

Pilot Program For the Dominican Republic

March 11, 1978

The development of a television industry in any new market, especially in countries outside the USA, depends most heavily on local manufacture of the TV tube and the TV cabinet, as either/both are very bulky, hence require inordinate amounts of money for shipping costs. In many instances, shipping costs of said items actually cost more than their price of manufacture.

By contrast, the associated electronic hardware which can be purchased on an O.E.M. (original equipment manufacturer) basis, at least until manufacturing capability is achieved, can be shipped into the same area at ¼ of the cost of either the tube or the cabinet – yet said electronic components represent more than 60% of the total cost of a complete TV set. Therefore, a successful TV set manufacturing operation can NOT be started/continued, unless the TV tube and the cabinet are manufactured reasonably near the point of end-use.

Over the past 30 years, it has been demonstrated in the USA, that the TV tubes, as manufactured for the public, can easily be modified to replace tubes found in most, if not all, military equipment (radar), display devices (airports), medical equipment display devices, (EKG – X-ray), computer display terminals (data display – with hard copy capability), etc.

Proliferation of visual communicative devices used by the public, in itself provides untold educational assistance by the very fact that data is being displayed and acted upon. Intentionally-provided public educational programs, televised at the appropriate times, would provide increased specific knowledge to all who view them.

It would promote the common language (eliminating dialects), increase public pride of the homeland, and contribute significantly to GNP. It would also provide an important, world-wide accepted usage of leisure time while at the same time promoting the desirability of peak physical fitness and mental capacity.

It has often been said that one picture is worth a thousand words; I say: one deed is worth a thousand pictures. The Government of the Dominican Republic, by demonstrating its cooperation in such cutting-edge educational structure, will gain world-wide recognition, for such an accomplishment.

It would benefit the masses, enhance manufacturing capability of Dominican industry, with the happy side benefit of strengthening the military. Increased diversification and versatility of Dominican industry will invite increasingly greater amounts of foreign capital and technology.

As the common people become more educated and more affluent, the Dominican swing to more industrialization, reducing dependence on agriculture, must inevitably strengthen the economic well-being, of the nation, at an ever increasing rate.

To get down to more specifics, investigation has revealed that there are presently approximately 100,000 TV sets in the Dominican Republic with approximately 4,000 sets being located in hotels and leisure establishments. By 1979 the number of sets in hotels, etc. will increase to approximately 10,000 .

Past experience in the USA has shown that these 10,000 sets will be completely replaced every three years, creating a demand for that segment of TV set ownership to approximately 3,333 new TV sets per year.

Again, as shown in the USA, those used TV sets can be refurbished and sold to the general public for approximately 50% of the original sale price providing a relatively modern TV set at a price that more people can afford.

Further, a financing entity set up specifically to handle those transactions, can reduce the monthly payments to as little as \$2.00 per month, thus bringing the availability of TV sets to even more people.

In the USA the average life of a TV tube is approximately 4 years while the average life of the TV set is approximately 10 years. In extrapolating these numbers and assuming that a new TV set will sell for approximately \$200.00 and a used one for approximately \$100.00, with replacement tubes selling for approximately \$40.00, the following minimal figures may be extrapolated, starting with 1979.

1st year 1979

Sales of new TV sets (hotels)	3,300	@	300.00	\$990,000.00
Sales of new TV sets (to public)	1,000	@	300.00	\$300,000.00
Sales of used TV sets	3,300	@	150.00	\$495,000.00
Sales of replacement tubes	2,000	@	40.00	\$100,000.00
Sales of tubes for military applications	100	@	40.00	\$4,000.00
Sales of tubes to industry	500	@	40.00	\$20,000.00

Therefore we could reasonably expect totals of 2,000 replacement tubes in 1979 at an income of approximately \$1,024,000.00; 4,300 new TV sets at an income of approximately \$1,290,000.00 ; 3,300 used TV sets at an income of \$495,000.00 per year ; for a grand total of \$2,909,000.00 for the year 1979.

Because of increasing population, normal increase of standard of living, increase of foreign-invested capital in leisure and industrial complexes, etc., a 15% per year increase in the above noted figures would appear reasonable and extremely feasible so that by 1985 the TV set manufacturer capability might well be approximately 17,380 new sets per year selling at \$5,214,000.00 ; TV replacement tubes of 119,520 at \$4,780,000.00 per year and the number of TV sets both new and used be swelled to approximately 134,760 sets.

Earlier herein, it had been briefly mentioned that a financial entity could be created to assist the general public to purchase the TV sets. Exploring this in greater detail, the following as an example is envisioned: A family's total income is \$10.00 per week; the total cost of an used TV is \$100.00 . The family may deliver, to the finance company, the sum of \$2.00 per month for 10 months, at which time the TV set will be released to said family. (Layaway plan-effectively used in the USA)

The family would then pay to the finance company \$2.00 per month until the balance of \$100.00 plus interest and carrying charges, paying the full obligation (approximately 40 months), at which point the family then owns the set. At that time it may be traded in for a newer TV set, depending on individual arrangements. By this method it would take a minimum of capital to start and continue this type of arrangement.

Initial labor requirements, with the Dominican Republic locals receiving salaries from \$3,000.00 to \$6,000.00 per year, to operate the plant(s) in the Dominican Republic might be as follows:

Total local payroll – 1979 approximately \$360,000.00 per year

TV tube operation	15 local people	2 consultants
Cabinet manufacturing	15 local people	1 consultant
Assembly operation	15 local people	1 consultant
Office, sales, etc.	10 local people	1 consultant
Finance	<u>3</u> local people	<u>1</u> consultant
Total	58	6

Total local payroll approximately \$1,000,000.00 per year

TV tube operation	45 local people	4 consultants
Cabinet manufacturing	45 local people	3 consultants
Assembly operation	45 local people	3 consultants
Office, sales, etc.	15 local people	3 consultants
Finance	<u>10</u> local people	<u>3</u> consultants
Total	160	16

Separate and apart from all of the foregoing, many other benefits will accrue to the industrial capability of the Dominican Republic because of the diversity of equipment necessary to sustain the television industry manufacturing requirements. For instance:

1) High vacuum pumps necessary for the manufacture of TV tubes may also be used in cryogenics, medicine, metal deposition, electron-beam welding, high-altitude experimentation, chemical mixing, military applications, neon sign manufacture and repair, air conditioning repair, electricity generation, inertia recapturing wheels, sterilizers, desiccators. Storage of elements normally destroyed by oxygen atmosphere, creating exotic atmospheres devoid of oxygen and or nitrogen, negative pressure applications and hundreds of uses in industries, other than the TV industry.

2) Bombardiers (induction heating generators) necessary for degasification of vital elements in the television tubes (CRT's) may also be used in the manufacture of razor blades multiple and automatic soldering (including silver soldering), tempering metals, military applications, costume jewelry manufacture, selective heat treatment, medicinal usages (such as ultra-modern techniques for treating cancer).

Also welding and soldering of components with no external means of achieving same (such as honeycombing), (welding of a pipe within a pipe), shrink fitting and hundreds of other uses including many in conjunction with vacuum pumps not herein mentioned.

Other equipment normally used in the manufacture of TV tubes, cabinets and the assembly of TV chassis are, such as follows: aluminizing equipment, high voltage supplies, high vacuum equipment, epoxy resin equipment and supplies, low-voltage high-current welders, angle iron cutters, diverse types of power saws (metal, wood, glass) high speed drills, hand tools, powered emery and grinding wheels, glass buffing equipment etc.

Again much of this equipment may be used in myriad applications in many other industries with little or no change or adaptation.

In the 4th paragraph herein, we have alluded briefly to intentional public education via television. In any developing country, the education of teachers competent enough to impart the knowledge to the youth which is necessary to upgrade their own standard of living as well as assisting the nation in dramatically increasing the GNP, is always of the highest priority.

It is hereby suggested, that with the assistance of the Dominican Republic Government, the following method of education is not only desirable

but represents the most advanced system of education in the entire world today – second to none.

With as few as 5 or 6 of the most effective teachers in the Dominican Republic, and by installing TV sets in every single class room in every school in the nation, by the use of the educational or a government sponsored TV station, and between the hours of nine A.M. to 3 P.M., each master teacher at the TV studio may effectively instruct as many as 600,000 students simultaneously, with each classroom teacher serving as an assistant to the TV instructor.

Despite the disparity of ages, classes 2nd grade through 8th, all can be simultaneously instructed in the vital statistics, geography, history and economics of the Dominican Republic during a daily ½ hour class – say at 9:00 A.M. to 9:30 A.M.

From 9:30 A.M. to 10:00 A.M. on Monday one of the 6 expert teachers may teach math to the 2nd graders; 10:00 to 10:30 A.M. math to the 3rd graders; 10:30 to 11:00 A.M. math to the 4th graders; 11:00 to 11:30 A.M. math to the 5th graders; 11:30 to 12:00 P.M. math to the 6th graders. The 7th and 8th graders may receive instruction during afternoon hours.

The following television-assisted education might be structured during those hours daily with a change of subject, determined by competent Dominican Republic educationists as follows: Monday – math; Tuesday – language; Wednesday – science; Thursday – geography; Friday – history or any substitution of curriculum decided upon.

During hours when TV assist is not provided, normal school activities, under the direct supervision technique may be resumed, including review of televised instruction, preparation for the next TV assisted instruction period, testing for effectiveness of TV assisted instruction, study periods, rest periods, arts and crafts, recreation, etc.

Assuming proof of the validity and effectiveness of this revolutionary approach to education, it might be desirable to broadcast TV-assisted instruction via different channels simultaneously, in order to spend - more time on subjects deemed requisite. For instance, to amplify on the previously discussed curricula at 9:00 – 9:30, on channel 2

Vital statistics, geography, economics, history would be televised to classes from the 2nd grade to the 5th grade while on channel 3 instruction on the same subjects with a higher degree of sophistication may be taught to the 6th, 7th and 8th graders.

9:30 – 10:00 channel 2 math to 2nd graders – channel 3 math to 3rd graders, 10:00 to 10:30 channel 2 math to 4th graders – channel 3 math to 5th graders – etc.

Hopefully, at this point, people responsible for the education of the Dominican Republic youth will decide upon the curriculum best suited to properly educate the Dominican Republic grade schoolers.

Glowing attributes of such system would be as follows:

- 1) All persons using the system will tend to speak a common language thereby minimizing dialect's usage.
- 2) Inexperienced, young, or new teachers will have the benefit of working with the best teachers in the nation, effectively becoming upgraded themselves and thereby becoming more effective teachers.
- 3) The assurance that the children are being taught the most up-to-date knowledge, uniformly.
- 4) Ready dissemination of all vital knowledge relative to the Dominican Republic, within hours, because of the simultaneous link-up of all schools in all provinces thereby uniting the country as no other country in the history of mankind.
- 5) Doubling the literacy rate in a single generation.
- 6) Leading the world in educational techniques via this revolutionary new concept with continued experimentation into specific areas during normal school hours when TV assist is not normally in use.
- 7) Expand the curricula of existing college facilities, with emphasis on diverse professional categories such as engineering, doctors, lawyers, accountants, scientists, business administrators, etc., de-emphasizing the obsoleted need for so many teachers.

Further, by making entrance requirements to the teachers' colleges more stringent, the "cream of the crop" of the potential teacher applicants, would thereby be effectuated.

An added incentive to those fortunate selectees, would be the possibility of becoming one of the few TV-assist MASTER teachers...obviously a prestigious and important position.

All of the foregoing represents just a brief recital of the beneficial effects that will ensue from a locally situated TV manufacturing operation which has the

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backing of the Dominican Republic Government, in conjunction with native-supplied capital and foreign-supplied technological assistance.

Any and all subjects discussed herein, may be expounded upon in more detail and with greater sophistication, at the appropriate time, whenever necessary.

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