions must become more efficient in their teaching to a) reduce expenses, b) increase throughput in terms of student volume, and c) increase the standards of student achievement. Efficient administration policies and structures coupled with COMPUTER AIDED INSTRUCTION best serve this objective.

2. More and more of the ex-public sector teaching community is being absorbed into an expanding private sector music teaching community operating in many forms from large studios to a piano in a teacher's living room. With this movement, of course, is an attendant following of people who are able and willing to pay for musical instruction either for themselves or for their children.

3. THE FUTURE OF THE ENTIRE MUSICAL INSTRUMENT MANUFACTURING AND RETAILING BUSINESS DEPENDS ON PEOPLE CONTINUING TO ASSUME A PARTICIPATIVE ROLE IN MUSIC. Thus we have a multi billion dollar (domestically alone) a year industry whose entire existence and future depends on people's participation in music, participation in the sense of playing an instrument, for outside of collectors, few people purchase instruments just to look at.

4. In order for the domestic manufacturers of keyboard instruments to maintain their lead over sales of imported instruments in terms of sales volume, the price of the domestic units must be consistent with what the market will bear. As more foreign competition is introduced, the domestic manufacturers will be pushed to maintain or lower their prices. They cannot do that at the

expense of corporate profits, however. Thus, they must invest in new manufacturing technology and facilities which will allow for increased efficiency. At the same time, to take advantage of the economy of scale as provided by up-to-date manufacturing facilities, sales volume must be maintained or increased. More keyboard instruments must be sold by the manufacturers which means more effective selling at the retail level. Effective sales technique always concentrates on overcoming customer objections. IN SELLING PIANOS, THE MOST OFTEN VOICED OBJECTION HEARD IS "I CANNOT PLAY" OR "I AM AFRAID TO LEARN TO PLAY" OR "IF I BUY A PIANO, IT WILL BE FOR MY CHILD (CHILDREN), HOW DO I KNOW HE IS CAPABLE OF LEARNING TO PLAY?" The Allegro Mentor product line could become a very important component of an aggressive keyboard instrument manufacturer's marketing program.

Recently, Texcon Corporation's President and Corporate Counsel held discussions with the Director of Engineering and the marketing manager of the Baldwin Music Company in Cincinnati, Ohio. The day before this meeting was held at Baldwin's offices, the same management group visited with individuals of similar level and authority at the Kimball Corporation in Jasper, Indiana. These two firms currently produce, collectively, 80% of all domestically manufactured pianos. Both companies substantiate the above outlook; Baldwin Corporation amplified on each point to considerable detail. BOTH OF THESE COMPANIES INDICATED THAT EDUCATION IS CRITICAL TO THEIR SURVIVAL. Baldwin Corporation exhibited the most vision in these regards and is currently evaluating many different approaches, both to the more general concerns of music appreciation and understanding as well to the specifics of making the teaching of keyboard instruments more efficient, easy, and fun. In this connection, Baldwin Corporation has spent hundreds of thousands of dollars promoting its family music store concept. We believe Kimball Company to

be working on some new approaches to the problem, however, as yet they have been unwilling to talk to us regarding their developments.

The insights which Texcon gained through those meetings and subsequent tours through the two (2) companies' manufacturing operations and engineering facilities, clearly point out the direction that these two companies are taking regarding education and educational related products; neither Kimball nor Baldwin are developing or actively considering the development of a product or product line similar to the Allegro Mentor. Texcon learned that the reason for this was not a lack of confidence in the usefullness and effectiveness of the Allegro Mentor, but rather a lack of expertise in the areas of 1) education and the analysis of innovation within the field, and 2) microcomputer and/or digital electronics from both a hardware and software standpoint. It should be noted that both Baldwin and Kimball possess sophisticated electronic assembly capability in their organ divisions; however, the engineering departments are considerably lacking when the state of the art is considered. Both Baldwin and Kimball manufacture very good and well-designed electronic organ products; however, neither company possesses micro-processor design capability of any sophistication. Thus, for one of the companies to undertake the in-house design of a product as complex as the Allegro Mentor, whole new departments would, in effect, have to be organized and the resources devoted to make these operational.

Thus, marketing opportunities exist for the Allegro Mentor product line in the following areas:

1. OEM contract accounts (large contracts to manufacture the product for Kimball or Baldwin company under their name).

2. The institutional market such as universities, high schools, and various government sponsored recreational programs.

3. The private sector music teaching community such as "solo" teachers and music studios.

4. The individual (consumer) who either owns a keyboard instrument and wishes to become more proficient with its use or who wants his children to study the instrument. In this general category too, fall those people who have not yet purchased an instrument, but who might be induced to do so by the availability of the Allegro Mentor System.

These general markets, as outlined above, are available both domestically and abroad as well. Particular export potential is seen in Canada, Australia, parts of South Africa, and many European countries.

MARKET RESEARCH AND EVALUATION

I. Market and Product Research Findings

The Product

A. Initial Products, Student System

1. Control console with following options:

* Remote communications

* Printer option

* Dynamics option

2. Acoustical piano keyboard interface unit

3. Stand-alone simulated keyboard unit

4. Video modulator for use with standard television monitor

5. Series of programmed instructional materials on cassette format

6. Student workbooks for theory lessons and reference

7. Custom monitor configured for upright piano use

B. Initial Products, Teachers' System

1. Full control with complete option menu

2. Acoustical piano keyboard interface unit

3. Stand-alone keyboard units

4. Series of programmed instructional materials on cassette format

5. Student workbooks

6. Accounting software package

7. Quality printer for both music and accounting applications

8. Custom configured monitor for use with upright pianos

9. Encoder unit which will allow the teacher to produce their own programmed instructional cassettes for use by their students. Both music and voice will be recorded. Music will be entered via playing the piano and the results will be checked through use of the teacher's printer. (After a piece or excercise is played, the teacher may review it as printed on paper, thereby checking for accuracy and providing a chance to edit and/or further annotate the material.)

10. Electronic music transfer capability option which will allow teachers to transfer music between other teachers, students (who have the printer option), or central music data bank as may be potentially maintained by a music publisher or clearing house.

Product Life Cycle:

Each of the proposed products will be introduced at an appropriate strategic time which will in part be dependent on the competition and the market receptivity of previously introduced products.

Pricing will be in accordance with standard business equations wherein variables dealing with competition and the timing thereof are considered as well as the swift amortization of R and D, as well as up-front tooling and marketing expenses. Once front-end costs are recovered, the product cost may be dropped if greater profits to the company would be realized due to increases in volume and corresponding reductions in the costs of production, distribution and retailing.

Each of the proposed products will be in the introduction and growth stages of the product life cycle. This portion of the cycle, of course, possesses the greatest profit potential.

Positioning of Product:

In today's society of mass-communications and enormous media proliferation, the most effective way to penetrate a new market and increase sales is through proper "positioning." By positioning, we mean the exploitation of the psychological principles used by media advertising to create a window or hole in a potential consumer's mind and then filling it. There are numerous ways to position a product in a consumer's mind, but the easiest and least expensive way is to be first. As an example of demonstration of this principle, consider the performance and name identification of the following firms: Coca-Cola, Hertz, IBM, Kodak, and Xerox. Typically, the first company and/or product into common thought is almost impossible to dislodge.

The position, in the consumers' minds, for a low cost, computer based, in-home music instruction system is not presently occupied. The same holds true for institutional type systems. The Allegro Mentor product line, by being first and through the use of other positioning strategies, will obtain short-term and long-term success by creating and filling such a "positioning window". Historically, the first brand of a product into the

general thought of the market place, on the average, receives twice the long-term market share of the number two brand and twice again as the number three brand.

The Market:

A. Market Segments to be Addressed:

1. Adults with instruments already in the home

2. Adults purchasing a new instrument for their own use

3. Children (ages 2-18) with instruments already in the home

4. Children whose parents are buying an instrument so that their children may learn to play

5. Public sector classroom instruction (secondary and university level)

6. Private sector music studios and individual private music teachers

B. Market Statistics:

1. Pianos sold domestically and manufactured domestically:

1977	1978	1979	1980	1981
256,000	282,000	271,000	268,000	276,000

2. Dollar value of domestically produced and sold pianos sales (millions):

1977	1978	1979	1980	1981
346	412	452	476	498

3. 1980 - 18,188,000 Americans who are considered to be "amateur piano players."

   * 21% male

   * 79% female

   * Median age: 28

   * Median family income $\geq$ $21,000 per year

   * Average number of family members: 4

4. 1980 school enrollment (public sector)

   * K-8, 31.1 million

   * 9-12, 14.8 million

5. Of 1980 high school seniors:

   * 19.7% participated in band, orchestra or ensemble for at least three years during high school.

6. Music Teachers:

   * 120,000 total in United States who are actively practicing their profession

   * 70,800 - K-12, public sector

   * 22,000 - university level, public and private

   * 47,000 - Strictly private instruction (studio and home)

7. Number of schools in the United States, 1978-1979:

	Public	Private
Elementary only	61,000	12,000
Secondary only	23,000	2,500
Combined	1,500	3,300
University level	1,474	1,660

8. Students enrolled in music courses (other than band), in public schools for grade levels 7-12 inclusive:

	Year	Number of Students Enrolled
*	1948	2,500,000
*	1960	4,900,000
*	1972	6,111,000
*	1980	7,272,000

Competition:

1. The Allegro Mentor will be positioned in four (4) different areas:

   Area one will be as a low cost, in home, computer-assisted music learning and drill system for self-study. AS SUCH, THERE IS NO COMPETITION IN THE MARKET PLACE EITHER DOMESTIC OR FOREIGN.

Area two will be as a low cost, in-home, computer-assisted drill and learning device which is used with and serves as an extension of, the student's music teacher. AS SUCH THERE IS NO COMPETITION, EITHER DOMESTIC OR FOREIGN.

Area three will be as a low to medium cost network-based system for use by private music studios and musical instrument retailers who offer lessons to customers. In this case, a class-piano instruction approach is used. THERE IS NO COMPETITION IN THE MARKET PLACE, EITHER DOMESTIC OR FOREIGN, FOR THIS TYPE OF INSTRUCTION EQUIPMENT. Several companies offer electronic pianos which may be grouped together in a classroom and a master console may be used by the teacher for selective listening to any student's practice or performance. None of the Allegro Mentor features and benefits are available from such an approach, however. There is an interesting and somewhat successful (in the business sense) commercial adaptation of this approach which is available on a franchise basis and which is being used by piano retailers around the country. The system is called "WIZ-VID", and it promises to teach the student four (4) years of piano technique in 29 weeks. Unfortunately, however, it does not; nor could any system. The cost of the program is approximately $500 for 29 hours of instruction. It is taught, at the store or studio, to groups of up to six adults. The course is only available to those over fourteen (14) years of age. The lessons are given through the use of the above mentioned electronic piano systems approach in conjunction with a front-room screen onto which a 35 mm projector projects images of an instructional nature. The student does not receive any type of learning machine for his own use outside of the studio. This program has been analyzed by Texcon's staff of musicologists as well as two (2) consulting musicologists to Texcon and has been judged to have little merit from both an educational as well as a musical point of view. This program is basically a

"gimmick" and has been used as a loss leader to aid dealers in selling pianos. This system is not to be considered in competition with the Allegro Mentor product line.

The fourth position defined for the Allegro Mentor product line is institutional; i.e., public schools, universities, city programs, federal and state correctional programs, etc. One advantage to, say as for an example, a university level music student is that he can use the system in its classroom network mode for class piano instruction and he can "check out" or rent, from the school, a unit to take home. In the case of a student who does not have outside access to a piano, he may use the stand-alone keyboard option and practice in his dormitory room every night.

2. There are other "computer operated music systems", however, none of these have been designed to teach music theory or instrument technique. As one example, one could buy a $599.00 Radio Shack TRS80 color computer, connect it to his $350.00 color television set and then purchase and insert the $25.00 Radio Shack "music" cartridge into the system. After spending several hours trying to learn how to operate the system/program as did Texcon's management and engineering department, the user may then "write" a few types of notes onto a poorly defined staff and then these notes may be stored and "played back" in sequence. Along with the video playback of the notes on the screen, sounds, vaguely approximating musical notes as displayed on the screen, will be heard through the television's audio system. The system is extremely cumbersome to use and very, very limited in terms of functionality. This system along with any similar (if any) system(s) does not compete with the Allegro Mentor system.

3. The Allegro Mentor does not compete with the music teaching community. All steps have been taken to insure that the Allegro Mentor will be accepted by the music teachers and further, music teachers will be prompted to recommend to their students that they (student) buy one.

Trends:

1. According to the American Music Conference's recent survey, the number of amateur musicians in the United States increased from 31.5 million in 1970 to over 50 million in 1980. The long-term growth prospects in the music industry are greatly enhanced by increased leisure time as well as future favorable demographic and income factors.

2. As schools are forced to reduce their music programs because of budget constraints, consumers will need to consider private sector alternatives from whom music instruction may be obtained and/or pursue self-study alternatives.

As previously indicated, Texcon has defined four major market categories. For review, these are:

* OEM Contract

* Institutional Markets

* Private Sector Teaching Community

* Individual Consumer Market

To properly position the Allegro Mentor products within each of the above four (4) market places and not at the expense of reducing the effectiveness of the product in adjacent targets, would require the development of four specific product lines and associated marketing plans. This is, in fact, what Texcon has done. An integrated approach will be taken, however, where each specific targeted market is first addressed and analyzed in terms of:

1. Potential return on investment

2. Cost to cultivate

3. Time to cultivate

4. Cashflow considerations

5. Upsides and downsides in terms of image, risk and carryover into another targeted market.

Texcon Corporation has been working closely with two major music publishing firms, both ofwhich are servicing an international retail network consisting of over 3,000 retail outlets. Both of the major publishing companies maintain an aggressive group of field representatives who routinely, in fact daily, call on retail accounts (music stores, instrument stores, etc.). Both of the companies also maintain very large listings (in computer-generated mail list form) of private and public sector music teachers, as well as larger volume customers. Obviously, both of these companies have printing and graphics capabilities in-house and thus can produce advertising materials (brochures, flyers, etc.) quite cheaply.

Through Texcon Corporation's relationship with these major music publishing companies and as augmented by Texcon's visits with the major domestic keyboard instrument manufacturers and various sub contractors and vendors thereto, Texcon has gained insights which will enable the integration of product and marketing approaches and at relatively low cost. The result is an overall plan which addresses the four (4) targeted markets in a logical and orderly fashion and which will take advantage of the increasing momentum gained in one specific area and use it to further propell another. A summary of the marketing plan follows:

I. Develop a small-scale network system for use by Texcon Corporation for a series of controlled studies for the purpose of 1) "fine tuning" the system and curriculum and 2) developing a data base of historical results which can be used in various marketing companies. Using a scientifically monitored control and reference group, statistical data will be compiled in terms of the benefits of the system; i.e., a comparison of the learning curve (rate of progressive learning) of the group using the system with that not using the system.

During this phase, the consultation, advice, and the direct efforts of a select group of university level music and instrumental teachers as well as leading authors of piano method will be sought. The prime consideration during this phase will be the accuracy and legitimacy of the testing and analysis processes and procedures.

II. Implement a network-based system providing a class piano setting at a large local piano retail store. Several teachers will be trained in the operation and use of the system. A great deal of local media exposure will be gained at this point. Secondly, the retail store(s) will participate in media advertising which will bring in additional students (as well as instrument customers). Students will be enrolled and to those enrolled, the home unit will be made available. Extensive, accelerated instruction will begin and the results will be carefully monitored by Texcon Corporation's staff.

III. A contractural agreement will be reached with one of the major music publishing firms and a joint venture will begin wherein the music publishing firm and Texcon "team up" to advertise the product. It is envisioned that this process will begin approximately six (6) months prior to large scale production; thus allowing for changes and additions to be made to the product based on usage and customer input.

Texcon will have at this time a series of marketing presentation materials including films or video tapes which thoroughly describe the benefits of the product line both to teachers and students. Along with these marketing materials, Texcon will have one or more portable network-based systems which are packaged, suitcase style, for easy air transportation.

Through the use of the music publishing companies mailing list resource, pre scheduled seminar/workshops will be advertised. It is anticipated that Texcon Corporation could successfully stage three (3) demonstration presentations, on a pre scheduled and arranged basis, in major strategic cities, per week. Texcon has currently developed a plan utilizing four (4) employees on a rotating basis of two teams of two people which will allow presentations to be made in 75 key cities around the United States during the six-month period prior to the large scale manufacturing.

The key to the success of such a whirlwind presentation of the Allegro Mentor will be the organization of the effort and the support of the home office. The presentation will consist, in part, of a workshop during which time all attendees are asked to complete various questions relating to technical considerations (changes, additional functions, different operating modes) and marketing. The names of additional people (retailers, teachers, schools, students, etc.) who may be interested in receiving product literature will be requested. This feedback will be shipped via air express to the home office. The home office will have a department consisting of at least one person who will actively and aggressively follow up, through phone and letter correspondence, each sales prospect or lead.

Standard public relations techniques will be used to gain local media coverage at each presentation. As much as possible, these details are propagated downward to the dealer or retailer sponsoring the presentation. Long in advance of Texcon's arrival for the presentation, a press kit (information package consisting of photographs, narrative, marketing hype, etc., and instructions on how to use it and to whom it should be sent) will be delivered to the sponsoring dealer/retailer.

IV. The presentations staged by Texcon and as outlined above, will be participated in by a member of Texcon's musicology staff. All major institutions involved with music or which teach music will be contacted and invited to attend the seminar presentations as well. Our musicologists, having had both university administrative experience as well as graduate level and postgraduate level teaching experience, will be able to conduct the seminar/workshops with sufficient academic literacy and articulation as to maintain the respect and interest of this audience. Again, leads generated from this market segment will be followed up by the home office.

V. Texcon Corporation will attend as an exhibitor all of the three (3) major annual music teachers' conferences. Both an exhibition booth and a seminar/workshop will be provided. When possible, Texcon Corporation will deliver group addresses regarding computer-aided music instruction as well.

VI. The combination of activity generated as outlined above will stimulate a great deal of investigatory activity among the major keyboard manufacturers in terms of how they might acquire Mentor-like products to provide to their dealers as an aid to the dealer in selling more keyboard instruments. Texcon will be well established by this time in terms of having workable and producible hardware/ software. After some initial floundering and a couple of internal feasibility studies, each of the two (2) major keyboard instrument manufacturers, Baldwin United Corporation and Kimball Company, will be ripe for negotiations leading to an OEM contract and/or evaluation and feasibility study.

By following this strategy, Texcon develops and maintains a "position of strength" which will allow for the serious pursuit of such an OEM contract and on terms which are favorable to Texcon. Were it not for the strength Texcon will gain through this period of "marketing development" a company such as Baldwin or Kimball would insist on "exclusive rights" to the system thereby limiting Texcon's market potential and short-term growth potential. By remaining somewhat aloof to these companies at the beginning and by developing marketing channels and distribution mechanisims apart from these companies, but often times through their own dealers and point of sale outlets, a great deal of strength is acquired for Texcon.

Texcon has assessed the risk of these companies developing competitive type systems and has discounted the possibility of either Kimball or Baldwin introducing systems of their own in a time frame which could impact Texcon's success. The following reasons are offered as substantiation of this view point:

1. Neither company currently possess either the creative or technical expertise necessary to design such a system. In order to acquire the resources and people required to do an in-house development and then put together the management organization of such an endeavor, a minimum of two (2) years would be required.

2. Neither company has had the needed level of experience in the design, assembly, testing, packaging, and support of micro-computer, digital electronics.

3. Both companies possess large amounts of latent resistance to such an in-house development. Typically, this becomes manifest at the higher levels of management

and filters down through the engineering management to the senior engineer level. The root of this resistance is the education and experience level of management and the senior engineering staff. By no means do we wish the reader to believe we feel that these companies have sub standard engineering departments or management. This is not the case, for both companies produce a well-designed line of electronic organ products which make these companies leaders in their fields. There is, however, a very great difference in the electronics and technology used in organs versus that of the "digital" and "micro processor" worlds. Undoubtedly, each of the two (2) mentioned companies has one or more junior level engineers who has a very good understanding of micro-processor applications and its support areas of hardware and software. Here lies the problem. The junior engineer is at that level not because he has a lessor educational background than the senior staff; he simply is younger, more recently educated (in recent technology) and has been with the company for a comparatively shorter period; all the ingredients of a threat to those above him.

Neither Baldwin nor Kimball have to this day pursued the typical solution to this industry-wide problem; the solution brings to form an "applied technology" group which is charted to develop state-of-the-art products which fall outside the context of those traditionally manufactured by the company.

Texcon will use this phenomenon to its advantage.

SERVICE WARRANTY POLICY

The Allegro Mentor console consists of four (4) main components; a two (2) piece cabinet, one (1) printed circuit board, and a keyboard. The Allegro Mentor piano keyboard interface unit and the dynamics sensor unit are both single-piece items. The keyboard interface consists of a two-part molded plastic case and one single-sided mylar circuit board. Mechanical access of piano keys to the contact pads located on the circuit boards is gained by a series of nylon rods inserted through teflon bushings onto which a carbon impregnated rubber tip has been attached. The contacts are "self-cleaning" and the logical input to the interface circuitry is CMOS operated from a+ and -5 volt supply thus minimizing "noise" considerations. The electronic interface consists of a small electronic-circuit board containing buffer and interface logic. The Dynamics Sensor consists of a two-piece circular injection formed plastic housing within which a single circuit board is contained. Mounted to this board is the capacitive type transducer device. The outputs of both the keyboard interface and the Dynamics Sensor device are well buffered as is the input to the Allegro Mentor console thus precluding the chance of damage due to static electricity.

The console and all of its external options will carry a ninety (90) day warranty and, during the warranty period, the customer will exchange the unit for a new unit at the retailer. The retailer will return the unit to Texcon where it will be refurbished, packaged, and sold to the retailers as a new unit. This method has proved very successful with the mass merchandisers distributing the various video TV games.

After warranty, service will be performed on a factory direct basis with the customer mailing the unit to Texcon Corporation.

Texcon will service the unit within forty-eight (48) hours and return it to the customer. A flat fee will be established and the customer will include a check with the unit to be repaired. The fee will be in the range of $18.00 to $26.00, with extra charges being assessed for additional repair work not covered.

Warranty service will be required on approximately 2% of the units sold. The cost of the warranty will average $8.00 per unit or $1,600 per 10,000 units sold.

Out-of-warranty service will be a profit center.

ALLEGRO MENTOR OWNERS' CLUB

An integral portion of Texcon's marketing plan is the formation of the Allegro Mentor Club, with a monthly newsletter to be a vehicle through which end-users of the product will be constantly exposed to new product developments, add-on or "optional" devices and the catalog of available music or learning programs. Secondly, and as importantly, the newsletter will provide a forum through which the end-users, both students and teachers, may exchange ideas, results and new musical materials.

The Allegro Mentor Club will be an individual profit center of the corporation and it will be a means of encouraging the members to become more enthusiastic and involved, thereby exposing the product to new potential customers. This additional involvement will result in additional sales—both for "add-on" products and entire systems.

Another key function of the Allegro Mentor Club is to provide a direct telephone contact with the factory (or engineering offices) for questions relating to the equipment, operation, use, interfacing and trouble shooting.

EXAMPLE OF BENEFITS GAINED FROM AN OEM CONTRACT

The year of 1981 saw 276,000 pianos sold within the United States. Additionally, 133,000 organs were sold domestically during 1981. According to industry consultants, thirty (30) percent of these pianos and organs were sold to people who did not know how to play the instrument. Most of these people later sought instruction. These same consultants estimate that a twenty-five (25) to thirty-five (35) percent increase in the above yearly sales volumes could be realized if the objections of "Not Knowing How to Play" or "Being Fearful of Learning" could be overcome.

Seventy-five (75) percent of the pianos sold within the United States are manufactured domestically. The four (4) largest companies, in terms of market share, are Kimball, Aeolian, Baldwin, and Steinway (owned by CBS). Of these companies, Kimball Corporation commands sixty (60) percent of the total market. Thusly computed, Kimball Corporation sells approximately 165,600 pianos yearly to the United States market (exclusive of its Bosendorfer line). Recalling that thirty (30) percent of the pianos sold are sold to people who do not know how to play, Kimball alone sells 48,680 pianos yearly (4,050 per month) to people who do not play. Further, if Kimball could at the retail level, overcome the above two (2) objections (can't play and fearing learning), Kimball would sell an additional 16,560 pianos per year (1,380 per month). Kimball Company alone thusly generates 5,430 potential sales of the Mentor product each month for a yearly total of 65,160 such potential sales.

LEASE PROGRAM

It has been Texcon Corporation's observation that most teachers in the private sector are not necessarily in a financial position to justify their cash purchase of a system or piece of equipment of the magnitude of the complete teacher's system. Also, many potential sales of student systems could be lost due to the cash purchase price of the students' system.

For these reasons, Texcon plans to integrate a dealer leasing plan into its marketing program. This plan calls for financing to be arranged through one of the large credit corporations such as General Electric Credit Corporation or Control Data's Credit Subsidiary. An outline of the implementation of the plan follows:

A teacher having an acceptable credit profile and who is currently teaching a minimum number of students (such as 10) who would wish to acquire the Mentor, would be shipped one teacher's system plus the number of needed student systems (here 10). These systems would be sold to the teacher and upon final payment, all liens will be removed and title will be transferred to the teacher. The teacher will, in turn, rent or rent with purchase option, the student systems to each student. A monthly payment representing the rental fee will be added to the teacher's lesson fee. Once the devices are paid for, this rental fee becomes additional income revenue for the teacher, except, of course, concerning those students who rent with purchase option; on these, the teacher receives an up-front commission from Texcon.

This approach provides the teacher with numerous advantages and benefits as well as incentives to recruit and sign up additional students into the program. Among these are:

* The teacher's system contains a software package which handles monthly invoicing to the students as well as the teacher's routine business-accounting needs. The device will actually print out a monthly statement and mailing envelope complete with address and postage.

* The teacher receives commissions or bonuses from Texcon for each new student recruited into the program.

* The teacher has a unique system which can be used in the teacher's advertising which provides the teacher with what could be called "a competitive edge" in terms of gaining students.

* Once the financial obligation to the credit company is retired, the teacher receives all of the rental fees as additional income.

The Suzuki violin method as developed in Japan has been organized and spread throughout the United States by the Suzuki sponsored organization known as Talent Education America. To be sure, Mr. Suzuki developed his method of teaching violin to large numbers of very young children, for good and pure artistic and social reasons. The fact that Mr. Suzuki owns the largest string instrument company in the world cannot go unobserved, however. One of the key ingredients to the success of his company in terms of sales volume has been the company's adaptation of a program similar to that outlined above.

As an example, in Phoenix, the Talent Edcuation of America organization is represented by the Mandel Music Studios, Mr. Max Mandel, Owner. The Mandel Music Studio had over 275 students enrolled as of August, 1982. Of these, most rent the violin instruments from the studio. The average monthly cost of lessons with instrument from the Mandel Studio is thirty-five (35) dollars.

A breakdown of the financial incentive to the teacher follows:

Assumptions:

Teacher charges $22.00 per month per student*

Teacher's system $1,500.00, teacher's cost

Student's system $450.00, teacher's cost

Teacher's system finance term—36 months*

Teacher's system finance term—24 months*

Teacher has twelve (12) students rent system

Teacher has three (3) students rent/purchase system

Service contract fee - $150.00 per year

	Year 1	Year 2	Year 3	Year 4
Teacher pays Texcon (total cash out)	$4,025.00	$4,025.00	$ 650.00	$ 150.00
Teacher receives from student	$3,960.00	$3,960.00	$3,960.00	$3,960.00
Teacher receives from Texcon (commissions)	$ 202.50	$ 202.50	$ 202.50	$ 202.50
Teacher's Total Cash In	$4,162.50	$4,162.50	$4,162.50	$4,162.50
TEACHER'S PROFIT**	$ 137.50	$ 137.50	$3,512.50	$4,012.50

*These figures do not show an accompanying finance charge (interest) nor do they show an additional service or finance charge assessed to the student to offset that charged to the teacher.

**This figure, representing the teacher's yearly profits from the program, do not include the income tax benefits to the teacher. (Tax investment credit for major capital equipment, 7% lease and depreciation credits.)

Texcon's marketing research indicates that it is not at all unrealistic to expect a sizable number of students who currently pay 25 to 50 dollars per month for a lesson fee to assume the additional rental fee of the system. This analysis results from in depth interviews with music/piano teachers, instrument and music retail stores, owners of major private music studios and parents of children currently enrolled in music lessons and/or studio programs.

PRICING

The pricing structure of the Allegro Mentor will be influenced greatly by the marketing strategy and market segment of the product line. Prime consideration will be given to recovering Texcon's initial front-end costs as swiftly as possible. It is anticipated that the initial market-entry price schedule for the product line will be considerably higher than that contemplated after large scale production is in effect and sales efforts gain momentum.

A second major consideration to pricing and the feature benefit mix of the product line is competition. Currently, Texcon's management believes it to be advisable to maintain the higher pricing structure until competition begins to surface. Once meaningful competition is encountered, a general price reduction will be promoted by Texcon and advertising will be targeted to the new market segment made available by the pricing reductions. The competition will thus be at a disadvantage both from a sales and cashflow standpoint.

Another key to the pricing strategy is the add-on options, programs, and interfaces. These have profit margins ranging from 47% to in excess of 400%. The sales forecasts show the expected volume and margins.

18 MONTH FORECAST OF MARKET SEGMENT MIX

	Market Segment	Units Sold	Sales Price	Dollar Value
A.	Individual Consumer	1,800	@395	$ 711,000.00
B.	Consumer with private teacher	8,000	@395	$3,160,000.00
C.	Institutional Sales (Systems)**	30	@15,800	$ 474,000.00
D.	OEM Contract	7,200	@225	$1,620,000.00
			TOTAL	$5,965,000.00

AFTER MARKET CASSETTES

	Units Sold	Unit Cost	Dollar Value
Volume I	17,000	@14.95	$254,150.00
Volume II	15,000	@14.95	$224,250.00
Volume III	13,000	@14.95	$194,350.00
Volume IV	8,000	@14.95	$119,600.00
Volume V	6,000	@14.95	$ 89,700.00
Volume VI	4,000	@14.95	$ 59,800.00
Volume VII	2,000	@14.95	$ 29,900.00
Volume VIII	1,000	@14.95	$ 14,950.00
		TOTAL	$986,700.00

ONGOING MARKET EVALUATION

The first-year acceptance of the Allegro Mentor product line will provide a ready market for additional programs and upgrades. The established network of retailers and end-users will provide a myriad of options for further program developments and applications. Texcon Corporation foresees further cost reduction and enhancements in the Allegro Mentor console as technology advances and component prices erode through higher quantities and vendor capabilities.

Consistent with advancements in education, new options and curriculum will be developed.

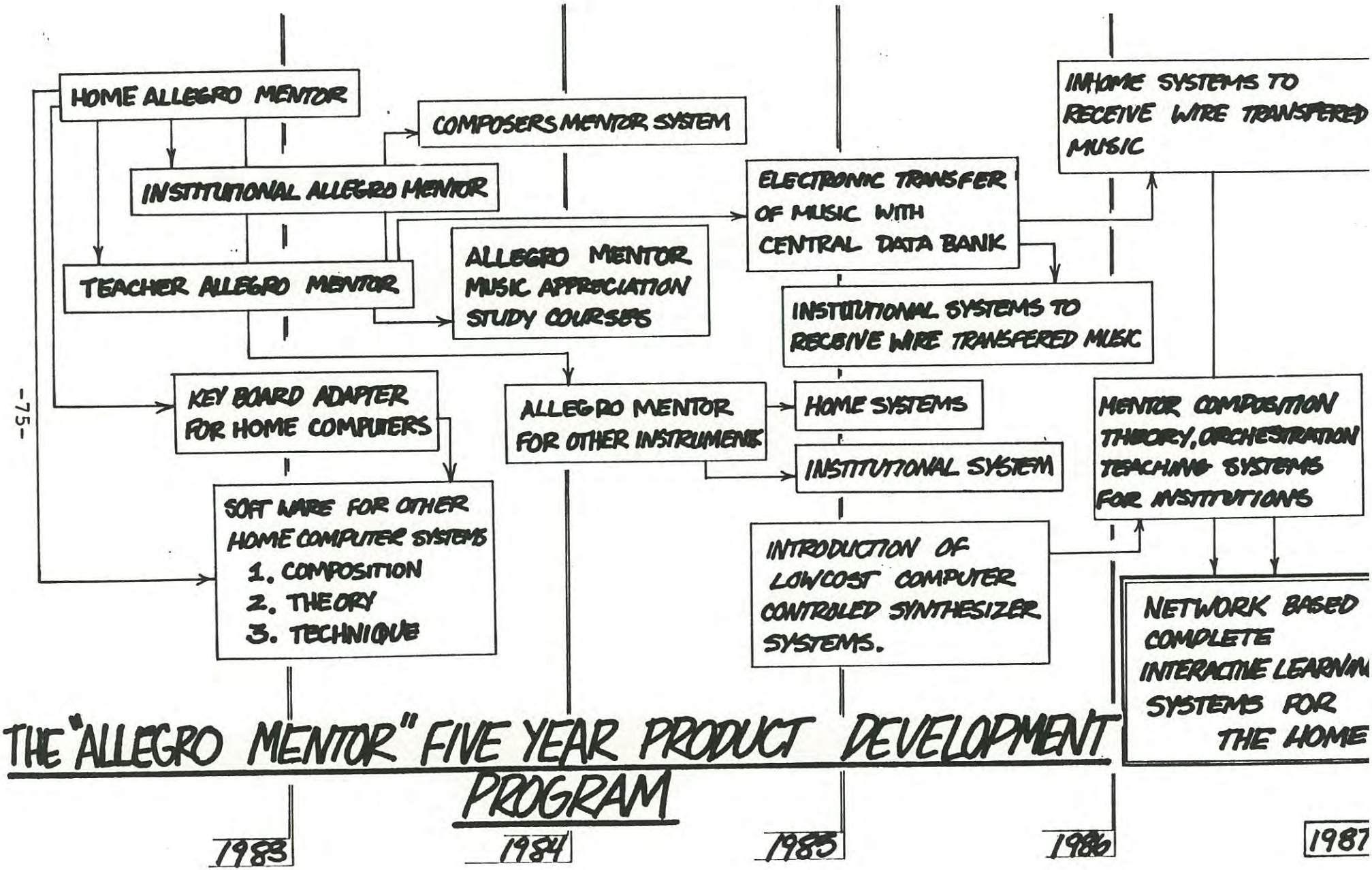
Trade shows and conferences will provide feedback on new equipment and innovations; Texcon will participate when feasible and further gain insight into the industry posture and trends in the market.

MARKETING COSTS

The costs associated with the Allegro Mentor Phase II marketing plan are listed below. The total marketing plan implementation will require additional salaried personnel in the field of music as well as support staff. It is anticipated that Texcon will bring Alvin and Audrey Marcus into the Corporation on a salaried basis at this point. In addition to the Marcus team, major expenses will be in the renting of a motor van, driver, and significant air travel and per diem. A projected budget follows:

Week	Activity	Cost	Cumulative
	Balance forward		.00
21-24	Van Rental	$ 500.00	
	Driver	1,250.00	
	Personnel Salaries	5,360.00	
	Air Fare	4,000.00	
	Administrative	1,000.00	
	Travel Expenses	2,800.00	
	Equipment Supplies	1,800.00	
	Brochures, Materials, Etc.	1,100.00	
	Gasoline, Van Maintenance	600.00	
	Sub total	$18,410.00	$ 18,410.00
25-28	Van Rental	$ 500.00	
	Driver	1,250.00	
	Personnel Salaries	5,360.00	
	Air Fare	4,000.00	
	Administrative	1,000.00	
	Travel Expenses	2,800.00	
	Equipment Supplies	1,800.00	
	Brochures, Materials, Etc.	1,100.00	
	Gasoline, Van Maintenance	600.00	
	Sub total	$18,410.00	$ 36,820.00
29-32	Van Rental	$ 500.00	
	Driver	1,250.00	
	Personnel Salaries	5,360.00	
	Air Fare	4,000.00	
	Administrative	1,000.00	

Week	Activity	Cost	Cumulative
29-32 (cont'd)	Travel Expenses	$ 2,800.00	
	Equipment Supplies	1,800.00	
	Brochures, Materials, Etc.	1,100.00	
	Gasoline, Van Maintenance	600.00	
	Sub total	$18,410.00	$ 55,230.00
33-37	Van Rental	$ 500.00	
	Driver	1,250.00	
	Personnel Salaries	5,360.00	
	Air Fare	4,000.00	
	Administrative	1,000.00	
	Travel Expenses	2,800.00	
	Equipment Supplies	1,800.00	
	Brochures, Materials, Etc.	1,100.00	
	Gasoline, Van Maintenance	600.00	
	Sub total	$18,410.00	$ 73,640.00
38-42	Van Rental	$ 500.00	
	Driver	1,250.00	
	Personnel Salaries	5,360.00	
	Air Fare	4,000.00	
	Administrative	1,000.00	
	Travel Expense	2,800.00	
	Equipment Supplies	1,800.00	
	Brochures, Materials, Etc.	1,100.00	
	Gasoline, Van Maintenance	600.00	
	Sub total	$18,410.00	$ 92,050.00
43-46	Van Rental	$ 500.00	
	Driver	1,250.00	
	Personnel Salaries	5,360.00	
	Air Fare	4,000.00	
	Administrative	1,000.00	
	Travel Expenses	2,800.00	
	Equipment Supplies	1,800.00	
	Brochures, Materials, Etc.	1,100.00	
	Gasoline, Van Maintenance	600.00	
	Sub total	$18,410.00	$110,460.00
	TOTAL MARKETING PLAN		$110,460.00

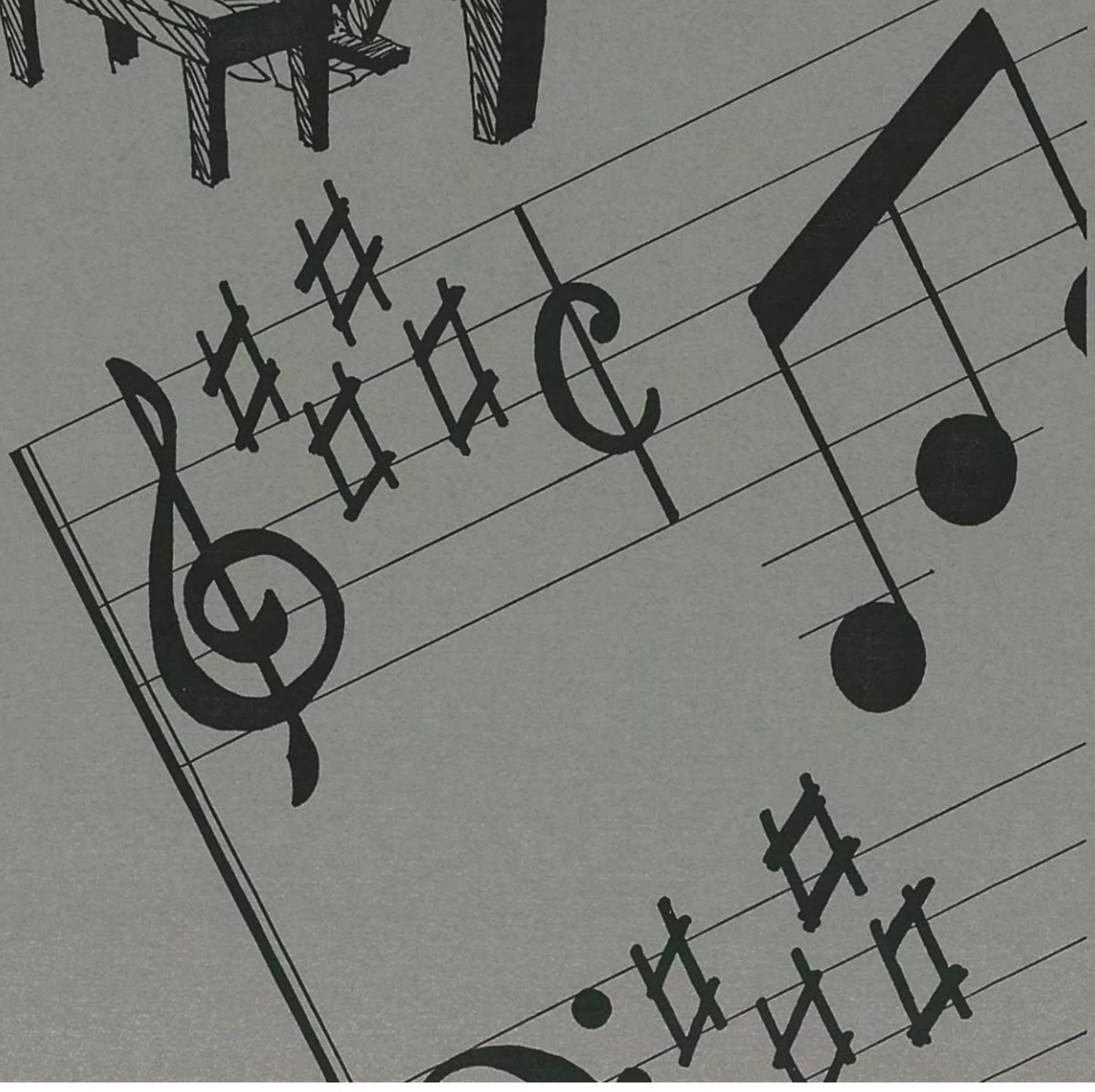


THE "ALLEGRO MENTOR" FIVE YEAR PRODUCT DEVELOPMENT PROGRAM

ALLEGRO MENTOR

"THE LIVELY TUTOR"





CORPORATE MANAGEMENT

Texcon's management believes strongly in the concept of the "incentive plan". Management believes that people work best on the incentive plan.

The common denominator of the incentive plan which is being implemented by Texcon is the link between a manager's or employee's performance with the type and amount of remuneration he receives in exchange for his work. Texcon is commited to a MBO management system (management by objectives). Thus, its operational management structure is highly organized and efficient. An overview of Texcon's management incentive plan follows:

Typically, overall goals in terms of new product development, market penetration, financial controls, production, etc., are established either from the CEO level or an executive committee. Those goals are then propagated downward through the vertical structure to the appropriate staff level whereupon they are evaluated and incorporated into an overall working plan. Resource requirements, scheduling constraints, cashflow considerations and market timing are considered; various venture simulation techniques are used the purpose of which is the analysis of probable results of decisions which relate to various combinations of the above mentioned problematic considerations and constraints. A series of alternative "action plans" are developed and evaluated against the requirements of the initial goal and its corollary constraints. The action plan is then further reviewed and normally, in the case of complex technical endeavors involving a multiplicity of divergent resources, a CPM (Critical Path Method) or PERT (Project Evaluation and Review Technique) analysis is completed and set forth in the form of CPM or PERT schedules. From this, resource requirements are definitively

identified, time constraints solidified and an entire MBO (Management By Objectives) program is organized. The plan may be reviewed with top executive management, funded, and put into action and monitored constantly for results.

It is at this point that the "incentive plan" comes in. The basic principals of MBO technique call for the identification of component tasks within the overall program, the identification of material and human resources necessary to perform these tasks, organization to relate or interface tasks of different orgin into an integrated whole and a method of progress review whereby each task is monitored and reviewed, constantly and consistently, to assure overall program integrity. If tasks fall prey to slippage, and this potential is known by the program leader far in advance of the task's Scheduled Completion Date, he can delegate action appropriate to the rectification of the identified problem(s) while maintaining cognizance of the overall program and the effect to the overall program which such contingent corrective actions may have. The key concept here, of course, is effective delegation. Delegation not in words but in real action.

The incentive plan requires that at the time the initial MBO program is finalized, its organizer, the program manager or department head or whatever the level, evaluate the program with his manager. A system of incentive rewards are discussed and agreed to by the parties involved. Typically, these consist of financial, promotion, corporate ownership through equity stock or stock options, or a combination of these. Here, an endless possibility for variation on the theme occurs. The rewards are contingent upon the performance of the manager or employees subject to the plan and as evaluated against the agreed to performance goals; milestones on the CPM or PERT serve as convenient monitor points. Thusly implemented, the amount of remuneration of the subject manager

or employee is now dependent entirely on activities over which he has total control.

In Texcon, as with any technically sophisticated company, an organization consisting of many different disciplines, each having input-output cycles and relationships of their own, is seen. The overall success of Texcon will be, of course, dependent on the level of efficiency and degree of contribution of each constituent group; i.e., marketing, production, engineering, finance, public and investor relations, personal, etc., and to an even greater degree, on how well the overall integration is managed.

Texcon Corporation's management has the depth of experience necessary to effectively manage this overall integration.

From the standpoint of efficiency and hence, profitability, it is imperative that Texcon be well-run and that its employees be highly motivated and thus productive. As important, however, is the company's continued existence and good health. The long-term survival of Texcon will be dependent on how well Texcon reacts to the market place in terms of market receptivity to its products and to its development of new products whose growth curves are timed to smooth out the volatility of other markets.

Any individual product line which is narrowly defined, will follow the typical "S" growth curve, at least for some time. Its market rises slowly at first and then steeply. As the product reaches full application, or some applications become better served by still newer developments, the market rise flattens out and eventually disappears. However, Texcon which produces that product, presumably will develop many others. Because of the existing product, Texcon will have come to know the market and, of course, it will have the product design and manufacturing capability to lead in providing successor products. The net

result of the integration of a large number of successful individual products rising and falling should be an even growth curve.

Texcon will be exploring new market opportunities. It is expected that initially new products will be in areas relating to the Allegro Mentor product line. This approach greatly reduces the amount of capital and time necessary to develop a marketing and distribution network required to capitalize on the new products. The corporation does intend to pursue growth by diversification into other non related areas as well. One means of meeting this quest of product diversification is through a rather innovative program which Texcon has developed for its employees. The program is known as Texcon's Employee Entrepreneurship Development Program or EEDP. A complete one hundred (100) page description of the program has been prepared and copied for all employees. If the reader is interested, he may obtain a copy of the program from Texcon's offices. A brief outline of the EEDP follows:

THE E.E.D.P.
GENERAL DESCRIPTION

A. Summary

The Employee Entrepreneurship Development Program, hereinafter referred to as EEDP, is a voluntary program maintained by Texcon as one means of product and market diversification. Through a system of committee review, new product ideas and corresponding market ideas are reviewed for consideration of development. Any employee, regardless of position or department, may be invited to make a presentation to the committee wherein he proposes his ideas as well as an action plan. Such presentations are encouraged by the committee to be as complete as possible. Technical, marketing,

production, financial and legal (trade or patent infractions, potential liabilities, governmental licensing, etc.) considerations should be addressed and answered. Sales forecasts, projected cash flows and P & L's as well as management schedules and controls are to be included. One, three and five year projections are required. In short, a business plan is the prerequisite of presentation.

B. Procedure

1. Presentation and Review

The presentation is made to the EEDP Committee. Copies of the business plan are distributed to all members for subsequent study and analysis. The EEDP Committee reviews the proposed new venture and measures it against a set of empirical values and considerations; a sort of conditional go/no go charter if you will. If the EEDP Committee considers the potential venture to be viable, the Committee so informs the contributing employee and within an agreed upon time frame. Comments are made relative to the proposed business plan. If the EEDP Committee feels additional information is required in order to complete the evaluation, every effort is made to make such a request in ample time for the contributor to prepare a response in compliance with the request prior to the decision date previously agreed to.

At this point, the proposed venture's future is completely subordinate to the test to which it has been subjected by the Committee. If the review process produces favorable results, an agreement is

entered into binding the two parties, Texcon and the employee, to legal terms and conditions which provide definitive accordances to each.

2. Design and Development

At this point, the contributor is authorized to begin Phase II. Texcon agrees to fund the project to the extent of providing sufficient resources necessary for the contributor (now a would-be entrepreneur) to complete Phase II. This phase, in essence, consists of the design engineering, prototyping, debugging and testing of the electronics. Sufficient mechanical prototyping is completed for 1) photography, and 2) the assembly of a fully demonstrable product or system which is suitable for trade-show or customer demonstration. It should be stressed that the entrepreneur is not conducting any of these activities on company time. His current company position is his first priority, disregard for this could constitute grounds to reject his venture's charter and/or dismissal from Texcon or division thereof.

Upon completion of Phase II, the committee, or its managing representative, reviews the venture's progress and evaluates its adherence to the seed business plan from which it grew. At this point, if the performance has been satisfactory to date, Phase III is initiated.

3. A New Entity

Phase III signifies somewhat of a major commitment on Texcon's behalf. Two significant things happen. First, the entrepreneur is phased out of his existing

position within Texcon and is now officially appointed director of a newly established division or entity through which his venture will be conducted. He receives a salary equal to some predetermined percentage of his previous salary. He has at his disposal the resources as projected in his business plan.

Second, Phase A of the program's marketing and production is begun. This is primarily a test of market response or, in the case of a program which is courting a large potential or a group of large potential customers, this is the dog and pony show and contract negotiations period. Upon the timely conclusion of Phase III, and after review by the committee's administrative representative, Phase IV begins.

By this time several things are apparent regarding the ultimate viability of the program. One prerequisite requirement of the business plan, and subject to the initial tests, is the inclusion of contingency plans. If results of Phase III are substantially below those forecasted, a decision may now be made to either continue the program with appropriate modifications or to enact the contingency plans. These plans allow for the liquidation of the program's material assets and residual value to the extent that costs may, at least, be recovered.

The decision may be to liquidate with great dispatch; the Committee representative works in close cooperation with the entrepreneur to limit downside liabilities. In the alternative, the decision may be to continue the program by activating Phase IV. Phase IV consists of an overall corporate commitment to launch the venture ahead and pursuant to the projected business

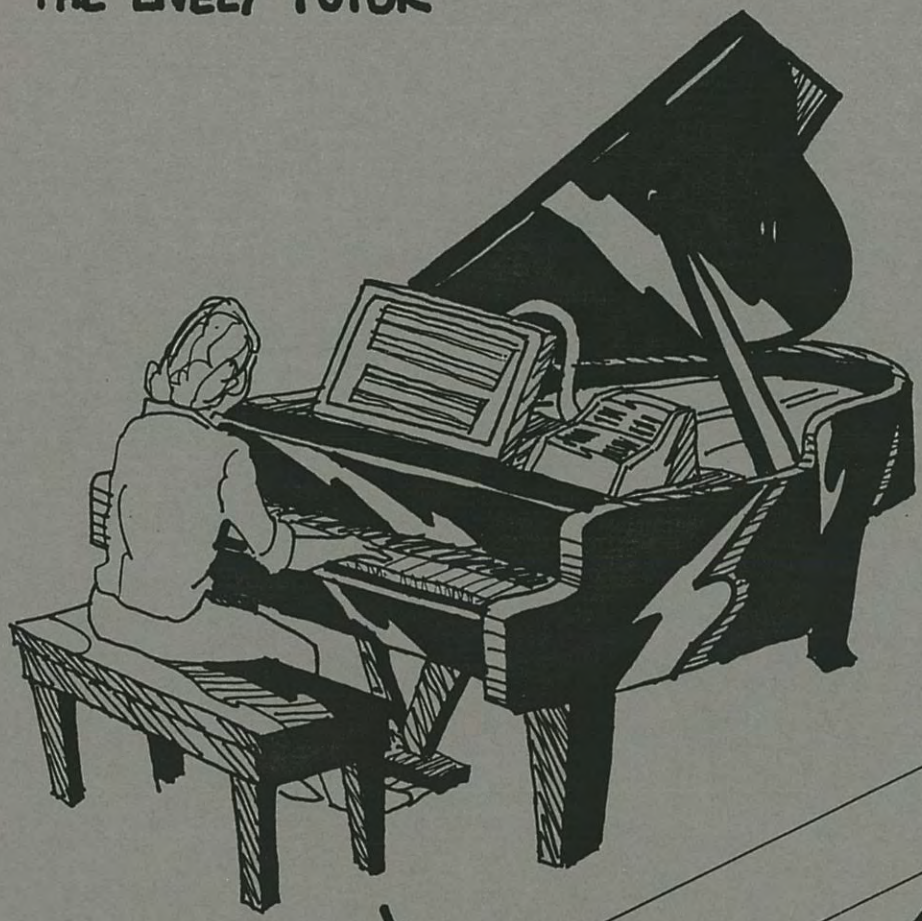
plan, plus, of course, any logical modifications which may have become necessary due to the surfacing of unforecasted events during the course of Phase I, II or III.

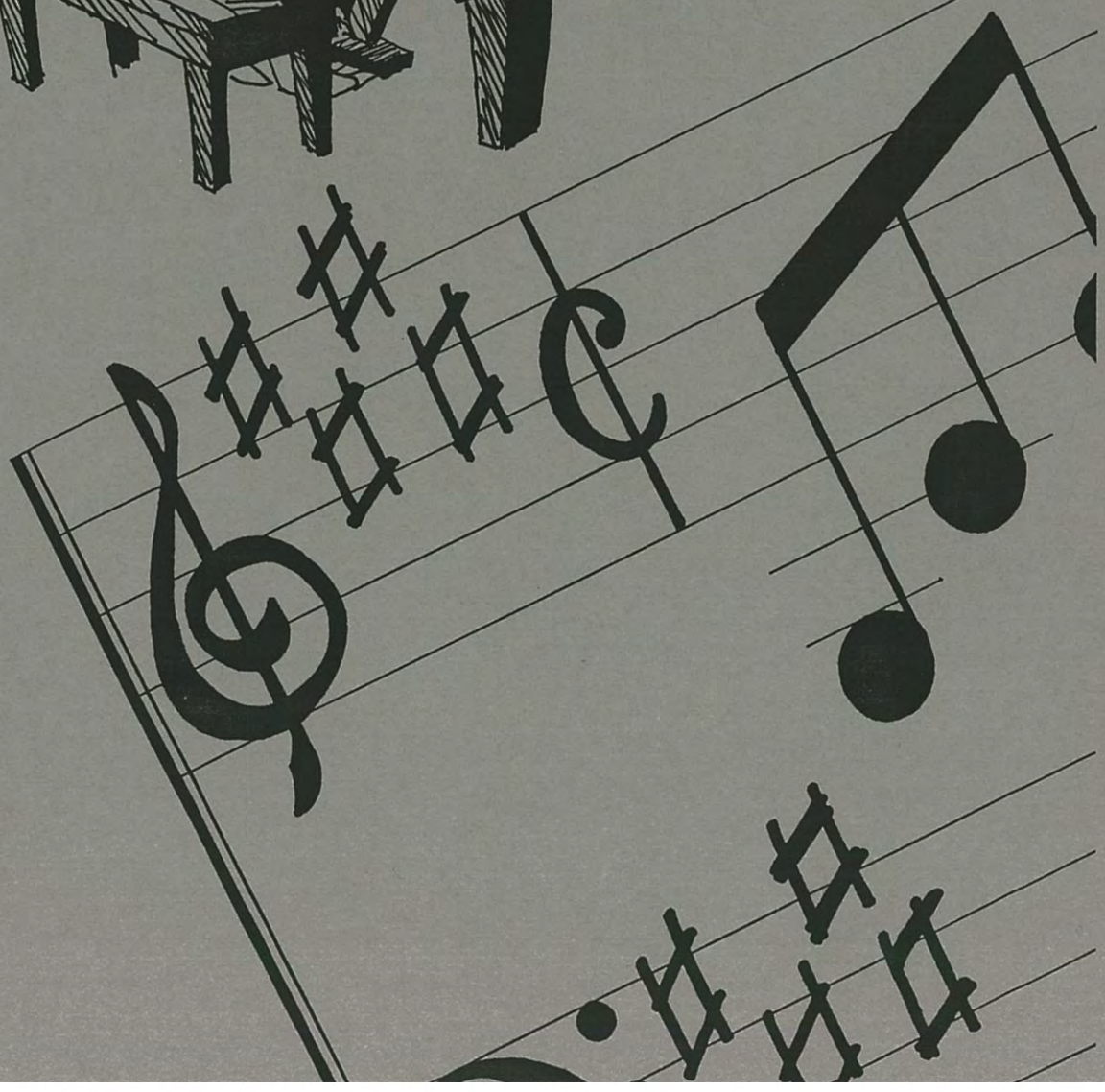
4. Production

Phase IV, in essence, is the final phase of the entrepreneur's venture. His business plan has been put into effect, inuring to the benefit of both the entrepreneur and Texcon. Although Phase IV is the final phase of the venture, the work and the rewards have only begun for the entrepreneur and Texcon. Like the parent corporation, Texcon, who played host to seeding and cultivation, the new venture has now matured to the point where it is self-sufficient and where it too must address its imperative of survival, good health, and continued growth. It too must count its cash daily, monitor its condition constantly to optimize its present position and develop the creative, innovative products and operating procedures which facilitated its birth and growth through its formative period.

ALLEGRO MENTOR

"THE LIVELY TUTOR"





DESIGN AND DEVELOPMENT PROGRAM

Development Status and Tasks

The following outline provides an overview of the current status of the Allegro Mentor product line:

The conceptual design of the Allegro Mentor product line has been completed. Special computer programs have been generated and tested on Texcon's in-house computer to demonstrate the ability to meet the product's performance goals. A prototype system consisting of an emulated student's console, an emulated teacher's console, and all external interfaces has been completed and is available at Texcon's offices for demonstration.

A material list has been compiled based on the conceptual design, and the products have been costed out based on a five thousand (5,000) unit volume as assembled over a period of one (1) year.

Mechanical renderings and semi-detailed, projected mechanical drawings have been completed for estimates on tooling and mold fabrication. A project evaluation and review technique (PERT) chart has been prepared and incorporated herein as well as a developmental budget.

The development of the Allegro Mentor product line has been thoroughly organized and planned; it awaits the implementation state.

The conceptual designs of the Allegro Mentor product line require that no new inventions or radical departures from presently available state-of-the-art technology need be developed. The engineering is a task involving the maximum knowledge of and use of state-of-the-art electronic principles and components. The low-cost parameters of the system will be met by the unique and highly efficient use of low-cost solid state memory and by the implementation of the latest generation of materials.

All major components and materials needed for the production phase of the project have been chosen after review of reliability engineering studies and failure analysis. Vendors have been analyzied in terms of financial capabilities and past performance to insure Texcon of the availability of components and materials when needed. All materials and components will be multiple sourced, that is, they will be available from more than one factory or vendor.

Both the hardware engineering and software engineering will be undertaken by Texcon as an in-house effort. Use of outside contractors will be held to a minimum and in no case will an outside contractor be involved with any portion of the design and development phase critical path.

The determining factors in Texcon's ability to meet its projected schedule will be the accuracy of its time projections and its ability to perform the hardware and software tasks in a timely manner consistent with the program schedules.

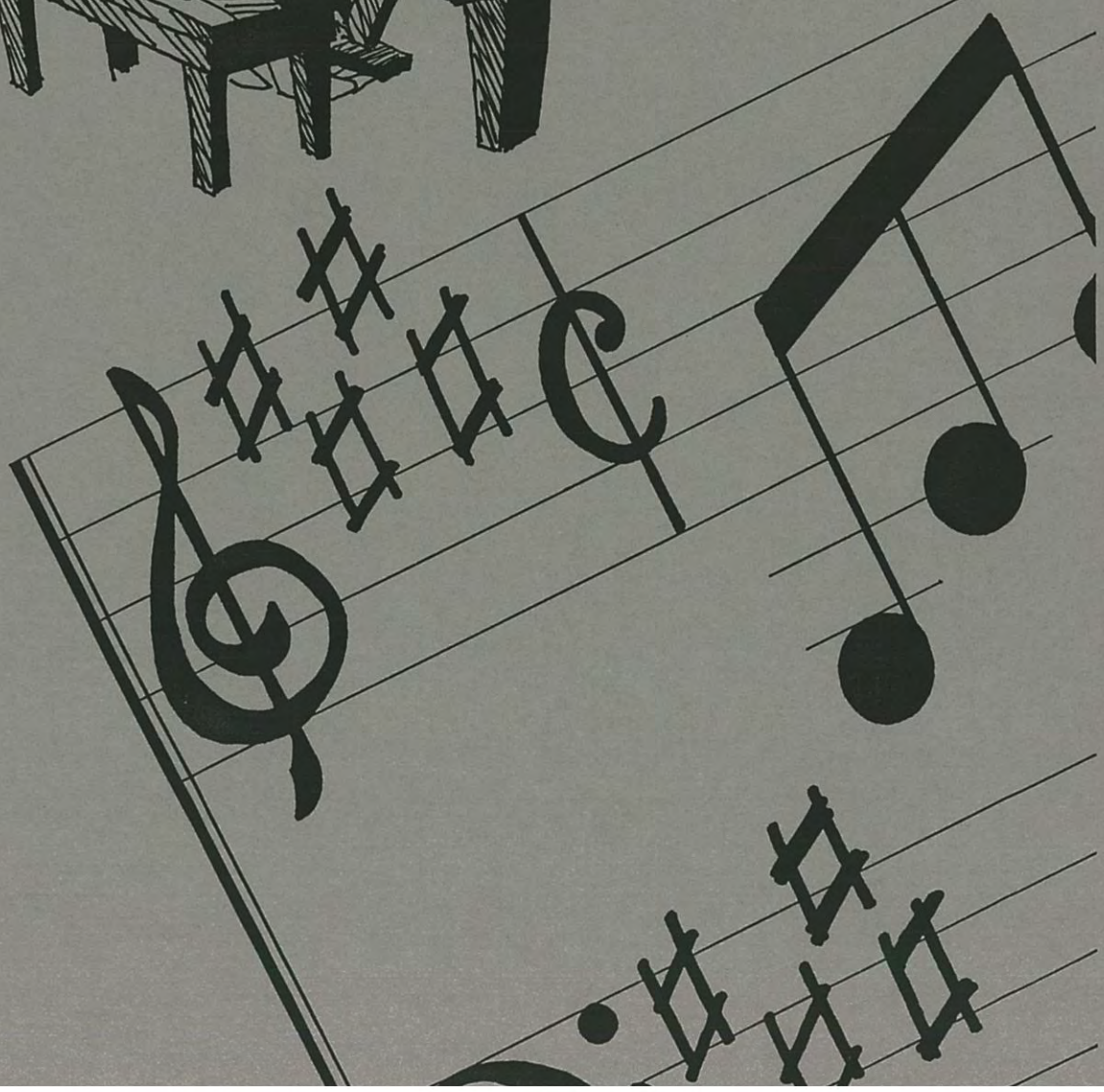
During the development phase of the project, the president of the corporation shall serve as the program manager thereby providing administrative, business oriented, leadership to the project's

development. The development phase of the project will be managed by objectives. Constant emphasis will be placed on the meeting of projected cost and time goals.

ALLEGRO MENTOR

"THE LIVELY TUTOR"





FACILITIES RESOURCE REQUIREMENTS

DESIGN FACILITIES RESOURCE REQUIREMENTS

The conceptual design of the Allegro Mentor Product has taken place at the corporation's 5555 East Main Street location in Mesa, Arizona. Texcon leases approximately one thousand square feet of air-conditioned office space at this location. This has proved adequate for the initial phase of the program in which the product conceptual design has been completed and the initial system prototypes have been built and tested.

The President of the corporation along with one system engineer and the group's secretary have occupied the space. The company has its engineering laboratory and computer system at this facility, along with a parlor-size full grand piano which is used 1) to write and test the musical curriculum, and 2) to be used in conjunction with the prototype electronics (hardware/ software) to provide a demonstration of the system concept and to allow for preliminary testing of the results gained by a student from use of the Allegro Mentor.

Upon the infusion of the comtemplated funds necessary to begin the development cycle of the Allegro Mentor product line, Texcon will relocate to a facility having approximately 3,500 square feet. The corporation is currently evaluating several possible sites at which they could relocate. The prime considerations in the final choice of a location are:

* Proximity to other electronic manufacturing and engineering firms as well as the typical assortment of contract-support services used by electronics firms (silk screen shops, circuit board manufacturers, drafting and artwork services, prototype assembly, metal fabrication, small-scale production, etc.).

This is an extremely important consideration for two (2) reasons: 1) The availability of competent and experienced employees at prices Texcon can afford, and, 2) Reduction of delivery time and costs required when working with sub contract vendors.

* Cost of lease and terms of Lease Agreement

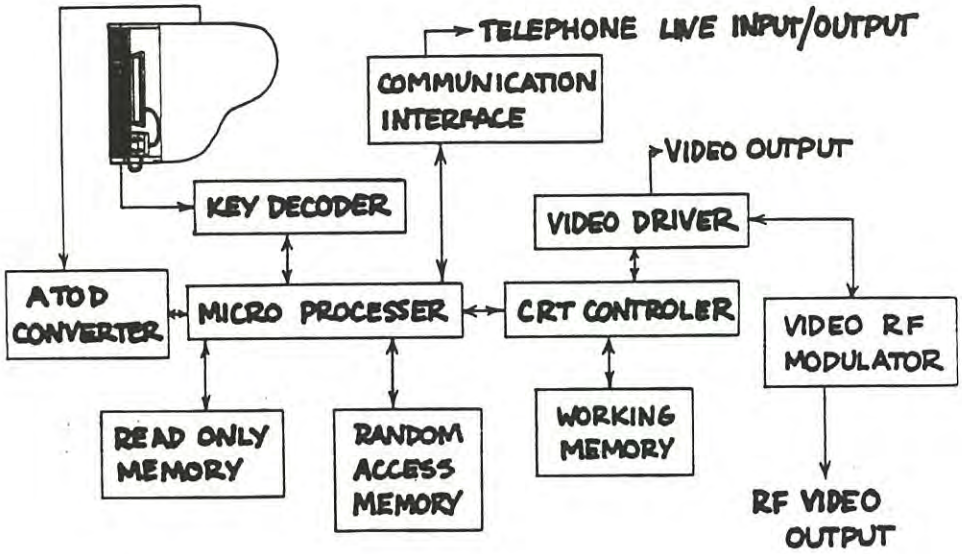
* Utility rate structures

* Growth expansion capability of building, thus reducing the number (if any) of times Texcon Corporation will have to move as the corporation grows.

* Financing available. This too is an important consideration for it affects the way in which the corporation will structure its capital base in future years.

Two areas currently under evaluation are the Hohokam Industrial Park, and the Scottsdale Industrial Airpark. This does not, however, mean that Texcon has excluded any other areas from consideration.

Texcon projects that space requirements will exceed ten thousand (10,000) square feet after its second year of operations; however, the corporation plans only to occupy eight thousand five hundred (8,500) square feet at the point of initial production. The 8,500 square feet should be sufficient to allow Texcon to meet its operating needs for the first eighteen (18) months of production.

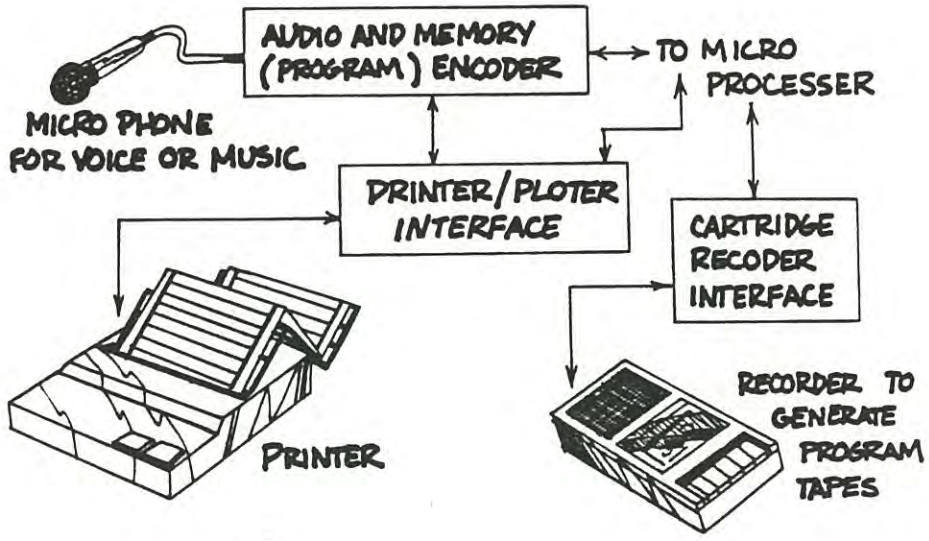


HOME SYSTEM

ALLEGRO MENTOR SYSTEM BLOCK DIAGRAM

TEACHER SYSTEM

SAME AS ABOVE WITH ADDED:



ALLEGRO MENTOR
Development Schedules

The following two (2) schedules provide clear indication of the activities or tasks which, when completed, will yield a complete production-ready package of documentation from which production of the Allegro Mentor Product Line will begin.

The first schedule is a "straight line" PERT or "milestone" schedule which is quite convenient to refer to for an overview of the development phase. Activities are listed in the left-hand corner and the projected date of completion is shown by the right most triangle. The distance from triangle to triangle represents the number of weeks within which the task will be completed. The numbers in the uppermost horizontal row indicate the week numbers starting from zero (0) and finishing at forty (40).

The second schedule provided is a CPM (critical path method) network analysis. This schedule and the accompanying four (4) pages of task itemization represents a far more detailed analysis of the engineering program. It is from this detailed analysis that time estimates and budget estimates are generated, analyzed, reviewed, and approved.

Note that the column entitled week number, on the task analysis sheets have not yet been filled in. This will be one of the first tasks to complete upon the initiation of the development program. In part, the actual week numbers will be a function of the human resource recruitment process and hence it is not advisable to label this attribute definitely until the program actually begins.

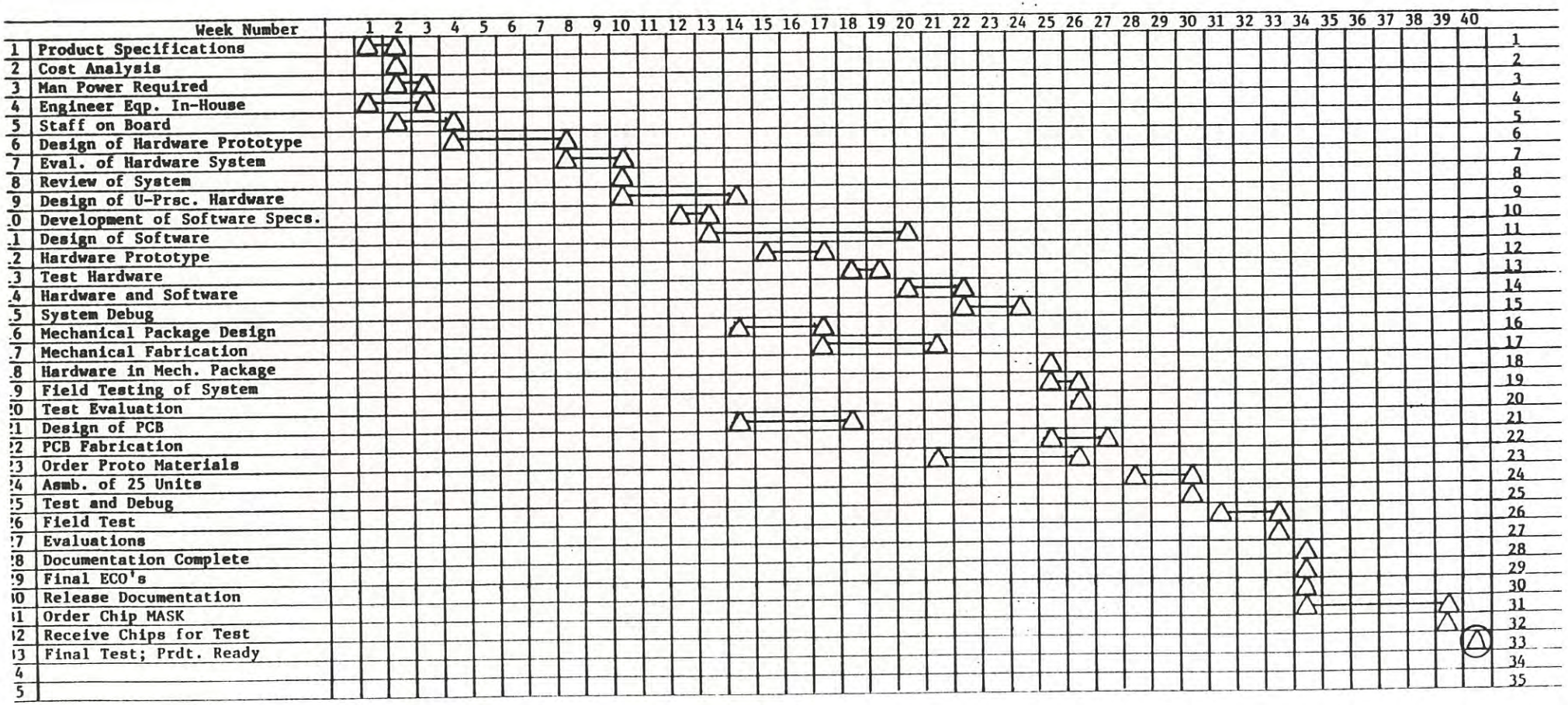
The lightly visible handwritten numbers on the CPM chart, represent float factors, optimistic, pessimistic and most

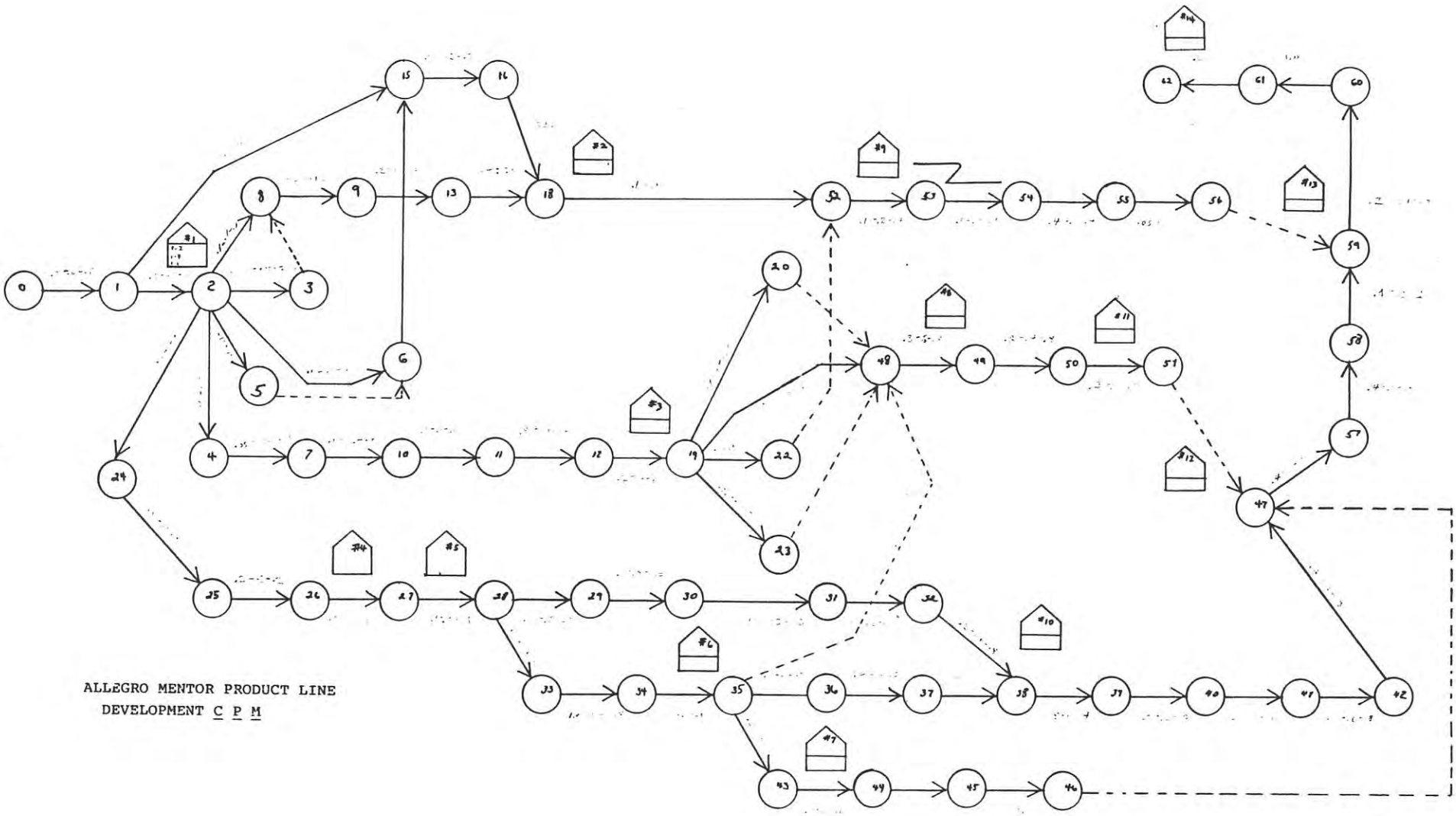
likely ratios which are factored into the development program planning equations prior to the completion of a definative schedule.

ALLEGRO MENTOR DEVELOPMENT

MILESTONE CHART

Allegro Mentor R & D Schedule





Prepared by:

Date: July 06, 1982

TEXCON CORPORATION ALLEGRO MENTOR
PRODUCT DEVELOPMENT CPM

	Initial	Date
Prepared by:		8-20-82
Checked by:	PL	8-27-82

Task Type	Activity Number	Task Resource Requirements						Week Number
		A.	B.	C.	D.	E.	F.	
Prepare Project Spec.	0-1	24						
Prepare Acceptance Spec.	1-15	8						
Optical Experiment	1-2	16	24					
Operator Display Menu	1-24	110						
Fabrication Drawing	2-8					40		
Generate Optical Parts List	2-3		10					
Generate Data Format	2-5		40					
Test Spec.	2-6		40					
Generate E.S. Test Spec.	15-16	8						
Format Optical Experiment Results	2-4		40					
Optical Experiment Conclusions	4-7		22					
Development of Electro/Optical Interface (Mechanical)	7-10	34	40					
Management Report	25-26	8						
Interface Display Approval	26-27	4	4					
Dummy Operation	3-8	0	0	0	0	0	0	
Basic Display Spec.	27-28	4						
Macro Flow Charts	28-29	220			140			
Display Hardware Design	28-33	120		220				
Arithmatic Functions	29-30	10			124			

TEXCON CORPORATION ALLEGRO MENTOR
PRODUCT DEVELOPMENT CPM

	Initial	Date
Prepared by:		8.20.82
Checked by:	RL	8.27.82

Task Type	Activity Number	Task Resource Requirements						Week Number
		A.	B.	C.	D.	E.	F.	
Interface Subroutines	30-31	200			40			
Produce ROM's	31-32	20			28			
Check ROM's and Listing	32-33	5			8			
Electronic Design	33-34	200		200				
Drafting	34-35				140			
Design Review	35-36	4	4	4	4			
Dummy Operation	35-48	0	0	0	0	0	0	
Mechanical Design	35-43	20				20	20	
Layout	36-37					8	80	
Fabricate and Assembly	37-38	100		200			10	
Test and Debug	38-39	160		16				
Debug and Layout	39-40	40		40				
Final Fabrication/Assmb.	40-41	10		28				
Electronic Final Test	41-42	38		38				
Mechanical Assembly	42-47			16				
Mechanical Design Review	43-44	4	4	4		4	4	
Mechanical Fabrication and Assembly	44-45			12			12	
Final Mechanical Assembly	45-46			80				
Dummy Operation	46-47	0	0	0	0	0	0	

TEXCON CORPORATION ALLEGRO MENTOR
PRODUCT DEVELOPMENT CPM

	Initial	Date
Prepared by:		8.20.82
Checked by:		8.27.82

Task Type	Activity Number	Task Resource Requirements						Week Number
		A.	B.	C.	D.	E.	F.	
Dummy Operation	5-16	0	0	0	0	0	0	
Dummy Operation	6-16	0	0	0	0	0	0	
Dummy Operation	16-18	0	0	0	0	0	0	
Parts Procurement/Tooling Mfg.	8-9	16		40			40	
Build Optical Support Structure	9-13		28					
Check Hardware for Optical Results Conformance	13-18	18	18					
Design Review	18-52	4	4	4		4		
Electronic Signal Specifications (COM)	10-11	4						
Design Signal Electronics	11-12	160		160				
Test Signal Electronics and Design Review	12-19	8		4				
Generate Signal Electronics Parts List	19-48	12		12				
Generate Signal Documentation	19-20					24		
Generate Signal Elect. Test Specs.	19-22	12		12				
Signal Elect. Data Format	19-23	12						
Dummy Operation	20-48	0	0	0	0	0	0	
Dummy Operation	22-52	0	0	0	0	0	0	
Dummy Operation	23-48	0	0	0	0	0	0	
Signal to Display Interface Design	48-49	120		40				
Interface Elect. Assembly	49-50			8				

TEXCON CORPORATION ALLEGRO MENTOR
PRODUCT DEVELOPMENT CPM

	Initial	Date
Prepared by:		8.20.82
Checked by:	RL	8/27/82

Task Type	Activity Number	Task Resource Requirements						Week Number
		A.	B.	C.	D.	E.	F.	
Interface Electronic Test/Debug	50-51	60		60				
Dummy Operation	51-47	0	0	0	0	0	0	
Test and Calibration	52-53	40		40				
Design Review	53-54	4	4	4		4		
Documentation Package Complete	54-55							
Documentation Review	55-56	2	2	2		14		
Dummy Operation	56-59	0	0	0	0	0	0	
System Intg., Test, Debug	47-57	16	80	16	0	0	0	
System Calibration and R.S.	57-58	16	16	16				
Final System Assembly/Test	59-60	8	4	8				
Design Review	58-59	4	4	4		4		
Burn in	60-61	20	20	20				
Field Impl.	61-62	8	2	2				

DEVELOPMENT COSTS

The costs associated with the Allegro Mentor R and D are listed below. Texcon's R and D costs to date are included. The total R and D effort will require engineering and management personnel as well as consulting personnel. In addition, new equipment and facilities will be required.

ALLEGRO MENTOR R AND D BUDGET/SCHEDULE AND MARKETING ANALYSIS

R and D Costs to September 20, 1982

Engineering Research Expenses:	
Travel	$ 1,800.00
Administrative	$ 7,577.00
Direct Engineering Expenses:	
Hardware	$ 3,300.00
Software	$ 4,500.00
Conceptual Design	$ 2,061.00
To Date Total:	$19,238.00

R and D Projected Continuation Budget

Week	Activity	Cost	Cumulative
	Balance Forward		$ 19,238.00
1-4	Equipment Acquisition	$ 2,200.00	
	Equipment Leases	1,800.00	
	Supplies	2,000.00	
	Facilities	900.00	
	Personnel Salaries	6,250.00	
	Travel (Technical Related)	1,500.00	
	Administrative	1,500.00	
	Sub total	$16,150.00	$ 35,388.00

R and D Projected Continuation Budget (Cont'd)

Week	Activity	Cost	Cumulative
5-8	Equipment Leases	$ 900.00	
	UL Consultant	2,200.00	
	FCC Consultant	3,000.00	
	Supplies	1,000.00	
	Facilities	900.00	
	Personnel Salaries	7,750.00	
	Travel (Technical Related)	1,500.00	
	Administrative	1,500.00	
	Sub total	$18,750.00	$ 54,138.00
9-12	Equipment Leases	$ 900.00	
	Supplies	2,000.00	
	Facilities	900.00	
	Personnel Salaries	7,750.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,000.00	
	Sub total	$15,050.00	$ 69,188.00
13-16	Equipment Leases	$ 1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	9,250.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,000.00	
	Sub total	$17,000.00	$ 86,188.00
17-20	Mechanical Design	$ 8,500.00	
	Consulting	3,000.00	
	Contract Services	5,500.00	
	Equipment Leases	1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	9,250.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,750.00	
	Sub total	$34,750.00	$120,938.00

R and D Projected Continuation Budget (Cont'd)

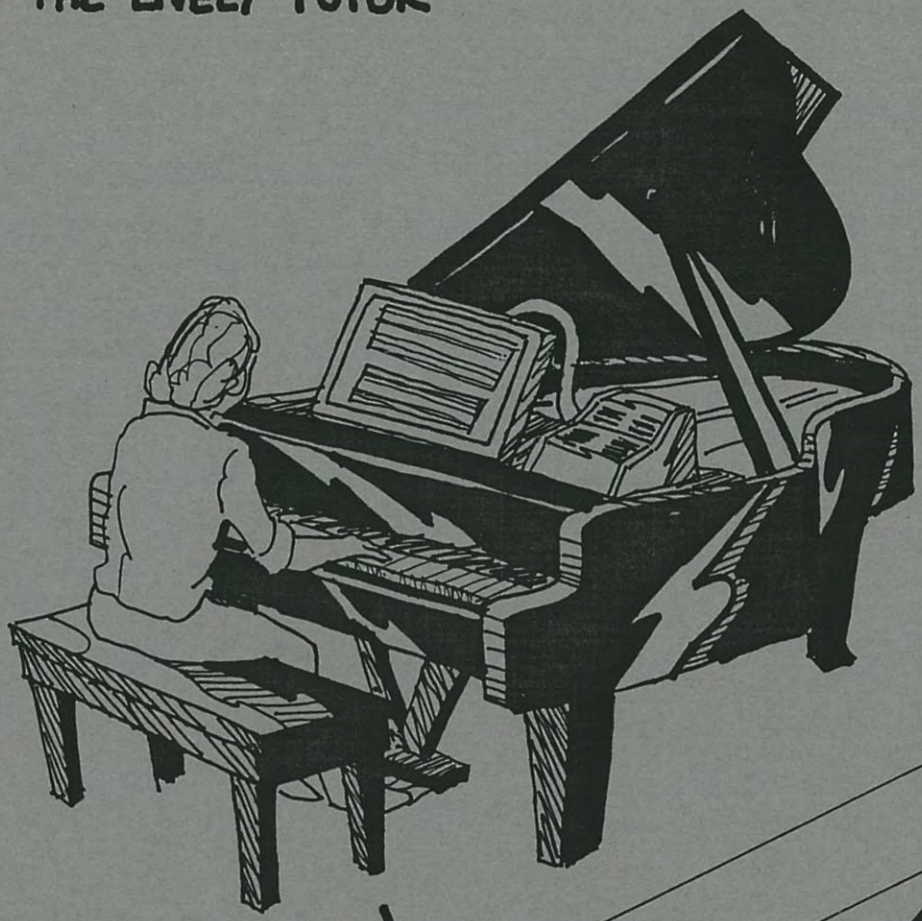
Week	Activity	Cost	Cumulative
21-24	Drafting	$ 2,200.00	
	Equipment Lease	1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	10,750.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,750.00	
	Sub total	$21,450.00	$142,388.00
25-28	Equipment Lease	$ 1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	10,750.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,750.00	
	Sub total	$19,250.00	$161,638.00
29-32	ROM MASK Charge	$ 2,500.00	
	Equipment Lease	1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	10,750.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,750.00	
	Sub total	$21,750.00	$183,388.00
33-37	FCC Approval	$ 3,000.00	
	UL Approval	5,000.00	
	Equipment Lease	1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	10,750.00	
	Travel (Technical Related)	1,500.00	
	Administrative	2,750.00	
	Sub total	$27,250.00	$210,638.00

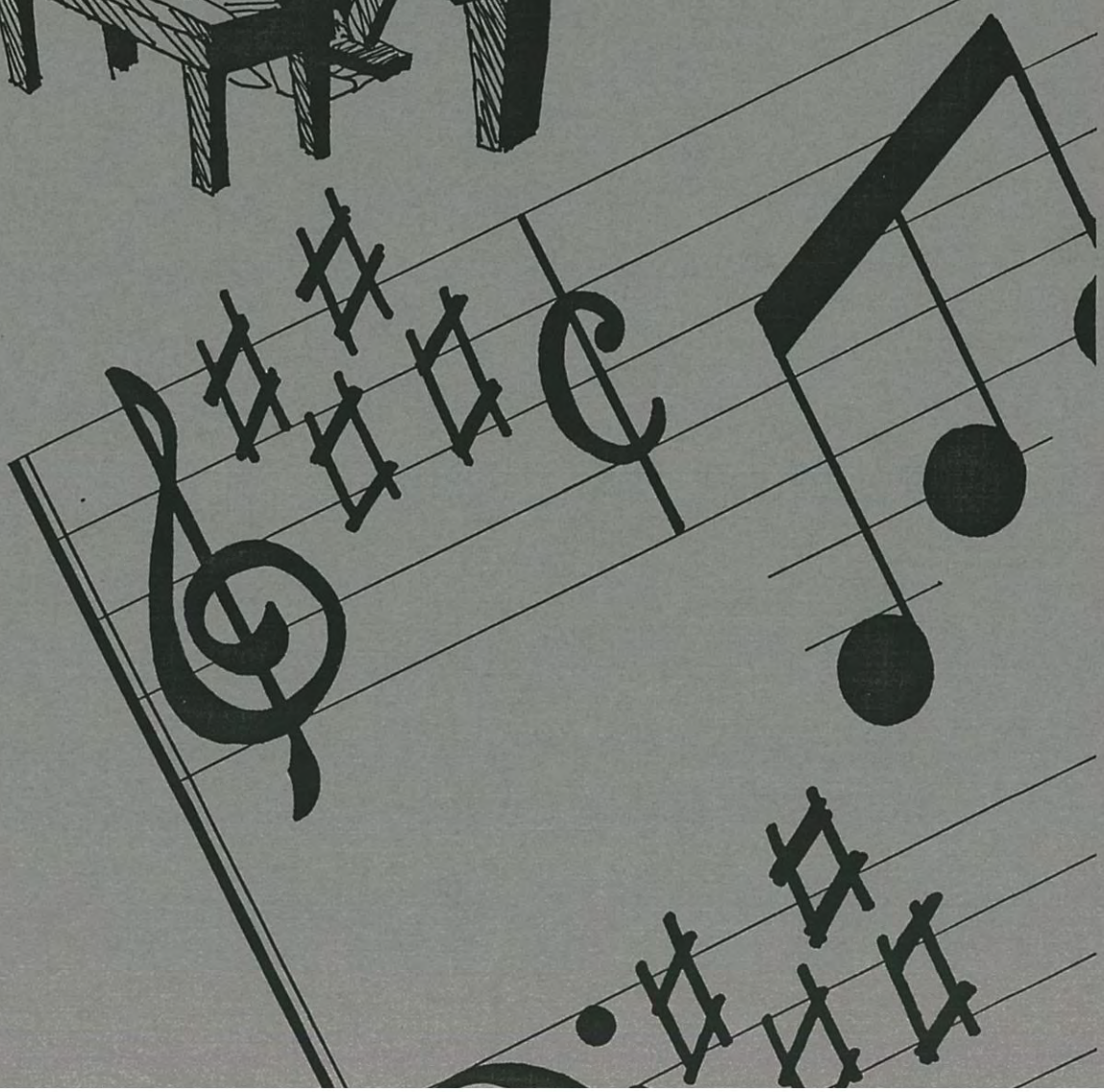
R and D Projected Continuation Budget (Cont'd)

Week	Activity	Cost	Cumulative
38-42	Equipment Lease	$ 1,350.00	
	Supplies	1,500.00	
	Facilities	1,400.00	
	Personnel Salaries	10,750.00	
	Travel (Technical Related)	1,500.00	
	Art and Photography	3,250.00	
	Package Graphics	2,500.00	
	Administrative	2,750.00	
	Sub total	$25,000.00	$235,638.00
	TOTAL R AND D		$235,638.00

ALLEGRO MENTOR

"THE LIVELY TUTOR"





PATENTS AND COPYRIGHTS

DESIGN PHASE
PATENTS AND COPYRIGHTS

The Allegro Mentor product line is a unique system of devices dedicated specifically to the teaching of keyboard instrument technique. The component devices are not adaptations of available computer systems products, but rather will be completely designed and engineered by Texcon Corporation to meet the targeted specifications. There are several highly unique aspects of the system and therefore there are a number of potential patents. Notable among these are:

1. Piano keyboard interface. This is the device which allows the standard acoustical instrument to "communicate" with with the systems computer.

2. Display device on which the musical staff(s) and notation appear and which is being designed to be placed on the instruments music rest.

3. Program cartridges and interface.

4. Telephone intercommunication circuitry.

5. Musical notation printer and driver circuitry.

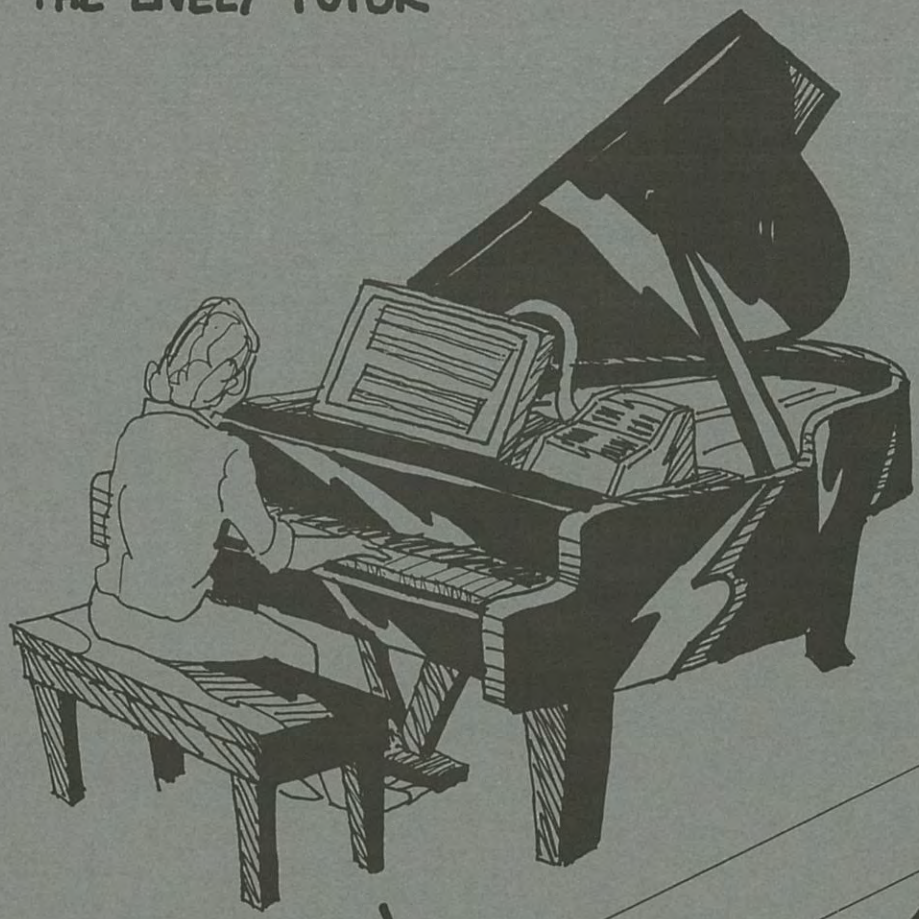
6. Console (computer) electronics.

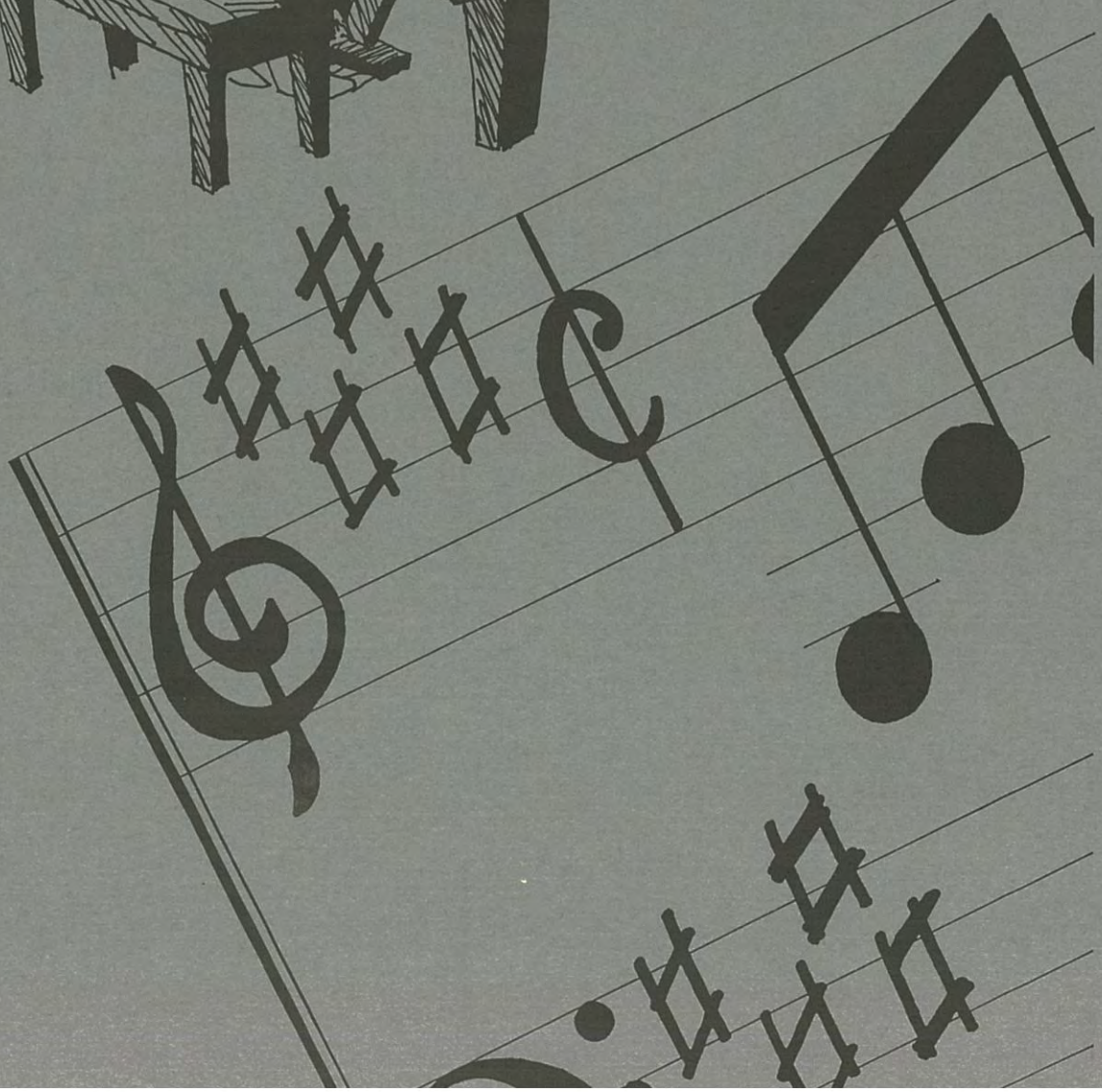
7. Systems concept for intended purpose.

It should also be noted that internal to the computer device resides "machine-level" software. This software provides the executive or overhead routines which allow for the device's internal operation. This software, along with firmware and PCB's, are copyrightable.

ALLEGRO MENTOR

"THE LIVELY TUTOR"





PRODUCTION

In the initial phases of production, the first six to ten months, Texcon Corporation will accomplish a significant portion of its production requirements through the use of sub contract services rather than be overly burdened by the overhead requirements of maintaining a production and production supervision staff; while production quantities are relatively low, analysis shows the use of contract resources to be more economical. As volume increases, production management and line supervision talent will be recruited and integrated into the corporation's operations.

In the beginning stages, Texcon will complete final assembly and all testing/diagnostics in-house. This means that Texcon will contract for the production of sheet metal components, molded plastic components, fabrication of electronic printed circuit boards, and the populating (stuffing of the components onto the circuit boards). These various items compose major sub assemblies of the product line. These sub assemblies will be constructed into the finished product by an in-house assembly crew and then the testing and diagnostics phases of the operation will be conducted by Texcon's T and D technician staff.

Final inspection and quality control procedures will be under the control of Texcon Corporation with the director of quality reporting directly to the President. As the corporation grows to a point where a Vice-president of Engineering is required, the quality control function will be subordinate to him (her).

Major components as well as sub assemblies will be ordered in quantities based on Texcon's yearly sales forecasts. A money purchase security contract will be given to major vendors for the entire yearly quantity, thus providing Texcon with significant volume price discounts. The contracts will provide for quarterly

adjustments of the delivery schedules and total quantities based on Texcon's performance in comparison to its projections. Typically, items will be scheduled, pursuant to Texcon's production needs, for monthly delivery. Terms will be Net 30 days from and for each such scheduled delivery. Texcon will divide the contracts between two (2) or more vendors to insure that failure of a single vendor to deliver will not impact Texcon's ability to meet its production commitments. Texcon will maintain a minimum raw materials inventory sufficient to meet two (2) weeks of scheduled productions.

As sales volume increases and economics justify, Texcon will begin a gradual integration of assembly personnel and/or automated assembly equipment into its operation.

The flow chart provided on the following page graphically depicts the production, quality control, and test cycles which Texcon Corporation plans to implement as it begins the manufacturing of its Allegro Mentor Product Line.

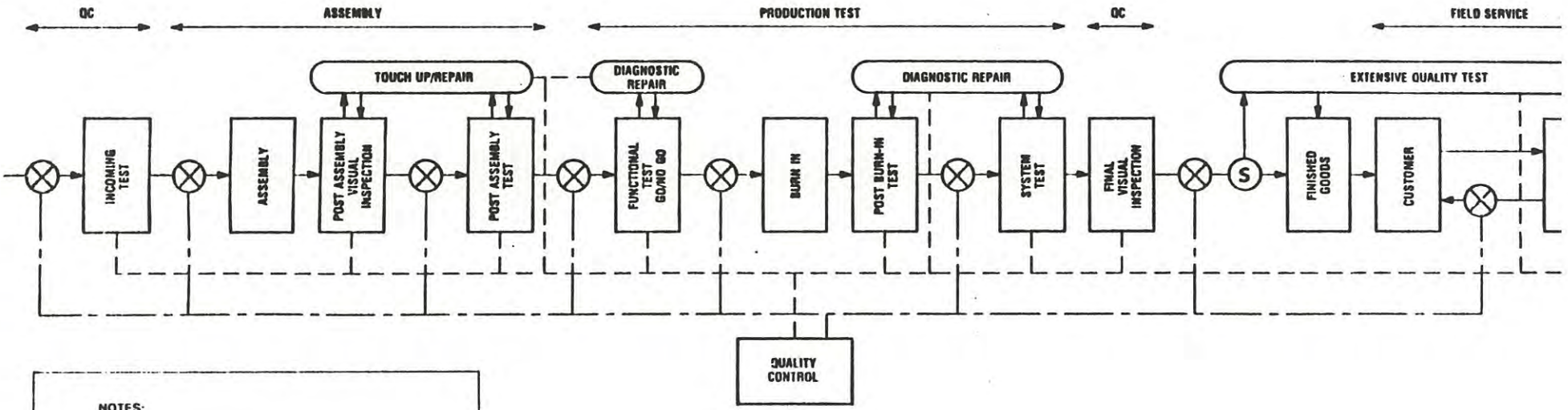
By implementing a judicious mix of automated assembly processes, automated test and diagnostic processes and procedures, and human resources of a skill level appropriate to the particular task, maximum throughput in terms of finished goods will be accomplished in the minimum amount of physical space and accompanying overhead.

The flow chart may be compared to table number 5.01 contained in the financial projection section of this document for a more complete view of the resource requirements redundant to support such a factory line. Table 5.01 is a schedule of projected human resource requirements relating to the operation of the company once production of the Allegro Mentor Product Line begins. Specifically, costs associated with the Product Test-Flow Diagram are reflected in the following categories:

A.) Manufacturing Manager	B.) ATE & D Dept.
C.) Production Engineering Dept.	D.) Materials Handling Dept.
E.) Shipping Department	F.) Assembly Department
G.) Quality Control	H.) Service Department

PRODUCT TEST FLOW

Allegro Mentor Product Line

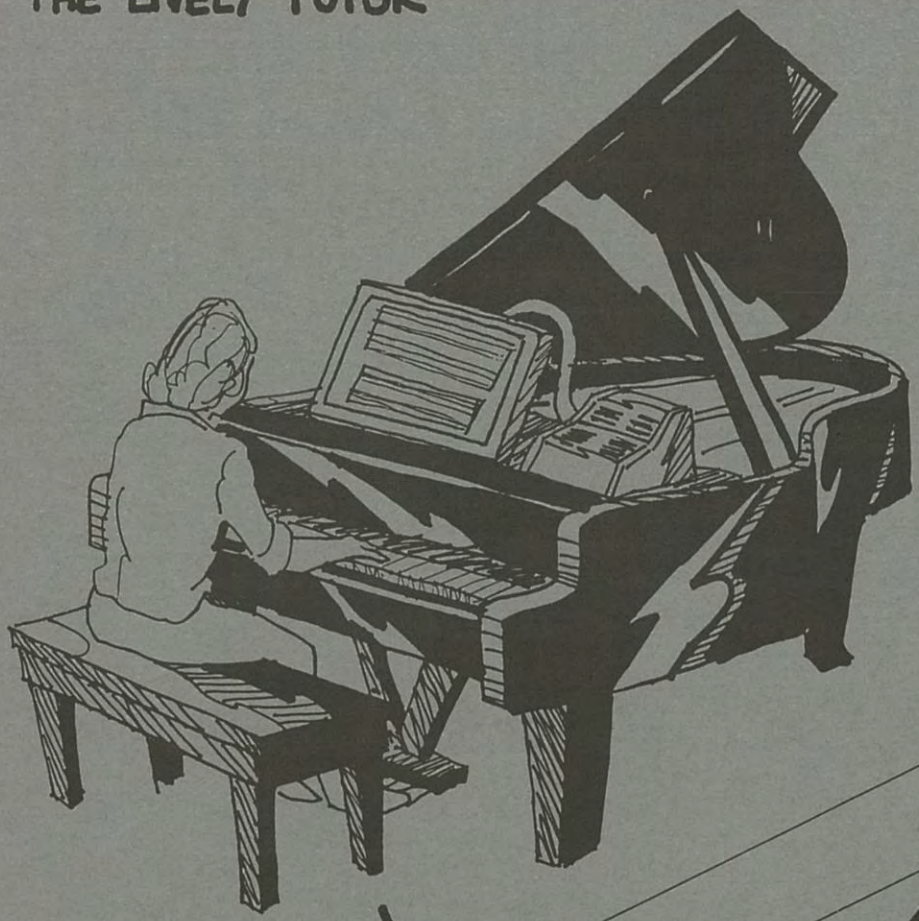


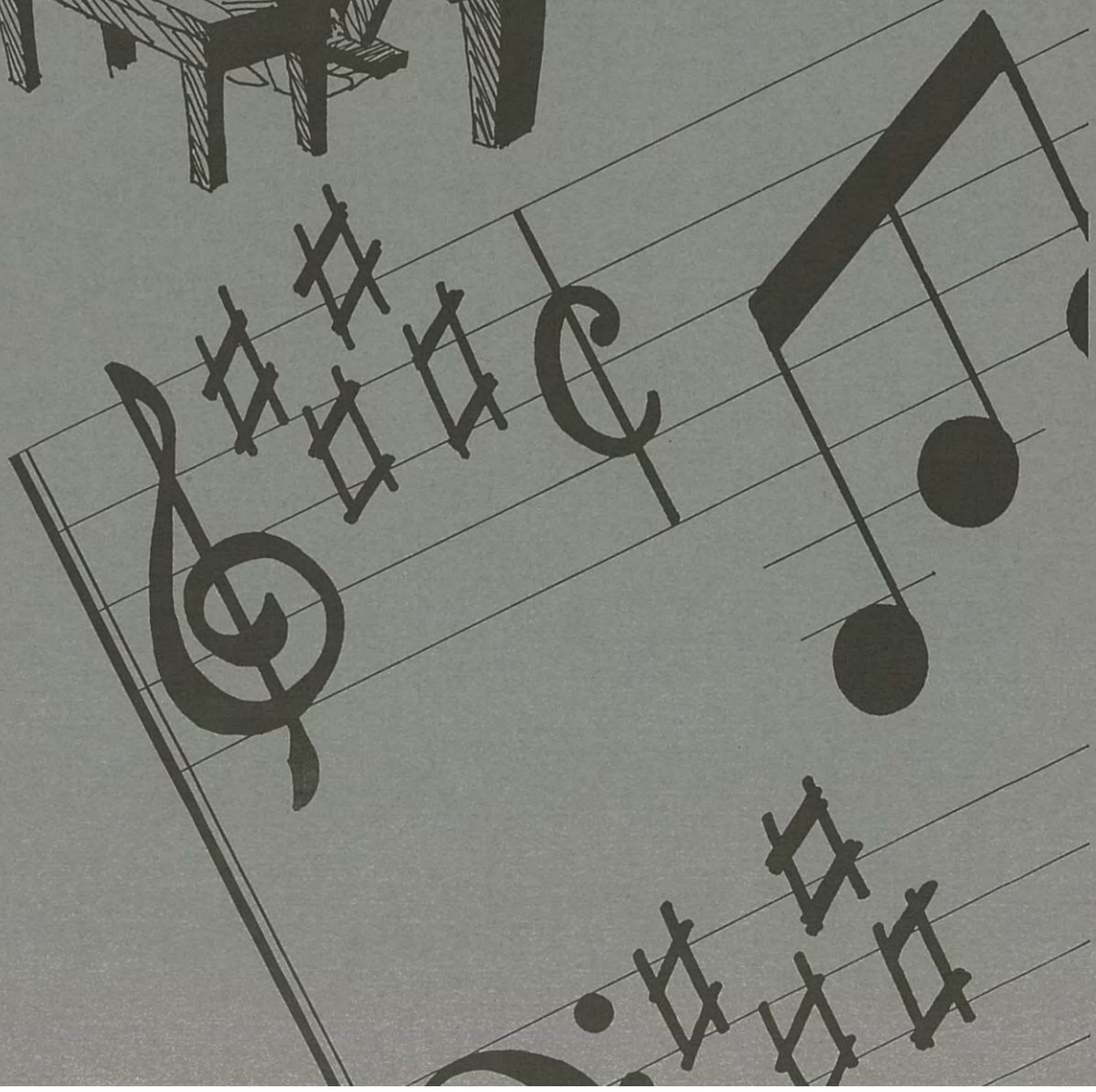
Prepared by: [signature]

Date: 8/26/82

ALLEGRO MENTOR

"THE LIVELY TUTOR"





PROPOSED FINANCING

PROPOSED FINANCING

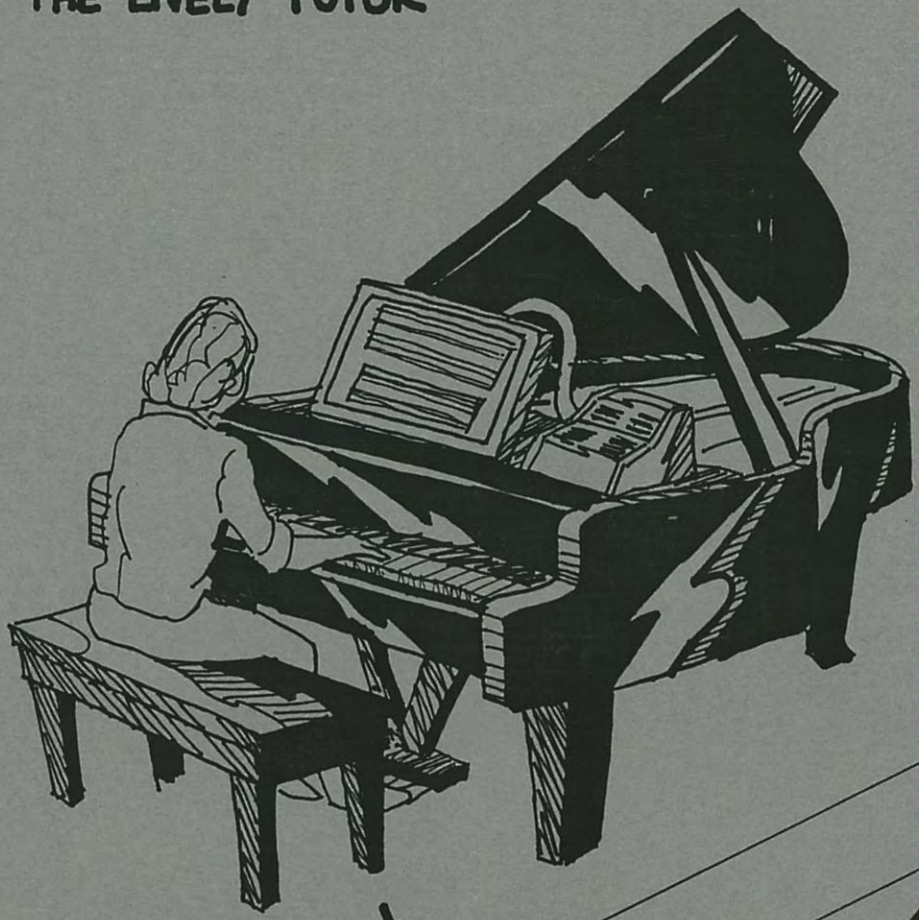
Texcon Corporation is currently seeking R and D funding and phase II marketing funding and in the amount of five hundred thousand ($500,000.00) dollars. This funding will lead to the production and sales of the ALLEGRO MENTOR product line. Texcon has arranged the financing for the manufacturing of the first and second year production runs predicated on yearly production quantities of not less than four thousand (4,000) units. Texcon is projecting sales in excess of eighteen thousand (18,000) units per year during its second year of operation.

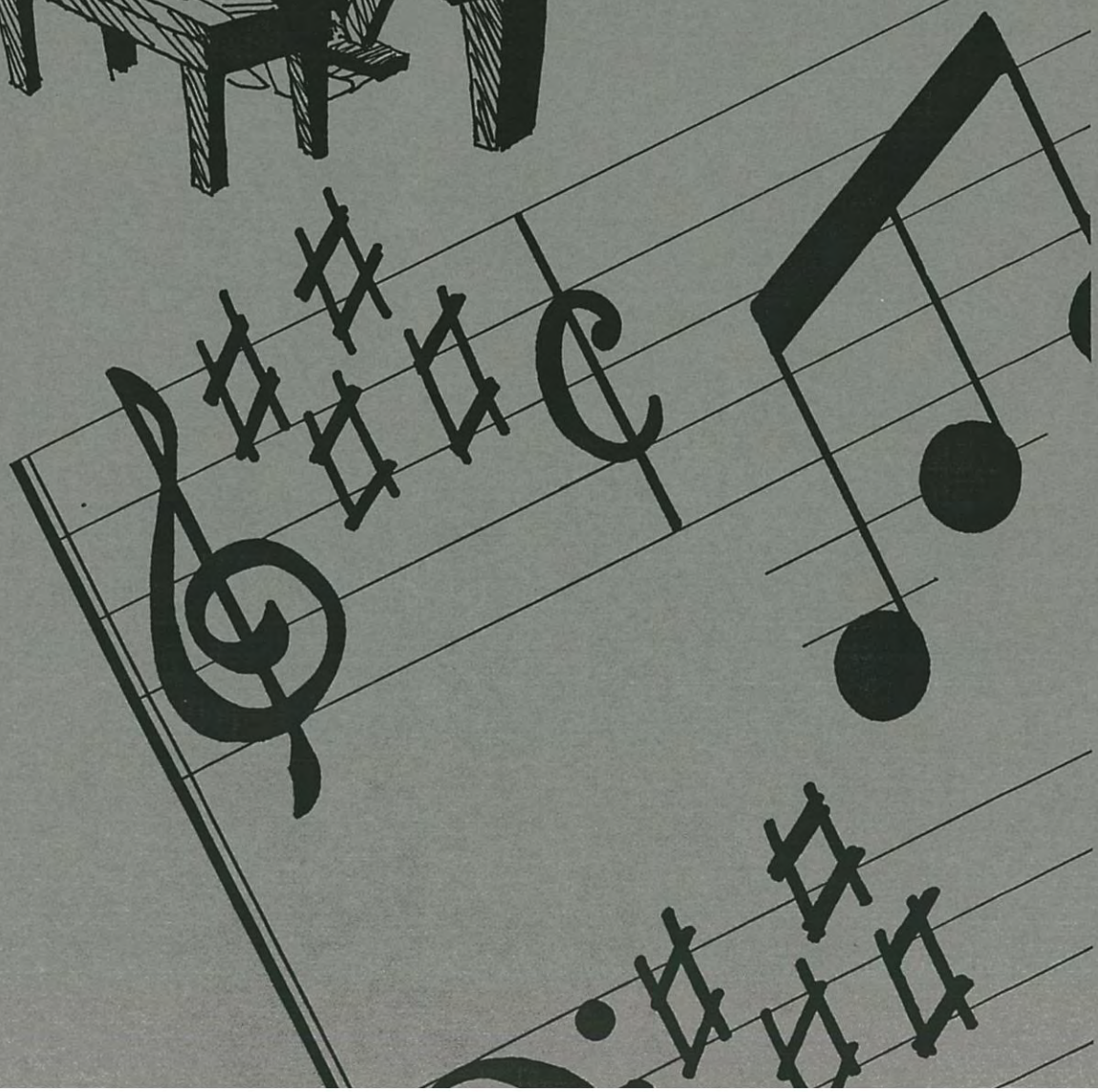
The five hundred thousand ($500,000.00) dollars will be apportioned to research and development and phase II marketing and in the following amounts:

R and D	$235,638.00
Phase II Marketing	$110,460.00
Legal and Accounting	$ 28,000.00
Commissions	$ 75,000.00
Production Costs	$ 3,500.00
Contingency Reserve	$ 47,402.00
TOTAL	$500,000.00

ALLEGRO MENTOR

"THE LIVELY TUTOR"





SALES FORECASTS AND FINANCIAL PROJECTIONS

TEXCON CORPORATION
PROJECTION OF SALES
$ IN 000's

TABLE #1.0A

ALLEGRO MENTOR (Keyboard Only)

Sales Forecasts

	Year 1		Year 2		Year 3		Year 4		Year 5	
	Units	$	Units	$	Units	$	Units	$	Units	$
Domestic:										
Individual Consumer	300	118,500	1,800	711,000	2,250	888,750	2,812	1,110,740	3,515	1,388,425
Consumer With Teacher	2,000	850,000	8,000	3,400,000	10,000	4,250,000	12,500	5,312,500	15,625	6,640,625
Institutional Sales	0	-	30	474,000	50	790,000	100	1,580,000	150	2,370,000
OEM Contract	1,800	405,000	7,200	1,620,000	9,000	2,025,000	11,250	2,531,250	14,062	3,163,950
Europe:										
Individual Consumer	0	-	500	197,500	625	246,875	781	308,495	976	385,520
Consumer With Teacher	0	-	2,200	935,000	2,750	1,168,750	3,437	1,460,725	4,296	1,825,800
Institutional Sales	0	-	5	79,000	15	237,000	25	395,000	30	474,000
Australia, South Africa and South America:										
Individual Consumer	0	-	300	118,500	375	148,125	468	184,860	586	231,470
Consumer With Teacher	0	-	1,500	637,500	1,875	796,875	2,343	995,775	2,929	1,244,825
Institutional Sales	0	-	2	31,600	5	7,900	15	237,000	20	316,000
Far East:										
Institutional Sales	0	-	2	31,600	4	63,200	8	126,400	14	221,200
OEM Contract	0	-	900	202,500	1,125	253,125	1,406	316,350	1,757	395,325
Totals:										
Individual Consumer	300	$ 118,500	2,600	$1,027,000	3,250	$ 1,283,750	4,061	$ 1,604,095	5,077	$ 2,005,415
Consumer With Teacher	2,000	$ 850,000	11,700	$4,972,500	14,625	$ 6,215,625	18,280	$ 7,769,000	22,850	$ 9,711,250
Insitutional Sales	0	-	39	$ 616,200	74	$ 1,098,100	148	$ 2,338,400	214	$ 3,381,200
OEM Contract	1,800	$ 405,000	8,100	$1,822,500	10,125	$ 2,278,125	12,656	$ 2,847,600	15,819	$ 3,559,275
		$1,373,500		$8,438,200		$10,875,600		$14,559,095		$18,657,140

TABLE #1.0B

ALLEGRO MENTOR (KEYBOARD ONLY) ADD-ONS

Sales Forecasts

	Year 1		Year 2		Year 3		Year 4		Year 5	
	Units	$	Units	$	Units	$	Units	$	Units	$
Cassette Volume I	4,100	61,295	22,440	335,478	28,074	419,706	35,145	525,417	43,960	657,202
Cassette Volume II	3,616	54,059	19,792	295,890	24,740	369,863	30,925	462,328	38,656	577,907
Cassette Volume III	3,132	46,823	17,144	256,302	21,430	320,379	26,787	400,465	33,484	500,585
Cassette Volume IV	1,927	28,808	10,546	157,662	13,182	196,264	16,478	246,346	20,598	307,940
Cassette Volume V	1,447	21,633	7,921	118,419	9,901	148,019	12,377	185,036	15,470	231,276
Cassette Volume VI	964	14,411	5,237	78,293	6,546	97,862	8,183	122,336	10,229	152,924
Cassette Volume VII	482	7,206	2,639	39,453	3,299	49,320	4,123	61,638	5,154	77,052
Cassette Volume VIII	241	3,603	1,319	19,719	1,649	24,653	2,061	30,811	2,577	38,526
Communications ICB (Optional)	2,000	35,900	11,700	210,015	14,625	262,518	18,280	328,126	22,850	410,157
Printer ICB (Optional)	224	1,344	1,378	8,268	1,723	10,338	2,153	12,918	2,691	16,146
Printer Unit (Optional)	224	104,160	1,378	640,770	1,723	801,195	2,153	1,001,145	2,691	1,251,315
Stand Alone Keyboard (Optional	9	252	1,443	40,332	2,688	75,129	5,302	148,190	7,642	213,593
Complete Teachers' System	200	300,000	1,170	1,755,000	1,462	2,193,000	1,820	2,730,000	2,285	3,427,500
Program (Composers) Encoder (Optional)	209	17,660	1,248	105,456	1,560	131,820	1,942	164,099	2,437	205,926
Musical Play-Back System (Optional)	0	-	1,248	155,938	1,560	194,922	1,942	242,653	2,437	304,503
		$697,154		$4,216,995		$5,294,988		$6,661,508		$8,372,552

SALES FORECAST ASSUMPTIONS

The following assumptions pertain to the projected sales forecasts for the Allegro Mentor and "add-ons":

I. Texcon Selling Price

	Product	Texcon Sales Price
A.	Individual Consumer Model	$ 395.00 Each
B.	Consumer with Teacher Model	$ 425.00 Each
C.	Institutional Sales (Systems)	$15,800.00 Each
D.	OEM Contract	$ 225.00 Each
E.	Program Cassettes Volume I-VIII	$ 14.95 Each
F.	Communication ICB (Option)	$ 17.95 Each
G.	Printer ICB (Option)	$ 6.00 Each
H.	Printer Unit	$ 465.00 Each
I.	Stand-Alone Keyboard	$ 27.95 Each
J.	Complete Teachers' System	$ 1,500.00 Each
K.	Program Encoder	$ 84.50 Each
L.	Musical Playback System	$ 124.95 Each

II. As introduced, "add-ons" are forecasted predicted on the following formulas:

A. Program Cassette Volume I = 1 x total units sold
Program Cassette Volume II = .882 x total units sold
Program Cassette Volume III = .764 x total units sold
Program Cassette Volume IV = .470 x total units sold
Program Cassette Volume V = .353 x total units sold
Program Cassette Volume VI = .235 x total units sold
Program Cassette Volume VII = .1176 x total units sold
Program Cassette Volume VIII = .0588 x total units sold

B. Communications ICB (Option)

Total number of Consumer with Teacher Models x 0.1 (10%)

C. Printer ICB (Option)

Total number of Consumer with Teacher Models x 0.1 (10%)
+ total number of Individual Consumer Models x 0.08 (8%)

D. Printer Unit

Total number of Consumer with Teacher Models x 0.1 (10%)
+ total number of Individual Consumer Models x 0.08 (8%)

E. Stand-Alone Keyboard

Total number of Individual Consumer Models x 0.03 (3%) +
number of Institutional Systems x 35.0

F. Complete Teachers' System

Total number of Consumer with Teacher Models x 0.1 (10%)

G. Program Encoder

Total number of Consumer with Teacher Models x 0.1 (10%) +
total number Individual Consumer Models x 0.03 (3%)

TABLE 3.0 Five Year Projected Gross Profit Allegro Mentor Product Line Operations

	Initials	Date
Prepared By:		9.23.82
Checked By:		9/30/82

	Year 1	Year 2	Year 3	Year 4	Year 5
Cash-In (Sales):					
Individual Consumer	$ 118,500.00	$ 1,027,000.00	$ 1,283,750.00	$ 1,604,095.00	$ 2,005,415.00
Consumer With Teacher	850,000.00	4,972,500.00	6,215,625.00	7,769,000.00	9,711,250.00
Institutional Sales (Systems)	-	616,200.00	1,098,100.00	2,338,400.00	3,381,200.00
OEM Contract	405,000.00	1,822,500.00	2,278,125.00	2,847,600.00	3,559,275.00
Cassettes Volumes I - VIII	237,838.00	1,301,216.00	1,626,066.00	2,034,377.00	2,543,412.00
Communications ICB	35,900.00	210,015.00	262,518.00	328,126.00	410,157.00
Printer ICB	1,344.00	8,268.00	10,338.00	12,918.00	16,146.00
Printer	104,160.00	640,770.00	801,195.00	1,001,145.00	1,251,351.00
Stand-Alone Keyboard	252.00	40,332.00	75,129.00	148,190.00	213,593.00
Complete Teachers' Systems	300,000.00	1,755,000.00	2,193,000.00	2,730,000.00	3,427,500.00
Program Encoder	17,600.00	105,456.00	131,820.00	164,099.00	205,926.00
Muscial Playback System	-	155,938.00	194,922.00	242,653.00	304,503.00
Total Cash-In Sales	$2,070,594.00	$12,655,195.00	$16,170,588.00	$21,220,603.00	$27,029,728.00
Cost of Goods Sold:					
Individual Consumer	$ 41,555.00	$ 360,100.00	$ 450,125.00	$ 562,448.50	$ 703,164.50
Consumer With Teacher	277,000.00	1,620,450.00	2,025,562.50	2,531,780.00	3,164,725.00
Institutional Sales (Systems)	-	306,052.50	580,715.00	1,161,430.00	1,679,365.00
OEM Contract	228,600.00	1,028,700.00	1,285,875.00	1,607,312.00	2,009,013.00
Cassettes Volumes 1 - VIII	55,681.50	304,633.00	380,873.50	476,276.50	595,448.00
Communications ICB	17,200.00	100,620.00	125,775.00	157,208.00	196,510.00
Printer ICB	89.60	551.20	689.20	861.20	1,076.40
Printer	45,920.00	282,490.00	353,215.00	441,365.00	551,655.00
Stand-Alone Keyboard	90.00	14,430.00	26,880.00	53,020.00	76,420.00
Complete Teachers' Systems	104,520.00	606,216.00	764,041.20	951,132.00	1,194,141.00
Program Encoder	8,360.00	49,920.00	62,400.00	77,680.00	97,480.00
Musical Playback System	-	95,472.00	119,340.00	148,563.00	186,430.00
Total Cost of Goods Sold	$ 779,016.10	$ 4,769,634.70	$ 6,175,491.40	$ 8,169,075.20	$10,455,427.90
Total Sales	$2,070,594.00	$12,655,195.00	$16,170,588.00	$21,220,603.00	$27,029,728.00
Cost of Goods Sold	$ 779,016.10	$ 4,769,634.70	$ 6,175,491.40	$ 8,169,076.20	$10,455,427.90
Gross Profit	$1,291,577.90	$ 7,885,560.30	$ 9,995,096.60	$13,051,526.80	$16,574,300.10

TABLE #9.0

FIVE YEAR PROJECTED INCOME STATEMENT
AND CASH NEEDS
ALLEGRO MENTOR PRODUCT LINE OPERATIONS

	Initals	Date
Prepared by:	[illegible]	9.3.82
Checked by:	[illegible]	9/14/82

Note #	Table #		Year 1	Year 2	Year 3	Year 4	Year 5
1.0	1.0	Cash In (Sales	$2,070,594	$12,655,195	$16,170,588	$21,220,603	$27,029,728
2.0	2.0	Cost of Goods Sold	779,016	4,769,634	6,175,491	8,169,076	10,455,427
3.0	3.0	Gross Profit	$1,291,577	$ 7,885,560	$ 9,995,096	$13,051,526	$16,574,300
4.0		Selling Expenses	$ 182,259	$ 514,518	$ 694,599	$ 937,709	$ 1,265,907
5.0		General and Admin. Expense:					
5.01		Payroll	$1,110,200	$ 1,716,830	$ 2,292,402	$ 2,949,332	$ 3,479,186
5.02	5.02	Office Equipment and Furnishings	102,833	88,133	65,683	44,500	25,700
5.03		Insurance	10,990	67,169	85,828	112,631	143,464
5.04		Professional Fees	35,139	214,769	274,428	360,131	458,717
5.05		Office Supplies, Printing, Etc.					
5.06		Facilities	62,400	124,800	156,000	171,600	189,200
5.07		Telephone/Telegraph	10,338	63,190	80,743	105,959	134,966
5.08		Travel and Entertainment	30	63,275	80,852	106,103	135,148
5.09	5.09	Engineering Department	474,220	739,960	969,455	1,162,384	1,250,935
5.10		Manufacturing and ATE Equipment	52,500	42,500	32,500	22,500	15,000
5.11		Vehicles and Expenses	30,000	30,000	30,000	39,000	39,000
5.12		Books, Subscriptions, Etc.	3,500	3,500	4,000	5,000	5,000
5.13		Depreciation	55,766	82,572	100,000	150,208	130,548
5.14		Corporate Facilities	24,000	24,000	24,000	24,000	24,000
		Total G & A	$2,184,145	$ 3,775,216	$ 4,890,490	$ 6,171,050	$ 7,294,771
		Net Income (Loss) Before Income Taxes	($ 892,568)	$ 4,110,344	$ 5,104,606	$ 6,880,476	$ 9,279,529
		CASH IN:					
		Cash Balance (Deficit)	-	$ 4,514,821	$ 8,535,166	$13,549,733	$20,340,250
		Sales	$2,070,594	12,655,195	16,170,588	21,220,603	27,029,728
6.0		Credit Line Advance	5,000,000	-	-	-	-
7.0		Interest on Unused Cash Balance	407,388	600,000	600,000	600,000	600,000
		Total Cash Available	$7,477,982	$17,770,016	$23,305,754	$35,370,376	$47,969,978
		Less:					
	2.0	Cost of Goods Sold	$ 779,016	$ 4,769,634	$ 6,175,491	$ 8,169,076	$10,455,427
	9.0	General and Administration	2,184,145	3,775,216	4,890,490	6,171,050	7,294,771
6.1		Debt Service	-	690,000	690,000	690,000	690,000
		Total Cash Out	$2,963,161	$ 9,234,850	$11,755,981	$15,030,126	$18,440,198
		ENDING CASH BALANCE	$4,514,821	$ 8,535,166	$13,549,773	$20,340,250	$29,529,780

NOTES TO FIVE-YEAR PROJECTED
INCOME STATEMENT AND CASH NEEDS

ALLEGRO MENTOR PRODUCT LINE OPERATIONS

Note 1 Projected Sales: Cash in from sales are based on the accumulated sales of the Allegro Mentor console unit and the various add-on devices. Table 1.0A provides an itemization of console-unit sales both by market (domestic, Europe, Australia, South Africa, South America, and the Far East) as well as product type (Individual consumer, Consumer with Teacher, Institutional Sales and OEM Contract). Table 1.0B provides an itemization of fifteen different add-on or optional devices. The total projected sales in terms of dollars were computed from the sums of the year-ending sales of tables 1.0A and 1.0B. Sales figures, for purposes of projection, are shown in constant equated (1982) dollars.

Note 2 Cost of Sales: Cost of sales are derived from the number of specific unit types sold per year, as indicated in tables 1.0A and 1.0B multiplied by the total cost to produce the specific unit as indicated in table 2.0. The costs indicated in table 2.0 are predicated on the yearly production of one third (1/3) the projected yearly unit sales for the specific unit type. A detailed analysis of the production costs associated with each specific unit type has been completed based upon prices quoted to Texcon Corporation, as vendor commitments, during the month of August, 1982. No adjustment has been made for the decline in prices of solid-state (ROM and RAM) memory or micro-processor integrated circuits although historically these will decline rapidly as the manufacturers recover their engineering/marketing costs and introduce yet more advanced parts. For purposes of projection, cost figures are shown in constant equated (1982) dollars. All taxes, brokerage fees, and import tariffs have been included based on available data as of June, 1982.

Note 3 Gross Profit: Gross Profit is shown as the difference between gross sales and the cost of goods sold.

Note 4 Selling Expenses: Selling expenses represent the costs associated with the marketing of the product line and are composed of commissions, rebates, dealer incentive costs, materials production costs, travel and entertainment, workshop costs, seminar costs, media/publicity costs and, in general, all costs associated with the marketing plan herein before outlined except for salaries as are identified in Table 9.01 hereof entitled Human Resource Requirements. A cost analysis of the initial six-month marketing plan has been provided and may be found in the marketing section hereof. These costs, on a yearly and territorially expanding basis, are included as well.

Note 5 General and Administrative Expenses: General and administrative expenses have been outlined and notated in, Sections 5.00 through 5.14. Each category of expenses has been based pursuant to the notes and/or schedules contained herein. In general, the ratios derived as a function of each specific category as a percentage of overall sales compare to those generally accepted and expected of a high-technology corporation early in its growth-mode cycle.

Note 5.01 Payroll: Salaries and payroll taxes are included in this category. The aggregate year figures are reflections of the total yearly figures as derived from Table 9.01 entitled Human Resourse Requirements. These yearly payroll figures do not include salaries associated with the Engineering Division of the Corporation except for the Vice-president of Engineering who is shown in the category of Corporate Officers. All engineering salaries are included in Section 5.09 and are manifest from Table 5.09 entitled Texcon Engineering Budget, Five Years Projected.

Note 5.02 Office Equipment and Furniture: Office equipment and furniture expenses as shown are the yearly totals of those detailed in Table 5.02. Office equipment and furnishings have been computed on needs dependent on the overall number and types of projected employees. Not included are furnishings and office equipment associated with the engineering departments and manufacturing departments. Engineering needs are covered in Section 5.09 with accompanying table while manufacturing needs are contained in Section 5.10 hereof.

Note 5.03 Insurance: Insurance figures are based on actual figures quoted to Texcon Corporation in August of 1982, and in regard to the projected type of product, type of manufacturing facilities, gross-sales figures, and projected number of officers, employees, and capital equipment. Included are product liability, general liability with excess umbrella, Workmans Compensation, average monthly medical-group insurance, officers' life insurance and individual automobile insurance policies providing for minimum deductible and maximum liability and collision coverage.

Note 5.04 Professional Fees: Professional fees are the management's estimate. Included in this category are legal and accounting fees, Board of Director fees, Patent and Copyright fees and employment agency placement (when used) fees.

Note 5.05 Office Supplies, Printing, Etc.: Office supplies, printing, etc. is a management estimate which includes provisions for supplies (i.e., pens, folders, file labels, cards, paper, etc.), water and coffee service, petty-cash expense, computer supplies (i.e., paper, discs, ribbons, etc.) stationery printing and special inter-company forms such

as order forms, quotations, work orders, material requisition forms, purchase orders, business cards, etc.

Note 5.06 Facilities: The facility category includes building rent and utilities (electricity, natural gas, and water) for the factory. Not included in this category are facilities for the Engineering Department or Corporate Offices. The needs of the Engineering Department are defined in Section 5.09 hereof and its accompanying table and the corporate office facilities expenses are defined in Section 5.14 hereof.

Note 5.07 Telephone/Telegraph: Telephone/telegraph expenses are management's estimate based on past experiences in managing high-technology, high-growth mode businesses. These expenses represent line and long distance changes only. Instruments and the central network switching equipment will be leased from a vendor offering the best benefit/cost package and terms. Estimates from various vendors have been received from Texcon Corporation as of August, 1982, and these have been factored into the category of Office Equipment and Furnishings, Section 5.02 hereof.

Note 5.08 Travel and Entertainment: Travel and entertainment expenses are management's estimate based on previous experiences managing high-technology, high-growth mode businesses. Included in this category are travel and entertainment expenses associated with corporate matters, vendor negotiations, and major contract (sales) negotiations. Not included are engineering and marketing related travel expenses. Engineering travel expenses are included in Section 5.09 and the accompanying table, while marketing related travel and entertainment expenses are contained in Section 4.0 hereof.

Note 5.09 Engineering Department: With the exception of the Vice President of Engineering, all engineering expenses of an R and D nature are included in this section. Engineering is treated as a separate division of the corporation with its own facilities, support, management, and ultimate P and L Responsibility.

The Manufacturing Department maintains a small engineering organization known as the Production Engineering Department; however, the responsibilities of the Production Engineering Department are limited to the support of the Manufacturing Department in terms of developing more cost-effective manufacturing processes and procedures, specialized automated test equipment and test fixtures, and maintenance of the ATE equipment programs and operation training. The R AND D ENGINEERING GROUP IS RESPONSIBLE FOR NEW PRODUCT INNOVATION with attention to ROI and P and L. This group will be located in facilities apart from the production facilities to accommodate the Professional Engineering Staff. Amenities such as location, general environment of surrounding area, availability of local restaurants, and other similar considerations will be important when selecting a site area for this facility. THE PRIMARY FUNCTION OF THIS GROUP IS THE CREATIVE INNOVATION OF NEW PRODUCT CONCEPTS AND DESIGNS consistent with the financial goals and constraints of the corporation.

Note 5.10 Manufacturing and ATE Equipment: Expenses for Manufacturing and ATE (Automated Test Engineering and Diagnostics) are based on the daily unit throughput in production. Furnishings, lounge tables, and workers' chairs are computed on the number of skilled factory employees, manufacturing supervisors, clerical support personnel, and production engineering staff. Major capital equipment in excess of fifty thousand dollars (i.e., a possible Hewlett-

Packard 3060 or Genrad 2270 auto PCB assembly test device) have been computed on a contract purchase basis and of a forty-eight (48) month duration.

Note 5.11 Vehicles and Related Expenses: Six (6) company vehicles are included in this expense statement as well as maintenance on a yearly basis. Three (3) of the vehicles are for the use of the three (3) executive officers of the corporation. Another unit will be provided to the Vice-president of Marketing and the remaining two (2) will be available for the general use of the corporation. With the exception of the three (3) units provided to Executive Officers, any company car provided to an employee as a portion of his employment package will be done on an "auto lease reimbursement" basis where the automobile is leased directly by the employee, in the name of the employee and on reliance on his personal credit, and the company will issue the employee a monthly check to cover the vehicle lease payment. The six (6) vehicles will be non-capitalized and lease credits will be earned by the company over the lease period. In the case of the three (3) vehicles provided to the Executive Officers, the officers will be able to purchase the vehicles from the lease company at the time they go "off lease" and for the cost of the lease residual.

Note 5.12 Books, Subscriptions, Etc.: This is management's estimate of the costs associated with the building up of a corporate library providing and maintaining business and technical publications and subscriptions. This does not include the engineering library which is reflected in Sections and Table 5.09 nor does this include accounting or legal publications such as D and B or the IPO Reporter or the Commerce Clearing House Incorporated's Federal Tax Reporter. Also, not included are various Frost and Sullivan or Standard and Poors surveys as published and colated

which are reflected either in the Marketing (Section 4.0), Engineering (Section 5.09) or Professional Fees (Section 5.04) categories hereof.

Note 5.13 Depreciation: For purposes of projection, the straight line method of depreciation has been used and over a sixty (60) month period for all capitalized equipment fixtures and furnishings. Straight-line amortization of lease items over the sixty (60) month period is included as well. No attempt has been made to depreciate "rights" to proprietary designs and/or patents, copyrights and licenses nor has any attempt been made to depreciate the cost associated with maintaining the R and D Engineering Division.

Note 5.14 Corporate Facilities: These expenses represent the lease, utilities, and lease-hold improvements associated with the corporate office. The corporate office will house the executive officers and support staff, the public relations department, and key highly-visible management personnel.

Note 6.0 Credit-Line Advance: Management has determined that the capital requirements to meet the constraints of manufacturing start up and continued moderate growth expansion are three million dollars ($3,000,000). It is anticipated that the corporation will secure a five million dollar ($5,000,000) credit line, and during the first year of operation, will draw down $5,000,000. The company plans to negotiate a high-yield money market and certificate of deposit plan with its local banks in which the $5,000,000 will be maintained. Quotes from one major bank and one medium-size bank in Phoenix in September of 1982 indicate that terms providing the company with twelve (12) percent per annum interest on the deposit balance could be negotiated. This earned income to a great degree offsets the cost of capital. Secondly, additional loans and/or lease contract

lines will be negotiated with the bank to establish Texcon's credit abilities and good ratings. The deposit base will be the security for such additional credit. Cash needs of approximately three million dollars ($3,000,000) have been predicated on a WORST CASE, NO SALES assumption. It is anticipated that the five million ($5,000,000) dollars will be repaid to the lending institution over a sixty (60) month period and with interest and principal payments beginning thirteen (13) months after the making of the loan.

As additional consideration to the lending institution, Texcon Corporation may negotiate other accordances at the time the credit line is negotiated. This is an important component of Texcon's overall strategic plan

Note 6.1 Debt Service: Based on Note 6.0 the repayment of the three million ($3,000,000) dollars over a sixty-month period would be reflected by the indicated yearly totals.

Note 7.0 Interest on Unused Cash Balance: Interest will be earned at the projected rate of twelve (12) percent per annum on the unused cash balance. For purposes of projection, the worst case no sales scenario as suggested in Note 6.0 is assumed. Thusly computed, the corporation will actually spend $2,963,161 in its first year of operation while producing $2,070,594 worth of merchandise, yet no income is assumed resultant from the sale of the produced merchandise. Further, it is assumed that the $2,963,161 will be spent in equal amounts over the twelve (12) month period or $246,930 per month. Interest is shown to be earned on the descending balance and at the rate of one percent (1%) per month as shown in the following tables:

TABLE #7.0

EARNED INCOME INTEREST ON CASH BALANCE

Interest on		Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Mo. 12
Month 1	$2,753,069	$27,530											
Month 2	$2,506,139		$25,061										
Month 3	$2,259,208			$22,592									
Month 4	$2,012,278				$20,122								
Month 5	$1,765,348					$ 17,653							
Month 6	$1,518,418						$ 15,184						
Month 7	$1,271,488							$ 12,714					
Month 8	$1,024,558								$ 10,245				
Month 9	$ 777,627									$ 7,776			
Month 10	$ 530,697										$ 5,306		
Month 12	$ 283,767											$ 2,837	
Month 12	$ 36,837												$ 368
Cumulative		$27,530	$52,591	$75,183	$95,305	$112,958	$128,142	$140,856	$151,101	$158,877	$164,183	$167,020	$167,388
TOTAL													$167,388

IN ACTUALITY earned interest should be significantly higher than projected above due to cash flow generated by the sales of the manufactured product and subsequent collection.

It is anticipated that the earned income resulting from interest will more than offset the collection cycle (30 day - 60 day - 90 day and collection actions) costs and interest costs related thereto thus for purposes of projection management elected not to show costs of collection and interest paid on outstanding balances due as receivables.

TABLE #2.0

PRODUCT COST AND MARGIN ANALYSIS

	Initial	Date
Prepared by:	[illegible]	9.17.82
Check by:	RL	9/18/82

The following cost analysis provides figures indicative of the actual cost to produce, item by item, the various components of the Allegro Mentor Product Line.

Product Cost

		Materials	Labor	T & D	Total Price	
A.	Individual Consumer Model	$ 89.50	$ 33.00	$ 16.00	$ 138.50	A.
B.	Consumer With Teachers' Model	89.50	33.00	16.00	138.50	B.
C.	Institutional Sales (Systems)	5,071.13	1,869.80	906.57	7,847.50	C.
D.	OEM Contract	82.00	30.00	15.00	127.00	D.
E.	Program Cassettes Volume I - VIII, (ea.)	3.00	.20	.30	3.50	E.
F.	Communications ICB (Option)	4.60	2.25	1.75	8.60	F.
G.	Printer ICB (Option)	.30	.10	.00	.40	G.
H.	Printer Unit	185.00	5.00	15.00	205.00	H.
I.	Stand-Alone Keyboard	8.00	1.50	.50	10.00	I.
J.	Complete Teachers' System	309.10	145.00	68.50	522.60	J.
K.	Program Encoder	22.00	13.00	9.00	40.00	K.
L.	Musical Playback System	45.00	22.00	9.50	76.50	L.

Product Margins

		Mfg. Cost	Texcon Sales Price	Margin	
A.	Individual Consumer Model	$ 138.50	$ 395.00	$ 256.50	A.
B.	Consumer With Teachers' Model	138.50	425.00	286.50	B.
C.	Institutional Sales (Systems)	7,847.50	15,800.00	7,952.50	C.
D.	OEM Contract	127.00	225.00	98.00	D.
E.	Program Cassettes Volume I - VIII, (ea.)	3.50	14.95	11.45	E.
F.	Communications ICB (Option)	8.60	17.95	9.35	F.
G.	Printer ICB Option	.40	6.00	5.60	G.
H.	Printer Unit	205.00	465.00	260.00	H.
I.	Stand-Alone Keyboard	10.00	27.95	17.95	I.
J.	Complete Teachers' System	522.60	1,500.00	977.40	J.
K.	Program Encoder	40.00	84.50	44.50	K.
L.	Musical Playback System	76.50	124.95	48.45	L.

TABLE 5.09

Five year projected Texcon Engineering Research and Development Budget

	Initials	Date
Prepared by:		8·28·82
Check By:		9.1.82

	Year 1		Year 2		Year 3		Year 4		Year 5	
	Number	Cost	Number	Cost	Number	Cost	Number	Cost	Number	Cost
Office Rent		$ 18,500		$ 22,000		$ 24,640		$ 28,160		$ 33,300
Furniture and Fixtures		26,000		14,000		16,000		8,000		2,000
Engineering and Test Equipment		40,000		40,000		40,000		32,000		30,000
Drafting Equipment		3,000		1,000		2,000		1,000		1,000
Drawing Storage Files		850		-		-		1,000		-
Micro Computer Development Systems		16,250		16,250		16,250		16,250		16,250
Components		12,000		15,000		18,750		23,437		29,296
Misc. Supplies		12,000		15,000		18,750		23,437		29,296
Scientific Calculators		1,200		1,200		1,200		1,000		800
Subscriptions and Dues		1,800		1,980		2,178		2,395		2,635
Books		1,500		1,500		1,500		1,500		1,500
Office Supplies		14,400		14,400		15,840		15,840		15,840
Printing, Forms, Etc.		1,800		1,500		1,500		1,800		2,000
Chief Electronic Engineer	0	-	1	36,300	1	39,930	1	43,923	1	48,315
Senior Project Engineer	1	28,500	1	31,350	2	68,970	2	75,867	2	83,453
Associate Engineer	0	-	1	24,500	1	26,950	2	59,290	2	65,219
Chief Mechanical Engineer	1	30,000	1	33,000	1	36,300	1	39,930	1	43,923
Assistant Mechanical Engineer	0	-	1	23,000	1	25,300	1	27,830	1	30,613
Senior Software Engineer	1	33,000	1	36,300	1	39,930	1	43,923	1	48,315
Associate Software Engineer	0	-	1	26,500	2	58,300	2	64,130	2	70,543
Engineering Assistant (Hw.)	0	-	1	22,000	1	24,200	1	26,620	1	58,564
Engineering Assistant (Sw.)	0	-	1	21,000	1	23,100	1	25,410	1	27,951
Level 4 Technician	1	21,000	1	22,050	1	23,152	2	48,620	2	51,051
Level 3 Technician	0	-	0	-	1	18,000	1	18,900	1	19,845
Technicians Assistant	1	16,000	1	16,000	2	32,000	2	32,000	3	48,000
Data Entry Clerk (Sw.)	1	15,000	1	15,000	2	30,000	2	30,000	2	30,000
Receptionists	1	11,000	1	11,000	1	11,000	1	11,000	1	11,000
Divisional Secretary	1	12,500	1	12,500	1	12,500	1	12,500	1	12,500
Project Secretary	1	12,500	1	12,500	2	25,000	2	25,000	2	25,000
Senior Draftsman	1	18,500	1	20,350	2	44,700	2	49,247	2	54,171
Associate Draftsman	1	13,000	1	14,300	2	31,460	2	34,606	2	38,066
Senior PCB Designer	1	20,000	1	22,000	1	24,200	2	53,240	2	58,564
Assocate PCB Designer	1	16,000	1	17,600	1	19,360	2	42,592	2	46,851
Human Engineering Specialists	0	-	1	27,500	1	31,625	1	36,368	1	41,824
Travel and Entertainment		36,000		36,000		54,000		67,500		67,500
Employee Benefits		24,700		48,060		64,597		80,099		86,545
Depreciation		17,220		31,470		46,320		57,970		67,820
Total Number of Engineering Employees and Engineering Budget	13	$247,000	20	$480,600	28	$645,970	32	$ 800,996	33	$ 865,453
TOTAL ENGINEERING BUDGET		$474,220		$739,960		$969,455		$1,162,384		$1,250,935

TABLE #5.02

PROJECTED FIVE YEAR OFFICE FURNITURE AND EQUIPMENT NEEDS

Allegro Mentor Product Line Operations

	Initial	Date
Prepared by:	[illegible]	9.20.82
Check by:	ET	9/21/82

	Year 1	Year 2	Year 3	Year 4	Year 5
Copy Machine*	$ 7,200	$ 7,200	$ 7,200	$ 7,200	-
Typewriters - IBM Selectric III	$ 12,100	$ 4,400	$ 2,200	$ 3,300	$ 2,200
Dictating Equipment	$ 3,000	$ 1,500	$ 750	-	-
Calculators, Non-scientific	$ 500	$ 500	$ 500	$ 500	$ 500
Accounting (10-key)	$ 1,500	$ 500	$ 500	$ 500	$ 500
Computer System**	$ 9,533	$ 9,533	$ 9,533	-	-
(Desks, tables, petitions, etc.)	$ 51,000	$64,500	$45,000	$33,000	$22,500
Telephone System	$ 18,000	$46,500	$27,000	$15,000	-
Total Office Equipment and Furnishings	$102,833	$88,133	$65,683	$44,500	$25,700

*Xerox or equivalent price quote for system meeting Texcon Corporation's needs as of August, 1982.

**Lease purchase prices derived from quotes received in August of 1982 (five year and four year leases).

TABLE #5.01
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FIVE YEAR HUMAN RESOURCE REQUIREMENTS
ALLEGRO MENTOR PRODUCT LINE OPERATIONS

	Initials	Date
Prepared by:	[illegible]	9.8.72
Checked by:	CC	9/12/72

	Year 1		Year 2		Year 3		Year 4		Year 5	
Gross Sales (Yearly)	2 M $		12.6 M $		16.1 M $		21.2 M $		27.0 M $	
Discrete Units Manufactured (Daily)	19		117		150		195		250	
	Numbers	Yearly Cost	Numbers	Yearly Cost	Numbers	Yearly Cost	Numbers	Yearly Cost	Numbers	Yearly Cost
Officers:										
President	1	$ 60,000	1	$ 80,000	1	$ 120,000	1	$ 160,000	1	$ 200,000
Vice-president (Exec)	1	45,000	1	60,000	1	90,000	1	120,000	1	150,000
Vice-president Finance	1	40,500	1	54,000	1	81,000	1	108,000	1	135,000
Vice-president Operations	1	40,500	1	54,000	1	81,000	1	108,000	1	135,000
Vice-president Engineering	1	36,000	1	48,000	1	72,000	1	96,000	1	120,000
Vice-president Marketing	1	45,000	1	60,000	1	90,000	1	120,000	1	150,000
Vice-president Investor/Public Relations	1	30,000	1	40,000	1	60,000	1	80,000	1	100,000
General:										
Receptionists	1	9,600	2	20,160	2	21,168	2	22,226	2	23,337
Accounting (MBA/CPA)	-	-	1	24,500	1	26,950	1	29,645	1	32,609
Bookkeeper Level 4	1	14,000	1	14,700	2	30,870	2	32,413	2	34,034
Bookkeeper Level 2	-	-	1	12,000	1	12,000	1	12,000	1	12,000
Secretarial:										
Executive Level	2	34,000	3	53,550	3	56,227	3	59,038	3	61,990
Level 4	6	75,000	8	105,000	10	137,812	12	182,325	14	223,349
Level 2	1	10,200	2	21,420	2	22,491	3	33,099	3	33,254
Order Clerks	2	24,000	2	25,200	3	39,690	3	41,674	3	43,758
Purchasing Agent	1	13,500	2	31,050	2	35,707	2	41,063	2	47,223
Expediters	1	12,000	2	25,200	2	26,460	3	41,674	3	43,758
Manufacturing Manager	1	28,500	1	32,775	1	39,330	1	47,196	1	54,275
AT & DE:										
Test Operator	1	14,000	2	29,400	3	46,305	3	48,620	3	51,051
Level 2 Technician	2	33,000	3	51,975	4	72,765	4	76,403	4	80,223
Production Engineering Department:										
Department Head/Engineer	1	24,500	1	26,950	1	29,645	1	32,609	1	35,870
Level 4 Technician	1	21,000	1	23,100	2	48,510	2	50,935	3	76,576
Level 2 Technician	-	-	1	16,500	1	18,150	1	19,965	2	40,111
Materials Handling:										
Clerk	1	9,600	1	9,600	1	9,600	2	19,200	2	19,200
Laborers	1	12,500	2	25,000	3	37,500	5	62,500	6	75,000
Human Resources Department:										
Director	-	-	1	24,000	1	25,800	1	27,735	1	29,815
Recruiter and Counselor	-	-	1	18,000	1	19,350	1	20,801	1	22,361

Continued on Next Page

TABLE #5.0I(Cont'd)
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FIVE YEAR HUMAN RESOURCE REQUIREMENTS
ALLEGRO MENTOR PRODUCT LINE OPERATIONS

	Initials	Date
Prepared by:	[illegible]	9·8·82
Checked by:	CC	9\22\82

	Year 1		Year 2		Year 3		Year 4		Year 5	
	Numbers	Yearly Cost	Numbers	Yearly Cost	Numbers	Yearly Cost	Numbers	Yearly Cost	Numbers	Yearly Cost
Music Department:										
Musical Director	1	$ 52,000	1	$ 59,800	1	68,770	1	79,085	1	$ 90,948
Pedagogists	1	20,000	1	22,000	1	24,200	1	26,620	1	29,282
Musicologists	1	18,500	1	20,350	1	22,385	1	24,625	1	27,085
Assembly:										
Inspector, Level 1	1	10,200	2	20,400	3	30,600	4	40,800	5	51,000
PCB Assembly	3	32,400	10	108,000	15	162,000	20	216,000	25	270,000
Mechanical Assembly	2	21,600	8	86,400	13	140,400	17	183,600	22	237,600
Wareflow Operator	1	12,000	2	24,000	3	36,000	4	48,000	4	48,000
Auto Processes Operators	-	-	1	11,000	2	22,000	2	22,000	3	33,000
Clerk	-	-	1	9,600	2	19,200	2	19,200	2	19,200
Inspector, Level 4	1	16,500	4	66,000	5	82,500	6	99,000	7	115,500
Quality Control:										
Director	1	22,500	1	24,750	1	27,225	1	29,947	1	32,942
Level 3 Technician	-	-	1	18,000	1	18,000	1	18,000	1	18,000
Level 2 Technician	-	-	-	-	1	16,500	2	33,000	2	33,000
Level 4 Inspector	-	-	-	-	1	16,500	2	33,000	2	33,000
Marketing Department:										
Divisional Managers (Sales)	-	-	3	75,000	5	137,500	5	151,250	5	166,375
Marketing Director	-	-	1	34,000	1	37,400	1	41,140	1	45,254
Sales Director	1	30,000	1	33,000	1	36,300	1	39,930	1	43,923
Promotional Coordinator	1	22,500	1	24,750	1	27,225	1	29,947	1	32,942
Service Department:										
Service Manager	1	22,000	1	23,100	1	24,255	1	25,467	1	26,741
Level 3 Technician	1	18,000	2	36,000	2	36,000	2	36,000	2	36,000
Shipping Department:										
Clerk	-	-	1	9,600	1	9,600	1	9,600	1	9,600
Laborers	2	25,000	2	25,000	3	37,500	4	50,000	4	50,000
TOTAL PAYROLL (LESS ENGINEERING)	46	$1,110,200	89	$1,716,830	119	$2,292,402	141	$2,949,332	158	$3,479,186