Appendix to Chapter 15:

SCIENTIFIC LIFE SYSTEMS, INC.

In Cooperation with the
UNITED STATES OLYMPIC COMMITTEE

The purpose of this Memorandum is to set forth, in succinct terms, the unique attributes of our overall program and the unprecedented benefits it will afford Olympic athletes, the United States Olympic Committee (USOC), the cause of preventative medicine, and the community at large.

I. HOW OUR PROGRAM WORKS

At the present time we have our pilot fitness Center, located in Englewood, New Jersey, in full operation. The Center, which is equipped with the most advanced variable resistance exercise equipment and is staffed by dedicated and intelligent United States Olympic athletes, offers individualized fitness training programs to suit the needs of our members. These programs have been designed with the assistance of medical and biomechanical staffs, whose specialized knowledge (garnered in part from years of association with the Olympics and Olympic athletes) is far in advance of the general state of the art.

The Center serves as a training ground for Olympic athletes and aspirants, for people with specialized medical problems who cannot find suitable fitness regimens elsewhere, and for members of the general public and industry groups who are concerned about their health and well being. We believe that because this program is so universally significant and beneficial, in time, every important community in the United States will seek and will support one of our Centers.

II. UNIQUE BENEFITS

Let us begin with a brief summary of what we do and can do for each of the groups referred to.

For the Public, Generally

--Individualized programs to bring each participating member of the public, in safety and without undue strain, to unprecedented levels of fitness and health, which have, until now, been totally beyond his reach. The satisfaction that will come with improved health, increased strength and energy, improved job performance and, where desired, improved performance at specific sports.

--The excitement of working with our nation's finest athletes.

For Industry Groups

--In addition to the benefits to the individuals described above, to improve the health, as well as the level of on-job performance by executives and or employees of a participating company and to correct specific physical problems that arise from specific work conditions.

Preventative Medicine

--Specialized programs designed to overcome specific problems, to improve the functioning of the patient's circulatory system and to raise the general level of his health.

--To integrate the patient in a General program, where he participates as a member of a training community and is not made to feel different or inferior.

For the Olympic Athletes

−-An opportunity to maintain amateur status, while engaging in a rewarding and useful career and enjoying the friendship of a congenial community of athletes.
−-An opportunity to continue training without financial sacrifice.
--An opportunity for systematic training under the guidance of colleagues who are qualified doctors and coaches and in a program whose advanced techniques, we believe will result in levels of performance not yet achieved by United States athletes (and will compare favorably with and perhaps surpass the training programs of the Russians and East Germans).

For USOC

--All of the benefits that will flow to USOC from the superior performance of the Olympic athletes, their happiness and economic security -- not the least of which will be the athletes' loyalty to USOC, which will play an integral role in the program.

--The vastly increased opportunity to discover new athletic talent.

--The excitement, interest and gratitude that the program will generate in the country, leading to broader-based and more significant economic sponsorship of the United States Olympic effort.

--Direct revenues that flow to the USOC from the program itself.

We are now ready to explore each of these aspects of our program in great detail.

III. OUR PROGRAM

The Center Program for Members

Our physical training Centers are unique in method and approach, and bear no resemblance to the chain health spas and exercise parlors that now proliferate throughout the country.

Membership in the Center is open to all, young and old, male and female. The conditioning program available to them is similar to that developed and employed by Olympic athletes, Olympic sports medicine and our best biomechanical engineers. The basic course consists of three 30-minute appointment sessions each week, in which the member is taken through a progressive system of individualized workouts, coached by one of the Olympian staff.

Individual objectives are set for each trainee with a view to building up specific muscle groups, increasing endurance and strength, weight reduction and/or raising cardiovascular capacity. A schedule to accomplish these objectives at a safe and effective pace is established. The schedule is monitored and progress is recorded.

The individualized attention and the style of moving from machine to machine in a program of balanced body training ensures that the trainee does not become bored, that he makes proper use of the equipment, and that he gets the most from the workout. The fact that his personal coach and trainer is an Olympic athlete adds a dimension of excitement and commitment to the trainee's participation (particularly for the children and young adults).

The overall intent of this basic training program is to improve the level of each trainee's physical conditioning. This intent, individually applied, covers the approach to all participants, young and old-- vigorous young athletes, sedentary office workers, middle-aged and elderly people needing to restore neglected physical capacity, and low-back sufferers. The increased strength, cardiovascular capacity, and greater muscular flexibility will sharpen the zest for life, elevate the sense of self, help protect against heart attack and stroke, and improve performance on the job and at specific sports.

Finally, when trainees are ready to move into special sports, as we encourage them to do whenever appropriate, special instruction is available from our Olympic athletes. We already have ongoing programs for such sports as judo, kayaking, fencing, crew, running and cross-country skiing.

For Industry

We are developing on-site programs for industry. Many corporations have come to understand that better job performance is the result of better physical health and that the work conditions impose special physical problems correctable by well-designed programs. Executive fitness

programs are in high demand, yet poor motivation and techniques have all to often led to boredom, monotony and failure. Truck drivers and desk-bound executives suffer back problems. Assembly line workers and secretaries are adversely affected by the physical and mental monotony of their jobs. While most company-based fitness programs are either resented as an intrusion or barely tolerated, we believe that our programs will meet with an unparalleled enthusiasm generated by the contact with Olympians and the unique design of the program itself.

Youth Outreach

Our programs will bring Olympic athletes into community schools and youth centers to discover young talent and provide training guidance. In this effect, we recognize that the usual approach in these institutions emphasized seasonal, team-oriented, competitive sports that create more spectators than participants and too often ignore the athletic needs of the also-rans. For those who "make the team", insufficient attention to prior muscular conditioning often results in injury. We are trying to emphasize conditioning for safety as well as for health, and we attempt to introduce a greater variety of sports skills into these institutions and point up the virtue, in appropriate individual situations, of lifelong amateur commitment.

Special Programs

While carrying out these generalized objectives in the community, we have designed specific programs meeting needs, which cry out for special attention, therapy and research in preventative medicine. An overwhelming void in areas of cardiac, pulmonary and vascular rehabilitation will be filled.

1. Diabetic Children

We are engaged in a program of physical fitness and athletic development for diabetic children. Diabetes patients are prone by the nature of their disease to cardiovascular complications that are the most common cause of their early death. One of the most effective ways of forestalling this is by a lifetime habit of exercise and athletic activity designed to maintain the circulatory system in peak tone. Historically, this has been the most neglected aspect of diabetic treatment, principally because of the unavailability of suitable training programs (compounded by difficulty of motivating the young diabetic patient, who discourages easily, feels himself different, and is too readily allowed to slip into the attitudes of illness). Working with juvenile diabetics, we have found that they respond with enthusiasm and renewed self-confidence to the presence and influence of Olympic athletes. We have had an unprecedented success in this project and are in close dialogue at this point with the American Diabetes Association, which wishes to participated with us in some meaningful way.

In addition, the diabetic conditioning program will be accompanied by a pioneering program of research, into the effect of physical training on the course of the disease. We hope that through our joint efforts with the American Diabetes Association a regular monitoring program will be

established consisting of: blood tests, stress testing, retinal blood vessel photography, renal function studies, neurologic evaluations, pulse volume recordings and plethismography. The information assembled should prove invaluable not only in the treatment of diabetes, but, in demonstrating the value of physical conditioning for everyone.

2. Physically Handicapped

Physically handicapped and paraplegic patients are another group whose survival and quality of life are especially dependent on a commitment to physical conditioning. We have therefore developed special programs for such patients concentrating on body strength and cardiovascular conditioning.

3. The Olympic Athlete

Historically, some of the most frustrating aspects of Olympic development in this country have been associated with the sacrifices our amateur athletes must make in order to represent their nation, at the Olympic games. Maintaining a dedication to a sport and to amateurism means that the athlete often trains without adequate financial support. Not infrequently his athletic development must be obtained at the cost of an education that might equip him for other alternatives of earning his own way. A good many "hang up their shoes" for this reason either before they achieve Olympic caliber or even afterwards, cutting short their competitive lives before peaking. A good many others turn professional.

We believe that our approach will afford our athletes greater dignity -- a responsible, respected, remunerative career, doing what they do best. It is a most dignified means of support during the years of their training and competitive involvement, and it continues to offer them a relevant career when the peak athletic years are over.

Uniquely, each of our Centers will be managed and manned in most aspects by Olympic athletes who, at the same time, will be: developing a financially rewarding, sports-associated career while maintaining amateur status; building working ties with other Olympic athletes; using our advanced facilities for their own physical conditioning and maintenance on a regular basis; bringing their acknowledged and thus far untapped expertise to bear on the better physical health of the community; thus becoming valued and respected members of the community. No longer will an Olympian have to choose between a "normal" life and his athletic career.

We hope to make it possible for the Olympian to achieve both goals.

Active and ex-Olympians do and will participate in all levels of our corporate activity, with opportunities for advancement in management and for profit participation. At the same time they are dedicated athletes practicing and promoting amateur sports for Olympic objectives in and for the benefit of the community.

We believe that our program will offer these superior athletes an opportunity for systematic training under the guidance of experienced personnel. We believe that the program's advanced techniques may well result in levels of performance not yet achieved by United States athletes (and may well compare favorably with and perhaps surpass the training programs of the Russians and East Germans). Moreover, the athletes will benefit greatly from each other-- from being part of a dynamic athletic community affording enlarged perspectives, fresh ideas and sharpened skills. Unfortunately, many of our Olympic athletes presently train in virtual isolation, and never benefit from close association with other Olympians.

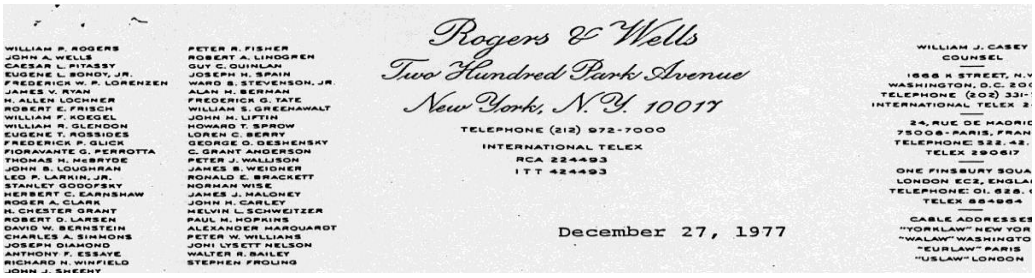
Finally the establishment of the regional United States Olympic Training Centers at Squaw Valley, Colorado Springs, etc., requires association with a nationwide grassroots program. What better method could be found, than to develop clusters of "mini training" centers throughout the country, staffed by the progeny of the Olympic games - the Olympic athletes themselves? A new, enduring and productive relationship between the United States Olympic Committee and the Olympic athlete will thereby be possible.

The benefits to USOC, direct and indirect, are of utmost importance. Every benefit to the Olympic athletes is multiplied several thousand folds for USOC and the nation. The USOC will be closely identified with the program that brings the athletes greater skill, strength and endurance; economic independence; self-respect and public Gratitude and adulation. In turn, the athletes will put forth greater loyalty and dedication to the United States Olympic effort, while the community rallies to support it financially.

This outline and proposal by Dr. Dardik and myself, was the best hope for be able to compete with the Eastern Europeans athletes without interfere with the Armature status of our athletes. In addition, these programs would be beneficial to the whole population, the disabled and the normal adult person, as well as children. We had two centers in operation: one in New Jersey and one in Washington, D.C. We had more requests for membership than we could fill up because of the size of the locations and parking permits. The public was elated with this fantastic program. Olympic Athletes from different events were hired. They were practicing for their event and at the same time coaching young children and running fitness programs for the adults. It was a fantastic success, functionally and economically.

At the same time I had started my new center at Coto De Caza, California, which was a unique, advanced research center. I will discuss the Coto De Caza research center in a separate Chapter later on. However, we were thinking of integrating the Coto De Caza Center to work with the SLS Company.

The following is the **letter from Mr. Casey to Mr. Palmery**, the President of Penn Central Corporation, which owned at the time Coto De Caza:



Dr. Irving I. Dardik
1555 Center Avenue
Fort Lee, New Jersey 07024

Dear Irv:

Here is a letter to Palmeri as promised on Friday. I'll be at Palm Beach and can be reached on the telephone at. 305-844-6844.

Yours,

William J. Casey

/Cc: w/encl. William E. Simon

William Simon and William Casey were very excited and wanted to expend the program to even more functions. In the next few meetings we had additional thoughts as described below:

Letter to Palmeri:

Bill Simon, Gideon Ariel, Bill Casey and I have agreed to form Scientific Life Systems, Inc. to complete the development of Gideon's computer-based exercise equipment, establish the network of physical fitness centers we've talked to you about and carry on related activities.

We will get this operation under way early in the year with the Englewood center as our showcase. We would like nothing better than to establish the first of these centers in the west in the building Gideon designed for you, which I understand will be completed toward the end of the year. We expect to be able to equip and undertake management of a physician-staffed physical fitness center on some kind of a joint venture with you by that time.

We will proceed to formulate a concrete proposal to talk to you about. Let's shoot at talking about it sometime during February.

Additional thoughts were added to the enterprise:

ADDITIONAL THOUGHTS:
SCIENTIFIC LIFE SYSTEMS, INC.
In Cooperation with the
UNITED STATES OLYMPIC COMMITTEE

The United States Olympic Regional Training Centers established at Squaw Valley and Colorado Springs are designed to give our Olympic athletes the necessary background through sports science and medicine to allow them to compete and win in world class competition with confidence and safety. This has been accomplished through the designation of departments of physiology, Biomechanics, nutrition, psychology, general medicine and orthopedics.

Scientific Life Systems, Inc. (SLS) incorporates similar principles but with dramatic programs and unique equipment to be applied at the corporate executive level and for the general public and community at large.

SLS offers a fantastic opportunity to insure the success and survival of the Olympic Regional Training Centers in Squaw Valley and Colorado Springs and others that will be developed around the country by providing the broad grassroots level programs that are so necessary. Scientific Life Systems, its programs and futuristic designed equipment, provides a major avenue through which we will prove superior to the Eastern European Countries in youth athletic development and in national preventative health and fitness programs.

The following is a general outline of Scientific Life Systems Inc. SLS can be divided into 3 parts.

I. Nationally oriented corporate executive program
II. General public and community program
III. Computerized exercise equipment and variable program development (with many obvious spinoffs)

I. The national corporate executive programs will be organized through a Sports Science Center. A major Sports Science Center could be created at Coto De Coza, a 5000-acre piece of land owned by Penn Central Corporation, where The *Vic Braden Tennis College* is located.

The Sports Science Center will have several components.

Cardiac stress testing

Oxygen consumption studies to definitively evaluate and monitor an individual's level of physical fitness and capacity for work

Programmable exercise with computerized exercise equipment

Computerized nutrition and diet program
Biomechanical analysis of tennis and golf swings and other sports The Scientific Life Systems program at the Coto De Caza Sports Science Center will stimulate the executive through challenge and discovery and by application of sound scientific principles to participate in a maintenance program throughout the year. A comprehensive SLS prescription can be provided which, will include lectures and discussions concerning problems in life style such as: smoking, diet, drinking habits, psychological attitude and so forth. In addition at Coto De Caza, a corporate convention center is currently available and could be expanded. There will be facilities for golf, tennis, horseback riding areas, skeet shooting, hunting, etc. Families of the executives could be encouraged to come for their total participation, as well. Maintenance and follow through programs for the remainder of the year would be done through the establishment of modified mini SLS centers at or near by the corporation. This facility will be staffed by a SLS medical group along with Olympic athletes and would also utilize computerized exercise equipment. The SLS program at Coto De Caza, in addition to formalized arrangements with corporations, would easily be able to accommodate independent individuals and families who would come for periods of time to receive a comprehensive SLS prescription while vacationing at the same time.

II. The second division of SLS could be entitled American Sports Medical Training Centers, which is ***designed for the general public at the community level***. Each of these training centers would include three parts.

A fitness and conditioning area for everyone giving a background in strength, flexibility, cardiovascular conditioning and relaxation with use of computerized exercise equipment designed for all age levels.

A sports participation division would include fencing, gymnastics, racket-ball, etc. The gymnastics program would be available for elite gymnastic athletes as well as, promising young athletes at the grassroots level. Through gymnastics one is able to develop the poise, strength, flexibility and confidence that is necessary to be an able participant in any sport. Thus for the first time in this country athletic profiling can be performed to help direct young athletes into specific sports. Gymnastic programs can also be designed for adults who have no interest in competition, but would like to be physically fit. Of interest is the fact that Edward Vilella, world renowned ballet dancer, will be working with Olympic gymnastics coach, Muriel Grossfeld, to develop this aspect of SLS throughout the country.

A Sports medicine section to include specialized programs for:

A. Cardiac rehabilitation
B. Pulmonary rehabilitation
C. Sports injury and general injury rehabilitation as well as prevention
D. The juvenile diabetes program for exercise on an organized nationwide basis
E. Hypertension program
F. A computerized diet program

The above are easily coordinated.

III. The third division relates to the ***work done by Gideon Ariel*** and would include following:

Development and manufacture of computerized exercise equipment that could be used not only in training centers but in hospitals and rehabilitation clinics for specialized work such as injury rehabilitation, cardiac rehabilitation and the like.

High-speed cinema photography with computerized systems for an analysis of:

A. Athletic techniques
B. Safety analysis of equipment
C. Computerized analysis of elite athletes and sporting events. Films could be shown on nationwide T.V. prior to Olympic games or other athletic competition to both describe the techniques of the event as well as provide the most dramatic instant replay capabilities ever.
D. The design of numerous types of efficient equipment whether they be shoes, tennis rackets, syringes and so forth.

We have so often heard that is necessary for the individual to alter his lifestyle in order to promote the proper kind of physical activity, nutrition and mental attitude that will allow him to avoid premature aging and chronic debilitation. SLS through scientific methods can easily provide this without creating dramatic changes in ones life style by means of a challenging and enjoyable approach. This is important in that SLS can fit in well with our industrialized society. I also want to reemphasize the unique role that SLS can play in the identification of prospective athletes and being able to direct them into the many Olympic sports, many of which have not been properly introduced to our youth. Individual training centers as well as the national program will be coordinated with select scientific and medical personnel who are anxious to participate. Research projects and data collection can easily be performed at a level never possible before in this country. The role that this program will play in preventative medicine is most exciting. Insurance company participation is a natural. The entire project is indeed an Olympic effort with Olympic ideals and goals and is now within our grasp. SLS will proudly display the Olympic seal in "cooperation with The United States Olympic Committee."

We were in the process of implementing this extraordinary program. We had the backing of such notorieties as Simon and Casey, and the support of Colonel Miller the director of the Olympic Committee.

During one of the initial meetings in Amherst, Mr. Casey saw me analyze a legal case with Dow Chemical related to the head injury of a gymnast and the effect of the mats, which did not absorb the shock that caused the injury. Casey, immediately notice the potential in the area of Workman's Compensation.

The next memo, prepared by Mr. Casey, came from a meeting between: Mr. Casey, Mr. Simon, Dr. Dardik and myself.

A PHASED MARKETING STUDY
prepared for
COMPUTERIZED BIOMECHANICAL ANALYSIS, INC.

This report directs your attention to a three-phase marketing and development plan, which divides CBA's potential into identifiable time segments.

Phase I examines present and pending agreements, accounts receivable and the steps that must be presently taken in order to facilitate Phase II. Phase I will consume approximately three months time.

Phase II highlights the untapped marketplace with special emphasis on product liability. Phase II will take approximately eighteen to twenty-four months. Phase III will project CBA's potential for becoming a public corporation, which appears to be the only way CBA can fully take advantage of the economic opportunities outlined in the first report.

Phase III, including time for SEC registration procedures, would consume from two to five years. Therefore, this report contemplates projected earnings commencing immediately and a public issue of stock terminating five years hence. All remarks assume that the present Amherst staff will not be increased and that the writer and a secretary will be the only other personnel added.

PHASE I

The chart below is intended to give you an overall view of CBA's current economic situation.

The Riddell contract is insufficient and is a token study at best. I feel that a personal contact with their attorneys will ultimately expand the scope of that project.

The USOC contract, although undervalued, is important in that the public relations, which we can derive from the human performance analyses, will serve as a foundation for contracting with

college and professional sports organizations, particularly in the sport of football. Careful examination of the USOC contract must determine the retail value of the Agreement so that CBA may take a charitable deduction for the balance between retail and "cost," with carryovers, if the balance is substantial enough.

The pending CITC agreement must be set into motion as soon as possible. I feel that the shoe business is a natural market for CBA as it easily accommodates Ariel's expertise in biomechanical analysis and his knowledge of sporting goods equipment. In this connection, future agreements with manufacturers should include in all product advertising that that product was tested by CBA. The CITC negotiations, if closed-ended (with exclusivity clauses) must be sufficiently lucrative to offset potential income in dealing with other shoe companies. Additionally, a per-unit surcharge should be sought in dealing with CITC. A biomechanical walking shoe properly advertised and aesthetically appealing could be the most lucrative contract of CBA's existence.

The Amerad Betonong contract not only provides us with needed cash flow, but it may open doors to government contracts. An April 6, 1978 New York Times' article (see Appendix A) indicates that artificially surfaced football fields may be the cause of pronounced increases in foot, ankle and knee injuries. The Times' article does not state whether the testing conducted thus far is anything more than static testing. Assuming that static testing only was conducted, CBA is in a unique position to assume testing responsibilities. The expertise gathered from the Pony and the Dow Chemical contracts will place us in high regard when negotiating for any material testing agreements.

It logically follows that Chevron and other artificial surface manufacturers will require CBA's services to determine a method for remedying any problems originating from their products. Finally, I plan to speak with the Executive Director of the Sporting Goods Manufacturers Association to determine the best way to approach its membership for analyzing different genre of sporting goods. The Sporting Goods Manufacturers Association could lend immeasurable aid to CBA from both a design-testing standpoint, as well as a product liability standpoint. This Association has been an important catalyst in trying to stem the tide of product liability litigation.

The subject of publicity and patent protection must be discussed in brief. Although I mention these subjects last in closing out discussions on Phase I, they are two of the first tasks that must be undertaken -- first publicity.

Publicity in the form of sophisticated, yet readable, brochures should describe, in general, Gideon Ariel's analytical methodology and how it adapts to the law, human performance and design. Preliminary estimates indicate that a brochure of this nature will cost approximately $10,000 for 1,500 units.

Normally, a project of this magnitude would cost $30,000; however, the cost can be reduced by three times if one individual does the subcontracting. It will take from two to three months to

write, design, and print the publication. I have an individual in mind and will bring examples of his work when we next meet.

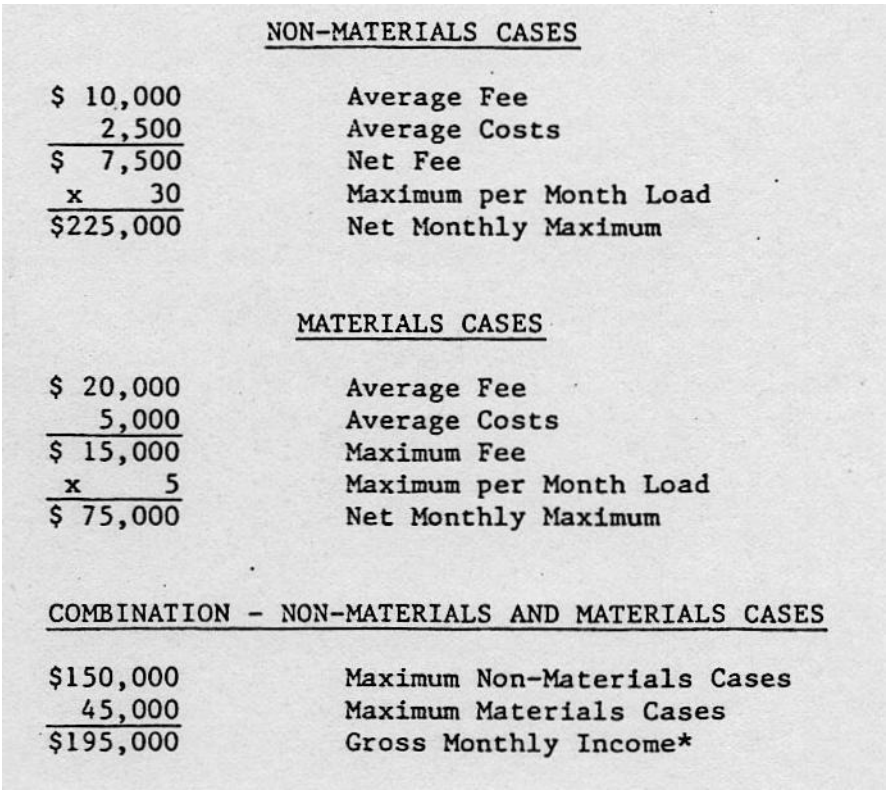
Patent protection must be obtained on the circuitry of the digitizing process. Discussions with Tom Wettach of Reed, Smith, Shaw, and McClay of Pittsburgh, indicate that there are no guarantees that a patent can be gained, but a "patent pending" status affords some immediate protection. A patent search and other legal proceedings cost from $6,000 to $7,000.

Wettach's view of obtaining a patent on the circuitry is optimistic. In the event that we obtain the patent, our computer data would even be protected. Software computer data is not patentable under current law, although the Supreme Court is currently reviewing the matter. I strongly urge that you go ahead with this project as the prospects of capturing the market, as outlined in the first report, in my view, is incentive enough.

PHASE II

The projects and contracts itemized in the Phase I discussion will naturally occupy a prominent place on the Phase II calendar. However, I will limit this discussion solely to products liability and Workers' Compensation.

In the products liability area, CBA has undertaken two types of cases: Materials cases and non-materials cases. The Johnnie Carson case falls under the latter category while the Dow case is actually, materials testing, in nature. Interviews with Gideon Ariel and Ann Penny have revealed the following:



NON-MATERIALS CASES

$ 10,000	Average Fee
2,500	Average Costs
$ 7,500	Net Fee
x 30	Maximum per Month Load
$225,000	Net Monthly Maximum

MATERIALS CASES

$ 20,000	Average Fee
5,000	Average Costs
$ 15,000	Maximum Fee
x 5	Maximum per Month Load
$ 75,000	Net Monthly Maximum

COMBINATION - NON-MATERIALS AND MATERIALS CASES

$150,000	Maximum Non-Materials Cases
45,000	Maximum Materials Cases
$195,000	Gross Monthly Income*

These above figures represent the highest and best utilization of publicity and sales promotion. I do not feel that the maximum number of cases (maximum load), as depicted in this report, will be realized at the immediate conclusion of Phase I or at the outset of Phase II. Achieving maximum load will depend on how fast the insurance carriers and their lawyers accept CBA as a viable alternative to doing nothing. The speed of acceptance will be enhanced by calling on organizations such as the Sporting Goods Manufacturers Association and the various major underwriters of products liability insurance. Please see Appendix B for a list of all the major products liability insurance companies and their location.

The Workers' Compensation business is virtually unknown. It is practically impossible to estimate gross revenues in this area without first having been in the marketplace. However, as long as there are industrial accidents, there will be a need for CBA. The cursory conversations I have had with people in the steel business indicate that there is a real need for CBA's services. The Industrial Manufacturers Association should be a contact point as well as those interested steel executives in the Gary, Indiana region.

The entire products liability and Workers' Compensation business may evolve ultimately into long-term, multi-million dollar agreements with insurance carriers. This is highly desirable, as CBA requires "stream" income to give it stability. Project by project income is less reliable because of the limited life of the contract.

For the purposes of this study, I submit a figure of $50,000 per year for Workers' Compensation work, realizable at the end of Phase II.

PHASE III

In order to fully take advantage of the market potential as outlined in my last report, CBA will need the extensive financing that accompanies an SEC registration and subsequent public offering. The decision to go public or not will largely depend on the evolution of Phases I, and II. However, one can envision CBA as well as human disability. That the qualitative rating systems discussed in the first report combined with the testing of sporting goods equipment would give rise to a totally unique system of manufacturing sporting goods -- one without fault, one without liability; yet a product that is an amalgum of superior design and biomechanical function -- the ultimate tennis racquet or golf club, for example. Pony Shoes is already heading in this direction.

The overall market here is in excess of $100 billion, but this is admittedly speculation and the subject of another study.

COMPANIES PARTICIPATING in the

ISO PRODUCT LIABILITY CLOSED CLAIM SURVEY

*Aetna Casualty and Surety Company	*Liberty Mutual Insurance Company
*Aetna Insurance Company	*Lumberman's Mutual Casualty Company
*Chubb & Son, Inc.	*Maryland Casualty Company
*Commercial Union Insurance Company	*Pennsylvania Manufacturers Assoc. Ins.
*Continental Insurance Company	*Reliance Insurance Company
*Continental Casualty Company	*Royal Globe Insurance Company
*Crum & Forster Insurance Group	*SAFECO Insurance Company of America
*Employers of Wausau	*Sentry Insurance Company
*Fireman's Fund Insurance Company	*St. Paul Fire and Marine Insurance Comp.
*Hartford Insurance Group	*Travelers Insurance Company
*Home Insurance Company	*United States Fidelity and Guaranty
*Insurance Company of North America	*New York-based corporations

PROJECTED EARNINGS

Phase I $ 372,000

Phase II $1,950,000

Phase III $100 Billion

This report, by Mr. Casey showed the unbelievable potential of SLS to be successful in the future while the C.B.A. Company was already very successful.

Particularly in the Liability business, here was the outline:

Computerized biomechanical analysis is a theoretical innovation, which has immense marketable potential. Within the legal realm, the three most prominent areas of marketable application are: Product Liability, Workers' Compensation, and Qualitative Rating Systems.

I. THE STATE OF PRODUCT LIABILITY

Product Liability has had a devastating effect on many industries because of the increasing number of court suits, excessive court awards, and spiraling insurance premiums (see Appendix A). In 1968, product liability cases numbered 50,000; in 1980, it is estimated that product liability cases, will number over 2 million. The average settlement of a product liability case in 1968 was $10,000; in 1978, the average settlement is $100,000. Thus, there has been a remarkable increase in both the number of product liability cases and the amount of their settlement.

According to the US Commerce department, the industries hardest hit by product liability are those involved in manufacture of machinery, sporting health equipment, toys, medical equipment, and drugs. Of every liability dollar spent by these industries, 56% of it goes to legal fees and costs. This expenditure, known as the Gross Legal Product (GLP), rose from $2 billion in 1955 to $154 billion in 1976. This immense legal expenditure is essentially the marketing target of biomechanical analysis, one in which this new applied science can serve, affect, and benefit from.

II. PRODUCT LIABILITY AND BIOMECHANICAL ANALYSIS

The first case in which Computerized Biomechanical Analysis, Inc., was consulted was Johnny Carson v. LNR Industries, manufacturers of gymnastic equipment. Mr. Carson contended that an injury to his neck and back, incurred while falling from an exercise slant board, which was a direct result of the slant board malfunctioning. Mr. Carson filed for $500,000 in damages against

LNR Industries and their insurance carriers, who soon thereafter contracted for Dr. Ariel's services. Using biomechanical analysis, Dr. Ariel replicated the accident using a test subject the same size and weight of Mr. Carson, and photographed, in high speed, the identical exercise, which Carson had performed. Dr. Ariel's frame-by-frame analysis revealed that it was mechanically impossible for the slant board to malfunction under those circumstances. Dr. Ariel's findings were confirmed by an independent engineering firm, Truesdail Laboratories, and shortly afterwards, Mr. Carson withdrew his legal suit. Computerized Biomechanical Analysis, Incorporated (CBA) was begun. Dr. Ariel's fee for the $500,000 damage suit was $4,200.

Month's later, CBA was contracted by the law firm of Corlett, Merritt, Killian, and Sikes, who were the legal representatives of the Dow Chemical Company and their insurance carriers, Fireman's Fund. The case involved a novice gymnast who was injured while attempting a back flip, which resulted in his total quadriplegia. A demand for $5 million in damages was based on the plaintiff' contention that the substance of the gymnastic mat-- Ethafoam-- was negligently manufactured by Dow Chemical Company, and that Ethafoam did not effectively prevent his injury.

Initially, Dow Chemical Company was ready to make a $5 Million out-of-court settlement offer based on their belief that a substantial judgment would he incurred, regardless of fault, strictly on sympathy. Dr. Ariel, however, through: biomechanical analysis that it was impossible for a substance to be both non-resilient enough to permit an individual to complete a back flip and resilient enough to absorb an injury of that kind. After Dow Chemical Company's top computer and materials experts supported Dr. Ariel's contention, the decision was made to continue the case, which is still pending. Dr. Ariel's, and CBA's fee for the $5 million damage suit was $20,000.

Thus, the biomechanical analysis performed by CBA proved to be the crucial factor in each of the cases.

The ramifications of this are as staggering as the potential market within the insurance industry. Until now, insurance companies have paid excessive costs for catastrophic accidents merely because they have been at the mercy of conjecture concerning the determination of fault. Biomechanical analysis provides a scientifically sound foundation from which insurance companies can organize their defense. The effect that biomechanical analysis can have on court decisions, out-of-court settlements, and insurance premiums is indeed great. Presently, there is an evident opportunity for CBA to attack the product liability market and to become the first and foremost authority on biomechanical analysis.

To our knowledge, there is no other system in existence that can adequately duplicate Dr. Ariel's computerized biomechanical analysis. Furthermore, it is felt that patents on the computerized components of Dr. Ariel's system can be obtained.

Concerning the immediate growth of CBA in accident analysis of product liability, the Dow Chemical Company, as a result of the previous case, has contracted CBA to determine impact analysis on all their foam products.

In addition, the Riddell Corporation, the leading manufacturer of football helmets in the country, plans to contract CBA for a study analyzing the design liability of football helmets. The importance of a business alliance with the Riddell Corporation is vital because the football helmet industry, as a whole, is involved in $100 million in liability suits each year. In fact, in 1977, the Riddell Corporation lost a $5.3 million product liability case (Stead v. Riddell) in the allegation that a football helmet was defectively designed.

III. WORKERS' COMPENSATION

Workers' Compensation statutes govern the amount of money employees receive for injuries incurred during employment. Presently, Workers' Compensation claims reach over $14 billion each year. To date, there has been no precise system to measure the degrees of disability, and as a result, insurance companies have resorted to general formulas to determine the amount of Workers' Compensation.

Using biomechanical analysis, the actual degree of a worker's disability can be measured, within a very small margin of error. This margin of error can be eliminated, if the worker is tested biomechanically before an accident has occurred. The worker's ordinary flexibility can be recorded and used as a standard once an accident has occurred. The comparison of a worker's pre-accident flexibility and post-accident flexibility will determine exactly the extent of the injury. Thus, through biomechanical application, a system can be provided that will consistently determine extent of injury and Workers' Compensation amounts. The result would be a substantial savings for any company that pays sizeable compensation fees. This analysis system would have similar attraction for insurance carriers who are constantly involved with accident claims.

Already, steel corporation executives have expressed interest in CBA's designing such a system to help accurately determine their insurance claims. If CBA becomes involved in this field, it could charge a large retainer fee for this service, which would provide CBA a significant cash flow.

IV. QUALITATIVE RATING SYSTEMS

It is anticipated that computerized biomechanical analysis can one day serve as an analytical standard for any product or device, which uses movement or moving parts. This rating system

could be used to give approval for such things as product safety and durability ("The Bio-mechanical Seal of Excellence", perhaps). Naturally, CBA would have to gain the complete support of major insurance carriers before a rating system of this nature can be designed. In view of the potential for CBA's reputable service in accident analysis and Workers' Compensation, a qualitative rating system is indeed a possibility.

V. Immediate MAR STING INITIATIVES

CBA requires a sophisticated marketing approach, which would help establish a reputable impact within its various fields of application. Strong, positive publicity could be generated by insurance research organizations, such as the Defense Research Institute, which provides information on the latest scientific developments to the insurance industry and their legal representatives. Governmental agencies, such as the Occupational Safety and Health Agency (OSHA), which monitors the safety of industrial premises, tools, and equipment, could also provide a market thrust (See Appendix C for extent of government regulation within product liability cases of various industries. Still further, numerous law and medical journals would be willing to report the results of any legal breakthrough affecting product liability or insurance costs.

VI. THE COSTS OF GROWTH

Currently, Dr. Ariel, CBA, and staff have been financially restricted in their growth potential in the various fields. A great deal of potential income is being lost due to lack of exposure and practically no budget.

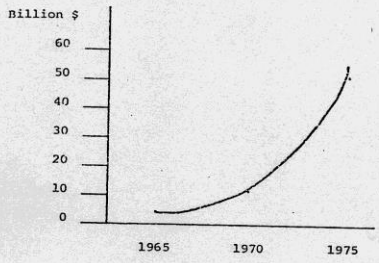
To begin in earnest, CBA needs funding of $163,000, which would include salaries for three personnel, office and administrative expenses, advertising and coats, and travel expenses.

VII. THE CHALLENGE AHEAD

These remarks serve only as an introduction to the market potential of Computerized Biomechanical Analysis, Incorporated. For those who are going to become involved in the future of CBA, the challenge is one of combining each individual's highest resources to build the strongest framework for a successful company.

APPENDIX A

COSTS OF PRODUCT LIABILITY CLAIMS (1965-1975)



	Number of claims	Total cost	Average settlement
1965	50,000	$.5 billion	$10,000
1970	500,000	$12.5 billion	$25,000
1975	1,000,000	$50 billion	$50,000

Source: Insurance Information Institute

Product liability in 1978:

Annual number of product liability cases	1,000,000
Average settlement per claim	$100,000
TOTAL dollar volume of market	$100,000,000,000

APPENDIX B

WORKMEN'S COMPENSATION INSURANCE: PREMIUMS WRITTEN 1970-1975

1970	$3,492,307,000
1971	3,660,066,000
1972	4,104,090,000
1973	4,761,174,000
1974	5,413,436,000
1975	6,100,000,000

Source: Bests' Aggregates and Averages

WORKMEN'S COMPENSATION ANALYSIS

Annual number of work injuries	2,500,000
Average cost per injury	$5,600
TOTAL dollar volume of market	$14,000,000,000

APPENDIX C

INDUSTRIES AFFECTED BY FEDERAL REGULATIONS OF PRODUCT LIABILITY

Federal Regulation Agency	Industry	% of industry affected
OSHA	Office equip.	80%
	Production mach.	72%
	Construction equip	66%
	Material Handling	56%
CPSC	Household Appliances	86%
	Glass products	70%
	Boats	54%
	Housewares	54%
	Leisure equip.	53%
	Clothing	26%
DOT	Trans/motor vehicles	46%
FDA	Food and drug	34%

FEDERAL AGENCIES INVOLVED IN PRODUCT LIABILITY:
Department of Commerce
Department of Justice
H.E.W. Urban Development
Department of Labor
Council of Economic Advisors
Economic Policy Board

Source: Insurance Information Institute