## 7-5 Study on the Timing of the Construction of the Second Stage Project

#### 7-5-1 Cost-Benefit Analysis

In considering changes in the timing of construction for the Second Stage Project, benefits include the reduction of waiting time and cargo handling time envisioned in the Second Stage Project as well as the saving of secondary transportation by feeder ships. Where as the construction investment of the Second Stage Project is counted as a cost. By deriving the internal rate of return therefrom, the contruction timing has been studied.

### (1) Study Case

As for the Second Stage Project, the following two cases are studied with regard to containerization.

Case-1' Where full container vessels will take priority in the use of berths for large ships under the conditions of the First Stage Project, as well as under the completion of the Second Stage Project. (In other words, a comparison with Case 1 of the First Stage Project)

Case-2' Where semi-container vessels continue service and feeder ships are used for secondary transportation from neighbouring nations under the First Stage Project, and full container vessels will enter service only after the completion of the Second Stage Project. (In other words, a comparison with Case 2 of the First Stage Project)

For Case 1', the completion of the Second Stage Project is simulated for every two years after 1985. For Case 2', the completion of the Second Stage Project is also simulated for every two years after 1985, assuming a container berth is constructed one year before full container vessels start service.

In this study, the necessary calculations are made every two years between 1985 - 1997 as completion years.

#### (2) Method of Comparison

The internal rate of return for Case 1' and Case 2' is calculated according to the year when the Second Stage Project will be completed. The method for calculating the internal return rate is as follows.

$$\sum_{i=1}^{n} \frac{Bi - Ci}{(1 + IRR)^{1}} = 0$$
 (7.2)

Where

Bi: benefit in i-th year

Ci: cost in i-th year

IRR: internal rate of return

In other words, the IRR which will satisfy equation (7.2) is the internal rate of return.

Theoretically, a year when the IRR is maximized is most advantageous for completing the container berth.

## (3) Calculation of Benefits

Total cost of waiting time and loading/unloading time (i.e. port-staying time) for each type and size of ships during each year is calculated for the First and Second Stage Projects, and the differences are considered to be yearly benefits produced by execution of the Second Stage Project.

If full container vessels enter into service, with no secondary transportation by feeder ships from neighbouring nations, the feeder charge will be saved which is also considered as a benefit in addition to the above.

The waiting time costs for each type and size of ship (general cargo vessels) is calculated as follows.

# (General Cargo Vessels)

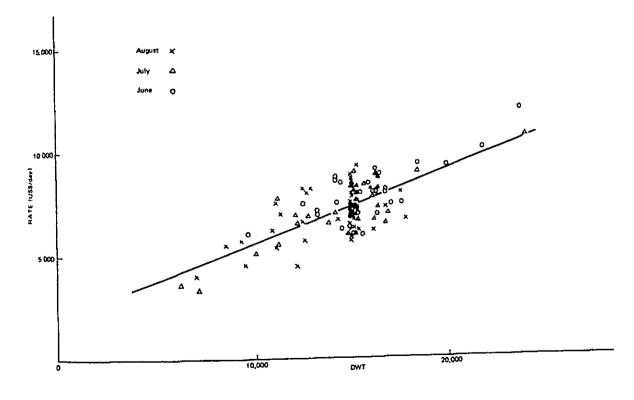
Ship cost per day for general cargo vessels is plotted in Fig. 7-5-1 from the actual contracts of ships that were employed for the three months between June — August, 1980 (Shown in SSE). Euqation (7.3) shows the calculation of daily cost per ships size (contract basis) by the method of least squares.

$$C = 0.36049 \times D + 1992.8 \ (\gamma = 0.72309)$$
 (7.3)

Where C: daily ship cost (US\$/day)

D: ship size (DWT)

Fig. 7-5-1 Contracted Rate of General Cargo Vessels (Jane-Aug. '80)



By the equation (7.3), daily ship cost by size is obtained as follows.

0 ~ 5,000 DWT	2,894 \$/d	(average:	2,500 DWT)
~ 10,000 DWT	4,697 \$/d	(average:	7,500 DWT)
~ 15,000 DWT	6,499 \$/d	(average:	12,500 DWT)
15,000 DWT ~	8,302 \$/d	(average:	17,500 DWT)

#### (Bulk Carrier)

Bulk carriers in the future are estimated from past experience to be around the 20,000 DWT class is the case with general cargo ships. Therefore the following estimation concerning the unit contract price of a bulk carrier has been made based on data from March — May 1981.

Daily cost per 1 DWT ship (contract basis) from March - May, 1981.

15,000 ~ 20,000 DWT	0.445 \$/d/DWT
20.000 ~ 25.000 DWT	0.436 \$/d/DWT

Therefore, in case of a bulk carrier of 20,000 DWT

$$(0.445 + 0.436)/2 \times 20,000 = 8,810 \text{ S/d}$$

### (Semi-container Vessels and Feeder Ships)

Ship costs for semi-container vessels are assumed to be 20% up from general cargo vessels in consideration of the relation between construction costs of general cargo vessels and semi-container vessels.

Daily ship cost for each ship type is as follows.

2,000 D	WT feeder ship	3.257 \$/day	
10,000 ~	15,000 DWT semi-cor	ntainer vessel	7.779 \$/day

### (Full container vessels)

Daily ship cost is estimated with reference to the estimate of the daily ship cost for a full container vessel carrying 1400 containers in Japan as follows:

1400 TEU loading container vessels 44.0	00 \$/day
---	-----------

The total ship cost for each year is calculated from (a) the abovementioned daily ship costs, (b) the number of waiting ships, (c) port staying time per type and size of ships expected after the completion of the First and Second Stage Projects, Differences in total ship cost are assumed to be the benefits of the Second Stage Expansion Project.

Benefits for each year and for each case are shown in Table 7-5-1. As ship waiting costs sharply increase with increases in waiting time, Table 7-5-1 does not list the benefits for years after the average waiting time per ship drastically increase.

Table 7-5-1 Estimated Benefit

(103 US\$)

		Case 1'		Case – 2'			(10, 022)
Year	A After 1st Stage	B After 2nd Stage	Benefit (A – B)	A' After 1st Stage	B' After 2nd Stage	C' Feeder charge	Benefit (A'-B'+C)
1986	6,827	3,581	3,246	4,001	3,581	887	1,307
87	8,418	3,756	4,662	4,226	3,756	1,013	1,483
88		3,909	j	4,386	3,909	1,139	1,465
89		4,120		4,619	4,120	1,265	1,764
90		4,250		4,822	4,250	1,391	1,963
91	Ì	4,464		5,131	4,464	1,465	2,132
92		4,679		5,720	4,679	1,538	2,579
93		5,000		5,916	5,000	1,612	2,528
94		5,212		6,437	5,212	1,685	2,910
95		5,481		6,819	5,481	1,759	3,097
96	Į	5,870		7,736	5,870	1,830	3,696
97		6,286		9,314	6,286	1,902	4,930
98	ļ	6,677		İ	6,677	1,973	
99		7,149	]	]	7,149	2,045	
2000		7,552			7,552	2,116	
01	İ	8,329	1	ĺ	8,329	2,187	
02	ļ	9,298	į		9,298	2,259	
03	}	9,468	ļ	; <del>!</del>	9,468	2,330	ļ
04		10,778	į	; }	10,778	2,402	
05		11,943		 	11,943	2,473	

### (Feeder charge)

Cost of secondary transportation of containers by feeder ships from neighbouring nations is \$17.51 per ton and \$263 per TEU. The feeder charge will be saved when full container vessels are in service, so that the cost of container transportation by feeder ships is included in the benefits of Case 2' where full container vessels will start service after the completion of the Second Stage Expansion Project.

#### (4) Cost Calculation

As this study aims at a relative comparison, only the construction cost is taken up and the administration and operation costs for each year are omitted.

Construction costs in this study cover the amount of yearly investment introduced from Table 10-3-1 and shown in Table 7-5-2 in the section for cost study.

As this study aims at examining construction timing, the optimum time for construction is studied by changing the investment years. The construction period is 4 years as shown in Table 7-5-2, making 1982 the first year for investment. The construction period for the project was reviewed by delaying the first year of investment by 2 years and observing changes in internal rates of return brought by each investment schedule.

Table 7-5-2 Investment Program

(103 US\$)

	First Year	Second Year	Third Year	Fourth Year	Total
Amount	778	10,607	10,858	8,207	30,450

## (5) Project Life

In examining the changes in internal rates of return for the project by changing the construction schedule for the container berth, the project life is assumed to be 20 years after the completion of the Second Stage Project. As a standard case for comparison, 1982 and the starting of service is projected for 1986. Benefits are therefore incurred during the 20 years from 1986 to 2004. However, the final year of the calculation period is 2004 in every case, even when the start of construction is delayed.

## (6) Internal Rate of Return

Table 7-5-3 and Fig. 7-5-2 show the internal rates of return when the completion year of the Second Stage Project is changed from 1985 to 1997 for Case-1' and Case-2'.

The value of IRR obtained here only has meaning in a relative context. In other words, benefits and costs taken up are meaningful only in this comparison and not all benefits necessarily belong to Costa Rica.

#### Case 1'

In Case 1', where full container vessels enter into service from 1985, the highest rate of return is obtained when the Second Stage Project is completed in 1986 ~ '87. A somewhat lower rate of return is obtained before that and it decreases when completed after 1987. The rate of return sharply drops after 1991 so completion of the Second Stage Project early in the latter half of the 1980's is considered preferable.

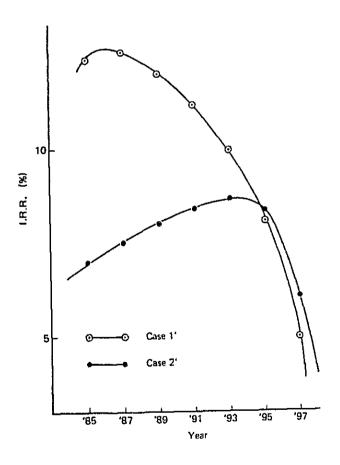
#### Case 2'

In Case 2', where no full container vessels are in service and only semi-container vessels stop at the Port of Caldera under the First Stage Project, the profitability of the Second Stage Project will increase up to 1995 but will be lower than that of the First Stage Project as shown in Fig. 7-5-1. This is anticipated because of the increasing waiting time. It full container vessels delay their service to the Port of Caldera, the Second Stage Project could best be completed in the first half of 1990's. But in this case, it is questionable whether profits will be sufficient.

Table 7-5-3 Internal Rate of Return

Completion Year of 2nd Stage Project	Case – 1'	Case – 2'
1985	16.9%	7.5%
87	19.1	8.1
89	18.7	8,8
91	18.2	9,5
93	17.3	10.1
95	15.9	10.6
97	13.5	9.7

Fig. 7-5-2 Internal Rates of Returns expected from Case 1' & Case 2'



## 7-5-2 Integrated Study of the Timing of the Execution of the Second Stage Project

Let us review the timing of the execution of the Second Stage Project in light of the following factors.

- (1) waiting time
- (2) occurrence of waiting ships
- (3) Rate of berth occupancy
- (4) internal rate of return

There are no theoretical answers to (1) - (3). These are matters to be judged from the present condition of the Port of Puntarenas and from general experience. An optimum answer can be given to (4) under certain premises.

#### Waiting time

If the Second Stage Project is not executed and if the marginal average waiting time is assumed to be 48 hours, as is the present situation at the Port of Puntarenas, then in Case 1 this marginal average waiting time will be reached in 1987 and in Case 2 in 1998. The waiting time will exceed 24 hours in 1985 for Case 1 and in 1995 for Case 2.

If a pier has to be completed before the waiting time reaches 48 hours, then the deadline will be 1986 for Case 1 and 1997 for Case 2.

#### Occurrence of waiting ships

If the Second Stage Project is not executed, the waiting ships will reach 30 - 40% of total calling ships from 1985 for Case 1 and in about 1990 for Case 2.

Assuming this level for the expansion of piers, the Second Stage Project must be completed before 1985 in Case 1 and by around 1990 in Case 2.

#### Berth occupancy rate

If the Second Stage Project is not executed, an optimum berth occupancy rate of 60% for 2 berths for large ships will be attained in 1991 for Case 1 and in 1988 for Case 2. However, 60% in Case 1 is attained if priority is given to container vessels, but this occupancy rate may not be the same priority is not given. Assuming that marginal rate is 55%, this rate will be attained in about 1985 ~ '86.

From the foregoing considerations, the Second Stage Project must be completed by about 1986 at the latest for Case 1 and by 1988 for Case 2.

#### Internal rate of return

Regardless of the execution of the Second Stage Project, if full container vessels are in service starting from 1985, the Second Stage Project would be most advantageously completed 1986 or 1987. If only semi-container vessels are in service as is now the case, the Second Stage Project need not be completed earlier as in Case 1'.

## Integrated study

The foregoing studies are summarized as follows:

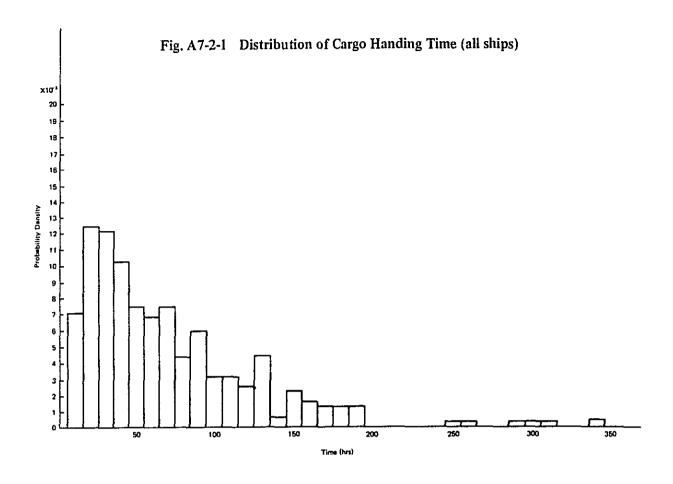
Item	The timing of the completi	on of the 2nd Stage Project
	Case 1	Case 2
Waiting time Actual conditions of waiting ships Berth occupancy rate Rate of internal return	1986 before 1985 1986 around 1986~87	1997 around 1990 1988 1995

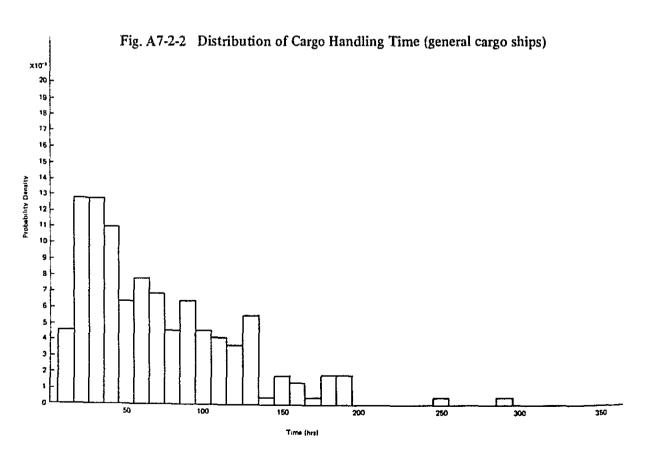
Note: The above results are obtained under the premises described above.

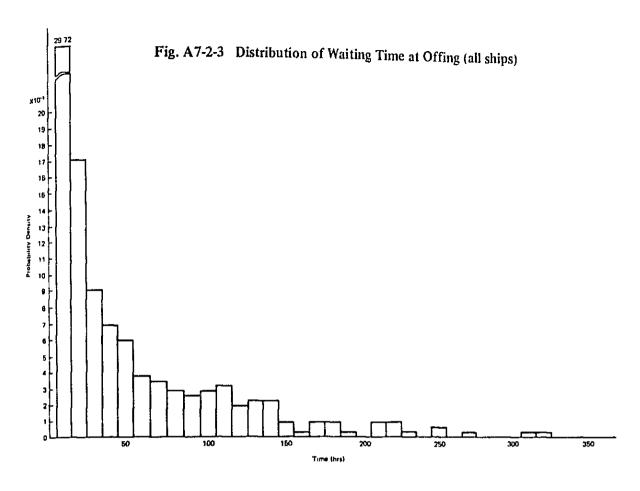
If full container vessels serve the Port of Caldera from 1985 under the First Stage Project, the completion of the Second Stage Project will preferably occur around 1986 under the premises mentioned above.

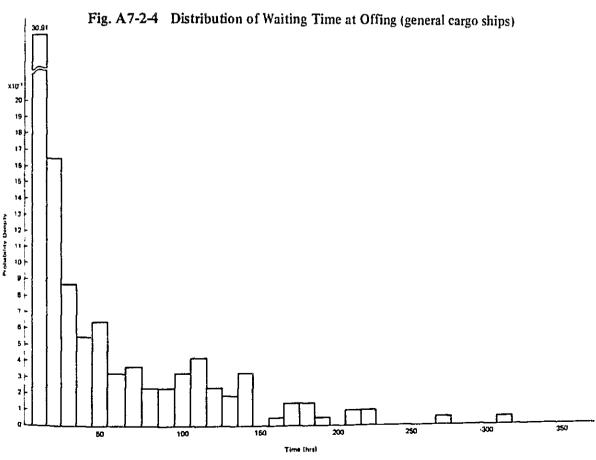
But if full container vessels are not served during the First Stage Project, then the Second Stage Project need not be completed before 1988.

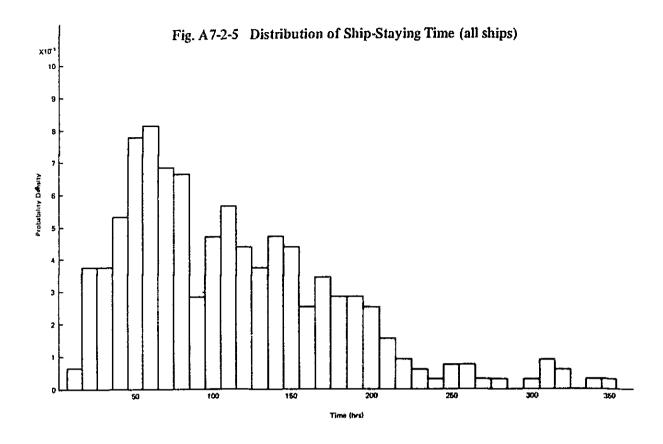
However, as full container vessels will presumably start serving the Port of Caldera during the early part of the latter 1980's, the completion of the Second Stage Project is expected by 1986 at latest.

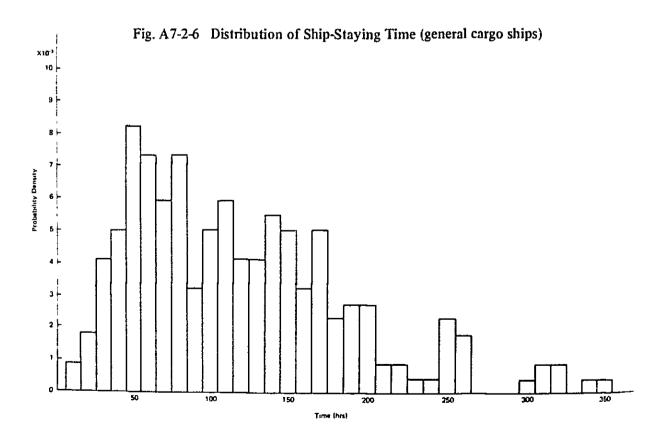


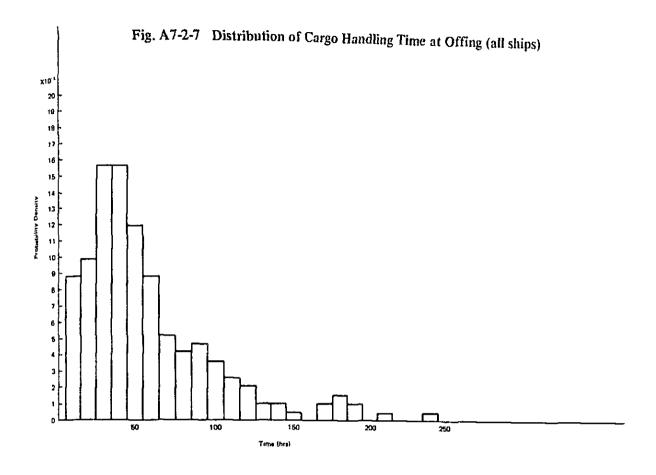


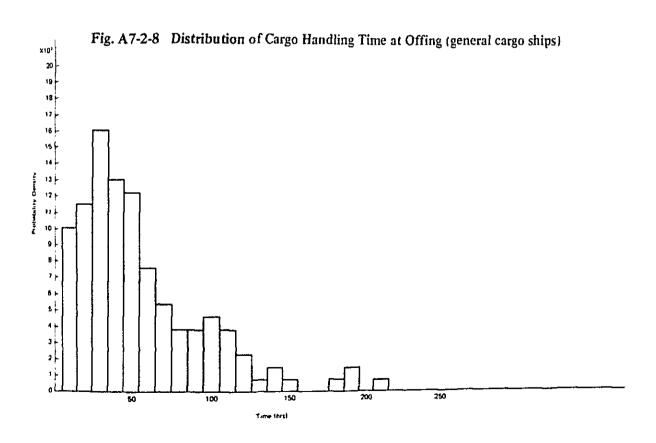


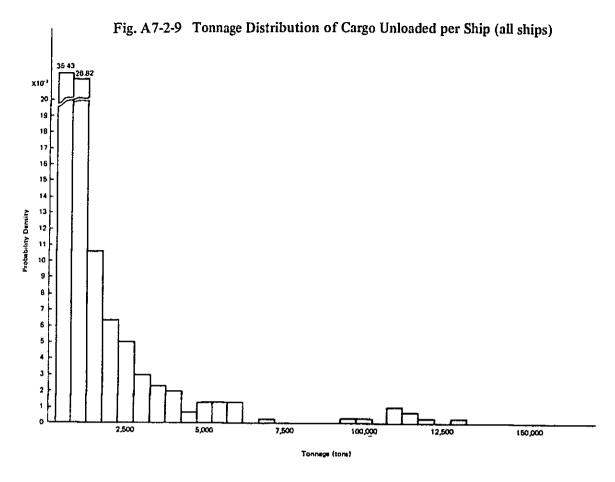


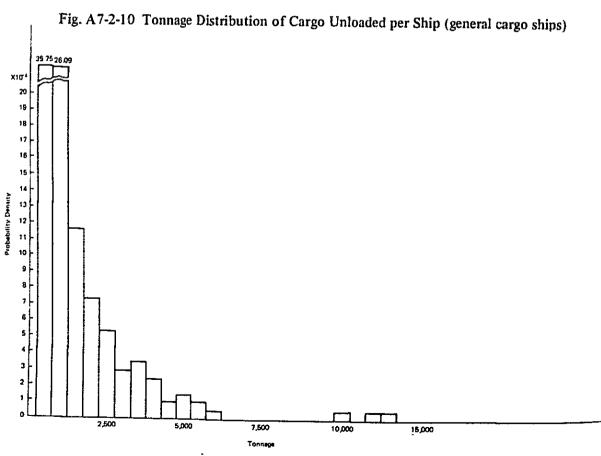


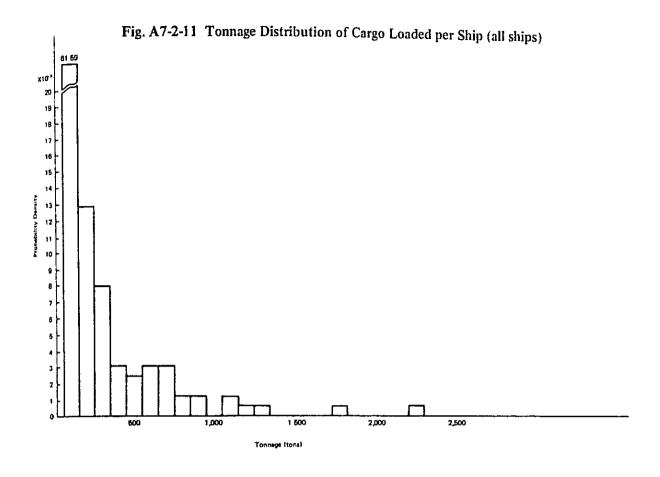












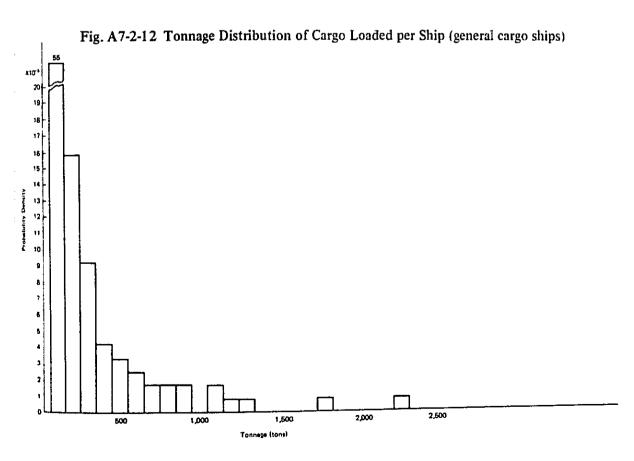
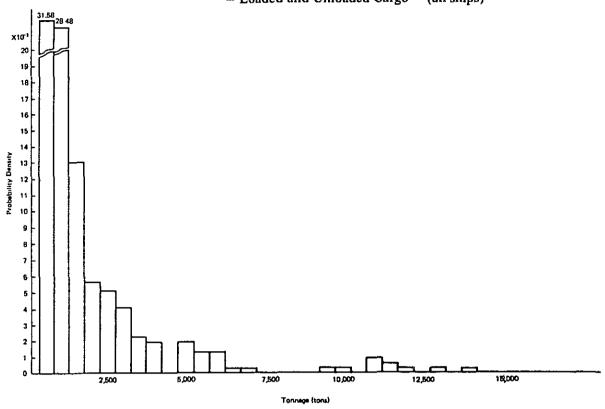


Fig. A7-2-13 Tonnage Distribution of Total Cargo per Ship

— Loaded and Unloaded Cargo — (all ships)



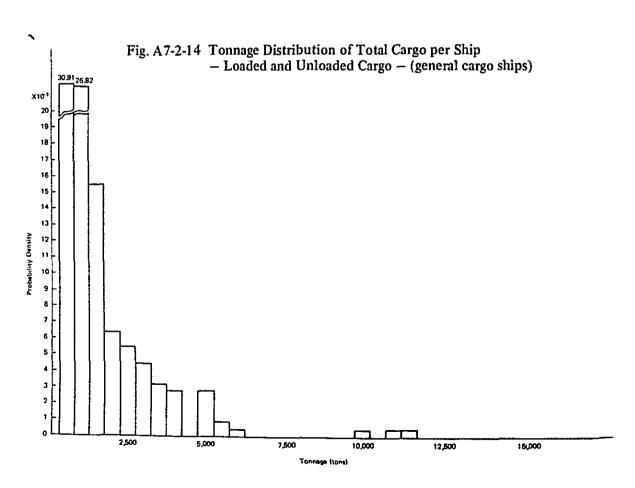


Fig. A7-2-15 Ship Size Distribution (all ships)

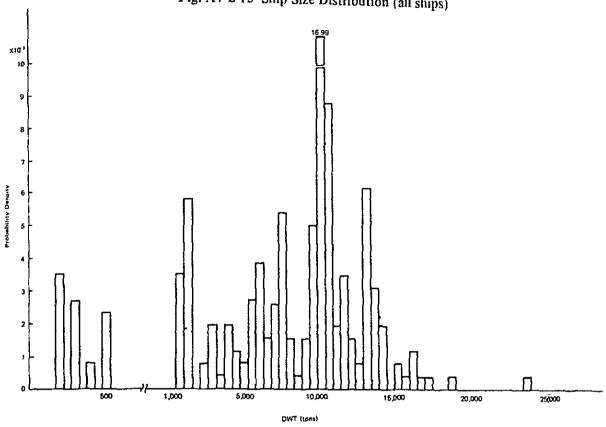
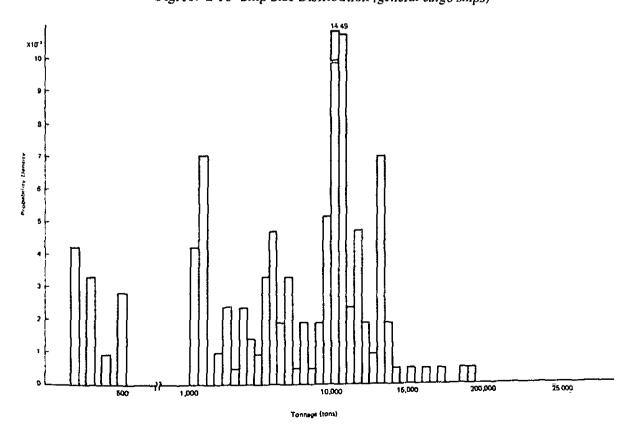


Fig. A7-2-16 Ship Size Distribution (general cargo ships)



CHAPTER 8 FACILITIES PLAN

## CHAPTER 8 FACILITIES PLAN

### 8-1 Mooring Facilities Plan

The projected use of the existing 2 berths for large ships and 1 berth for small ships is estimated by the simulation test in the preceding chapter as follows.

- 1. The use of large ship berths will exceed 50% from the start and 55% in 1985 and 60% in 1988 and will sharply rise thereafter, even if only semi-container vessels and feeder ships stop at the Port of Caldera.
  - 2. The use of small ship berth will continue at about 20% until about 2000.

From the foregoing, for the 2nd Stage Project, it follows that large ship berths must be constructed first. Also.

- 1. Container facilities must be completed in preparation for the berthing of full container vessels.
- 2. In the 1st Stage Project, as the water depth at the pier handling container is -11.0m and the length of the pier is 210m, both water depth and the length of the pier will be insufficient for container ships expected in the future (eg. 1,500 TEU type full container ships for the Central America Service).

For the above-mentioned reasons, a newly constructed pier will be built as a container pier and the existing -11.0m pier will share the function of handling general cargo and bulk cargo. Therefore, in the 1st Stage Project, already developed container related facilities will be transferred from the -11.0m pier to the new pier.

## 8-2 Facilities Plan for the Container Wharf

### 8-2-1 Pier

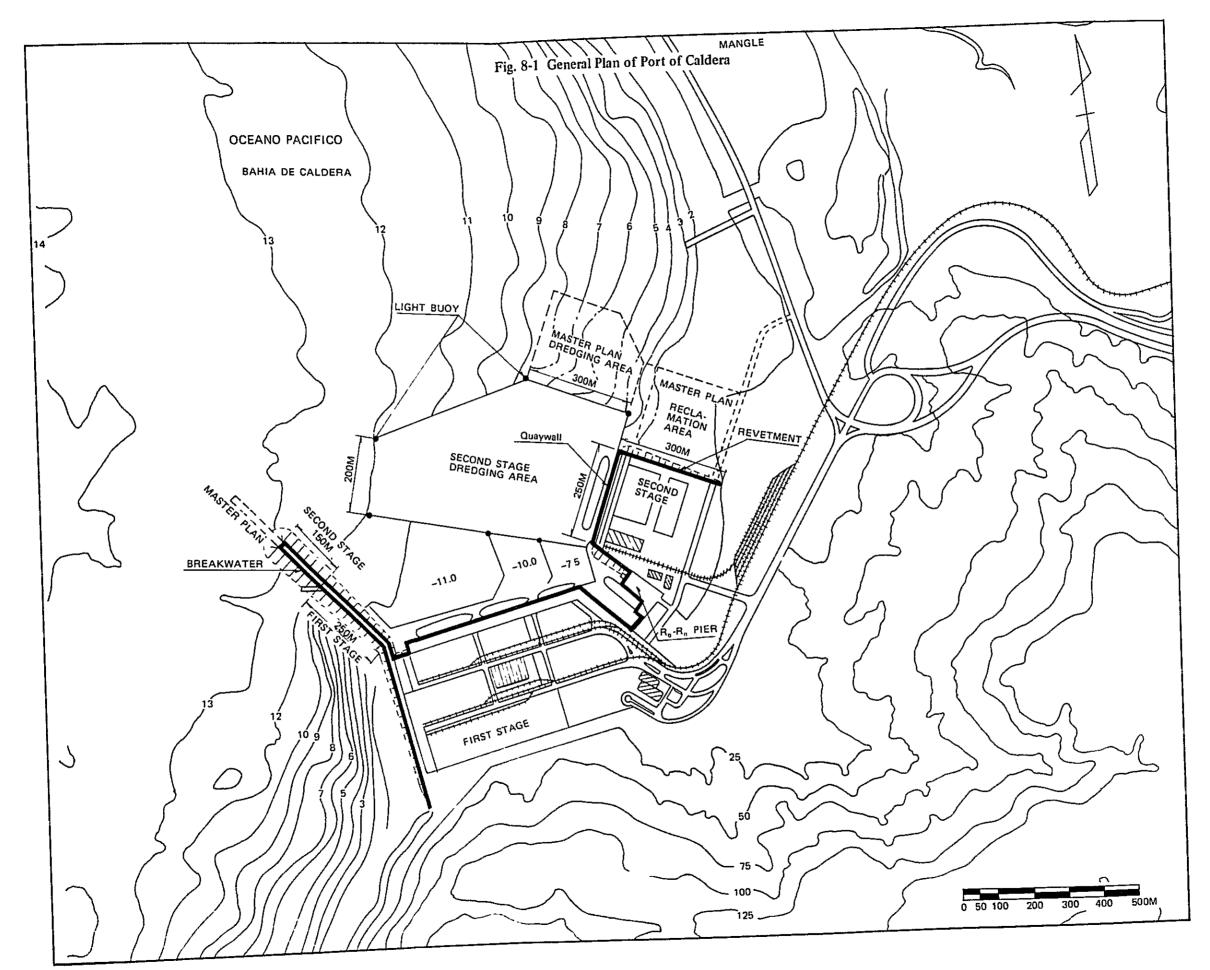
Full container vessels currently being used worldwide have a loading capacity, draught and overall length as shown in Fig. 8-2-1 and 8-2-2. The largest container vessels used in the Central American Route are the type of 1,500 TEU loaded.

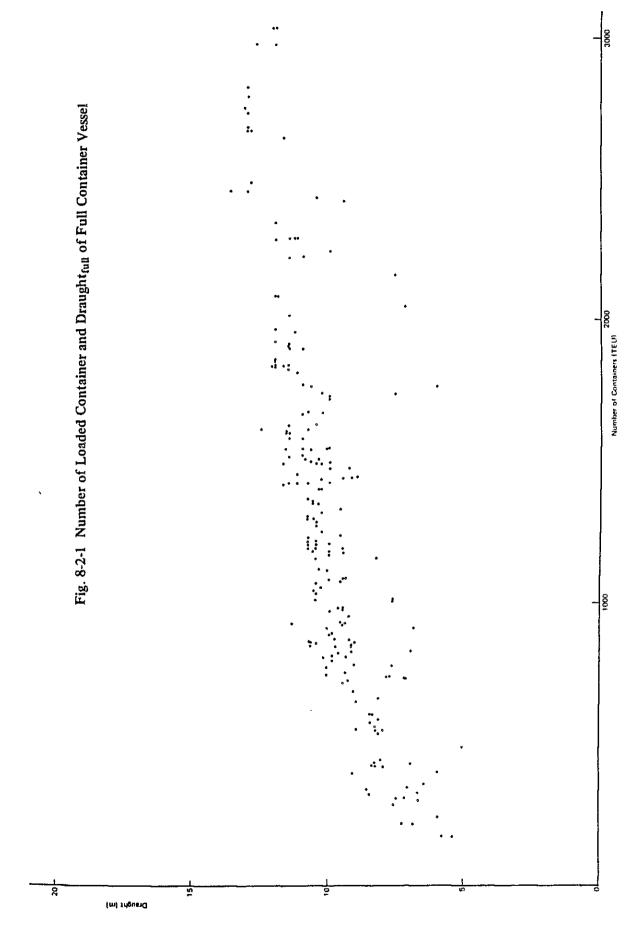
In view of the cargo volume in the Central American Route, there is little possibility of using larger ships during the next 10 years. Therefore, assuming the use of vessels with 11 0m draught and overall length of 220m, the water depth at the pier should be -12.0m and the length of the pier 250m.

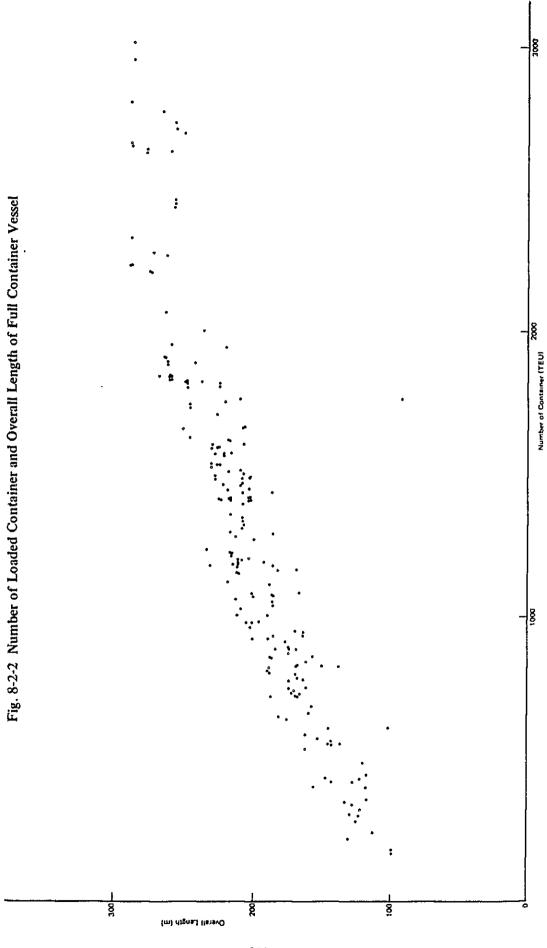
For larger container vessels in the future, -12.0m water depth is sufficient but the length of the pier must be extended to 300m. The reason for not requiring a water depth of more than -12.0m is a draught restriction of the Panama Canal in the Central American Route which does not permit ships larger than an overall length of 274.3m, width 32.3m and draught 11.8m.

#### 8-2-2 Container Yard

The container yard is a vast ground provided for the accommodation of containers to be loaded or unloaded from the ship in orderly alignments and is generally located adjacent to the apron. In this yard the containers to be loaded on the ship must be aligned in right order and a sufficient space must be reserved for the containers to be unloaded from the ship.







The area of the container yard is determined according to the number of containers handled and the container handling system adopted.

The number of containers to be handled in the 2nd Stage Expancion Project is given in Table 8-2-1, prepared from the estimated container cargo volume given in Table 6-3-6.

Table 8-2-1 Number of Containers Handled at the Port of Caldera (unit TEU)

Year	1980	1985	1990	1995	2000
No. of Containers	8,000	15,000	20,000	25,000	30,000

Table 6-3-6 gives the number of loaded containers and Table 8-2-1 gives the total of loaded containers and empty containers.

The container handling system consists of the following.

Straddle carrier system (S/C system)
Transfer crane system (T/C system)
All chassis system (A/C system)
Fork lift truck system (F/L system)

Table 8-2-2 gives a general comparison of each handling system. For the Port of Caldera, the S/C system will be most appropriate in view of initial investment, storage capacity and accessibility.

The required area of for the container yard is studied by simulating the number of containers handled at the container terminal. The simulation will be carried out for handling 20,000 TEU by the S/C system in 1990. In Costa Rica, as the railroad occupies a large part of land transportation, a simulation is also made on the F/L system which is more suitable for connecting railroads, for reference.

#### 8-2-3 Simulation of container terminal operation

Handling of containers by the S/C system and the F/L system is carried out in the order shown in Fig. 8-2-3 and 8-2-4. The simulation is carried out under the following conditions.

No. of containr cranes 1
Stacking tiers empty container 3

loaded container 2 (3 for export by F/C system)

Frequency of container vessels calling the port

2 ships/week

Number of containrs handled per ship

100 - 150 TEU for loading and unloading

Method of transportation to and from the container yard

Railway 60%, Road 20%, CFS 20%

Distribution of bringing in containers to the container yard

Table 8-2-2 General Comparison of Container Handling Systems

Terminal System		All-chassis	Straddle Carrier	Transfer Crane	Forklift Truck
Initial Investment		0	0	0	0
Storage Capacity		Δ	0	<b>©</b>	Δ
Accessibility		0	0	Δ	0
	Road	0	0	Δ	0
Adaptability to	Railway	Δ	Δ	0	0
Pavement	Pavement		Δ	О	0
Automation		Δ	Δ	0	Δ
Damage to Container		<b>©</b>	Δ	0	Δ
System Flexibility		0	0	0	Δ

Legend:

Superior ©

Moderate O

Inferior  $\Delta$ 

Fig. 8-2-3 Straddle Carrier System

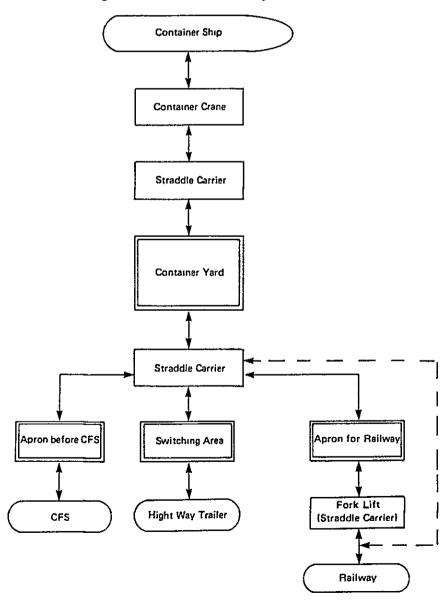
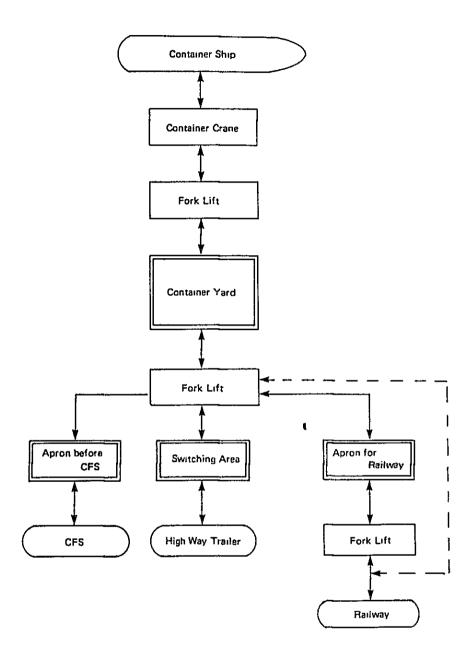
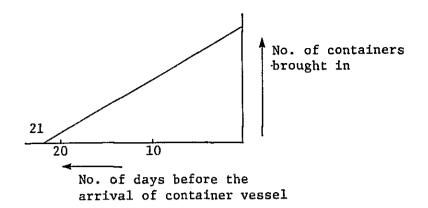
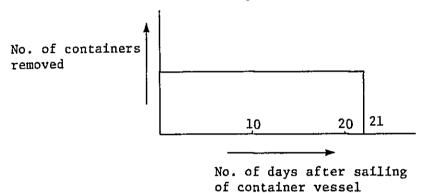


Fig. 8-2-4 Fork Lift System





Distribution for removal from the container yard.



Ratio of loaded containers		loaded C	empty C
to empty containers	inbound	90%	10%
	outbound	46%	54%
Ratio on 20 footers to 40 footers	20 footers	66.7%	40 footers 33.3%

The result of the simulation is shown in Table 8-2-3

Table 8-2-3 Result of Container Handling Simulation

System	Case	Frequency of entering the port	Volume of loading and unloading per ship	Volume of cargo handled/ week	Number of required slots	Increased volume handled per slot
S/C	Case-1 Case-2	2/week 2	100 TEU 150	400 600	738 Slot 961	0.897 TEU/Slot
F/L	Case-1 Case-2	2 2	100 150	400 600	530 758	0.877 TEU/Slot

The result of the simulation shows that in the S/C system, 738 TEU slots are required for handling 400 TEU/week and 738 TEU slots for handling 600 TEU/week.

Based on the result, the number of slots required for handling 20,000 TEU/year is calculated. Average volume handled per week is calculated as follows.

Assuming the peak volume of cargo handled as + 20% by seasonal variation, the maximum volume of cargo handled per week will be

385 TEU/week  $\times$  1.2 = 462 TEU/week

The number of slots required for handling 462 TEU/week is

S/C system 738 + 
$$(462 - 400) \times \frac{1}{0.897} = 808$$
 TEU slot

F/L systems 530 + (462 - 400) x 
$$\frac{1}{0.877}$$
 = 601 TEU slot

Here, slot means grid-like cross lines drawn to the size of the container, marked on the container yard.

Major container handling equipment required to handle the above number of containers in the container yard is as follows:

S/C system	Container Crane	1 o	r 1
	Straddle Carrier	4	3
	Fork Lift		1
F/L system	Container Crane	1	
	Fork Lift	4	

#### 8-2-4 Container Freight Station (CFS)

In the container transport system, transport of cargo in containers from the origin to the final destination or the so-called door-to-door transport, is most ideal. For LCL cargo, however, there must be a place where these cargoes are stuffed into the container. For exports, LCL cargo must be grouped at a specific point where cargo is sorted according to the destination and then stuffed in the container. For imports, mixed cargoes are taken out of the container, sorted according to the destination and then delivered to the consignee. These works are done in the container freight station (CFS). Customs procedures are also accomplished in the CFS. Since the CFS is used for packing, unpacking and storage of general cargo, the entire area is covered with a roof.

The required floor area of CFS is calculated for the projected container cargo volume in 1990.

Assuming the cargo volume handled at CFS to be 20% of the total container cargo volume, it is estimated from Table 6-3-6.

Import  $134,700 \times 0.2 = 27,000 \text{ ton/year}$ Export  $67,800 \times 0.2 = 13,000 \text{ ton/year}$  The conditions for the CFS are

Storage capacity of cargo per unit floor area 2 tons/m<sup>2</sup>
Percentage of occupancy of floor area 50%

Average number of days for storage Import 20 days
Export 14 days

Then, required floor area of CFS is

$$\frac{27,000 \times 20 + 13,000 \times 14}{2 \times 0.5 \times 365} = 1,978 \text{ m}^2 = 2,000 \text{ m}^2$$

#### 8-2-5 Other Facilities

Other facilities in the container terminal include a control tower, a maintenance shop and a gate.

The function of the control tower is to supervise loading and unloading operations, cargo handling in the container yard to see if the work is progressing in accordance with the program and instructions from the terminal office. The control tower is generally located at a place which commands a whole view of the containers in the terminal. The control tower carries out its functions by transmitting instructions to the operators of cargo handling equipment by radio telephone and watching the progress of the work. In some cases, the control tower is located within CFS.

The maintenance shop performs inspection, repair and cleaning of containers and maintenance of equipment and apparatus used in the container terminal. The maintenance shop is generally equipped with a power source for refrigerated containers, a air compressor, a welding machine, a battery charger and machinery and equipment required for maintenance work.

A gate is provided in the terminal to process documents for the delivery and receipt of cargo, check the condition of cargo and designate loading and unloading points in the container yard. A truck scale is provided adjacent to the gate for weight inspection of container cargo.

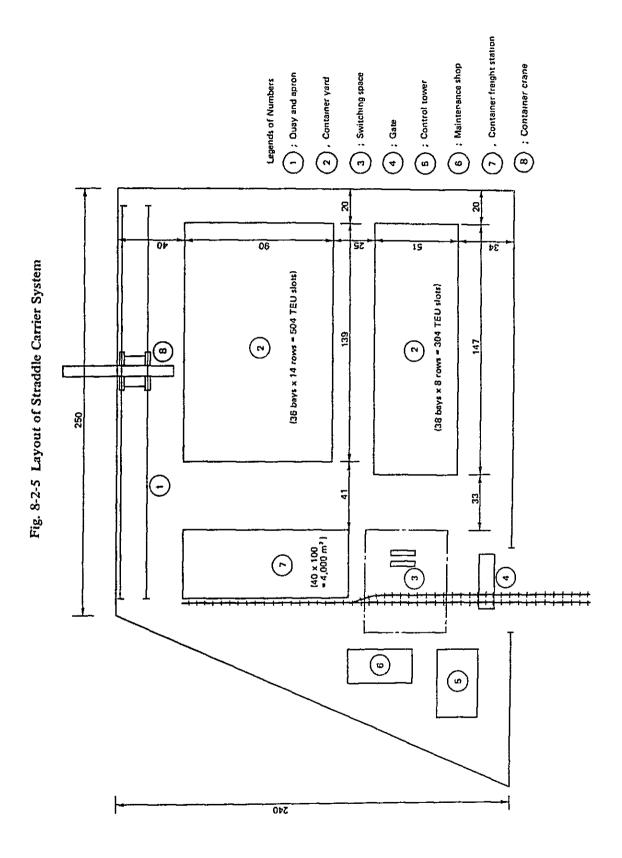
#### 8-2-6 Layout of container terminal

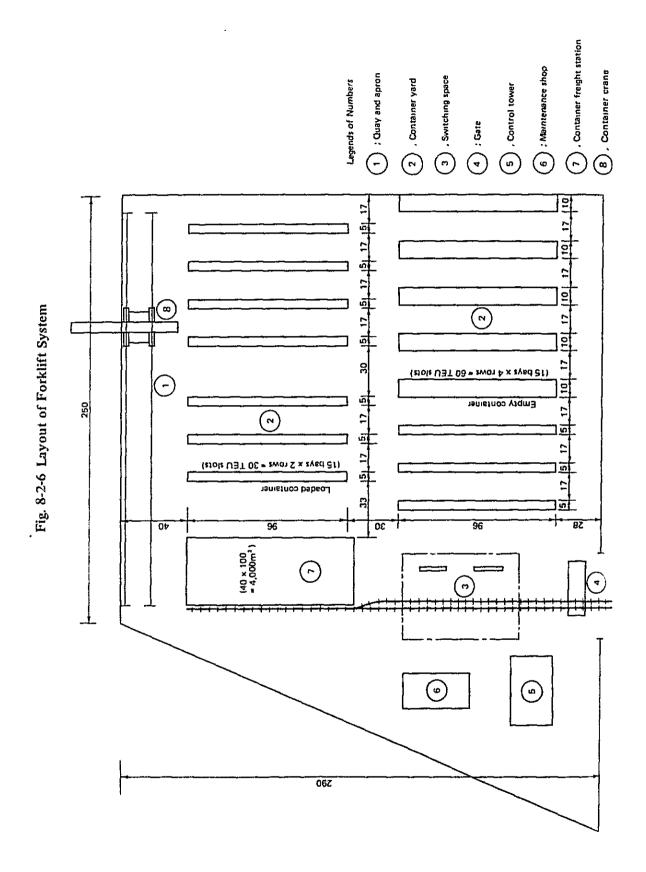
The maximum annual capacity of a 20,000 TEU container terminal for 1990 is shown in Fig 8-2-5 for the S/C system and in Fig. 8-2-6 for the F/L system.

Comparing both systems, the required area of the container yard for the S/C system is 36,000 m<sup>2</sup> while that for the F/L system is 47,500 m<sup>2</sup>, the latter requiring 11,500 m<sup>2</sup> more.

Investment in major handling equipment is somewhat cheaper for the F/L system but overall investment including construction costs of the container yard is more economical for the S/C system.

The new projected pier will not be used to capacity by container cargo, with only a 20 - 40% berth occupancy rate for use by container cargo from 1990 to 2000 as shown in Fig. 7-4-4, while the two existing berths will be used in 50 - 70% by large vessels. Therefore, it is desirable that the new pier will be used by vessels other than full container vessels so long as container vessels are not affected. Since semi-container vessels handle non-container cargo, the CFS will be enlarged from 2000 m<sup>2</sup> to 4000 m<sup>2</sup> for common use as a transit shed for general cargo and positioned close to the apron in consideration of handling non-container cargo.





#### 8-3 Breakwater

The height, period, rate of appearance and direction of incidence of waves affecting the Port of Caldera were already described in Chaper 4 shall discuss the harbor wave height that is registered when waves with the rate of appearance in Fig. 4-2-6 of that chapter and the direction of incidence in its Figs.  $A4-2-43 \sim A4-2-48$  enter the harbor.

Figs. 8-3-1 and 8-3-2 are diffraction charts for a breakwater with a length of 250m. These diffraction charts show by 50m mesh a diffraction coefficient calculated by means of a computer program in accordance with the irregular wave theory. This diffraction coefficient is the wave height ratio of waves diffracted from the tip of the breakwater to out-sea waves. The wave height in front of the wharf proposed under the Second Stage Expancion Project is the height of composite wave of these diffracted waves and the reflected waves of the existing (First Stage) verticalwall wharf. To compose a reflected wave the reflected image of the Second Stage Quaywall with the line of the existing wharf as the mirror surface is delineated and the composite wave height is calculated by determining the reflected wave height from the diffraction coefficient for the front of the wharf representing that reflected image and compose the diffracted wave and energy. A composite wave height is obtained as the square root of the sum of a diffracted wave height and the square of a reflected wave.

The wave height ratios of composite waves in front of the Second Stage proposed wharf to outside-of-harbor waves, if they are calculated by this method, are as follows.

Period 18 sec: Wave height ratio of composite waves 0.24

Period 16 sec: Wave height ratio of composite waves 0.22

Fig. 8-3-3 shows the wave height appearance unsurpassed probabilities for the front of the proposed wharf estimated from these wave height ratios.

Generally in port planning, the target of harbor calmness is 90~95% throughout the year as the rate of appearance of days when the cargo handling limit wave height is not exceeded. Since the Second Stage proposed wharf is intended for container ships, it is, indeed, necessary to set target values for the cargo handling limit wave height suitable for container ships and the number of days available for container cargo handling work.

An important factor in determining the cargo handling limit wave height is the surging of ships to be estimated from the use of the existing wharf by ships. The oscillation of ships by waves, if estimated as long-wave approximation by noting only the motion of water particles, is as follows:

Maximum velocity: 
$$U_{max} = \frac{H}{2} \sqrt{\frac{g}{h}}$$
 .....(1)

Horizontal half amplitude: 
$$\xi \max = \frac{T}{2\pi}$$
  $U\max = \frac{TH}{4\pi} \sqrt{\frac{g}{h}}$  .... (2)

II: wave height, h: water depth, g: gravity acceleration, T: period

Here, using maximum velocity Umax = 0.1 m/sec and horizontal half amplitude  $\xi$  max = 0.25m (full amplitude 0.5m) as limit values to which container cargo handling is possible and calculating cargo handling limit wave height by giving h = 12m and T = 18 sec, H = 0.22m and H = 0.19m are obtained from expressions (1) and (2), respectively. From this result, we adopt

H = 0.2m as cargo handling limit wave height.

It is desirable to increase the rate of appearance of days on which the cargo handling limit wave height is not exceeded to about 95% in order to ensure the regular operation of container ships.

At the present length of 250m of breakwater, the rate of appearance of cargo handling limit wave height of less than 0.2m is about 80% (see Fig. 8-3-3), which is far below the target value. So, it is necessary to improve harbor calmness by extending the breakwater.

Figs. 8-3-4~8-3-11 are a diffraction chart for the case where an extension of 150m is constructed under the Second Stage Expancion Project to bring the total length of the breakwater to 400m. Fig. 8-3-12 is a wave height unsurpassed probability chart prepared by estimating the wave height in front of the container wharf from this diffraction chart. As can be seen from it, 94.5% can thus be ensured as the rate of appearance of cargo handling limit wave height of less than 0.2m.

Fig. 8-3-1 Diffraction Diagram (1)

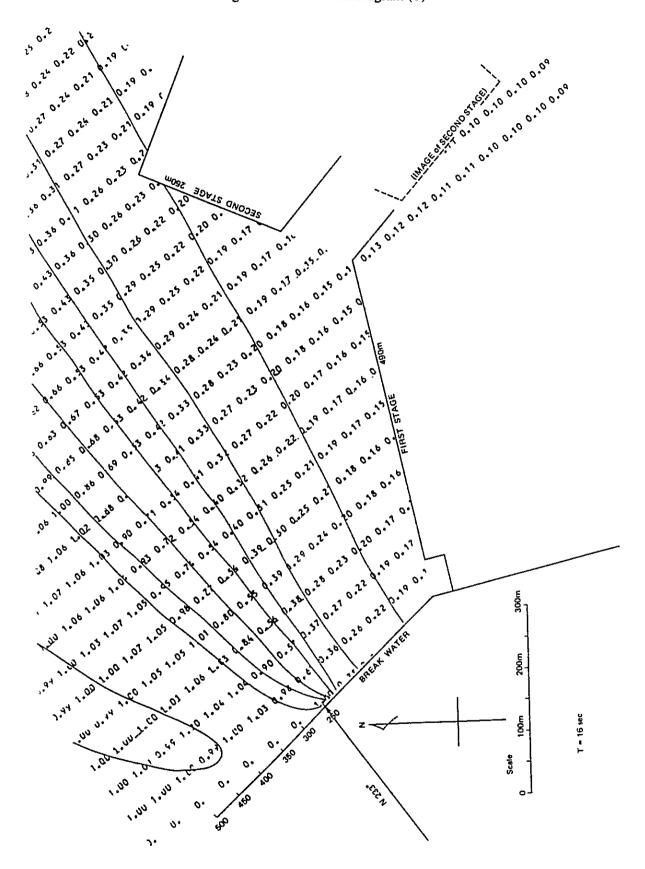


Fig. 8-3-2 Diffraction Diagram (2)

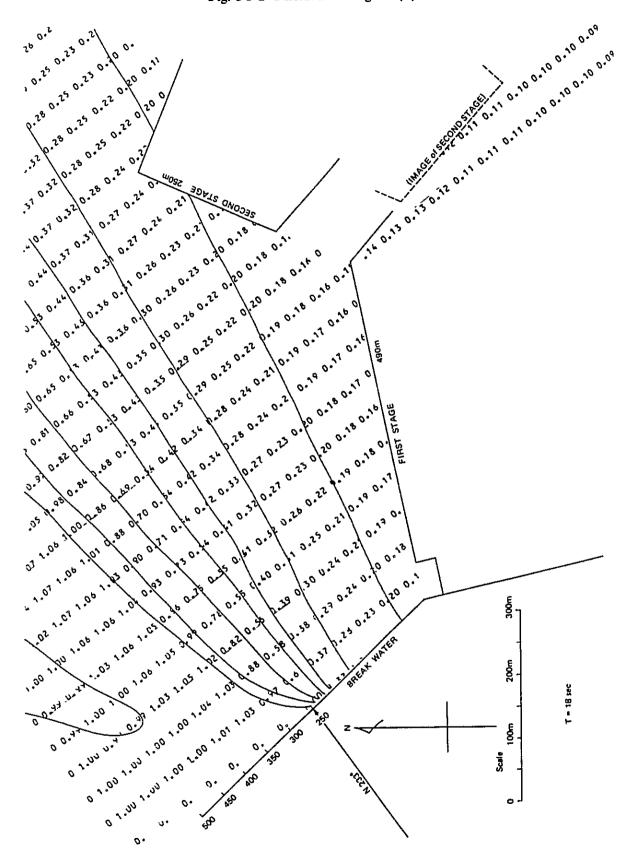


Fig. 8-3-3 Percentage Excess of H<sup>1</sup>/<sub>3</sub> and T<sup>1</sup>/<sub>3</sub>

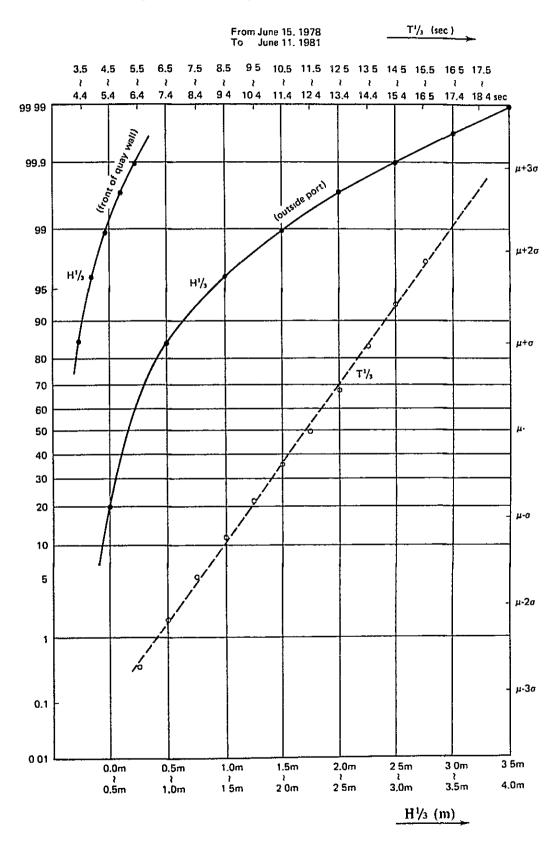


Fig. 8-3-4 Diffraction Diagram (3)

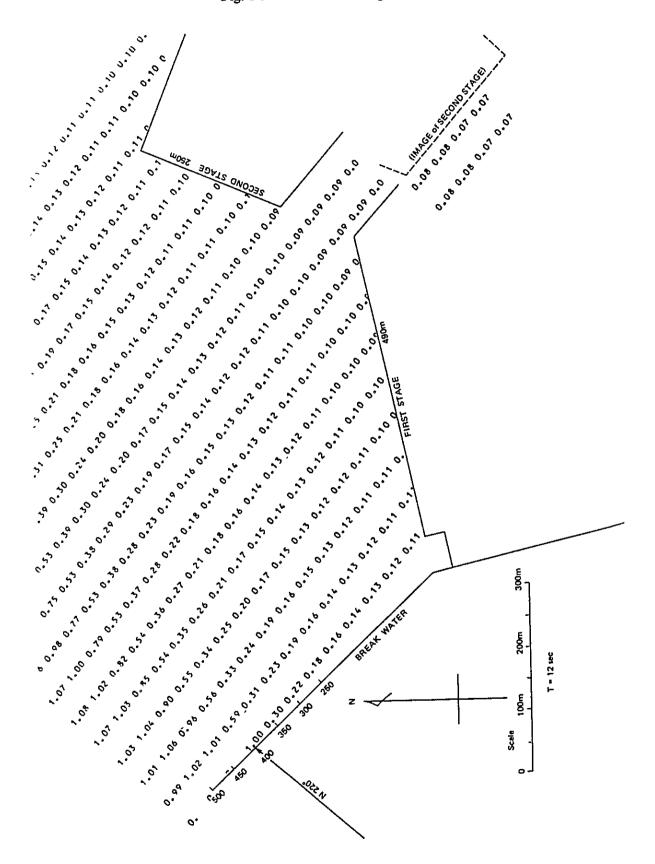


Fig. 8-3-5 Diffraction Diagram (4)

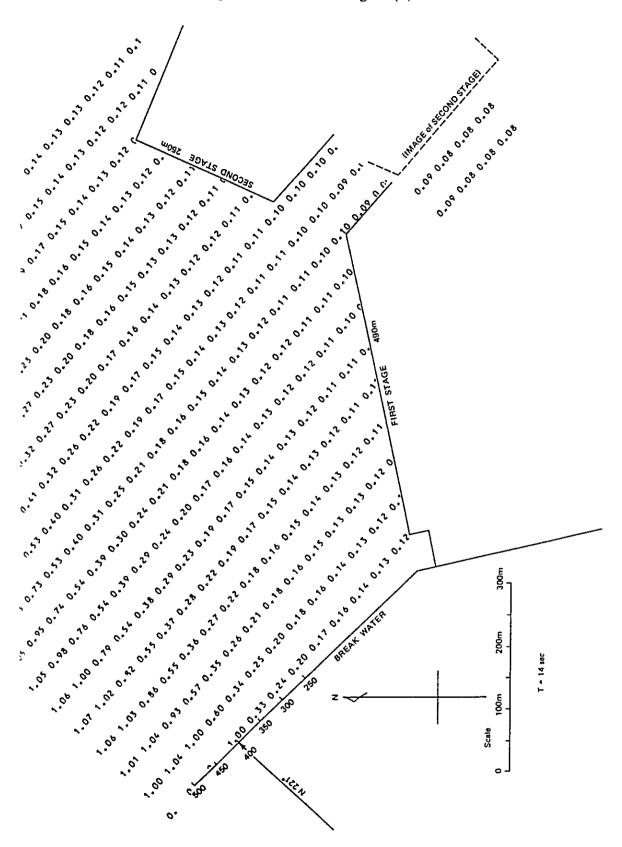


Fig. 8-3-6 Diffraction Diagram (5)

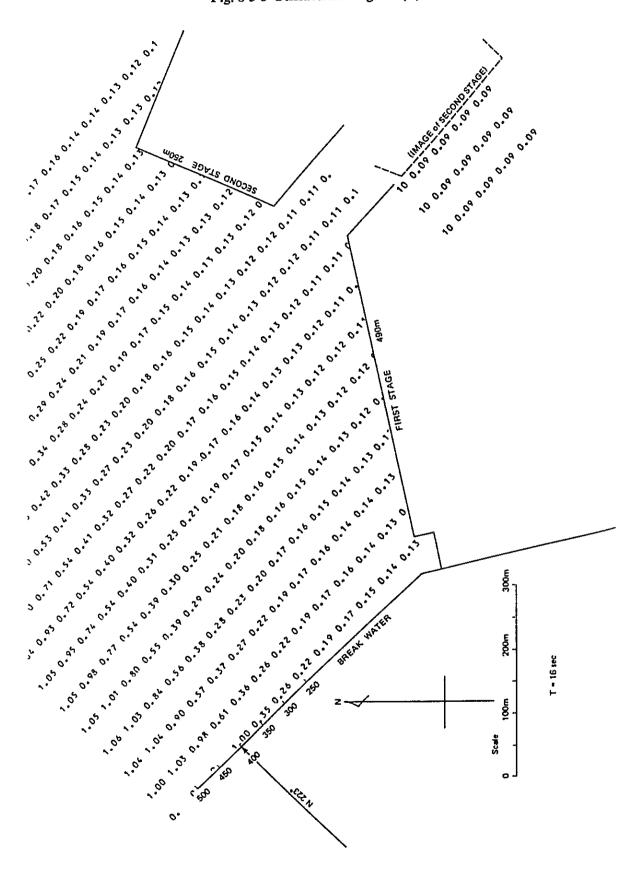


Fig. 8-3-7 Diffraction Diagram (6)

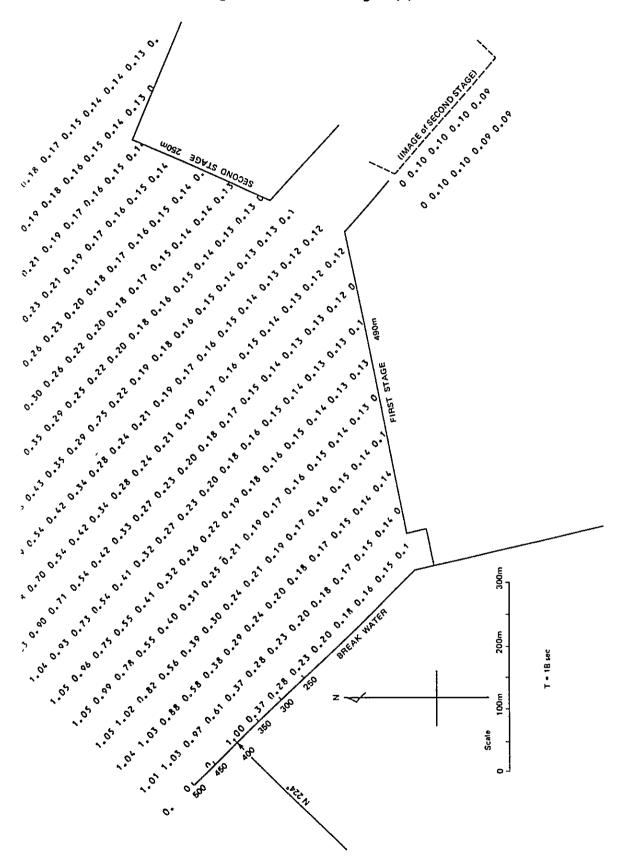


Fig. 8-3-8 Diffraction Diagram (7)

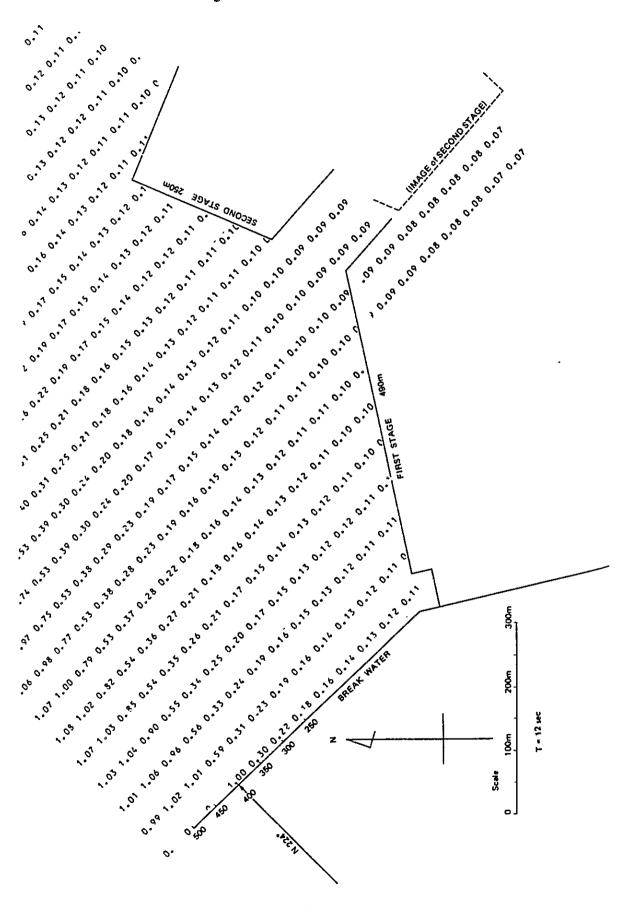


Fig. 8-3-9 Diffraction Diagram (8)

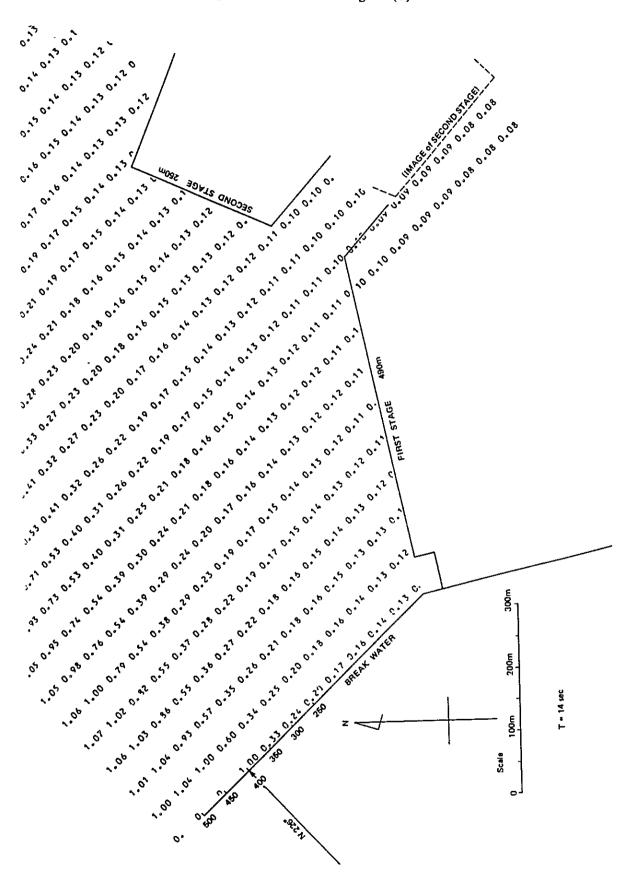


Fig. 8-3-10 Diffraction Diagram (9)

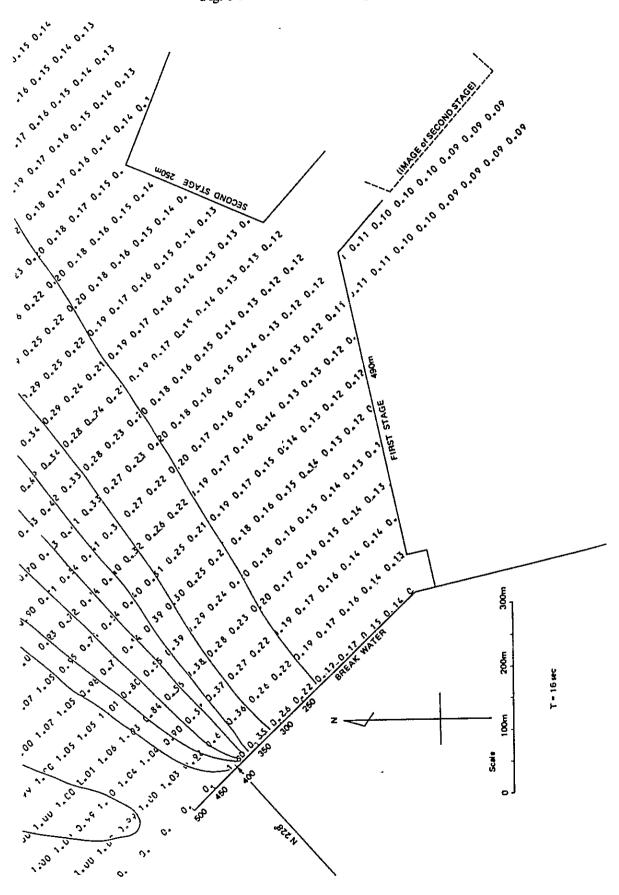


Fig. 8-3-11 Diffraction Diagram (10)

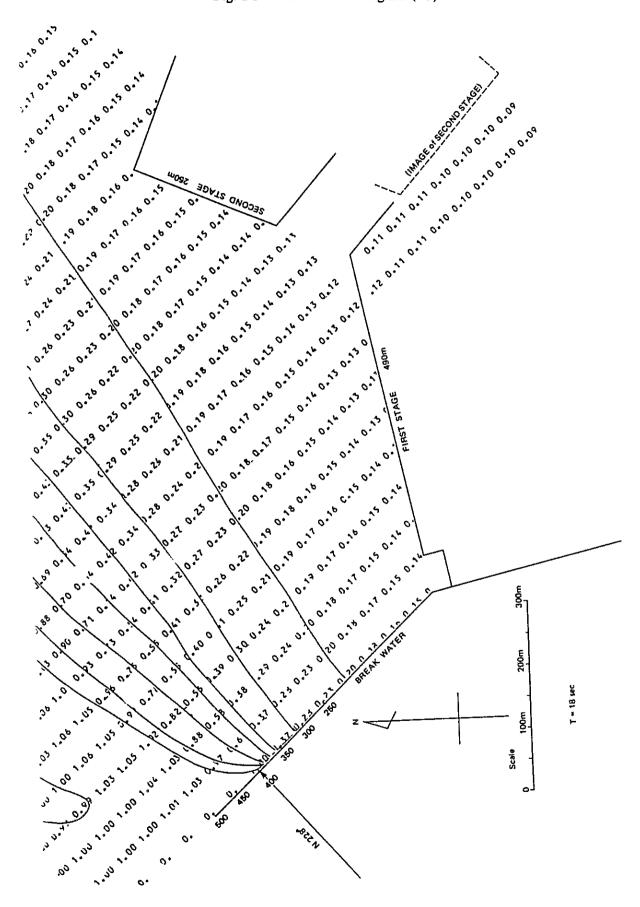
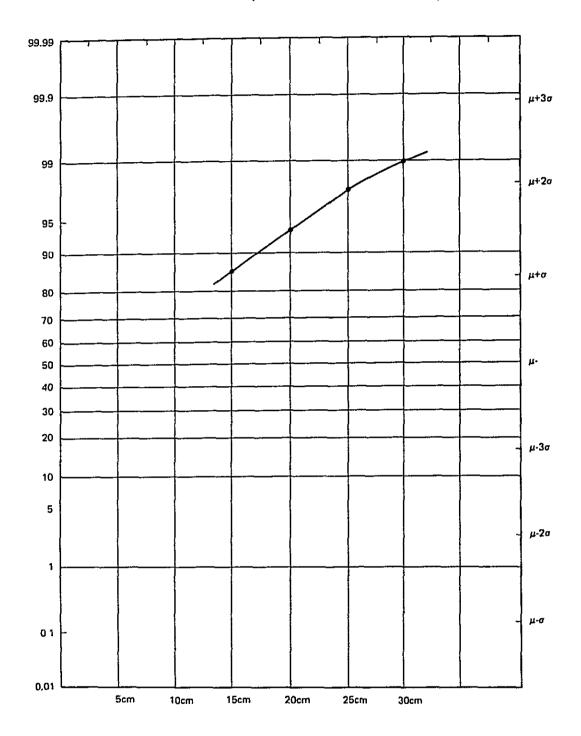


Fig. 8-3-12 Percentage Excess of H<sup>1</sup>/<sub>3</sub> (Infront of the container wharf)



 $H^{1}/_{3}$  (m)

## 8-4 Littoral Drift Preventing Facilities

Judging from the results of the sounding survey conducted in August 1981, the accumulation of earth and sand on the coast south of Port Caldera is still in its earliest stage, but there are signs of earth and sand entering the harbor. Therefore, it is important to act promptly to stop the entry of earth and sand into the harbor.

Toward this end, the following two proposals have been put forth:

- (i) To increase the earth and sand stock capacity on the south side of the breakwater.
- (ii) To forcibly cause a flow from the tip of the breakwater toward its base.

As to (i), extending the breakwater is most effective. To make the extension all the more effective, it is better to bend the extended part toward the offing rather than extend on the existing slope line of the breakwater. To cause the flow in (ii) as well as to achieve the end in (i), the extended part of the breakwater must be bent toward the offing. This is because the incidence of waves is almost at a right angle to the existing breakwater and, if the breakwater slope line is bent toward the offing when the breakwater is extended, the incidence of waves from the offing will be oblique to the extended part and consequently, a flow toward the root of the breakwater will occur.

Thus, bending the extended part of the breakwater toward the offing is necessary from both (i) and (ii). To maximize the flow toward the base of the breakwater, it is desirable to bend the extended part toward the offing by 45° from the existing slope line of the breakwater Since, however, this is unfavorable for the purpose of ensuring harbor calmness, a groyne consisting of a part, only about 50m in length, bent toward the offing will be constructed and the main breakwater will be extended in a direction most effective to ensure harbor calmness.

Even after the construction of the groyne, its effect must be confirmed by careful surveys on littoral drift. If sand drifting cannot be prevented by this groyne, littoral drift can be stabilized by removing sand on the foreshore of the bulkhead through excavation from the shore side.

### 8-5 Administration and Operation

The new wharves to be constructed under the Second Stage Expancion Project consist mainly of wharves for the handling of container cargoes. Container cargoes are handled also by the First Stage Project facilities and have appropriate personnel for this work but, when the new wharves are ready, there will have to be personnel reassignment in order to meet the expanded functions.

In the case of Japanese container terminals, container handling duties at a container wharf are, by division of work, as follows;

- (1) Receipt and delivery of cargoes at the gate
  - (a) Checking for number, seal and condition
  - (b) Checking of CSC safety approval plates
  - (c) Preparation of equipment receipts (in, out)
  - (d) Receipt of export papers and checking for contents
  - (e) Recovery of delivery orders
- (2) Duties on the container yard
  - (a) Storage of loaded contaienrs and empty containers
  - (b) Plugging and de-plugging of reefer containers
  - (c) Temperature check for reefer containers
  - (d) Operation of cargo handling machines
- (3) Duties relative to stevedoring
  - (a) Operation planning
  - Planning of ship storage and marshaling
  - Planning, direction and supervision of cargo handling work
  - (b) Calculation of ship stability
  - (c) Preparation of stowage plans
  - (d) Lashing and unlashing of on-deck containers
  - (e) Covering and uncovering of hatches
  - (f) Checking for number, seal and condition
  - (g) Operation of container cranes
- (4) Inventory work
  - (a) Inventory control
  - (b) Preparation of inventory reports
- (5) Preparation of papers to be submitted to shipping companies
  - (a) Stowage plan
  - (b) Results of stability calculation
  - (c) Equipment receipt
  - (d) Container inventory report
  - (e) Dangerous cargo list
  - (f) Reefer container list
  - (g) Loading container report
  - (h) Discharging container report

- (i) Exception list
- (6) CFS work
  - (a) Handling of LCL cargoes
- (7) Maintenance work
  - (a) Inspection and maintenance of cargo handling equipment
  - (b) Inspection and maintenance of containers

The number of workers required for these assignments differs by the scale of container wharves, types of handling systems and the number of containers. The number of workers assigned to control and operation at a Japanese container terminal of the straddle carrier system and with a wharf length of 250m is shown for reference as follows;

Wharf length	250m
Wharf water depth	12m
Number of container cranes	2
Number of straddle carriers	8

Annual total number of cargoes

handled 80,000 TEU

Number of workers 150

Breakdown;

General clerical work, documentation, security: 20
Operation planning: 20
Cargo handling equipments operators and workers. 50
CFS work: 20
Maintenance work: 40

If the numbers of workers in 1990, target year for the Second Stage Expancion Project, is determined by referring to the above figures and in accordance with 20,000 TEU as the number of containers to be handled in that target year, it will be necessary about 50 workers since the scale of cargo handling equipment is 1/2 and the number of containers to be handled is 1/4 and the mean of these values is 1/3. What is important in the administration and operation of a container wharf is that all the work is so organized as to perform an integrated unit under a single commanding system without being cut down sectionally or horizontally by functions or ranks of workers.

### 8-6 Long Term Plan

For long term plan, a study has been made concerning the scale and arrangement of port facilities from 1990 to 2000.

## 8-6-1 Mooring Facilities

As a result of the simulation of the use of piers discussed in the preceding chapter, the use of the existing two berths of large piers exceeds 60% of berth occupancy rate due to the increase

of general cargo vessels so another berth will be required.

The length of the pier and water depth must be determined from the largest ships using the pier. It is difficult to estimate at the present moment the size of the ships but to meet the requirement of larger ships, a pier of 240 m long and with water depth 12.0 m is projected for 30,000 DWT freighter, similar to the water depth of the adjacent container pier.

On the other hand, the container terminal must have a container yard extended by about 20,000 m<sup>2</sup> to handle 30,000 TEU in 2000.

## 8-6-2 Breakwater

The breakwater must be extended another 200 m to calm the basin in front of the 240 m pier which will be newly constructed.

CHAPTER 9
DESIGN, CONSTRUCTION AND COST
ESTMATION

## CHAPTER 9. DESIGN, CONSTRUCTION AND COST ESTIMATION

A general basic design has been made of the port facilities included among the facilities described in CHAPTER 8: FACILITIES PLAN. The main items within the port facilities are the following:

- (1) Breakwater
- (2) Quaywall
- (3) Revetment
- (4) Anchorage
- (5) Navigation aids
- (6) Land reclamation and pavement

Three alternatives (a rubble mound type, a wave breaker block type and a caisson type) for the breakwater, and two alternatives (a steel sheet pipe pile type and a caisson type) for the quaywall have been studied.

# 9-1 Design

### 9-1-1 Breakwater

## (1) Design Conditions

The following conditions apply to the basic design of the breakwater.

Wave height  $H^{1/3} = 4.3 \text{ m} (30 \text{ years probability of occurrence})$ 

Wave period  $T^{1}/_{3} = 18.5$  seconds

Tidal level H.W.L. = +3.0 m

 $L.W.L. = \pm 0.0$ 

Seismic coefficient Ch = 0.15 (horizontal)

Cv = 0.00 (vertical)

Soil conditions

Elevation	Soil	Internal friction angle (φ) or Cohesion (C)	Unit weight (t/m³)
Seabed to -20 m	Sand	φ = 30°	1.0
Below -20 m	Silt	$C = 0.3Z + 4.0 (t/m^2)$ (Zo = -20.0)	0.7

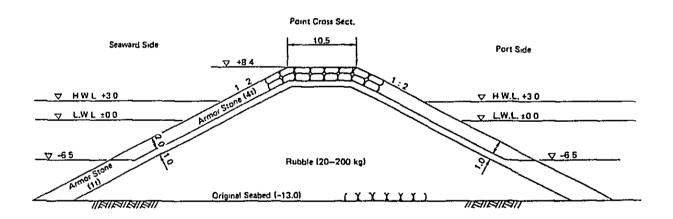
Internal friction angle of rubble  $\phi = 40^{\circ}$ Safety factor (for a caisson type)

	Ordinary	Seismic
Sliding	1.2	1.0
Overturn	1.2	1.0
Bearing of Seabed	2.5	1.5

## (2) Rubble Mound Type

Some work on the rubble mound breakwater has already been done under the First Stage Project and only simple construction equipment is required.

Fig. 9-1-1 Breakwater - Rubble Mound Type



Crown elevation of the breakwater sufficient to prevent extreme waves overtopping into the anchorage is:

$$1.25 \times 4.3$$
 (wave height) + 3.0 (H.W.L.) = +8.4 m.

The ground conditions are less favorable than those in the area covered by the First Stage Project and, as the conclusion of a study of circular rupture, 1:2 (gentler than 1:1.5 for the First Stage) as the grade of slope on the port side will be used for increased safety. The calculation results for circular rupture are shown in Fig. 9-1-2. The required unit weight of armor stone is at least 8.5 tons to hold down the damage ratio below 1%. However, it is difficult to collect and transport such big block stones under the local conditions.

One of the characteristics of a sloping breakwater of the rubble stone type is that the unit weight of a armor stone can be flexible according to the allowable damage ratio. In Europe and America, it is sometimes a practice to reduce the required unit weight by allowing for certain damage by waves corresponding to the design wave.

Fig. 9-1-3 shows the relation between Woole-proposed damage ratio of an armor stone and wave height. From this figure, it can be seen that, assuming a damage ratio of 10%, the breakwater can withstand a wave height with an extra of about 40%. This means that a unit weight of less than one half the required weight for the damage ratio of 1% is sufficient. Under this design, the damage ratio is 10% and 4-ton armor stones that can be locally collected and transported may be used.

### (3) Wave Breaker Block Type

To hold down the damage ratio below 1% and facilitate the construction, some wave breaker blocks are recommended for armor. Many kinds of wave breaker blocks exist, but the design has been made using "DOLOS", which have been used at the outer revetment in the Port of Limon. The required unit weight of a block is 4.0 tons, and 6.0 tons at the point of the breakwater, considering the concentration of wave force. Typical cross sections are shown Fig. 9-1-4.

Fig. 9-1-2 Circular Rupture-Rubble Mound Type

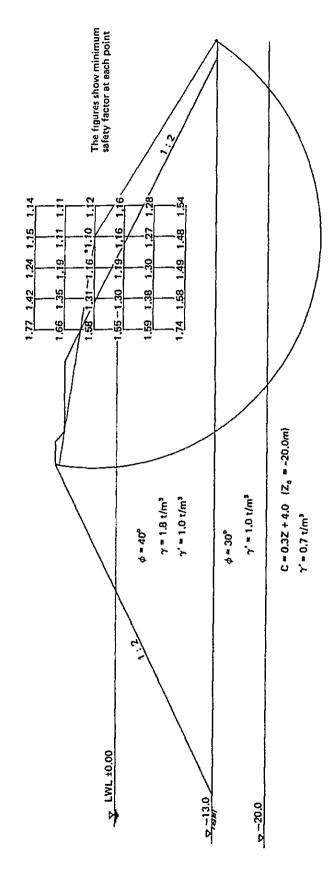


Fig. 9-1-3 Woole-proposed Damage Ratio and Wave Height

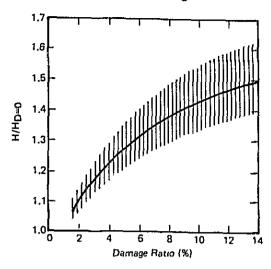
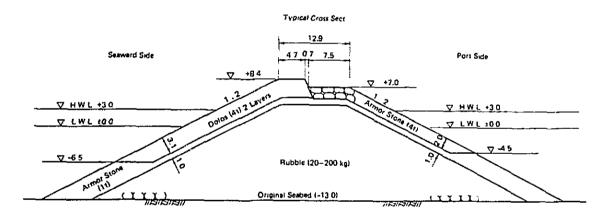
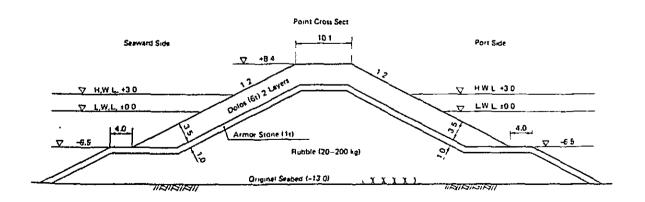


Fig. 9-1-4 Breakwater-Wave Breaker Block Type





## (4) Caisson Type (Fig. 9-1-5)

The casson type as an alternative to the rubble mound type was studied. Though cassons have not yet been fabricated in Costa Rica, they can be locally produced if adequate preparations are made.

The crown elevation of rubble mound on which caissons are installed is -10.0 m, and the crown width is 40.0 m. Slope tops each of 8.5 m are planned for the front and the rear of the caissons out of consideration for safety against circular rupture. Calculation results for this are shown in Fig. 9-1-6.

The size of caissons is: 16.0 m wide, 15.0 m long and 13.0 m high and each weighs about 1,600 tons in the air. (Fig. 9-1-7) Concrete blocks of about 20 tons will be arranged in two rows in front of the caissons, namely, on the seaward side of the port, to prevent scouring. The caissons will be filled with sand except for the top 1.0 m thickness which will be filled with stones.

To fabricate caissons, there must be a manufacturing facility. There are various types of caisson fabricating facilities but it has come a conclusion that the slipway type is the most economical facility for this locality. As next best, a floating dock might also be useful.

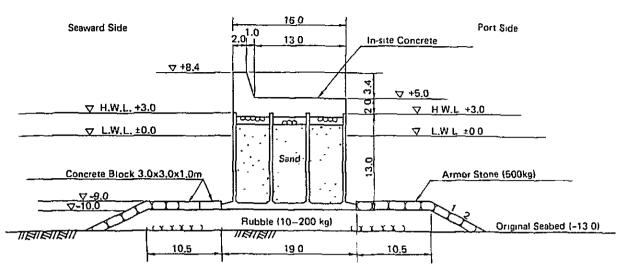
As the site of a slipway, the land/water area between the eastern revetment under the First Stage Project and the Ro-Ro Pier is a suitable choice.

This slipway should be structurally as simple and economical as possible. Its conceptual chart is shown in Fig. 9-1-8.

This type breakwater is stable but the construction is complicated, requiring many days and great cost.

Fig. 9-1-5 Breakwater - Caisson Type





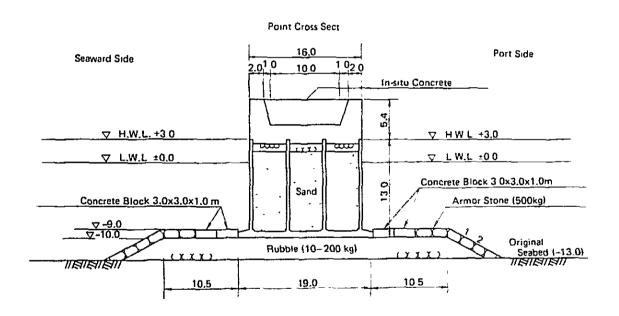
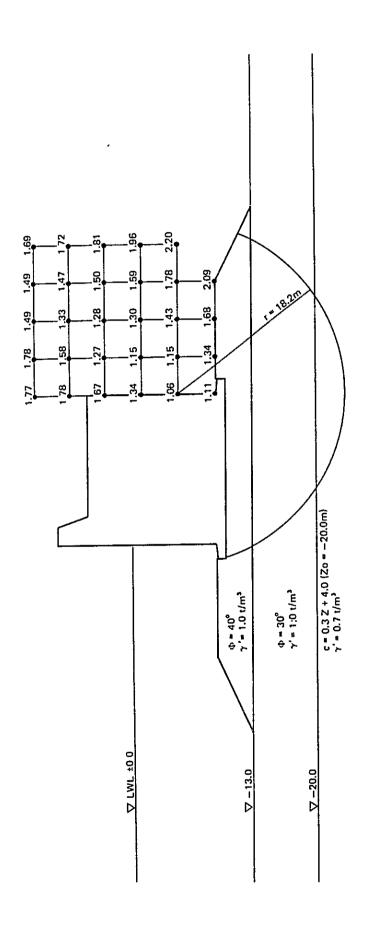
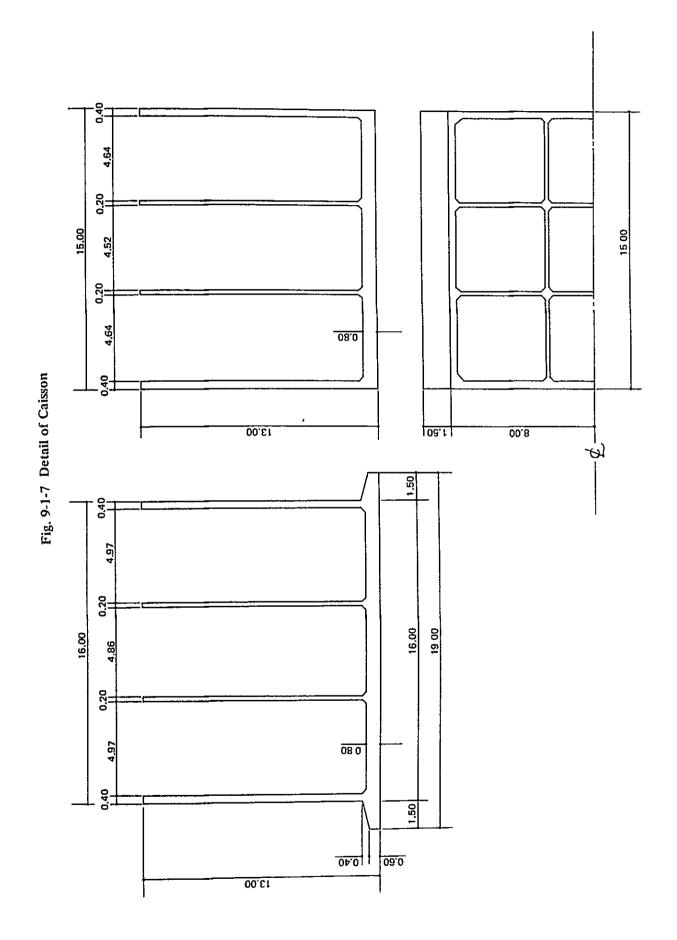
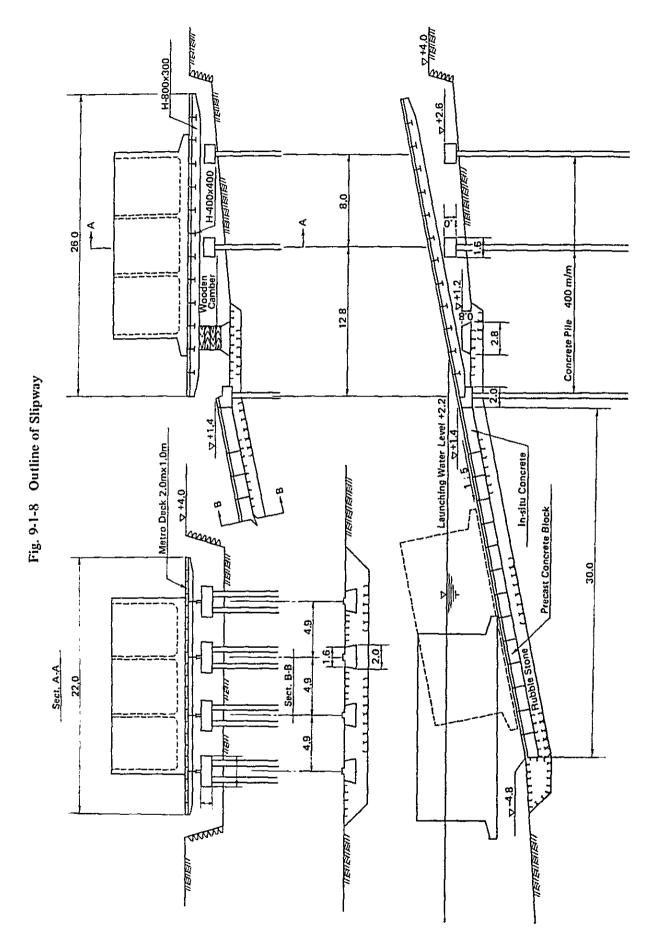


Fig. 9-1-6 Circular Rupture-Caisson Type

The figures show minimum safety factor at each point







## 9-1-2 Quaywall

# (1) Design Conditions

Objective vessel 25,000 D.W.T.

Length of quaywall 250.0 m
Water depth -12.0 m
Crown elevation +5.0 m

Tidal level H.W.L. = +3.0 m

 $L.W.L. = \pm 0.0 \text{ m}$ 

Residual water level R.W.L. = +2.0 m (steel sheet pipe pile type)

R.W.L. =  $\pm 1.0$  m (caisson type)

Ship's berthing velocity 15.0 cm/sec

Seismic coefficient Ch = 0.15 (horizontal)

Cv = 0.00 (vertical)

Surcharge Ordinary: 3.0 t/m<sup>2</sup>

Seismic : 1.5 t/m<sup>2</sup>

Apron width 40.0 m

Soil conditions

Elevation	Soil	Internal friction angle (φ) or Cohesion (C)	Unit weight (t/m³)
+5.0 m to seabed	Sand	φ = 30°	Above R.W.L.=1.8 Below R.W.L =1.0
Seabed to -23 m	Sand	φ = 35°	1.0
Below -23 m	Silt	$C = 10 \text{ t/m}^2$	0.7

Internal friction angle

of rubble  $= 40^{\circ}$ 

Maximum wheel load of container crane

Operating; sea side 38t x 6 wheels

land side  $27t \times 6$ 

Storm; sea side  $40t \times 6$ 

land side  $40t \times 6$ 

Wheel base 16.0 m

Safety factor (for a caisson type)

Ordinary Seismic
Sliding 1.2 1.0
Overturn 1.2 1.0
Bearing of 2.5 1.5

# Allowable stress (for a steel sheet pipe pile type)

	Ordinary	Seismic
Steel pipe pile		
Mariner	2,100 kg/cm <sup>2</sup>	3,150 kg/cm <sup>2</sup>
STK 41	1,400	2,100
Wale SS41	1,400	2,100
Tie rod	1,800	2,700

# (2) Steel Sheet Pipe Pile Type (Fig. 9-1-9)

Steel sheet pipe piles are used for quaywalls with great water depth if steel sheet piles do not have a sufficient section modulus. In this method, steel sheet pipe piles are continuously driven and connected with anchor piles by tie rods to form a wall. The outside diameter of the steel sheet pipe piles is 1,068 mm and the central interval of piles driven is 1,264 mm. A steel pile of 165 mm of outside diameter is chucked between the piles and welded to the piles before driving, to prevent the outflow of backfill. The length of steel sheet pipe piles is 24.9 m and their penetration length is 10 m. These piles are of corrosion resistant mariner steel. The anchor piles are of the vertical type and have an outside diameter of 711 mm and a length of 12.0 m.

Semi high-tensile steel is used for the tie rods to reduce their diameter as much as possible.

Steel sheet pipe pile type quaywalls are structurally similar to the steel sheet pile type, which has already been built under the First Stage Project. However, it requires careful countermeasures against corrosion. A cathodic protection system is effective against the corrosion of steel in sea water but, in the ground, this method is inadequate; therefore, thickness allowance should be considered in advance.

The quaywall life is assumed to be about 75 years. From the study of tropical data, it is reasonable to assume a corrosion rate of 30% above the Japanese level.

Life of cathodic p	rotection	20 years
Thickness allowance in ground		for 75 years
Corrosion rate in	ground	
	Above R.W.L.	0.039 mm/year
	Below R.W,L.	0.026 mm/year

Cathodic protection shall be repeated after a lapse of 20 years.

7 +58 2 -9 ≥ 50 Steel Pipe Pile c t c 1263 8 (4711 2 x 114) Fig. 9-1-9 Quaywall-Steel Pipe Pile Type (-12.0m) 400 Steel Pipe Pile c 1.c 2527 6 (4609 6 x 112) Sliff hadmif Tie Rod c t.c. 1263 B (¢65 High Tension) Original Staber atig vadmiT Δ -20 0 Steel Pipe Pile C t c 2527 6 (6609 6 x 112) Steer Pipe Pile c t.c. 1263.8 (¢1016 x 116) -150 +10 +20 Rubber Fender +5.0 Q -12 0 Planned Depth D Ы D Q HWL +30 D LWL 100 - 259-

### (3) Caisson Type

The soil conditions of the proposed wharf site are relatively satisfactory and a caisson type quaywall can be constructed there.

The rubble mound foundation must be 3.0 m thick in consideration of the bearing strength of the ground and it must be excavated down to -15.5 m. The dimensions of a caisson are 10.0 m wide, 15.0 m long and 14.5 m high. (Fig. 9-1-11) Its weight is approximately 1,200 tons.

Sand materials are filled into installed caissons and rubble stones are filled behind them. Mats are placed on the joints in the caissons to prevent the reclaimed sand from spilling out.

Coping concrete is 3.0 m high and 4.8 m wide. A front crane rail is installed on it. A rear crane rail is installed on the steel pipe pile foundations.

#### 9-1-3 Selection of Structure for Breakwater and Quaywall

There are six possible structural combinations of breakwater and wharf, but when using the caisson structure, if another structure is used for either the breakwater or the wharf, the number of caissons to be manufactured is small and the cost of manufacture and installation per caisson is high so that these combinations are uneconomical. Accordingly, the following three combinations should be considered.

	Breakwater	Quaywail
Plan I	Rubblemound	Steel sheet pipe pile
Plan II	Wave breaker block	Steel sheet pipe pile
Pian III	Caisson	Caisson

In the following table, the above three alternatives are assessed in terms of four items: construction cost, durability, construction period and relative ease of construction. In the table, letters A, B and C indicate order of preferability.

	Plan I	Plan II	Plan III
Cost	Α	C	В
Durability	C	В	Α
Period	Α	В	C
Relative ease	Α	В	С

#### (1) Construction Cost

Construction cost for the 150 m breakwater and 250 m wharf and the mobilization relative to the construction of these is smallest with Plan I. It is largest with Plan II because of the costly fabrication and installation of wave breaker concrete blocks. Construction cost with Plan III is the second highest after that for plan II because it involves the mobilization cost of floating crane and the cost of constructing a caisson manufacturing yard. The construction cost for each alternative is shown below.

Plan 1	US\$12,100,000.
Plan II	US\$14,700,000.
Plan III	US\$14,200,000.

### (2) Durability

A breakwater of the rubble stone type, allowing a damage ratio of 10% for armor stones against design wave height, must be repaired, if it is damaged. By contrast, there is no problem about the durability of the wave breaker concrete block type and the caisson type. As for the wharf, a wharf of the steel sheet pipe pile type must undergo cathodic protection for a second time after the life (20 years) of the first cathodic protection is over.

### (3) Construction Period

The construction period for Plan I is shortest, being only 48 months. It is 60 months with Plan II and 66 months with Plan III. (Each means total construction.)

# (4) Relative Ease of Construction

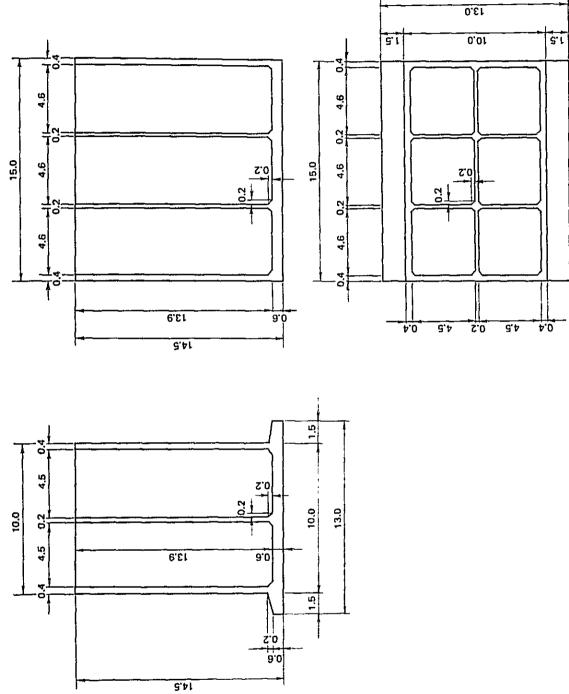
The construction method of Plan I is basically the same as that of the First Stage Project; thus, the local personnel have experience in it. In Plan II, which proposes to use wave breaker concrete blocks for the breakwater instead of armor stones, construction is somewhat more difficult than in Plan I. Construction with Plan III consists, basically, of the fabrication and installation of caissons. The work involved is mainly performed at sea and liable to the effects of meteorological and oceanographical phenomena, so work control is more complicated, compared with Plans I and II.

From the above observations, Plan I is the best, followed by Plan II. As for Plan III, it excels in durability but is inferior in construction cost, construction period and the ease of construction and is, therefore, most unfavorable. Hence, Plan I has been adopted as basic design and so studies in Sections 9-2 and 9-3.

Q +5 8 Earth Fill 03 100 Fig. 9-1-10 Quaywall-Caisson Type (-12.0m) 40 0 St x 8.9084 008,S .p 1.5 ell9 eqi9 lees Rubble Stone (1-50 kg) D 0.3 5'0 4 15 Rubble Stone (10-200kg) Sand Fill 0.4 +20 V +50 Rubber Fender Planned Depth (200-400 kg) X **D** Δ H.W.L +30 ∇ L.W.L. ±0.0

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Fig. 9-1-11 Detail of Caisson



#### 9-1-4 Revetment

The revetment is the same as in the First Stage's design. It is a rubble mound type. The design wave height is 1.0 m.

### 9-1-5 Anchorange

The design water depth of the anchorage is -12.0 m. The space of the anchorage has been planned by considering safe mooring and unmooring. (Fig. 9-1-13)

## 9-1-6 Navigation aids

Light buoys will be newly installed at three points on the northern boundary of the anchorage. The buoys will be of the ZLB-210 type. As for the southern boundary, buoys already installed under the First Stage Project will be relocated to the boundary of the -7.5 m, -10 m and -11 m anchorage areas.

The light beacon facility installed at the tip of the breakwater in the First Stage Project will be relocated to the top of the breakwater to be constructed under the Second Stage Project.

## 9-1-7 Land Reclamation and Pavement

Dredging materials will be used for land reclamation. The elevation of the reclaimed land is +5.8 m behind the apron. On the land side,  $0.5 \sim 1\%$  grades are provided as in Fig. 9-1-14 in consideration of surface drainage.

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Original Seabed

Fig. 9-1-13 Anchorage

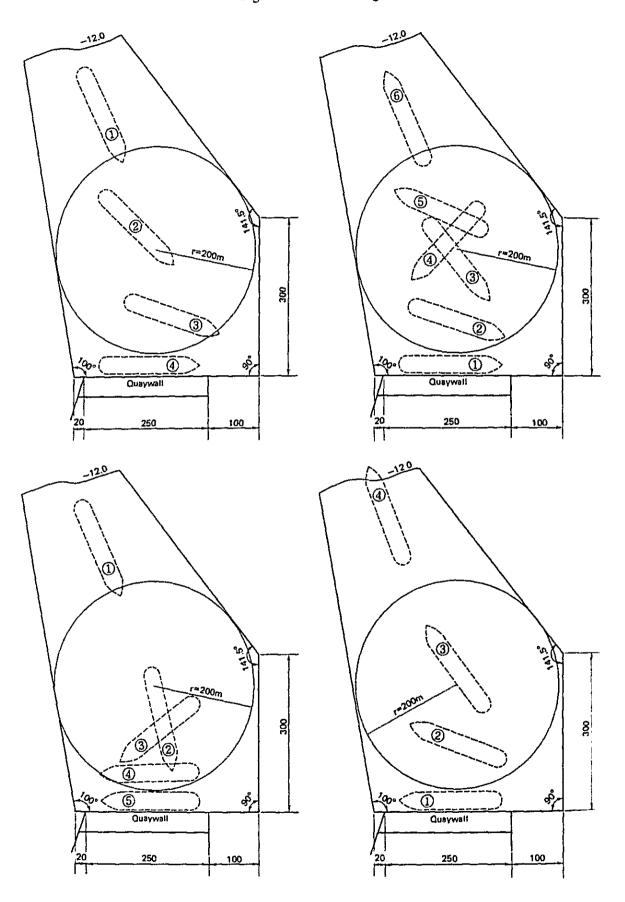
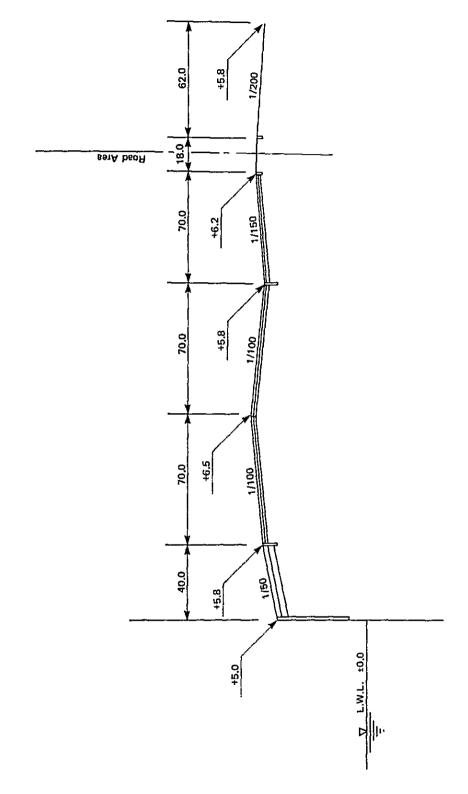


Fig. 9-1-14 Vertical Section of Reclamation Area



# 9-2 Construction

## 9-2-1 List of Facilities

Facilities included in this construction program are as follows:

Classification	Facility	Specification
Port facility	Breakwater	Rubble mound
-		L = 150 m
	Quaywall	Steel sheet pipe pile
		L = 250 m
	Revetment	
	North side	Rubble mound type, L = 300 m
	South side	Rubble mound type, L = 140 m
	Anchorage	Depth $-12.0 \text{ m}, A = 226,000 \text{ m}^2$
	Navigation aids	1 lump sum
	Land reclamation	Reclamation, $A = 95,000 \text{ m}^2$
	and pavement	Pavement, $A = 55,000 \text{ m}^2$
Related facility	Road	B = 12.0  m, L = 620  m
	Railway sidings	L = 700 m
	Building	Transit shed and container
		freight station, $A = 4,000 \text{ m}^2$
		Administration office, A = 1,000 m <sup>2</sup> .
		Repair shop, $A = 800 \text{ m}^2$
	Water supply, Sewerage,	l lump sum
	Power distribution system	

The construction cost to be determined includes not only the cost of construction of the above-mentioned facilities but also the cost of temporary works necessary for the construction, the mobilization and demobilization cost of working craft, equipment, etc., the cost of purchasing and installing cargo handling equipment and the cost of executing soil investigation and design.

#### 9-2-2 Execution Plan

## (1) Construction Materials

The approximate quantities of main materials to be used for this work are generally estimated as follows:

Material	Quantity
Steel pipe pile	4,000 tons
Reinforcing bar	250 tons
Tie rod	235 pcs
Other steel	1,200 tons
Concrete	13,000 m <sup>3</sup>
Rubbie	*290,000 m <sup>3</sup>
Sand	*5,000 m <sup>3</sup>
Reclamation materials	860,000 m <sup>3</sup>

#### (\* Excluding materials for concrete.)

Of these materials, steel pipe piles and other steels will be imported because they are not produced in Costa Rica. As for concrete materials, cement can be procured from domestic sources because it is produced in the country. The aggregates (sand) will be collected from such sources as the Barranca River. Stones will be procured by railway and truck transportation from Mt. Dantas, where they were collected for the First Stage Project. Earth for land reclamation will be procured from dredging materials.

#### (2) Construction Equipment and Working Craft

Construction equipment, such as bulldozers, payloaders, crawler cranes and dump trucks, which were used for port construction at the Port of Caldera (First Stage), the Port of Limon and the Port of Moin can be used for the Second Stage construction at the Port of Caldera. Work can be performed with basically the same construction equipment as in the First Stage Project. Therefore, if work on this plan is executed soon, no imports will be necessary except for the replacement of some equipment that have become worn out through normal use.

As for working craft, not many exist in the country since methods mainly using land equipment and not using working craft were employed for port construction at the above-mentioned ports. Therefore, it is advisable in this project to use land equipment instead of working craft as much as possible.

#### (3) Mobilization from Abroad

Main items among the working craft to be brought from abroad is dredger. Dredger must be accompanied by an anchor boats and lighters, as well as discharge pipes, floaters and rubber sleeves. Blanket transportation by a lift barge is recommended for efficient and safe transportation of these.

#### (4) Labor Force

Through experience in the construction of the three ports including the Port of Caldera under the First Stage Project, it will be possible to domestically procure skilled and unskilled workers. However, skillful divers for grading the armor stones of rubble mound carefully will have to be obtained from abroad.

## (5) Outline of Construction Method

## (1) Preparations and Temporary Work

Preparations and temporary work necessary for the execution of this construction are as follows:

#### (A) Preparations

Order and transportation of construction materials and equipment.

## (B) Temporary work

- Construction of field office, camp and storages.
- Provision of material and equipment yards and shops for working on reinforcing bars and concrete forms.
- · Construction of a concrete mixing plant.

## (2) Temporary Work for Construction

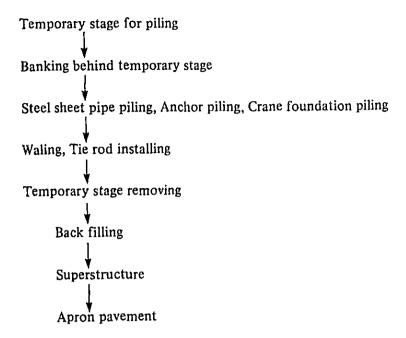
To drive steel pipe piles without using a pile driving barge, a temporary stage is necessary. It should be of the steel pile pier type with a width of 12 m, using steel lining plates for floor slabs. Materials for 125 m of the 250 m quaywall will be provided and used by rotation.

#### (3) Rubble Breakwater

The rubble breakwater has a cross section that is basically the same as under the First Stage Project. It will be gradually extended by hauling stones by truck over the existing breakwater and depositing them at the furthest end. Divers will be used to grade the underwater part of the slope and a simple floating crane will be used to move some stones. Masons will be used to grade the above-water part and stones will be moved from the breakwater top, using a crawler crane or a truck crane.

## (4) Steel Sheet Pipe Pile Quaywall

The working procedure for a steel sheet pipe pile quaywall is as follows:



Foundation piles for the temporary stage are driven, using a simple pile driving barge consisting of a flat barge equipped with a crawler pile driving machine. When removing foundation piles, they are pulled out, using a vibro-hammer attached to this crawler pile driver.

Steel pipe piles and the foundation piles for the sea-side crane rails are driven from atop the temporary stage, using a crawler pile driver. Steel pipe piles are painted for corrosion prevension for 4 m from the top before they are driven.

Anchor steel piles and the foundation piles for the land-side crane rails are driven from atop a bank behind temporary stage, using a crawler pile driver.

Waling, the installation of tie rods and the placing of coping concrete are all performed as land work without using working crafts.

#### (5) Revetment

A revetment is constructed in similar fashion to a rubble breakwater.

#### (6) Dredging and Reclamation

The use of a pump dredge is advisable because dredged materials must be used for land reclamation. In fact, it is necessary to bring a pump dredger of 2,000~4,000 ps from abroad. Since the amount of dredged material somewhat exceeds the amount of materials required for land reclamation, there must be a dumping site outside the reclamation area to dispose of the surplus, but if no suitable place is available for this purpose, the surplus must be dumped in offing. In which case, there must be dumping barges.

# 9-2-3 Construction Schedule

Construction schedule including the period of executing soil investigation and design is shown in Table 9-2-1.

After starting this project, the soil investigation will be concluded within 3 months, and a detailed design within 9 months. After this work, Tender, Tender Evaluation and Award will be executed within 3 months.

Construction starts during the second year. Most of the breakwater, the quaywall, the revetment, dredging and reclamation will be concluded in 24 months. From the fourth year, the construction of pavement, buildings and railways will start, and this will be concluded in 12 months. Accordingly, the total construction period will be 4 years.

Table 9-2-1 Construction Schedule

Work									Month	췯							
Item	Unit	Q'ty	3 (	6 9	12	15	18	21	24	27	30	33	36	39	42	45	48
Soil investigation	mns	<b>_</b>	888 200 200					l					_		!		
Engineering study/Detail design	sum	-			II.												
Tender/Evaluation/Award	sum	-															
Mobilization/Demobilization	sum	_;	,	-								***		1		2	
Breakwater	Ħ	150.				J					1.				П	_	
Quaywall	E	250.			. <u> </u>					5		2	II.				
Revetment	) 	440.				<u>ಟ</u>											
Dredging/Reclamation	m <sub>3</sub>	820,000		ļ 						_							
Road/Container yard pavement	mns	7											<u>[</u> \$]		23		
Railway	uns	-:									_	_	Ш				
Building	sum					ļ 								- <b>-</b>			
Electric power/Water supply/Sewerage	sum	1.						i									

## 9-3 Cost Estimation

Conditions of rough cost estimation are as follows.

- (1) All prices are expressed in April 1981 prices.
- (2) The scope of cost estimation is limited to within the Port area. Road and railways to connect with existing or planned routes outside the Port area are excluded.
- (3) Prices are expressed in U.S. dollars, and the exchange rate is US\$1.00 = Colones 15.00
- (4) Material/equipment not available in Costa Rica is imported/mobilized from abroad, but import duties for imported material/equipment is excluded from the cost estimation.
- (5) Escalation of prices are not allowed.
- (6) Contingency is 15% for physical unknown factors excluding the items of cargo handling equipment and mobilization/demobilization.
- (7) Management expenses/supervision costs of government/consultant are not allowed.

  The cost estimation under the above-mentioned conditions for the construction cost is \$30,450,000. Details of the construction cost are shown in Table 9-3-1.

Table 9-3-1 Construction Cost

Unit: U.S. dollars 1,000.00

Item No.	Description	Unit	Quantity	Amount	Foreign Currency	Local Currency
1	Breakwater	m	150	3,393	949	2,444
2	Wharf	m	250	8,557	7,266	1,291
3	Revetment	m	440	1,366	518	848
4	Dredging & Reclamation	m <sup>3</sup>	820,000	2,870	1,886	984
5	Navigation aids	sum	1	158	130	28
6	Road & Container yard pavement	sum	1	1,286	_ ,	1,286
7	Railway	sum	1	331	100	231
8	Buildings	sum	1	2,136	648	1,488
9	Electric power, Water supply & Sewerage	sum	1	950	300	650
10	Container handling equipment	sum	1	4,500	3,350	1,150
11	Mobilization & Demobilization	sum	1	970	850	120
	Sub-total			26,517	15,997	10,520
12	Engineering study & Design	sum	1	<i>7</i> 78	736	42
13	Physical contingency	sum	1	3,155	1,767	1,388
	TOTAL			30,450	18,500	11,950

CHAPTER 10 ECONOMIC ANALYSIS

## CHAPTER 10 ECONOMIC ANALYSIS

### 10-1 Importance of the Second Stage Expansion Project

This chapter discusses as to whether the Second Stage Expansion Project is economically feasible as a project or not.

The economic effects expected of the Second Stage Expansion Project are the maintenance of efficient environments of port cargo handling in keeping with the future increase of the volume of cargoes handled and the enjoyment of the merits of the container transport system to be brought about by the call of container ships.

Of these, the direct economic effects concerning transport costs expected to be realized by the execution of the Second Stage Expansion Project include the reduction of waiting time of ships in port and the elimination of feeder charges by the operation of container ships.

The indirect economic effects to be received by users include the reduction of interest payment on cargoes through the shortening of transporting time, the reduction on packing and crating costs, and the assurance of safety and certainty that containerization provides.

Further, the project will stimulate regional development, encourage industry to locate in the area, and increase employment and provide work for the local construction industry.

## 10-2 Evaluation from the View-point of the National Economy

Cost and benefit analyses concerning the economic feasibility of the Second Stage Expansion Project were made, assuming a project life of 25 years and using 1981 as the basic year.

These analyses were made for the following two cases in keeping with the two cases used in Chapter 7 in discussing the timing of entry of full container ships.

- Case-1: Full container ships will call at the Port of Caldera from 1985 and be given priority in using berths and, from 1986, exclusively use facilities completed under the Second Stage Expansion Project.
- Case-2: No full container ships call at the First Stage Project Facilities. After container facilities are completed under the Second Stage Expansion Project, full container ships will call at the Port of Caldera.

#### 10-3 Benefits

## (1) Benefits That Were Analyzed

As stated already, the First Stage Project for the Port of Caldera will be completed within fiscal 1981 and the port will begin to function as the foreign trade public port on the Pacific side of Costa Rica instead of the Port of Puntarenas, which has become inefficient because of its extremely obsolete facilities.

The completion of the First Stage Project will increase the cargo handling capacity of the port and improve its cargo handling efficiency.

But to stabilize and develop the Costa Rican economy in the future, the Port of Caldera must be further improved so as to meet the increase of cargo volume and be able to cope with new forms of transportation including container transport.

This further improvement of the Port of Caldera can be expected to induce regional development in the vicinity of the port and the increase of demand for related industries and the increase of employment through the continuation of port construction. Benefits in this respect seem likely to be quite immense.

These benefits that effect a wide range of the society and economy cannot be easily measured in specific terms. So, the following two benefits that can be measured are evaluated here:

- (1) Reduction of staying cost
- (2) Reduction of feeder charges

### (2) Reduction of Staying Cost

If the facilities proposed under the Second Stage Expansion Project are constructed, the three berths constructed under the First Stage Project will be available for the exclusive use of general cargo ships, etc. and, therefore, waiting time for berthing will be drastically reduced: thus staying cost will be retrenched.

- Case-1: In the event that the Second Stage Expansion Project is not carried out, the average waiting time for the berthing of general cargo ships, etc. will greatly increase from 1989 (see Chapter 7) and ships are likely to be diverted to other ports. Since, therefore, any increase of this benefit from the previous year cannot be expected, it is assumed that the staying cost is the same from 1988.
- Case-2: In the event that the Second Stage Expansion Project is not carried out, the average waiting time for the berthing of general cargo ships, etc. will greatly increase from 2000 (see Chapter 7). So, it is assumed for the same reason as in Case 1 that the staying cost is the same from 1999.

Table 10-3-1 Reduction of Staying Cost in Case-1

		<del></del> _	(Unit: 1,000 colones)
Year	3 berths	4 berths	Staying cost reduction
1986	102,405	53,715	48,690
87	126,270	56,340	69,930
88	172,305	58,635	113,670
89	172,305	58,635	113,670
90	172,305	58,635	113,670
91	172,305	58,635	113,670
92	172,305	58,635	113,670
93	172,305	58,635	113,670
94	172,305	58,635	113,670
95	172,305	58,635	113,670
96	172,305	58,635	113,670
97	172,305	58,635	113,670
98	172,305	58,635	113,670
99	172,305	58,635	113,670
2000	172,305	58,635	113,670
i	172,305	58,635	113,670
2	172,305	58,635	113,670
3	172,305	58,635	113,670
4	172,305	58,635	113,670
5	172,305	58,635	113,670
6	172,305	58,635	113,670
7	172,305	58,635	113,670
8	172,305	58,635	113,670
9	172,305	58,635	113,670
10	172,305	58,635	113,670

Table 10-3-2 Reduction of Staying Cost in Case-2

Year	3 berths	4 berths	Staying cost reduction
1986	60,015	53,715	6,300
87	63,390	56,340	7,050
88	65,790	58,635	7,155
89	69,285	61,800	7,485
90	72,330	63,750	8,580
91	76,965	66,960	10,005
92	85,800	70,185	15,615
93	88,740	75,000	13,740
94	96,555	78,180	18,375
95	102,285	82,215	20,070
96	116,040	88,050	27,990
97	139,710	94,290	45,420
98	164,805	100,155	64,650
99	217,110	107,235	109,875
2000	217,110	107,235	109,875
1	217,110	107,235	109,875
2	217,110	107,235	109,875
3	217,110	107,235	109,875
4	217,110	107,235	109,875
5	217,110	107,235	109,875
6	217,110	107,235	109,875
7	217,110	107,235	109,875
8	217,110	107,235	109,875
9	217,110	107,235	109,875
10	217,110	107,235	109,875

# (3) Reduction of Feeder Charges

In Case 2, container transport from nearby countries is necessary until the completion of the Second Stage Expansion Project. This requires the cost of container secondary transport by feeder ships. When berths for exclusive container use are completed, this cost can be cut by the call of full container ships.

Table 10-3-3 Feeder charge

(Unit: 1,000 colones)

J	(Citt: 1,000 cololles)	
Year	Feeder charge	
1986	13,305	
87	15,195	
88	17,085	
89	18,975	
90	20,865	
91	21,975	
92	23,070	
93	24,180	
94	25,275	
95	26,385	
96	27,450	
97	28,530	
98	29,595	
99	30,675	
2000	31,740	
1	31,740	
2	31,740	
3	31,740	
4	31,740	
5	31,740	
6	31,740	
7	31,740	
8	31,740	
9	31,740	
10	31.740	
	.	

#### (4) Indirect Benefits

Besides the above benefits that can be evaluated in terms of money, the following indirect economic effects for users and the regional development in the vicinity of the Port of Caldera can also be expected from the Second Stage Expansion Project.

- (1) Retrenchment of inventory cost and interest payment through the shortening and increased punctuality of transporting time.
- Reduction of cargo packing and crating cost.
- 3 Prevention of theft and damage of cargoes.
- 4 Regional development in the vicinity of the Port of Caldera.

- ⑤ Improved conditions for industrial location. This is conductive to the attraction of companies.
- 6 The continuation of port construction will give rise to demand for related industries and increased employment.

#### 10-4 Costs

The following were used as project costs:

- (1) Construction cost
- (2) Operation cost
- (3) Cost of maintenance and repair

#### 10-5 Calculation Prices

## 10-5-1 Methods of Determining Calculation Prices

Calculation prices evaluated by border prices (international prices) are used for all benefits and costs. Methods of determining calculation prices are in principle as follows:

## 10-5-2 Determination of Standard Conversion Factor, Consumption Conversion Factor and Other Conversion Factors

1. A standard conversion factor is calculated by the following formula because there is no direct export subsidizing system:

Statistics concerning exports and imports are as shown in Tables 10-5-1  $\sim$  2. The following results are obtained from calculation using these figures:

1979	0.988
1980	0.989

It can be seen from the study of export customs duties that about 95% of these are export customs duties for meat, cocoa, sugar and bananas.

Standard conversion factors are mainly used to convert the prices of non-trade goods included in the building cost of civil engineering and building facilities into border prices. Therefore it is not correct as a standard conversion factor for such items as bananas and sugar. So, calculation was made for what was left after subtracting these. The results were as follows:

1979	0.959
1980	0.960

From this, the standard conversion factor is set as follows:

$$SCF = 0.96$$

Table 10-5-1 A List of Statistics on Costa Rican Export and Import

(1) Export

(Unit: 1,000 colones)

<del></del>	(
1979	1980
2,693,567	2,104,102
1,626,964	1,718,299
1,191,005	1,288,088
149,441	346,323
78,893	87,620
7,979,699	8,691,816
	2,693,567 1,626,964 1,191,005 149,441 78,893

(2) Import

(Unit: 1,000 colones)

Item	1979	1980
Processed foods	768,668	1,014,654
Alcoholic beverages and tobacco	71,292	79,166
Incombustibles	226,139	300,241
Combustible lubricating oil	1,618,526	1,918,742
Perfumed oil and animal oil and fat	72,069	111,661
Industrial raw material	816,373	883,608
Transporting machines and materials	3,751,981	3,427,777
Total including others	11,928,774	13,057,071

Table 10-5-2 Costa Rican Customs Statistics

Item	1979	1980
Import tax	751,310	807,549
Export tax	511,110	564,871
(For meat, cocoa, sugar and bananas included in above)	(497,320)	(540,237)

## 2. Consumption Conversion Factor

Because of the relative unimportance of food, clothing and other consumer goods as imports, it was assumed that the consumption conversion factor equals the standard conversion factor.

#### 3. Evaluation of Skilled Labor

It is considered that in Costa Rica the market mechanism is functioning concerning skilled labor force and the market wage rate correctly reflects the contribution of labor to production. It seems, therefore, that the present nominal wage truly represents its economic value. Converted into an international price, it is as follows:

Conversion factor of skilled labor = (nominal wage rate) x (consumption conversion factor)
= 1 x 0.960
= 0.960

#### 4. Evaluation of Unskilled Labor

Generally in developing countries, the nominal wage paid by a project often exceeds the opportunity cost of labor as far as unskilled labor is concerned.

The opportunity cost was estimated from the per-worker agricultural GDP. It is 110 colones/day assuming 26 work days in a month since the agricultural GDP in 1980 is 7,205 million colones and the number of agricultural workers is 209 thousands.

By contrast, the market wage of unskilled labor in constructionwork is  $80 \sim 100$  colones/day and does not greatly differ from the opportunity cost estimated from the agricultural GDP. This is probably because the Costa Rican unemployment rate is only 4.5% — particularly, it is 2.4% for men — and the nation's employment is stabilized. It is considered, therefore, that the nominal wage for unskilled labor approximately represents its economic value. Converted into an international price, it is as follows:

Conversion factor of unskilled labor = (nominal wage rate) x (consumption conversion factor)
= 1 x 0.96
= 0.96

#### 10-6 Calculated Prices of Benefit Items

The reduction of staying cost and feeder charges was taken up as a benefit. These are in international prices.

#### 10-7 Calculated Prices of Cost Items

#### 1. Construction Cost

Table 10-7-1 shows the general conversion factors that are obtained by itemizing construction costs payable in domestic currency.

Table 10-7-1 Conversion Coefficients of Construction Cost

			Domestic currency						
Type of work	Division component	Foreign currency	Portion corre- sponding to trade goods	Un- skilled	Skilled labor	Balance	Non trade goods	Total Con- version factor	1 × 2
	Conversion factor Composition ratio %	1.000	1.000	0.960	0.960	0	0.960	2	
Revetment and reclamation	13.9	(13.0) 0.13	(17.0) 0.17	(13.5) 0.130	(11.5) 0.110	0	(8.5) 0.082	0.622	0.086
Breakwater	11.1	(5.1) 0.51	(21.1) 0.211	(19.2) 0.184	(24.7) 0.237	0	(7.8) 0.075	1.217	0.135
Wharf	28.1	(39.3) 0.393	(7.0) 0.07	(16.8) 0.161	(16.5) 0.158		(29.9) 0.287	1.069	0.300
Road and pavement	4.2	(0) 0	(13.8) 0.138	(4.7) 0.045	(3.2) 0.031	0	(2.5) 0.024	0.238	0.010
Building	7.0	(3.5) 0.035	(12.5) 0.125	(11.4) 0.109	(13.3) 0.128	0	(11.7) 0.112	0.509	0.036
Cargo handling equipment	14.8	(18.1) 0.181	(10.8) 0.108	(12.2) 0.117	(7.1) 0.068	0	0	0.474	0.070
Others	20.9	(21.0) 0.21	(17.8) 0.178	(22.2) 0,213	(23.7) 0.228	0	(39.6) 0.380	1,683	0.352
Total	100.0	_	_	_	_		Gen fact	eral conve or 0.	rsion 989

Note: 1. Figure in ( ) is composition ratio (%) by component of each type of work.

2. Conversion factor by type of work =  $\Sigma$  (composition ratio by component in ( )) x (conversion factor of each component)

3. General conversion factor =  $\Sigma$  (composition ratio of each type of work 1) x conversion factor by type of work 2)

# 2. Maintenance and Administration Cost and Operation Cost

These costs were calculated mainly on the basis of construction cost. So, their evaluation may change with the change of evaluation of construction cost but here, costs according to market prices are used to avoid underestimation of costs.

## 10-8 Economic Profitability

The economic profitability of this project is evaluated by the internal rate of return and in accordance with the above results.

The internal rate of return is the IRR determined by the following formula:

$$\sum_{i=0}^{n} \frac{B_{i} - C_{i}}{(1+r)^{i}} = 0$$

n : Period of calculation
B<sub>i</sub> : Benefit in i-th year
C<sub>i</sub> : Cost in i-th year
r : Rate of discount

25 years was used as the lifetime of the project. The internal rate of return was determined by using 1986, when the Second Stage Expansion Project equipment begin to be used, as the first year and the period until 2010 as the period of calculation. From the results of calculation summarized in Table 10-8-1, it can be said that Case 1 is the more feasible.

Table 10-8-1 Internal Rate of Return

	Case-1	Case-2
Caluculated price	14.9%	7.8%
Market price	14.4%	7.5%

The internal rate of return calculation sheets are shown in Table A10-1  $\sim$  2.

#### 10-9 Sensitivity Analysis

The IRR discussed in the preceding section applies to all ships and cargoes that enter or leave the Port of Caldera.

But in fact, only imported goods, by lowering commodity prices, etc. directly to the Costa Rican economy. So for reference in Case 1, a study was made econcerning the IRR for the net profit determined by multiplying each year's benefits by the proportion of the volume of imported goods. The results are shown in Table A10-5~6.

Table 10-9-1 Internal Rate of Return

	Case-I
Calculated price	12.3%
Market price	11.8%

## 10-10 IRR for Other Projects

Past internal rates of return for port projects in neighboring countries and other projects in Costa Rica by international banking organizations range from 13% to 18%, as can be seen from Table 10-10-1.

Table 10-10-1 I.R.R.s for Other Projects

Name of project	Time	I.R.R	Project life
Nicaragua — Second Coriento Port Project	1979.10	11 ~ 15%	20 ~ 30 years
Costa Rica Power Project	1980.10	13.5%	30 years
Costa Rica Fourth Highway Project	1975. 12	17 ~ 18%	20 years

#### 10-11 Evaluation

The following conclusion can be derived from the results of the economic analysis:

- 1. Since the internal rates of return for other Costa Rican projects, etc. are  $13 \sim 18\%$ , it can be said that this project is sufficiently profitable from the view-point of national economy.
- 2. This project shows a considerable internal rate of return in a sensitivity analysis and involves no particular problem from the view-point of economic profitability. Therefore, decision on the execution schedule of the project should be comprehensively made in light of the role of the Port of Caldera as a foreign-trade public port and the prospects of fund raising.

Table A 10-1 I.R.R Calculation Sheet (Market Prices)

Case-1 14.4%

		Cost			Ber	efit	
	Investment	Operation cost	Cost of mainte- nance and repair	Total	Port staying cost	Total	Net Benefit
1981							0
82	11,670			11,670	ļ		△ 11,670
83	159,105			159,105	]		△159,105
84	162,870			162,870		1	△162,870
85	123,105			123,105	1	į	△123,105
86		9,567	11,114	20,681	48,690	48,690	28,009
87		9,567	11,114	20,681	69,930	69,930	49,249
88	[	9,567	11,114	20,681	113,670	113,670	92,989
89	}	9,567	11,114	20,681	113,670	113,670	92,989
90	•	9,567	11,114	20,681	113,670	113,670	92,989
91 -	1	9,567	11,114	20,681	113,670	113,670	92,989
92		9,567	11,114	20,681	113,670	113,670	92,989
93	İ	9,567	11,114	20,681	113,670	113,670	92,989
94	)	9,567	11,114	20,681	113,670	113,670	92,989
95		9,567	11,114	20,681	113,670	113,670	92,989
96		9,567	11,114	20,681	113,670	113,670	92,989
97		9,567	11,114	20,681	113,670	113,670	92,989
98	į	9,567	11,114	20,681	113,670	113,670	92,989
99		9,567	11,114	20,681	113,670	113,670	92,989
2000		9,567	11,114	20,681	113,670	113,670	92,989
1		9,567	11,114	20,681	113,670	113,670	92,989
2		9,567	11,114	20,681	113,670	113,670	92,989
3	j	9,567	11,114	20,681	113,670	113,670	92,989
4		67ج9	11,114	20,681	113,670	113,670	92,989
5	1	9,567	11,114	20,681	113,670	113,670	92,989
6	1	9,567	11,114	20,681	113,670	113,670	92,989
7		9,567	11,114	20,681	113,670	113,670	92,989
8	1	9,567	11,114	20,681	113,670	113,670	92,989
9	!	9,567	11,114	20,681	113,670	113,670	92,989
10	į	9,567	11,114	20,681	113,670	113,670	92,989

Table A 10-2 I.R.R Calculation Sheet (Calculated Prices)

Case-1 14.9%

(Unit: 1,000 co							
}		Cost			Ben	efit	
Year	Invest- ment	Operation cost	Cost of mainte- nance and repair	Total	Port staying cost	Total	Net Benefit
1981					<del> </del>	<b>†</b>	0
82	11,203			11,203			A 11,203
83	15,2741			152,741			△152,741
84	156,355	1		156,355			4156,355
85	118,181	Ì		118,181			Δ118,181
86	•	9,567	11,114	20,681	48,690	48,690	28,009
87		9,567	11,114	20,681	69,930	69,930	49,249
88		9,567	11,114	20,681	113,670	113,670	92,989
89		9,567	11,114	20,681	113,670	113,670	92,989
90		9,567	11,114	20,681	113,670	113,670	92,989
91		9,567	11,114	20,681	113,670	113,670	92,989
92		9,567	11,114	20,681	113,670	113,670	92,989
93		9,567	11,114	20,681	113,670	113,670	92,989
94		9,567	11,114	20,681	113,670	113,670	92,989
95		9,567	11,114	20,681 +	-	113,670	92,989
96		9,567	11,114	20,681		113,670	92,989
97		9,567	11,114	20,681	,	113,670	92,989
98		9,567	11,114	20,681	,	113,670	92,989
99		9,567	11,114	20,681	-	113,670	92,989
2000		9,567	11,114	20,681	113,670	113,670	92,989
1		9,567	11,114	20,681	113,670	113,670	92,989
2		9,567	11,114	20,681	113,670	113,670	92,989
3		9,567	11,114	20,681		113,670	92,989
4		9,567	11,114	20,681	113,670	113,670	92,989
5		9,567	11,114	20,681	113,670	113,670	92,989
6		9,567	11,114	20,681	113,670	113,670	92,989
7		9,567	11,114	20,681	113,670	113,670	92,989
8		9,567		20,681	133,670	113,670	92,989
9		9,567	11,114	20,681	113,670	113,670	92,989
10		9,567	11,114	20,681	113,670	113,670	92,989

Table A 10-3 I.R.R Calculation Sheet (Market Prices)

Case-2 7.5%

		Co	ost			Benefit		
Year	Invest- ment	Operation cost	Cost of maintenance and repair	Total	Port staying cost	Feeder charge	Total	Net Profit
1981								0
82	11,670	1		11,670	}			△ 11,670
83	159,105	f		159,105	į			△159,105
84	162,870			162,870				4162,870
85	123,105			123,105				△123,105
86		9,567	11,114	20,681	6,300	13,305	19,605	△ 1,076
87		9,567	11,114	20,681	7,050	15,195	22,245	1,564
88		9,567	11,114	20,681	7,155	17,085	24,240	3,559
89		9,567	11,114	20,681	7,485	18,975	26,460	5,779
90		9,567	11,114	20,681	8,580	20,865	29,445	8,764
91		9,567	11,114	20,681	10,005	21,975	31,980	11,299
92		9,567	11,114	20,681	15,615	23,070	38,685	18,004
93		9,567	11,114	20,681	13,740	24,180	37,920	17,239
94		9,567	11,114	20,681	18,375	25,275	43,650	22,969
95		9,567	11,114	20,681	20,070	26,385	46,455	25,774
96		9,567	11,114	20,681	27,990	27,450	55,440	34,759
97		9,567	11,114	20,681	45,420	28,530	73,950	53,269
98		9,567	11,114	20,681	64,650	29,595	94,245	73,564
99		9,567	11,114	20,681	109,875	30,675	140,550	119,869
2000		9,567	11,114	20,681	109,875	31,740	141,615	120,934
1		9,567	11,114	20,681	109,875	31,740	141,615	120,934
2		9,567	11,114	20,681	109,875	31,740	141,615	120,934
3		9,567	11,114	20,681	109,875	31,740	141,615	120,934
4		9,567	11,114	20,681	109,875	31,740	141,615	120,934
5		9,567	11,114	20,681	109,875	31,740	141,615	120,934
6		9,567	11,114	20,681	109,875	31,740	141,615	120,934
7		9,567	11,114	20,681	109,875	31,740	141,615	120,934
8		9,567	11,114	20,681	109,875	31,740	141,615	120,934
9		9,567	11,114	20,681	109,875	31,740	141,615	120,934
10		9,567	11,114	20,681	109,875	31,740	141,615	120,934

Table A 10-4 I.R.R Calculation Sheet (Calculated Prices)

Case-2 7.8%

(Unit: 1,000								
ļ		Co	ost		}	Benefit		<u> </u>
Year	Invest- ment	Operation cost	Cost of mainte- nance and repair	Total	Port staying cost	Feeder charge	Total	Net Profit
1981				<del> </del>				0
82	11,203	:		11,203			 	△ 11,203
83	152,741			152,741				Δ152,741
84	156,355			156,355				△156,355
85	118,181	,		118,181				△118,181
86		9,567	11,114	20,681	6,300	13,305	19,605	△ 1,076
87		9,567	11,114	20,681	7,050	15,195	22,245	1,564
88		9,567	11,114	20,681	7,155	17,085	24,240	3,559
89		9,567	11,114	20,681	7,485	18,975	26,460	5,779
90		9,567	11,114	20,681	8,580	20,865	29,445	8,764
91		9,567	11,114	20,681	10,005	21,975	31,980	11,299
92		9,567	11,114	20,681	15,615	23,070	38,685	18,004
93		9,567	11,114	20,681	13,740	24,180	37,920	17,239
94		9,567	11,114	20,681	18,375	25,275	43,650	22,969
95	'	9,567	11,114	20,681	20,070	26,385	46,455	25,774
96		9,567	11,114	20,681	27,990	27,450	55,440	34,759
97		9,567	11,114	20,681	45,420	28,530	73,950	53,269
98		9,567	11,114	20,681	64,650	29,595	94,245	73,564
99		9,567	11,114	20,681	109,875	30,675	140,550	119,869
2000		9,567	11,114	20,681	109,875	31,740	141,615	120,934
1	,	9,567	11,114	20,681	109,875	31,740	141,615	120,934
2		9,567	11,114	20,681	109,875	31,740	141,615	120,934
3		9,567	11,114	20,681	109,875	31,740	141,615	120,934
4		9,567	11,114	20,681	109,875	31,740	141,615	120,934
5		9,567	11,114	20,681	109,875	31,740	141,615	120,934
6		9,567	11,114	20,681	109,875	31,740	141,615	120,934
7		9,567	11,114	20,681	109,875	31,740	141,615	120,934
8		9,567	11,114	20,681	109,875	31,740	141,615	120,934
9		9,567	11,114	20,681	109,875	31,740	141,615	120,934
10		9,567	11,114	20,681	109,875	31,740	141,615	120,934

Table A 10-5 I.R.R Calculation Sheet (Market Prices)

Only import is studied for Case 1 11.8%

<del></del>	T	Cos	t	<del></del>	Be	nesît	t: 1,000 colones
Year	Investment	Operation cost	Cost of mainte-nance and repair	Total	Port staying cost	Total	Net Benefit
1981							0
82	11,670	,		11,670	1		△ 11,670
83	159,105		ł	159,105	!		△159,105
84	162,870	i	1	162,870	i •		△162,870
85	123,105			123,105			△123,105
86		9,567	11,114	20,681	41,387	41,387	20,706
87		9,567	11,114	20,681	59,301	59,301	38,620
88		9,567	11,114	20,681	96,278	96,278	75,597
89	į	9,567	11,114	20,681	96,278	96,278	75,597
90		9,567	11,114	20,681	96,278	96,278	75,597
91		9,567	11,114	20,681	96,278	96,278	75,597
92	1	9,567	11,114	20,681	96,278	96,278	75,597
93		9,567	11,114	20,681	96,278	96,278	75,597
94		9,567	11,114	20,681	96,278	96,278	75,597
95		9,567	11,114	20,681	96,278	96,278	75,597
96	1	9,567	11,114	20,681	96,278	96,278	75,597
97		9,567	11,114	20,681	96,278	96,278	75,597
98		9,567	11,114	20,681	96,278	96,278	75,597
99		9,567	11,114	20,681	96,278	96,278	75,597
2000		9,567	11,114	20,681	96,278	96,278	75,597
1		9,567	11,114	20,681	96,278	96,278	75,597
2		9,567	11,114	20,681	96,278	96,278	75,597
3		9,567	11,114	20,681	96,278	96,278	75,597
4		9,567	11,114	20,681	96,278	96,278	75,597
5		9,567	11,114	20,681	96,278	96,278	75,597
6		9,567	11,114	20,681	96,278	96,278	75,597
7		9,567	11,114	20,681	96,278	96,278	75,597
8	,	9,567	11,114	20,681	96,278	96,278	75,597
9		9,567	11,114	20,681	96,278	96,278	75,597
10		9,567	11,114	20,681	96,278	96,278	75,597

Table A 10-6 I.R.R Calculation Sheet (Calculated Price)

Only import is studied for Case 1 12.3%

		Cost	· · · · · · · · · · · · · · · · · · ·		Bene	fit	· · · · · · · · · · · · · · · · · · ·
Year	Invest- ment	Operation cost	Cost of mainte- nance and repair	Total	Port staying cost	Total	Net Benefit
1981							0
82	11,203			11,203			A 11,203
83	152,741			152,741			△152,741
84	156,355			156,355			<i>4</i> 156,355
85	118,181			118,181	1		18,181
86		9,567	11,114	20,681	41,387	41,387	20,706
87		9,567	11,114	20,681	59,301	59,301	38,620
88		9,567	11,114	20,681	96,278	96,278	75,597
89		9,567	11,114	20,681	96,278	96,278	75,597
90		9,567	11,114	20,681	96,278	96,278	75,597
91		9,567	11,114	20,681	96,278	96,278	75,597
92		9,567	11,114	20,681	96,278	96,278	75,597
93		9,567	11,114	20,681	96,278	96,278	75,597
94		9,567	11,114	20,681	96,278	96,278	75,597
95		9,567	11,114	20,681	96,278	96,278	75,597
96		9,567	11,114	20,681	96,278	96,278	75,597
97		9,567	11,114	20,681	96,278	96,278	75,597
98		9,567	11,114	20,681	96,278	96,278	75,597
99		9,567	11,114	20,681	96,278	96,278	75,597
2000		9,567	11,114	20,681	96,278	96,278	75,597
1		9,567	11,114	20,681	96,278	96,278	75,597
2		9,567	11,114	20,681	96,278	96,278	75,597
3		9,567	11,114	20,681	96,278	96,278	75,597
4		9,567	11,114	20,681	96,278	96,278	75,597
5		9,567	11,114	20,681	96,278	96,278	75,597
6		9,567	11,114	20,681	96,278	96,278	75,597
7		9,567	11,114	20,681	96,278	96,278	75,597
8		9,567	11,114	20,681	96,278	96,278	75,597
9		9,567	11,114	20,681	96,278	96,278	75.597
10		9,567	11,114	20,681	96,278	96,278	75,597

CHAPTER 11 FINANCIAL ANALYSIS

## CHAPTER 11 FINANCIAL ANALYSIS

## 11-1 Purpose of Financial Analysis

Whereas economic analysis studies the effects of execution of a project and its time of execution from the view-point of national economy, financial analysis examines the financial health of the organization to execute the project.

In other words, the purpose of financial analysis is to analyze how the costs and profits of the execution of the project affect the financial status of the management body concerned, to study its prior financial situation, and to propose measures to make it financially more sound.

#### 11-2 Preconditions

The financial health of the Port of Caldera Second Stage Expansion Project was studied by preparing financial statements under the following preconditions:

- (1) The Port of Caldera is operated on a self-paying basis by the cost method.
- (2) The operation and raising of funds for the Port of Caldera Second Stage Expansion Project were assumed similarly to the results of the First Stage Project as follows:

< Necessary funds >	
Foreign funds	¢277,500,000
Domestic funds	179,250,000
Total	456,750,000
< Fund raising >	
Loans I	¢277,500,000
" 2	89,625,000
Government funds	89,625,000
Total	456,750,000

Thus, it is assumed that all foreign funds is raised by loans 1 while a half of the domestic funds is raised by loans 2 and the remainder is financed from the funds of the Costa Rican Government.

The conditions of these loans are as follows:

 Borrowed from
 Interest (annual)
 Grace period
 \*Period of loan (year)

 Loan 1
 4.75%
 7
 20

 Loan 2
 8.00%
 7
 20

Table 11-2-1 Conditions of Loans

<sup>\*</sup> Includes grace period

# (3) Depreciation is made by the fixed instalment method

The period of depreciation is in accordance with the standard of the Costa Rican Government.

Table 11-2-2 Depreciation Rates and Periods by Facility

Name of facility	Depreciation rate	Period of depreciation
Breakwater	0,010	100
Wharf	0.020	50
Warehouse and office	0.029	35
Navigation aid	0,040	25
Railway	0.050	20
Waterworks, sewer and electricity	0,067	15
Road, container yard and pavement	0.067	15
Cargo handling equipment	0.100	10

#### (4) Revenue

The provisional tariff prepared by the MOPT was used in estimating the revenue of the Port of Caldera.

#### (5) Financial Statements

When the Second Stage Expansion Project is completed, equipment supplied for this project will be operated together with equipment completed by the First Stage Project – including administration. So, the financial statements were prepared on the assumption of the integrated operation of the First Stage and the Second Stage Expansion equipment. (Case 2)

For reference, financial statements for the case where only the First Stage equipment is operated were prepared as Case 1.

- Case-1: Operation of only the First Stage equipment.
- Case-2: Integrated operation of the First Stage and the Second Stage Expansion equipment.
- 2 The financial statements were prepared, using 1981 as the basic year. Further, it was assumed that investment for the Second Stage Expansion Project be started in January 1982 and completed in December 1985 and that facilities constructed under this project begin to be used from January 1986.

#### (6) Taxes and Public Charges

Taxes and public charges for profits were not taken into consideration because the Port of Caldera is operated directly by the Costa Rican Government.

#### (7) Interest for Short-term Loans and Interest for Money on Deposit

20% and 16% were assumed for, respectively, the interest for short-term loans and the interest for money on deposit.

#### 11-3 Revenue

The provisional tariff prepared by the MOPT was used to estimate revenue.

For the status of revenue in Case 1 and that in Case 2, see the statements of profit and loss in respectively, Table A 11-1 and Table A 11-2.

Table 11-3-1 Outline of Tariff

(Unit Colones)

Туре	Revenue Item	Unit Charge
1	Pilotage, towage, etc.	16.30/TRB
2	Groundage	300.00/m de esl/dia
3	Charge for cleaning cargoes	0.80/ton
4	Unloading and other charges in importing general cargoes	250/ton
	Loading and other charges in exporting general cargoes	235/ton
5	Unloading and other charges in importing container cargoes	160/ton
	Loading and other charges in exporting container cargoes	145/ton
6	Unloading and other charges in importing bulk cargoes	160/ton

Note: 1. TRB = el Tonelaje de Regestro Bruto (registered net tonnage)

2. m de esl/dia = metro de eslora/diario (per meter of ship's length per day)

## 11-4 Expenditure

The expenditure items were divided into operation cost, cost of maintenance and repair, depreciation cost, general administration cost and paid interest and calculated as follows:

## (1) Operation Cost

The operation cost is composed of personnel cost in the operation branch and light and fuel cost.

## Personnel Cost in Operation Branch

This was calculated by determining per-capita personnel cost from the Port of Caldera's tentatively calculated operation cost and past results and multiplying this by the required number of personnel in each year.

70 thousand colones was used as personnel cost per capita per annum.

Also, 50 was used as the number of workers necessary for the Second Stage facilities. It was assumed that 30 of them would be recruited from among workers in current employment. So, the new addition is 20 persons.

Table 11-4-1 Change in Number of Personnel in Operation Branch of the Port of Caldera

(Unit: person)

Case	1981 ~ 1985	1986 and after
1	631	631
2	631	651

## (2) Light and Fuel Cost

Total of (A)  $\sim$  (B). Case-1:

From 1986 when container yard begins to be used, total of (A)  $\sim$  (E). Case-2:

# (A) Tugboat $1,700ps \times 1$

 $0.16\ell/ps/h \times 1,700ps \times 4 \text{ hour } \times 365 \text{ days } \times 0.64/\ell = \ell2,542,000$ 

#### (B) Forklifts

3 ton x 10, 46ps  
6 ton x 3, 58.5ps  
36~40 ton x 1, 215ps 0.16
$$\ell$$
/ps/hour x 1,458ps x 16 hours x  
40 ton x 1, 215ps 365 days x \$\psi\$11.5/\$\empty = \$\empty\$15,667,000  
5 ton x 5, 58.5ps  
15 ton x 1, 100ps  
actor 5 3, 250ps x 8

250ps x 8 (C) Tractor 5

Trailer 3  $0.16l/ps/hour \times 2,000ps \times 16 hour \times 365 days \times $\psi 11.5/l$ = 421.491.000

## (D) Container crane

Hoisting	370	kw	580 kw
Traversing	90	kw	
Traveling	150	kw	
Elevator	75	kw	

6.820/number of containers handled x 2.5 minutes x 2 x 1/60 x 1986:  $580 \text{ kw} \times \text{$0.6 \text{ kw/hour}} = \text{$259,000}$ 

(E) Straddle carrier  $30.5t \times 4 \rightarrow 190PS \times 4$ 

 $0.16 \ell/ps/\ell \times 190 ps \times 4 \times 16 \text{ hours } \times 365 \text{ days } \times \ell 11.5/\ell = \ell 8,167,000$ 

## (2) Cost of Maintenance and Repair

This cost was determined by multiplying the cumulative amount of investments by 3% in accordance with the results at other ports of the same scale. In determining this ratio, the cost of maintenance and repair for each facility was obtained and the weighted averaging of these was made.

2% was determined as the cost rate of maintenance and repair for the breakwater by assuming 24.5% as the rate of damage by waves of a realizing period of 30 years and 30% as the rate of damage by other factors. The rate of damage by waves was obtained by applying the Hudson's formula as follows:

Table 11-4-2 Cost of Maintenance and Repair by Facility

(Unit: 1,000 colon)

Name of facility	Value	Cost rate of maintenance and repair
Breakwater	61,050	2%
Revetment	24,450	2
Dredging and reclamation	61,845	3
Wharf	156,225	2
Building	37,755	3
Light-buoy	2,835	3
Railway	5,850	3
Road, waterworks and sewer	39,240	3
Cargo handling equipment	67,500	5
Total	456,750	3

# < Rate of Damage to Breakwater by Waves >

i) The relation between the rate of damage and wave height if 4 tons is the weight of rubblestones used for the mound can be obtained by the following Hudson's formula:

$$W = \frac{\tau \tau H^3}{K_D (Sr - 1)^3 \cot \alpha}$$

W: Minimum weight of rubblestones (t)

 $\tau\tau$ : Unit volume weight in air of rubblestones (t/m<sup>3</sup>)

Sr : Specific gravity of stones

α : Angle with a horizontal slope (degree)

H: Wave height used for design calculation (m)

KD. Constant determined by damage rate

$$4t = \frac{2.65 \times H^3}{\text{Kd} \left(\frac{2.65}{1.03} - 1\right)^3 \times 2}$$

Damage rate	0 ~ 1%	Kd = 3.2	H = 3.4  m
	1 ~ 5	Kd = 5.1	H = 3.9  m
	5~15	Kd = 7.2	H = 4.4  m
	10 ~ 20	Kd = 9.5	H = 4.8  m
	15 ~ 40	Kd = 12.8	H = 5.3  m

The source: Technical Standards for Port and Harbour Facilities in Japan 1980

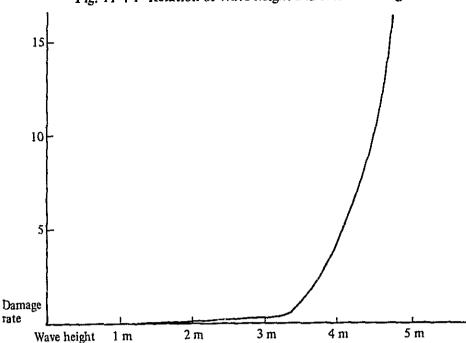


Fig. 11-4-1 Relation of Wave height and Rat of damage

## ii) Rate of Damage to breakwater by waves of a realizing period of 30 years.

Wave height	Rate of damage in suffering year	Probability of damage	Rate of damage in a realizing period
4.0 ~ 4.5 m	8%	1/30	8% x 30/30 = 8%
$3.5 \sim 4.0$	2%	1/11	$2\% \times 30/11 = 5.5\%$
3.0 ~ 3.5	0.3%	1/4.5	$0.3\% \times 30/4.5 = 2.0\%$
$ \begin{array}{c} 2.5 \sim 3.0 \\ 2.5 \sim 2.0 \\ 1.5 \sim 2.0 \\ 1.0 \sim 1.5 \end{array} $	0.3%	1/1	0.3% x 30/1 = 9%
		Total	24.5%

#### (3) Depreciation Cost

Assuming that all assets are invested on in the middle of the term, it was decided that, regarding the assets of the n years of the period of depreciation by types of depreciation assets shown in Table 11-2-2, depreciation is made 1/2n in the first year (year of investment), 1/n in each year from the second year until the (n-1) year and 1/2n in the last year (after n years).

This was calculated by the following formula:

$$D(i) = \frac{\frac{F(i-n)}{2} + \sum_{i=i-n+1}^{i-1} F(i) + \frac{F(i)}{2}}{n}$$

D(i): Amount of depreciation in i term F(i): Total amount invested in i term

n: Period of depreciation (number of years)

### (4) General Administration Cost

This was obtained by assuming 209 as the number of personnel in the administration branch and multiplying this by 160,000 colones, personnel cost per capita per annum.

### (5) Interest Payment

## 1 Long-term Loans

The interest was determined by multiplying the term's average balance (1/2 of the sum of the balance at the beginning of the term and the balance at the end of the term) in each year by the interest rate.

#### (2) Short-term Loans

It was assumed that shortages in available funds is filled with short-term loans and that the rate of these loans is 20%.

### 11-5 Status of Revenue and Expenditure

#### 11-5-1 Preparation of Financial Statements

Income statement a source and application of funds and a balance sheet were prepared under the above-mentioned conditions. The results are shown in tables attached at the end of this chapter.

## 11-5-2 On the Status of Revenue and Expenditure

Study of the status of revenue and expenditure from these financial statements shows that profit in every term is minus due to shortage of revenue and increase of interest payment for loans.

Thus, financial difficulties continue and there is no choice but to borrow short-term operating funds.

Under the present circumstances, therefore, it is difficult to operate the Port of Caldera on a self-paying basis.

The problems and improvements are specifically discussed below.

## (1) Problems

#### (1) Tariff

The revenue was studied, based on a provisional tariff, which was determined by cost accounting on condition of S1 = 48.54. So, it will be some time before the operation cost can be financed with the revenue and the revenue cannot cover the interest for loans necessary for equipment investment.

② Borrowing Shortages in Short-term Operating Funds from Banking Organizations
As stated above, financing is difficult due to a short revenue and there is no choice but to
borrow operating funds. It is assumed that these will be financed with short-term loans
from city banks. But since no early improvement of profitability is in prospect, the payment of interest for these loans will be heavy burden.

# (3) Excessive Burden of Interest for Borrowed Investment Funds

This project depends on long-term loans for most of the investment funds and, moreover, the operation cost cannot be financed with the revenue. Thus, the burden of interst for loans is excessive.

### 2. Improvements

Re-study was made item by item concerning the above-mentioned problems.

## (1) Re-study of Tariff

The present tariff was revaluated on condition of \$1 = \$15. The status of revenue and expenditure in this case is as shown in Table A 11-4. As can be seen from the appended financial statements, the balance can be greatly improved and the revenue is more than sufficient to finance the operation cost and the payment of interest.

It can be said, therefore, that increasing the tariff may help to maintain the self-paying system of the Port of Caldera.

## ② Government Subsidy for Short-term Operating Funds

To supply short-term operating funds, which run short every year, presupposes loans from city banks. The appended financial statements include interest on these loans. To see the net amount of shortages, study was made by preparing financial statements for the case where no interest for short-term loans is involved. The results are as shown in Table A 11-6.

It can be said that the government supply of every year's shortages in operating funds shown in the appended source and application of funds may help to maintain the self-paying system of the Port of Caldera.

If government aid is to be limited to the extent of financing the operation cost, it will be necessary to consider increasing the tariff so as to equal the operation cost.

#### (3) Government Subsidy for Investment Funds

Study was made for the following two cases with a view to increasing government funds in fund raising because of the aforementioned excessive burden of interest for loans as investment funds:

#### i) (Case 2-A)

All domestic funds will be supplied by the government.

Loans 1	¢277,500,000
Government funds	179,250,000
Total	456,750,000

#### ii) (Case 2-B)

In addition to the above, a half of loans 1 will be supplied by the government.

Loans 1	¢138,750,000
Government funds	318,000,000
Total	456,750,000

In either case, the revenue and the expenditure are unbalanced, as can be seen from Table A 11-7 and 11-8. This is due to the fact that 627,741,000 has already been

received in loans for the First Stage Expansion Project and the repayment of these loans and the payment of their interest are a heavy burden.

To improve the balance, it will therefore be necessary to reconsider fund raising for the Second Stage Expansion Project so as to increase financing from government funds, and for government to take over the repayment of the First Stage Project's loans.

## 11-6 Financial Analysis of Costs and Benefits

In the preceding section, the financial health of the Port of Caldera was discussed by analyzing financial statements. In this, the profitability of the Second Stage Expansion Project is evaluated for reference' sake by analyzing costs and benefits.

## 11-6-1 Methods of Analysis

### (I) Benefits

For benefits, revenue increase through the execution of the Second Stage Expansion Project was used.

#### (2) Costs

For costs, the construction cost of the Second Stage Expansion Project and the increase of operation cost through the execution of the project were used.

For the details of revenue increase and cost increase in (1) and (2), see Table A11-2. For details of the construction cost, see Table A10-1.

#### 11-6-2 Financial Rate of Return

The financial rate of return was calculated for two cases. Case 2 and Case 2' where the tariff was re-studied at S1 = 0.5.

The results are shown in Table 11-6-1 and the F R R calculation sheets are shown in Table 11-6-2 and Table 11-6-3.

The average rate for loans is 5.5% annually. Whereas, the rate for Case 2 is  $\triangle 0.4\%$ , which seems to underscore the financial difficulty of maintenance. The rate for the changed tariff is 5.6%, which seems to show that it is possible to repay the loans

Table 11-6-1 Financial Rate of Return

	Case 2	Case 2'
FRR	△0.4%	5.6%

The financial rate of return was determined by the following formula:

$$\sum_{i=0}^{n} \frac{\mathrm{B}i - \mathrm{C}i}{(1+r)^{i}} = 0$$

Bi : Benefits in i-th year
Ci : Costs in first year
r . Rate of discount

Table 11-6-2 FRR in Case-2

△0.4%

(Unit: 1,000 colones)

<del></del>	<del></del>	<del></del>	<del>,</del>	(Onic. 1,000 colones)
Year	Revenue	Operation cost	Construction cost	Net Profit
1981				
82			11,670	△ 11,670
83	İ		159,105	△159,105
84			162,870	△162,870
85	•		123,105	△123,105
86		27,974		△ 27,974
87		35,269		△ 35,269
88		35,269		Δ 35 <b>,</b> 269
89	5,572	35,269		△ 29,697
90	11,145	35,269		△ 24,124
91	18,412	35,269		Δ 16,857
92	25,678	35,269		Δ 9,591
93	32,945	35,269		△ 2,324
94	40,211	35,269		4,942
95	47,478	35,269		12,209
96	55,705	35,269	ļ	20,436
97	63,932	35,269		28,663
98	72,159	35,269		36,890
99	80,386	35,269		45,117
2000	88,613	35,269	į	53,344
1	96,840	35,269		61,571
2	105,067	35,269		69,798
3	113,294	35,269		78,025
4	121,521	35,269		86,252
5	129,748	35,269		94,479

Table 11-6-3 FRR in Case-2'

5.6%

(Unit: 1.000 colones)

	<del></del>		<del></del>	(Unit: 1,000 colones)
Year	Revenue	Operation cost	Construction cost	Net Profit
1981	-			
82	}		11,670	A 11,670
83	1		159,105	4159,105
84			162,870	△162,870
85			123,105	4123,105
86		27,974		△ 27,974
87		35,269		△ 35,269
88		35,269		4 35,269
89	10,576	35,269		△ 24,693
90	21,155	35,269		△ 14,114
91	33,942	35,269		4 1,327
92	46,728	35,269		11,459
93	59,517	35,269		24,248
94	72,303	35,269		37,043
95	85,089	35,269	}	49,820
96	99,527	35,269		64,258
97	113,968	35,269		78,699
98	128,405	35,269	1	93,136
99	142,846	35,269		107,577
2000	157,284	35,269	1	122,015
1	171,723	35,269		136,454
2	186,163	35,269		150,894
3	200,601	35,269		165,332
4	215,061	35,269		179,792
5	229,480	35,269		194,211
		<b>,</b>	1	

## 11-7 Evaluation

The financial health of the Second Stage Expansion Project was studied under the preconditions of 11-2, namely, that the revenue is built up by a provisional tariff and that about 80% of the necessary funds is financed with loans. But as stated above, the revenue and the expenditure are unbalanced and thus financial difficulties constantly prevail, making the operation of the Port of Caldera on a self-paying basis difficult.

Therefore, to maintain the financial health of the Port of Caldera and keep up its operation on a self-paying basis, it will be necessary to consider the following measures:

- (1) Change of the tariff
- (2) Government subsidy for short-term operating funds
- (3) Government subsidy for investment funds

## **Financial Statements**

# Table A-11-1 (Case 1)

(I) INCCHE STATEMENT											
(YEAR)	1981	1962	1983	1984	1985	1986	1987	1988	1989	1990	
THERATING MEYE WES											
FLHT DIV.							21466	22649	22649	22649	
5FC-1 1	14599	15717	16834	17592	19069	20262	21455 19676	20046	20046	20046	
;	18679	18893	18908	18922	18937	19307	462	462	482	482	
ā	330	354	377	401	424	443	70025	71668	71668	71668	
ā	53078	56493	59909	63324	66739	68382		28057	28057	28057	
4	13281	15727	18174	20620	23067	24730	26393 19418	20102	20102	20102	
	18278	18221	18163	18106	180+8	18733		163004	163004	163004	
10TAL	118445	125405	132365	138965	146284	151857	157429	22649	22649	22649	
TOTAL 1	14599	15717	16834	17592	19069	20262	21455		20046	20045	
2	16879	16893	18908	18922	18937	19307	19676	20046	482	482	
i	330	354	377	401	424	443	462	462	71668	71668	
,	53078	56493	39909	63324	66739	68382	70023	7166B			
Ţ	13281	15727	16174	20620	23067	24750	26393	28057	28057	28057 20102	
1	18278	18221	18163	18106	18048	18733	19418	20102	20103		
TUTAL	118445	125405	132365	138965	146284	131657	157429	163004	163004	163004	
SENTAL DIV.	0	0	٥	0	0	Q	0	Ģ.	ū	ŏ	
THER DIV.	0	0	0	٥	0	0	0	0		1/2004	
THEL UPERATING REVENUES	118445	125405	132365	138965	146264	151857	157429	163004	163004	163004	
TPERATING EXPLASES		_								84394	
PPEHATIUNS	84213	64236	84262	84286	84311	84327	84344	84361	84377		
MAINTENANCE	20452	2D452	20452	20452	20452	20452	20452	20432	20452	20452	
EEPHECIATION	20863	20663	20863	20863	20863	20863	20863	20863	50862	22092	
ADMINISTRATIL»	33440	33440	33440	33440	33440	33440	33440	33440	33440	33440	
THERS	0	- 6		0	0	0	0	. 0	. 0	0	
TOTAL OPERATING EXPENSES	156966	156793	159017	159041	159066	159082	159099	139116	159132	160378	
NET TIPERATING INCOME(NOT)	-40523	-33568	-26652	-20076	-12782	-7225	-1670	3886	3672	2626	
(NO! BEFURE DEPRECIATION)	-19660	-12725	-5789	787	5081	13638	19193	24751	24735	24718	
OTHER INCOME	-1,00-										
INTEREST	0	0	0	Q	0	0	0	0	O.	o.	
OTHERS	ŏ	Ď-		٥	0	0	0	٥	0	Q	
	ō	ō	ò	0	٥	0	٥	0	0	D	
TUTAL DTHER EXPENSES	_	•	_								
INTEREST DW LONG-TERH LOANS	33566	31709	29851	27666	25153	22642	20133	17623	15112	12601	
INTEREST ON SHORT-TERM LOAMS	9478	29564	52161	79354	112054	150034	194662	247415	310716	390262	
INITATED THE PROPERTY COURT	7770	2,700	0	a	0	0	٥	0	٥	0	
DTHERS	43044	61273	82012	107020	137207	172676	214795	265038	325828	402863	
TOTAL	43044	04215	42-02								
	-63567	-94861	-108664	-127096	-149989	-179901	-216465	-261150	~321956	-400237	
INCOME BERGRE TAX	-0770	-,-,,,,,	-10107		٥	0	G	0	0	0	
TAX	-83567	-94861	-108664	-127096	-149989	-179901	-216465	-261150	~321956	-400237	
NET INCOME	-10000	-44901	-100000	-12.075	0	0	0	. 0	0	0	
LEGAL RESERVE	×	<del></del>	<del> </del>	·š	ă	Y	ō	ō	Ó	٥	
DIVIDENDS	-63567	-94861	-108664	-127096	-149989	-179901	-216465	-261150	-321956	-400237	
SURPLUS	-83301	-74801	-100004	-141070	6-7707	******				•	

		Ti	COME STATE	EHENT						
(YEAR)	1991	1992	1993	1984	1995	1996	1997	1998	1999	2000
OPERATING REVENUES PORT DIV.		· <u>-</u> - ·						···		
SEC.1 1	22649	22649	22649	22649	22649	72649	22649	22649	22649	22649
300.2	20046	20046	20046	20046	20046	20046	20046	20046	20046	20046
ţ	462	482	482	462	462	482	482	482	482	442
	71668	71668	71668	71668	71668	71668	71668	71668	71668	71668
5	28057	28057	28057	28057	28057	28057	28057	28057	20057	28057
6	20102	20102	20102	20102	20102	<u> 20103</u>	20102	20102	20102	20102
TOTAL	163004	163004	163004	163004	163004	163004	163004	163004	163004	16300* 22649
TOTAL 1	22649	22649	22649	22649	22649	22649	22649	22649 20046	22649 20046	20046
2	20046	20046	20046	20046	20046	20046	20046	482	462	482
Ş	482	482	71668	71668	71668	462	71668	71668	7166	71668
<u> •</u>	71668	71668	28057	28057	28057	71668	28057	28057	28057	28057
5	20102	20102	20102	20102	20103	20102	20102	20102	20102	20102
TOTAL	163004	163004	163004	163004	163004	163094	163004	163004	163004	163004
RENTAL DIV.	103004	103004	10000	1 0 5 0 0 4	102004	105002	707004	102000	- 203030	2000
OTHER DIV.	ň	ň	ň	ă	ň	ă	ő	ŏ	č	ŏ
TOTAL OPERATING REVENUES OPERATING EXPENSES	163004	163004	163004	163004	163004	163004	163004	163004	163004	163004
DPERATIONS	84408	84422	84436	84450	14464	84461	84498	64515	#4533	84550
MAINTENANCE	20452	20452	20452	20432	20452	20452	20452	20452	20452	20452
DEPRECIATION	20463	20863	20863	20163	23224	20863	20163	20163	20863	21612
ADMINISTRATION	33440	33440	33440	33440	33440	33440	33440	33440	33440	33440
OTHERS	- 0	- 6	- 0	0	Φ		0	0	0	
TOTAL OPERATING EXPENSES	159163	139177	159191	159205	161580	159236	159253	159270	159288	160054
NET OPERATING INCOME(NOI)	3,41	3827	3113	3799	1424	376	3751	3734	3716	2930
(NOI BEFORE DEPRECIATION) DTHER INCOME	24704	\$469 <u>0</u>	24676	24462	24644	24631	24614	24599	24579	24562
INTEREST		0_	. 0	0	0				·- 9	0
DTHERS		0	- 0	0		ō	a	o.	ē.	, v
TOTAL OTHER EXPENSES	0			0	0	٥	0	0	0	0
INTEREST ON LONG-TERM LOAMS	10090	7561	5070	2560	979	327	1	1	1	1
INTEREST ON SHORT-TERM LOANS	486931	601796	741630	911966	1124052	1379435	1662067	2050392	2500570	3056830
OTHERS	0	0	٥	0	0	0		0	0	0
TOTAL	497021	609377	246700	914546	1125031	2379762	1695068	2020203	2500571	3056851
INCOME BERORE TAX	-493180	-603550	-742887	-910747	-1123607	-1375994	-1674317	-2046659	-2496855	-3053901
TAX	40000	4.63.63		0	0			3044450	-7404455	-3053901
NET INCOME	-493180	-605350	-742887	-910747	-1123607	-1375994	-1676317	-2046659	-2496455	-107170
LEGAL RESERVE DIVIDENDS	<del>- }-</del>	- 8	- 0	- 0	<del></del>	<u></u>	<del>×</del>	~ <del>X</del>	<del></del>	Č
SURPLUS	-493180	-605550_	-742887	414747	-1173467	-1474004	-1676317	-2046659	-2496855	-1093901
Senting	-417760	-0033330			-1123607	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-40.034.	-50-10034	-4-10437	2022300

INCOME STATEMENT

(YEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2019
OPERATING REVERUES										
PORT DIV.										
SEC.1 1	22649	22649	22649	22649	22649	22649	22649	22649	22649	22649
2	20046	20046	20046	20046	20046	20046	20046	20046	20046	20046
à	482	482	482	482	482	482	482	482	482	482
•	71668	71668	71668	71668	71668	71668	71668	71666	71665	71666
<del>)</del>	28057	28057	26057	28057	20037	28057	28057	28057	28057	28057
703	20102	20102	20102	20102	20102	20102	20102	20102	20102	20102
TOTAL TOTAL	1630D4 22649	163004 22649	163004	163004	163004	163004	163004	163004	163004	163004
IDIAL 1	20046	20046	22649 20046	22649	22649	22649	22649	22649	22649	22649
4	482		482	70046	20046	20046	20046	20046	20046	20046
÷	71668	482 71668	71668	482 71668	482	482	462	482	482	462
3	28057	28057	28057	28057	71668 28037	71668	71668	71668	71668	71668
?	20102	20102	20102	20102		28057	28057	28057	28057	28057
JATOT	163004	163004	163004	163004	20102 163004	20102	20102	20102	20102	20102
RENTAL DIV.	0	0	103404	103004	102004	163004	163004	163004	163004	163004
THER DIV.	ŏ	ō	ŏ	ŏ	ŭ	ů	0	0	ŭ	ŭ
THTAL OPERATING REVENUES	163004	163004	163004	163004	163004	163004	163004	163004	163004	16300*
OPERATING EXPENSES			20200	20200	103004	100004	103004	102004	103004	103004
DPERATIONS.	84568	84585	54602	84619	84637	84654	84671	84689	84706	64723
MAINTENANCE	20452	20452	20452	20452	20452	20452	20452	20452	20452	20452
DEPRECIATION	20863	20363	20863	20863	20912	20863	20863	20863	20863	20863
ADMINISTRATION	33440	33440	33440	33440	33440	33440	33440	33440	33440	33440
OTHERS	0	0	٥	D	ō	D		à	D	0
TOTAL OPERATING EXPENSES	159323	159340	159357	159374	159441	159409	159426	159444	159461	159478
NET OPERATING (NCOME(NOI)	3681	3664	3647	3630	3563	3395	3578	3560	3543	3526
(NOI BEFORE DEPRECIATION)	24544	24527	24510	24493	24475	24458	24441	24423	24406	24389
OTHER INCOME	_									
INTEREST	0	₽_		Ŏ	Ď	0	D	0	0	Ů.
DTHERS	g	<u>o</u>	0	0	0	Ģ	0	¢	0	٥
TOTAL	0	0	0	٥	0	Q	0	0	0	0
OTHER EXPENSES							_			
INTEREST ON LONG-TERM LOANS	3736751	4561694	5569949	6802268	8308718	10149961	1	1	1	1
INTEREST ON SHORT-TERM LOAMS	3130137	4301034	2204444	P805588	\$208178	10144401	12400072	15150214	18511509	22630382
OTHERS	3736752	4562895	3369930	6802269	3503719	10149962	12400073	15150215	18511510	3343000
TOTAL	3/30/24	4202073	3797720	9002207	9209114	10844105	15400013	17170213	10311310	22630383
INCUME BERDRE TAX	-3733071	-4558031	-5566303	-6798639	_8305184	-1014444	-12304405	-15146655	-12607047	-35474847
TAX	-5155012	4738031	- 220000	0	-e1406	-10[#6361	C622627-	V CEBAA165	-7820.461	enress
NET INCOME	-3733071	-4558031	5566303	-6798639			-12106405	-15146655		-22674857
LEGAL RESERVE	0	0	0	0,,,,,,,	0	0	0	0	0	0
DIVIDENDS	ă		<del>-</del>	~~~ š	č	č	ŏ	- š	~ ŏ	ŏ
SURPLUS	-3733071	-4558031	-5566303	-6798639	-B305156	-10146367		-15146655	-18507967	-2262657
·							3			

		ce, 16.	ALANCE SHE	ET			-			
(YEAR)	198)	1982	1982	1984	1985	1986	1987	1988	1989	1990
ASSETS		- <del></del>				<del></del>				
CASH MINIHUM	0			9		<u>-0</u> .	. 0	9	õ	0
CASH EXCESS TOTAL CASH	ž	ŭ	ŭ	ŭ	Ū	Ŏ	ō	ō		Ď.
RECEIVABLES	Ă		·¥	—— <del>X</del>	🐰		v	- 🕺	- 9	ž
INVENTORIES	ř	ň	ŏ	ň	ž	ž	ň	ž	ž	ž
DTHER CURRENT ASSETS			- 0	- 0		- 0	<u> </u>	<u>X</u>	- 0	<del>-</del>
TOTAL CURRENT ASSETS	ŏ	ŏ	ŏ	ă	ŏ	_ <u>ŏ</u>	ŏ	3	ŏ	ŏ
LA'LD	•	-2-					=	- 7		•
PURT DIV.	96991	96991	98991	98991	94991	98991	98991	98991	98991	98991
RENTAL DIV	ō	Ō	0	ō		Ö	0	5	٥	Ó
DIHER DIV.	0	0	_ 0_	0		0	0	0	0_	0
TOTAL	94991	98991	98991	98991	98991	98991	98991	98991	98991	98991
OTHER PROPERTIES										
PORT DIV.	660467	640024	619161	598294	377433	556572	535709	314846	493983	496481
RENTAL DIV.	Q	.0		0	, 0	<u>. o</u>	0	Ď	0	Q
OTHER DIV.		0	0	-4			0			
TOTAL	660887	640024	619161	548298	577433	526572	535709	514846	493983 392974	496481 393472
TOTAL FIXED ASSETS	759678	739013	718132	697289	676426	655563	634700	513831	247414	343412
OTHER ASSETS	159878	719015	718132	697289	676426	655563	634700	623837	592974	595472
TOTAL ASSETS	197618	134073	174735	07/207	010428	022203	634100	043031	312714	313415
IABILITIES & EQUITY			~							
LONG-TERM LOAMS, CURRENT	32082	32082	45818	45818	45418	45818	45018	45818	45818	43818
SHORY-TERH LOANS	94786	200866	320749	472800	847744	852600	1094020	1330123	1727036	2175589
BTHER CURRENT LIABILITIES	, , , ,		0		Ó	Ö	0	0	0	0
TOTAL CURRENT LIABILITIES	126868	252943	366567	513616	693562	898418	1139836	1425943	1772854	2221407
LONG-TERM LDANS	563577	531495	485677	439859	394041	348223	302405	256587	210769	164951
OTHER LONG-TERM DEBT	7	5	D	Ď	٥	Đ	Đ	. 0	0	Đ
TOTAL LONG-TERM DEBT	363377	531495	483677	439859	394041	348223	302403	256587	210769	164951
OTHER CIABICITIES "	0	0	0		0			0		0
TOTAL LIABILITIES	690445	764443	852244	958477	1087603	1246641	1442243	1682530	1983623	2386358
							444000	153000	153000	153000
CAPITAL A	153000	133000	153000	153000	123000	123000	153000	133000	193000	123000
CAPITAL B	0	0	443000	143000	153000	153000	133000	153000	153000	153000
TOTAL CAPITAL	153000	153000	153000	153000	123000	- T22000	- 13000 K	233000	777000	1-3000
LEGAL RESERVE	Ų	-17047	-287092	-414188	-564177	-744078	~960543	-1221693	-1543649	-1943886
SURPLUS		-178428 -83367	-178428	-287092	-titiii-	361177	744575	-960543	-1221693	-1543649
RETAINED EARNINGS	-83367	-94861	-108664	-127096	-149919	-179901	-216465	-261150	-321956	-400237
NET INCOME TOTAL EBUITY	789433	-25421-	-134092	-761168	-411177	-391078	-107543	-1068693	-1390649	-1790886
TOTAL LIABILITIES & EQUITY	759878	739015	718152	697219	676426	655563	634700	613637	592974	395472

BALANCE SHEET

	(7EAR)	199)	1992	1993	1994	1995	1996	1997	1998	1999	2900
ASSETS											
CASH WINTOUN		0	0	0	0	٥	0	0	a	0	0
CASH FELESS		0	0	đ	J	a	0	Đ	. 0	0	0
TUTAL (AS+		0	٥	٥	0	٥	0	0	0	0	b
4ECEI-AHLLS		0	0	D	0	0	0	a	0	a	0
INVENTORIES		0	0	a	0	D.	0	0	0	0	Q
THEM LEHTERT ASSETS		9	0	0	0	0	0	0	0	0	0
T THE E PHENT ASSETS		C	C	0	0	Q	0	G	G	0	Đ
LA* C											
PINT PIV.		98991	98991	98991	98991	98991	98991	98991	98991	98991	98991
FENTAL 114.		0	0	0	0	0	0	a	O	0	D
DYMEA DIV.		σ	σ	_ 0	0	0	٥	0	. 0	٥	Ċ
TOTAL		98991	98991	98991	98991	98991	98991	98991	98991	98991	98991
THER PHOPERTIES											
P(101 Ply.		475616	454755	433892	413029	460645	439782	418919	398036	211193	410131
PENTAL TIV.		٥	0	0	0	0	0	0	0	٥	0
titiEN CIV.		ō	٥	0	0	٥	Û	ø	Đ	٥	0
TOTAL		475616	454755	423892	413029	460643	439782	418919		377193	410131
TUTAL FIXED ASSETS		574609	553746	532883	512020	559636	338773	317910	497047	476184	509122
HITHER ASSETS		0	a	0	0	9	0	0	٥	0	0
TOTAL ASSETS		374609	553746	532883	313030	559636	538773	517910	497047	476184	509122
LIABILITIES & EQUITY											
LUNG-TERM LEANS, CURRE	NT	45818	45825	45818	13736	15736	0	a	O.	٥	٥
SHORT-TERM L DANS		2693724	3324229	4092071	3027773	6212732	7381599	9239053	11264849	13740841	16827640
UTHER CURRENT LIABILI	TIES	0	0	ā	ā	0	0	Ď	0	0	0
TOTAL CURRENT LIABILI		2739542	3370047	4137889	5041509	6226468	7581599	9239053	11264849	13740641	16827680
LONG-TERM LOANS		119133	73315	27497	13761	25	25	25	25	25	25
DIHER LONG-TERM DEBY		0	0	ā	ä	ō	Ď	٥	Ö	Ď	Õ
TOTAL LONG-TERM DEBT		119133	7,3315	27497	13761	25	25	25	25	25	25
THER LIABILITIES		. 0	0	0	ŏ	ō	Õ	ā	ă	ō	Ď
TOTAL LIABILITIES		285867\$	3443362	4165386	5055270	6226493	7581624	9239078	11264874	13740866	16827705
CAPITAL 4		153000	153000	153000	153000	153000	153000	155000	153000	133000	153000
CAPITAL B		a	•	ø	0	Ð	0	0	0	0	0
TOTAL CAPITAL		153000	153000	153000	723000	153000	153000	153000	153000	153000	153000
LEGAL RESERVE		0	0	0		0	Û	. 0			۵
SURPLUS		-2437066	-3042616	-3783503	-4696230	-5819857	-7195651	-8874168		-13417682	-16471383
RETAINED EARVINGS		-1943886	-2437066	~3042616	-3785503	-4696250	-2019857	-7195851		-10920827	-13417682
NET INCOME		-493160	-605550	-742867	-910747	-1123607	-1375994	-1678317	-2046639	-2496855	-3053901
TOTAL EQUITY		-2264066	-2889616	-3632503	-4543230	-3666857	-7042851		-10767827		-16318583
TOTAL LIABILITIES & E	צדנעם	374609	553746	532863	215050	559636	538773	317910	497047	476184	509122

		Ţ	SALANCE SH	ÉET			-	•			
CYEAR	1) 2001	2002	zoos	2004	2003	2006	2087	2048	2009	2010	
ASSETS											
CASH MINIMUM CASH EXCESS	, ,				<u>-</u> <u>-</u> <u>-</u> -						
TOTAL CASH	š	č	ŏ	ă	ă	ă				ă	
~FC+1 VAPLES	~ ð	<del>-</del>	0	0	Ď.				0	0	
4:5	_0	0	Š			ò		0		0	
T CURRENT ASSETS		Ô	- 0	0		q			)		
TOTAL CURRENT ASSETS	Ç	0		D		0	🗓		) <b></b>	L Q	
LAND					****			****		0.004	
PORT DIV.	91991	98991	98991	98991	96991	98991	24992	98991	91991	98991	
RENTAL DIV. OTHER DIV.	, ,	ň	ž	Ü	ŭ	Ü				,	
TOTAL	98991	98991	98991	16791	76991	98991	98991	98991	98991	98991	
OTHER PROPERTIES	/4//*	,,,,,	,,,,		,	,,,,	,.,,,		,,		
PDRT DIV.	389268	368405	347342	326679	308227	267364	266501	247631	224775	299342	
RENTAL DIV.	.0	0	0		0		0	ع		0	
GIHER DIV.	_ o`	0	0	0	0	0	0		) 0	0	
TOTAL	367260	368405	347542	326679		287364		247676			
TOTAL FIXED ASSETS	489259	467396	446533	425670	407216	386355	365492	344629	323766		
DINER ASSETS	147165	- <u>- D</u>		D	P	<u></u>		- 1			
TOTAL ASSETS	488259	467394	446533	425670	407218	386335	365492	344629	323766	298223	
LIABILITIES & EAUITY											
LONG-TERM LOANS.CURRENT	٥	٥	۵	0	0	0			1	0	
SHORY-TERH LOANS	20539468	25077056	30622496	17400272	45686976	25812480	68188112	13313904	101401008	124202432	
OTHER CURRENT LIABILITIES		D	0	0	6	0	0			. 0	
TOTAL CURRENT LIABILITIES	20539868	25077036	30622496	37400272	45686976	55812480	64166112	#3313904	101801008	224552432	
LONG-TERM LOAMS	25	23	25	27	25	23	25	25		25	
OTHER LONG-TERM DEBT	.0		.0	.0		.0		0	0		
TOTAL LONG-TERM DEBT	25	23	25	25	25		<u>Z</u>	23	23	25	
TOTAL LIABILITIES	20539913	25077081	30622321	37400297	45557001	45017576	484444	43313030	101401033	114501467	
inite challtites	20339913	2301 1081	20055351	31400241	45687001	25812502	68188137	03344727	101401033	124305431	
CAPITAL A	153000	153000	153000	155000	153000	153000	153000	153000	153000	153000	
CAPITAL B	=5,775				6	0			0	8	
TOTAL CAPITAL	153000	153000	153000	153000	153000	153000	153000	153000	153000	153000	
LEGAL RESERVE	0	- 0	- 6	0	0		0		70	0	
SURPLUS	-20204654	-24762685	-30328986	-37127627	-45432763	-55579150	-67975645	-43122300	-101630267	-124257124	
RETAINED EARNINGS									-43122300		
NET INCOME FOTAL EBUSTY	-3733071	-4556051	-9966303						~18307967		
TOTAL LIABILITIES & EQUIT									-101-17267		
TOTAL PERSONAL PROPERTY.	Y 488239	467396	446533	425670	407218	386355	365492	344629	323766	788227	

(YEAR)	1981	1982	1963	1984	1985	1986	1987	1988	1989	1990
SOURCE 3										
NET INCOME	-83967	-94861	-108664	-127096	-149989					
DEPRECIATION	20863	20863	20863	20863	20863	-179901	-216465	-261150	-321956	-400237
LUNG-TERM LUANS	0	ā	2000	20003	20803	20863	20863	20863	50863	22092
OTHER LONG-YERM DEBT, INCREMENT	0	ŏ	ŏ	ō	ŏ	0	å	0	0	0
OTHER LIABILITIES, INCREMENT	٥			٥				_	_	_
CAPITAL INCREMENT	0	ő	ŏ	ŏ		ŭ	ň	0	0	0
TUTAL	-6270+	-73998	-87801	-106233	-129126	-159038	-195602	-240287		
APPLIATION:			• • • • •	2-0033		-114036	-643005	-540561	-301093	-378145
TAXES & DIVIDENDS	a	0	0	O	0	ď				
ADDITIONS TO FIXED ASSETS	0	Ō	ō	ŏ	ŏ	ň	ž	Ž	ū	74200
HEPAYMENT OF LONG-TERM LOAMS	32082	32082	32062	45818	45818	45818	45818	45618	45818	24390
NTHER ASSETS, INCREMENT	0	0	Ō	Ö		7,010	42010	77049	47010	45818
TOTAL	35085	32082	32082	45618	45816	45618	45818	45818	45818	70408
INCREASE IN WORKING CAPITAL	-94784	-106080	-119883	-152051	-174944	-204856	-241420	-206105	-346911	-448553
INCREASE CUMPONENTS										
CASH, INCREMENT	Ð	o o		ń	6					_
RECEIVABLES, INCREMENT	Ó	ő	ŏ	õ	ň	č	ž	ň	ŭ	ŭ
INVENTORIES, INCREMENT	Ó	ō	Ď	õ	ň	ž	, .	ŭ	Ŏ	ň
OTHER CURRENT ASSETS.	0	Ŏ	ō	ñ	ŏ	ř	ž	ž	ŭ	ň
INCREMENT			•	•	•	•	•	J	U	v
TOTAL	0	0	0	0 _	0_	<u>0</u>	0	0	0	0
DECREASE COMPONENTS										
SHORY-TERM LOANS, INCREMENT	94786	106080	114865	152051	174944	104484	241420	344144		
OTHER CURRENT LIABILITIES.	71100	0	12.7003	1-1011	-,-944	204836	241420	286105	346911	448553
INCREMENT	•	-		•	٠	U	U	U	0	0
TOTAL	94186	106080	119883	152051	174944	204836	241420	286105	346911	448593

		SOURCE	& APPLICA	TION OF FL	NOS					
(RA3Y)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
DORCE										
NET INCOME	-493180	-605550	-742087	-910747	-1123601		1676317		-2496135	-3053901
DEPRECIATION	20863	20863	20863	20863	25224	20863	20863	20163	20863	21612
LONG-TERM LOANS				<u> </u>	0		0	0		0
OTHER LONG-TERH DEBT.	₽	0	Đ	0	D	D	Ď	G	0	0
OTHER CLABILITIES, INCREMENT	0	O	Ö	0	- 0	a	0	0	n	
CAPITAL, INCREHENT	0	O_	0	0	Ġ	č	ŏ	ō	ň	ă
TOTAL	-472317	-584687	-722024	-649884	-1100383	-1355131	-1657454	-2025796	-2475992	-3032289
PPLIATION:									4	
TAXES & DIVIDENOS	0		0	0	C	0	0	0	Ğ	~ - · · o
ADDITIONS TO FIXED ASSETS	0	b_	0	0	70840	Đ	. 0	Ō	Ď	34550
REPAYMENT OF LONG-TERM LOANS	45010	45010	45818	45818	13736	13736	0	-	0	0
OTHER ASSETS, INCREMENT			0			9	0			
TOTAL	65818	45818	45818	45818	84576	13736	0		0	34550
CHEASE IN WORKING CAPITAL	-518135	-630505	-767842	-935702	-1104959	-1364867	-1657454	-2025796	-2475992	-3086139
NCREASE COMPONENTS										
Cash, Inchement	9	0	9		٥		-0	٥	0	0
RECEIVABLES, INCREMENT			0	0	0				0	0
INVENTURIES, INCREHENT			Ò		a	Q	0	0	0	0
DIHER CURRENT ASSETS,	0	0	0			0	0	0	0	0
TOTAL	0	. 0	0	0	0	0	0	0	0	0
ECREASE COMPONENTS										
SHORT-YERM LOANS, INCREMENT	_311122_	630505	767842	935702	T184959 "	1368867	1637434	2025796	2475992	<u>"3066839</u>
THER CURRENT LIABILITIES.		0	0	٠	°.	<u>0</u>	0		0	0
TOTAL	518135	630505	767842	935702	1184959	1368867	1637454	2025796	2475992	3086639

(HEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SDURCE 1										
NET INCOME	-3733071	-4558031	~5566303	-6798639			-12396495	-15146655	-18507967	-22626857
DEPRECIATION	20863	20863	20863	20863	20912	20863	20863	20863	20863	20863
LONG-TERM LUANS	0	Đ	0	0	٥	0	o	0	0	0
CTHER LUNG-TERM DEBT, INCREMENT	0	0	0	0	0	0	ů.	0	0	a
UTHER LIABILITIES, INCREMENT	0	0	0	. 0	0	Õ	¢	¢	. 0	0
CAPITAL, INCREMENT	0	0	0	0	0	0	٥	0	0	0
TOTAL	-3712208	-4537168	-5545440	-6777776	-8284244	-10125504	-12375632	-15125792	-18487104	-22605994
APPLIATIONS										
TAXES & DIVIDENDS	0	0	0	٥	0	0	0	0	0	0
ADDITIONS TO FIXED ASSETS	0	0	0	C C	2460	.0	<b>Q</b> .	_ 0	· Q	75420
REPAYMENT OF LONG-TERM LUANS	٥	-0	Q	0	0	0	0	0	0	O.
DIHER ASSETS, INCREMENT	0	0	0	0	0	g	٥	9	8	ø
TOTAL	Ō	_ 0	0	0	2460	0	0	0	0	95430
INCREASE IN WORKING CAPITAL	-3712208	-4537168	-5545440	-6777776	-8286704	-10125504	-12375632	-15125792	-18487104	-22701424
INCREASE CUMPONENTS										
CASH, INCREMENT	0	0		o	0	·- ō	0	ō	C	0
RECEIVABLES, INCREMENT	0	0_	0	0	0	0	0	0	0	0
INVENTORIES, INCREMENT	0	0	Q	0	Û	G	8	0	٥	D
OTHER CURRENT ASSETS,	0	0	0	0	Ō	_, _0	Õ	_ 0		Q
INCREMENT	_		_				_			
TOTAL	0	0	0		. <u> </u>		9.		º	0
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	3712208	4537161	5545440	6777776	8286704	10125504	12375632	15125792	18487104	22701424
OTHER CURRENT LIABILITIES.	٥	_6_	0	0	ه ر	0	٥	Ō	٥	0
TOTAL	3712208	4537168	3545440	6777776	8286704	10125504	12377632	15125792	18487104	22701424

Table A-11-2 (Case 2)

		(1) [1	COME STATE	MENT						
(YEAR)	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
DPERATING REVENUES PORT DIV.										
SEC.1 1	14599	15717	16834	17952	19069	20262	21455	22649	23642	25035
2	18879	18893	18908	18922	18937	19307	19676	20046	20915	20785
3	330	354	377	401	424	443	462	482	501	520
•	53078	56493	59909	63324	66739	68382	70025	71666	73311	74954
5	13281	15727	18174	20620	23067	24730	26393	28057	29720	31383
_ 6	18278	14221	18163	16106	15045	18733	19418	20102	20787	21472
TOTAL	118445	125405	132365	139325	146284	151857	157429	163004	168576	174149
TOTAL 1	14599	13717	16634	17952	19069	20262	21455	22649	23842	25035
2	18879	18893	18908	18922	18937	19307	19676	20046	20415	20785
3	330	354	377	101	424	443	462	462	501	520
	53078	56493	59909	63324	66739	68382	70025	71668	73311	74934
5	13281	13727	18174	20620	23067	24730	26393	28057	29720	31383
6	18278	18221	18163	18106	18048	18733	19418	20102	20787	21472
TOTAL	118445	123405	132365	139325	146284	151857	157429	163004	168576	174149
RENTAL DIV.	Q	0	0	_0		0	0	0	0	** ``
OTHER DIV.	0	0	0	0	0	Ö	ō	ō	Ď	2
TOTAL OPERATING REVENUES	118445	125405	132365	139325	146284	151857	157429	163004	168576	174149
OPERATING EXPENSES					- •					
OPERATIONS	84215	84238	84262	84286	84311	93894	93911	93928	93944	93961
HA INTENANCE	20452	20452	20452	20452	20452	31566	31566	31566	31566	31566
DEPRECIATION	20863	20863	20863	20863	20863	28157	35452	35432	35452	36681
ADH[N[STRAT]ON	33440	33440	13440	33440	33440	32439	33439	33439	33439	33439
OTHERS	. o	0	0	G	í q	ó	. 0	Ó	0	á
TOTAL OPERATING EXPENSES	158968	158993	139017	159041	159066	187056	194368	194565	194401	195647
NET OPERATING INCOME(NO!)	-40523	-33586	-26652	-19716	-12782	-35199	~36939	-31381	-25825	-21498
(NOI BEFORE DEPRECIATION)	-19660	-12725	-5789	1147	6081	-7042	-1487	4071	9627	15163
OTHER INCOME				=						
INTEREST	0	0	C	٥	0	0	0	Ď	0	ħ
DTHERS	0	- 6	— <del>-</del>	- 0	0				<del>ŏ</del>	- 5
TOTAL	0	0	0	٥	ò	ō	Ö	ŏ	ă	ă
OTHER EXPENSES								•	•	_
INTEREST ON LONG-TERM LOAMS	33566	31983	34066	39158	42879	42991	40482	37972	35441	32629
INTEREST ON SHORT-TERM LOANS	9478	29595	51652	64217	70298	121748	196713	259039	333510	426668
OTHERS	. 0	0		0	0	0	0	. 0	0	0
TOTAL	43044	61578	85718	103375	113177	164739	237195	297011	368951	459297
INCOME BERORE TAX	-83567	-95166	-112370	-123091	~125959	-199938	-274134	-328392	-394776	-480795
TAX	9	0	_0	0	0	•	0	Ģ	Q	Ó
NET INCOME	-83367	-95166	+112370	-123091	~125959	-199938	-274134	-328392	-394776	-480795
LEGAL RESERVE	0	0	0	<u> </u>	0	0	0		0_	- 0
DIVIDENDS	~ ~ <del>6</del>	<b></b>	0	0	0	0		0	0	0
	-83567		-112370	-123091	~125959	-199938		-326392		

		1	NCOME STAT	EHENT						
(YEAR)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
OPERATING REVENUES PORT DIV.				<del></del>						
SEC-1 i	26095	27154	26214	29273	30333	31386	32439	33493	34546	35599
ž	21818	22651	23885	24918	25951	. 27022	28092	29163	30233	31204
ä	941	295	552	603	624	648	673 97816	697 101466	722 103117	746 108768
- <del></del>	78066 32666	81178 33948	84290 33231	87402 36513	90514 37796	94165 39379	40962	42346	44129	45717
2	22230	22989	23747	24506	25264	26109	26954	27798	26643	29488
TOTAL	181416	188682	193949	203215	210482	218709	226936	235163	243390	251617
TOTAL 1	26095	27154	21214	39212	30323	31366	32439	23.92	24246	22599
2	21818	22851	23885	24918	25951	27022	28092	29163	30233	31304
	541	562	382 44290	603	90314	94163	97816	697 101466	722 105117	746 108768
<u>•</u>	78066 32666	81178 3394#	35231	47402 36513	37796	29379	40962	42546	11129	45712
<b>?</b>	22230	22989	~ - 25767	24506	25264	26109	26954	27798	28643	29488
TOTAL	181416	141642	195949	203213	210462	218709	226936	235163	243390	251617
RENTAL DIV.	C	0		Ď	ō	ō	0	0	0	Q
OTHER DIV.	. 0	<u> </u>	0	0	0	0	0	235163	242200	- 0
TOTAL OPERATING REVENUES	181416	180642	193944	203215	210482	218709	226936	233163	243390	251617
OPERATING EXPENSES		93989	94003	94017	94032	94044	94065	94082	94100	94117
MAINTENANCE	93973	31366	31346	31566		31366	31766	31566	31266	21266
DEPRECIATION	35432	35452	- 33432	35452	- 57615	39452	35452	35452	35452	36201
ADMINISTRATION	33439	33439	22429	33439	33439	33440	33440	33440	33440	33440
DTHERS	0	G		0	0		0	19454D	194555	195324
TOTAL OPERATING EXPENSES	194432	194446	194460	194474	196849	<u>194506</u> 24203	194523 32413	40623	48832	56293
NET OPERATING INCOME (NO!)	-13016 27436	-3164 29618	1489 36941	8741 44193	13633 51446	59653	67862	76073	84284	92494
(NOI BEFORE DEPRECIATION) OTHER (NCDME										
INTEREST	0	0		0	0	0	0	0	0	0
OTHERS	0		- 6	9	0	0	0	0	0	0
TOTAL	0	0	0			0	<u>P</u>			<u>v</u> _
OTHER EXPENSES			21556	17847	14554	12454	10675	9220		6313
INTEREST ON LONG-TERM LOAMS INTEREST ON SHORT-TERM LOAMS	29295 340587	23320 676367	640306	17297	1252697	1362640	1937595	2360219	2874609	3507223
DINEREST ON SHORT-TERM LUANS	) 54028/ 6	910291	8-0-06	2035020	_0	0.		. 0	0	0
YOYAL	569862	701487	862062	1036221	1297235	1393102	3948510	2369439	2882377	3513336
INCOME BERORE TAX	-512198	-707631	-860573	-1047480	-1283622	-1570899	-1915857	-2328816	-2833545	-3457245
TAX	0	. 0	0	0		0		-2324B16	-2833545	-3457243
NET INCOME	-542694	-707651	-860373	-1047480	-1243622	-1570199	~1915857	-4J69816	-56555	
LEGAL RESERVE		<u> </u>	<u> </u>		<u>0</u>		- ×	- 0	<u>`</u>	ŏ
DIVIDENDS	0		-860573		-1283622	-1570899	-1915857	-2328816	-2833545	-3457243
SURPLUS	-582898	-707651	-800315	-75-1-20	-7165000	TATE AND A	717741			78

		1	NCOME STAT	EHENT						
(SA3Y)	2001	2002	2003	2004	2005	2005	2007	2008	2000	2010
OPERATING REVENUES										
PURT DIV.								41918	41918	41918
SEC.1 1	36652	37705	38759	39812	40865	41918	41918		32728	32728
30444 1	32375	33445	34516	35586	36657	32726	32728	32728		
•	770	795	819	844	868	892	892	692	892	892
3	112419	116070	119720	123371	127822	130673	130673	130673	130673	130673
•	47295	48878	30462	52045	33628	55211	35211	55211	55211	55211
3	30233	31178	32022	32867	33712	34557	34557	34557	34557	34557
6	259844	268071	276298	284525	292752	295979	293979	295979	295979	295979
TOTAL	36652	37705	38759	39812	40865	41918	41916	41918	41918	41918
TUTAL 1		33445	34516	35586	36657	32728	32728	32728	32728	32728
2	32375		819	844	868	892	892	392	892	892
3	770	195	119720	123371	127022	130673	130673	130673	130673	130673
4	112419	116070					35211	55211	55211	55211
5	47295	48878	50462	32045	53628	55211		34557	34337	34557
Ā	30333	31178	32022	32867	33712	34557	34557			295979
TOTAL	259844	266071	276298	284525	292752	295979	295979	295979	295979	272717
RENTAL DIV.	0	0	0	٥	Ď	Ò	Ų	ņ	Ų	ŭ
OTHER DIV.	0	0	0	Û	0	0	Q	gg	4	
TOTAL OPERATING REVENUES	259844	268071	276298	284525	292752	295979	295979	295979	295979	295979
OPERATING EXPENSES										
	94135	94152	94169	94186	94204	94221	94238	94256	94273	94290
OPERATIONS	31366	31566	31566	31566	31566	31566	31566	31366	31566	31566
MAINTENANCE	35452	35452	35452	35452	35501	35452	35452	35452	35432	35452
DEPRECIATION	33440	33440	33440	33440	33440	33440	33940	33440	33440	33440
ADMINISTRATION	23440	33-10	44.40		44318	22779	73.10	7710	ò	ů., , ,
OTHERS		444414	194627	194644	194711	194679	194696	194714	194731	194748
TOTAL OPERATING EXPENSES	194593	194610					101283	101265	101248	101231
NET OPERATING INCOME(NOI)	63251	73461	81671	89881	98041	101300		136717	136700	
(NOT BEFORE DEPRECIATION)	100703	108913	117123	125333	133542	136752	136735	130111	120100	120003
OTHER INCOME					_		_			
INTEREST	0	0	0	0	Ģ	Ō	ā	Q	Ÿ	ŭ
DTHERS	0	٥	٥	٥	٥	Q.	Ō	0	ū	ŭ
TOTAL	0	Q	٥	a	Q	0	Q.	0	0	Ü
DTHER EXPENSES										
INTEREST UN LONG-TERN LOANS	4861	3403	1974	821	188	1	1	1	1	. 1
INTEREST ON SHORT-TERM LOAMS	4282607	5222118	6363820	7755875	9453371	11533193	14073902	17171052	20936475	25593700
	420200	0	0_00	O .	0	Ò		0	0	
OTHERS	4287468	3225526	6265794	7756696	9453539	11553194	14073903	17171053	20956476	25593701
TOTAL	4201400	3243349	0303177	,,,,,,,		,	2-0.0.00			
	7	-5132065	-6284123	-7666815	-0155614	-11437494	-13972620	-17069788	-20153221	-25492470
INCOME BERGRE TAX	-4222217	-2725002	-0584753	-1000017	-,,,,,,,,,	-77477014	-12,12050			
TAX			4244122	-9444	-03486	-11431804	-13972620	-1706976F	-20455254	-25492470
NET INCOME	-4222717	-5152065	-6284123	-7666815	-2423310	-11-21014	-171115050	-2,001100		
LEGAL RESERVE	Ō	Ď	<u>_</u>	¥	¥		~~ -봊	<del>-</del>		
DIVIDENDS	0	0	. 0	q			0			
SURPLIIS	-4222217	-5152065	-6284123	-7666813	-9355318	-11431894	-13972620	-71003168	-44033440	-47474410

		Ø 5.	ALANCE SHÊ	ĒŤ						
(YEAR)	1951	1982	1983	1984	1985	1986	1987	1988	1959	1990
ASSETS				<del></del>						
CASH MINIMUM	Ō	0	ō	_ 0	9	Q	وَ	õ	Ō	ð
CASH EXCESS	0	Q.	0	Q	Q	Ō	ō	0	0	Đ.
. TAL CASH	0	9.	Q_	Q_	🤉		. 9	~ · · · · ·	0	Q
HECEIVABLES	0	0	ō	0	0	0	0	0	0	o o
INVENTORIES	<u> </u>	<u> </u>		<u>Q</u>		<u></u>	<u>_</u> <u>0</u>			- <del></del> <u></u>
OTHER CURRENT ASSETS	0	ō	0	0	0	0	ō	ō	0	o o
TOTAL CURRENT ASSETS	Q	- <del>.</del> .	<b>Q</b>		9	0	_ 9	.0	_ 0	<b>Q</b>
LAND										
PORT DIV.	9859 <u>7</u>		123716_	115016	187286	712510	165286	185286	185286	185286
RENTAL DIV.	Q.	e e	0		Ď	Q.	o.	Ď	Ö	Ď
OTHER DIV.	<u> </u>	<u> </u>					0	0	44444	
TOTAL	98991	101254	123706	165076	183286	185286	185286	183286	185286	185286
OTHER PROPERTIES	772.7	2.72227	747.		577435	.:::		-14-77	813377	
PORT DIV.	660887	640024	619161	598298	277432	919733	884281	848829	813317	801286
RENTAL DIV.	õ	🖳	<u> </u>					<u></u> 2		
GTHER DIV.		4	0					4.4		******
TOTAL	660887	640024	419161	391291	277435	919733	814281	449129	113377	101286
TOTAL FIXED ASSETS	759878	741240	742947	783374	762721	1105019	1069567	1034115	998643	986572
OTHER ASSETS	0	9405	126575	101210	122495		0			
TOTAL ASSETS	759678	750683	879322	#84954	483616	1105019	1069567	1034115	994663	986572
LIABILITIES & EQUITY		<del></del>	<del></del>							
LONG-TERM LOAMS, CURRENT	32082	32082	45818	47818	45818	42518	45818	- 46628	26920	66114
SHORT-TERM LOAMS	94786	201171	315355	326826	376160	841319	1125819	1464577	1870529	2394153
OTHER CURRENT LIABILITIES			0	0	0	Ó	0		Ö	0
TOTAL CURRENT LIABILITIES	176868	233253	361173	372644	421978	887137	1171637	1511205	1927449	2462267
LONG-TERM LOANS	563277	542450	641137	724049	761166	712248	669520	622702	202212	499868
OTHER LONG-TERM DEBT		0			0	0				
TOTAL LONG-TERM DEST	563577	542850	641137	724049	761166	715348	669530	623902	363982	499868
OTHER LIABILITIES	ò	0	0	a d	a	0	0	0	Ô	Q.
TOTAL LIABILITIES	690445	776105	1002310	1096693	_1,83144	1602485	1891167	2134107	2993931	2962135
									~	
CAPITAL A	153000	153315	164315	202455	242625	242625	252623	247625	242625	242623
CAPITAL B				0	0	0	0	0		-100-0
TOTAL CAPITAL	153000	153315	168315	202455	242625	242625	242625	247625	242625	242625
LEGAL RESERVE	0	0	0		0	0	0	a	٥	
SURPLUS	ŏ	-170733	-291103	-414194	-540155	7a0091	1015223	-1352617	-1737393	-2216180
RETAINED EARNINGS	ŏ-	-83367	-178733	-291103	-414194	-540153	-740091	-1014225	-1342617	-1737393
NET INCOME	-83267	-95166	-112370	-123091	-125959	-199934	-274134	-324392		-480795
TOTAL EQUITY	69433	-25418	-12274	-211739	-297528	-497466	-771600			-1975563
TOTAL LIABILITIES & EQUITY	759878	750645	879372	884934	883616	1105019	1069567	1034113		916512

BALANCE SHEET (YEAR) ASSETS
CASH MINIMUM
CASH EXCESS
TOTAL CASH
RECEIVABLES
INVENTURIES
TOTHER CUMMENT ASSETS
TOTAL CUMMENT ASSETS ò Ö TOTAL
LAND
PORT DIV.
RENTAL DIV.
QTHER DIV. D QTHER QIV.
TOTAL
LIHER PROPERTIES
PORT DIV.
RENTAL DIV.
OTHER DIV.
TOTAL
TOTAL
TOTAL FIXED ASSETS
GÜRER ASSETS
TOTAL ASSETS 145246 D 0 0 692505 877791 694930 880216 880216 915668 0 844764 0 844764 803483 803483 874387 838935 909839 LIABILITIES L EQUITY
LDNG-TEHM LDAMS, CURRENT
SHORT-TERN LOAMS
OTHER CURRENT LIABILITIES
TOTAL CURRENT LIABILITIES
LONG-TERM LDAMS
OTHER LOAMS
OTHER LOAMS-TERM DEBT
TOTAL LONG-TERM DEBT
OTHER LOAMS-TERM DEBT
OTHER LIABILITIES
TOTAL LIABILITIES 3733172 0 3775127 243802 0 243802 3009713 0 7091776 0 7131731 203847 3753949 4651107 8734678 10641302 0 10667321 12960885 15785197 19267008 283757 0 15811416 98971 0 98971 8760897 177628 353794 0 427831 0 3006901 6938525 10818930 13112294 15910387 19385979 CAPITAL A
CAPITAL A
TOTAL CAPITAL
LEGAL RESERVE
SURPLUS
RETAINED EARNINGS
NET INCOME
TOTAL EBUTTY
TOTAL LIABILITIES & EQUITY 0 24<u>2</u>625 0 0 242625 0 0 242625 0 242625 742626-7526645 -860373 -4126645 0 -2801086 -2218188 -582898 -2558461 951120 0 -3508737 -2801086 -707651 -3266112 -913668 -24<u>26</u>22 0 -6700612 -5416790 -1283622 -6457787 877701 242625 242625 0 2140078-2140078-2600761-3838208-9838208--5416790 -4369310 -1047480 -3174165 0 -10187168 -12315984 -13349329 -18806772 -8271311 -10187168 -12315984 -13349329 -1915857 -2328816 -2853545 -1457283 -9948543 -122713359 -13106904 -18564147 8743247 \$38933 4013483 821832 821832 ...

		1	BALANCE SHI	ΕT							
(YEAR)	2003	2002	2003	2004	2005	2004	2007	2008	2009	2010	
ASSETS											
CASH MINIMUM CASH EXCESS	ō	0	õ	õ	و	ą	0	Q	٥	ō	
1 7' CASH	č	ŭ	0	ŭ	ă	g	8		Ď	D	
HEEE I VAHLES	ň	ň	ŏ	X	. ,	ž	Ą	<u> </u>	, v	. <u>Y</u>	
INVENTURTES	ă	ö	ŏ	ŏ	č	ő	Ğ	· ŏ		ň	
OTHER CURRENT ASSETS					6				ò		
TOTAL CURRENT ASSETS	ō	0	0	0		Ō	ō	Č	Ď	. 0	
LAND						_			•		
PORT DIV.	185266	185266	155266	163266	143246	289246	145216	182586	155286	185286	
RENTAL DIV.	0	0	0	D	. 0		9		9	, ē	
OTHER DIV.	0	185286	195286			q			·		
OTHER PROPERTIES	185286	180486	182466	185286	105266	185286	182589	105286	185286	189286	
PORT DIV.	640334	604882	369430	333974	500937	538835	503383	467931	432479	492457	
RENTAL DIV.	0.052	0	30.150	0,1,0	0,000	25055	20220	75.75		77.	
DTHER DIV.	ă	ă	ō		b	·	Ž		- 3	Ď	
TOTAL	640334	604882	369430	533974	500937	538833	503383	467931	432479	492457	
TOTAL FIXED ASSETS	825620	790168	754716	719264	686223		648669		617765	677743	
OTHER ASSETS	- 0	0		0	. 0	Q	. 0				
TOTAL ASSETS	825620	790168	754716	719264	446223	724121	688669	653217	617765	677743	
				-							
LIABILITIES & EQUITY	74740	25409	15127	3923	•						
LONG-TERM LOAMS CURRENT	23539232	28682064	34936144	42602624	31931024	63400816	77237984	94372320	114192096	140744544	
OTHER CURRENT LIABILITIES	0	10002007	347,01.4	72001024	31,31414	0,700010	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			0	
TOTAL CURRENT LIABILITIES	23365431	26707473	34971261	42608547	51931024	63400816	77337964	94372320	113192096	140744544	
LONG-TERM LOAMS	46533	21124	6007	14	64	44		.84	84		
OTHER LONG-TERM DEBT	5	D	0	-Ď	0	٥	7	, (	. 0	. 0	
TOTAL LONG-TERM DEBT	46533	21124	6007			. 64		64			-
GINER LIABILITIES	0	Q		٥	0	0		0.07700	)		
TOTAL LIABILITIES	23611984	28728397	34977268	43608633	51931108	62400900	77330061	44515404	713135140	140744628	
F401 F41 4		*****		242428	242/28	210128	242623	242623	242623	242625	
CAPITAL A CAPITAL B	242625	\$42625	\$43952	242625	242625	242623	244922	1 2022	ATERKA O	0	
TOTAL CAPITAL	242625	242625	242625	242625	212625	242625	242625	247625	242625	242625	
LEGAL RESERVE	676083			0	O				)	D	
SURPLUS	-23024989	-28181054	-14443177	-42131992	-51467310	~6291940 <b>4</b>	-76892024	-93961812	-114817040	-140309310	
RETAINED CARNINGS	-18806772	PROACHEC	-78141054	-34469177	-42131992	~514F7510	-62919404	-76892024	-93961612	-11481/040	
NET INCOME	-4222217	-5152065	-6784123	-7666213	-9235518	-11431894	-13972670	-11069788	-2005>226	-254 <u>92</u> 470	
TOTAL EBUITY	-22746364	-27938429	-34222332	-41889367	-51244885	~62676779	-16644344	-23174791		-f-chbagan	
TOTAL LIABILITIES & COUITY	825620	790166		719264				653217	617765	677743	

(YEAR)	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
SUURCE: NET INCOME DEPHECIATION	-63567 20863	-95166 20663	-112370 20863	-123091 20863	-125959 20863	-199936 28157	-274134 35452	-328392 35452	-394776 35452	-480795 36681
LONG-TERM LOA'S UTHER LUNG-TERM DEBTA INCREMENT	0	11355	144105 0	128730	82935 0	0	0	0	0	0
CTHER CIAMILITIES, INCREMENT CAPITAL, INCHEMENT	0 0 -62704	0 315 <del>-</del> 62633	0 15000 67598	0 3*140 60642	0 40170 18009	0 0 -1717#1	0 -238682	D 0 -292940	0 0 -359324	0 0 -444114
TITAL APPLIATIJA: TARES & DIVIDENOS	-02/04	a	q	0	0	D	0	0	0	0
ADDITIONS TO FIXED ASSETS REPAYMENT OF LONG-TERM LOANS OTHER ASSETS, INCREMENT	32082 0	2265 32082 9405	22530 32082 127170	61290 43618 -34995	210 45818 21315	370455 45618 -122895	45818	45818	46628	24590 56920 0
TOTAL INCREASE IN HURKING CAPITAL	32082 -94786	+3752 -106385	161762 -114184	72113 -11471	67343 ~49334	293378 -465159	45818 -284500	45818 -338758	46628 -403952	81510 -525624
INCREASE C IMPINENTS CASH, INCREMENT	0	0	0	0	0	0	0	0	0	0
RECEIVABLES, MCREMENT INVENTUATES, MCREMENT OTHER CURRENT ASSETS,	0	٥	ŏ	ŏ	ŏ	0	Q D	ŏ	0	ŏ
INCREMENT TUTAL	â	0	ø	0	o	0	٥	0	0	0
DECREASE COMPONENTS SHORT-TERM LOANS, INCREMENT DTHER CURRENT LIABILITIES.	94786 0	106385 0	114184	11471	49334	463139 0	284500 0	33875B 0	405952 0	525624 0
INCREMENT TUTAL	94786	106385	114164	11471	49334	463139	284500	328756	405952	725624

		SOURCE	& APPLICA	LTION OF FL	JNDS						
(PEAR)	1991	1992	1993	1994	1995	1996	1997	1994	1999	2000	
SOURCE:			_								
NET INCOME	-582898	-707651	-660573	-1047480	-1283622	-1570899	-1913037	-2328816	-2833545	-3457243	
DEPRECIATION	35452	35452	35432	35452	37113	35452	35452	33432	33432	36201	
LONG-TERM LOAMS	0	Q.	Ō	9	0	9	0	0	9	Q	
OTHER LONG-TERM DEST, INCREMENT	0	· · · · ·									
OTHER LIABILITIES, INCREMENT	· · · ·	0		0	0	. 0	0	Ū.	Ö	ŏ	
CAPITAL, INCREMENT	D	Đ	0	O.	0	٥	0	. 0	0	Q	
TOTAL	-547446	-672199	-825121	-1017028	-1245809	-1535447	-1880405	~2293364	-2798093	~3421042	
APPLIATION:											
TAXES & DIVIDENDS	0	0	O	٥		. 0	0	o.	o.	0	
ADDITIONS TO FIXED ASSETS		9			70140	67500		عـــــــ		20330	
THEY ASSETS, INCREMENT	66114	72037	72037	72037	39955	39935	26219	26219	26219	26513	
TOTAL	66114	72037	72037	72037	110795	107455	26219	26219	26219	60769	
INCREASE IN WORKING CAPITAL	-613560	-744236	-897128			-1642502	-1906629		-2624312	-3301611	_
INCREASE COMPONENTS	-										
CASH, TACREMENT	- 6	- 0									
RECEIVABLES, INCREMENT	ň	X	ň	č	ň	ž	ň	ň	ň	ň	
INVENTORIES, INCREMENT	õ	5	~ <del>~ ~ ~</del>	7 <del>3</del>		ň	ŏ	7	ŏ	ő	
OTHER CURRENT ASSETS.	ŏ	ě	ŏ	ŏ	č	ă	č	ă	ŏ	ŏ	
INCREMENT						- •	*	•	•	•	
TOTAL		0	0	0	0.	0	0	0	0		
DECREASE COMPONENTS											
SHORT-TERM LOAMS, INCREMENT	613560	744236	897156	1084065	1356604	1642902	1906624	2319343	2824312	J901611	
OTHER CURRENT LIABILITIES,	0	0	0	0	Q	_ 0	Þ	Q	Ö	0	
TOTAL INCREMENT		*****				44.4		*****		*****	
,	61356D	744236	897138	1084065	1336604	1692902	1706624		<u> </u>	1501111	

(YEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SOURCE:										
NET INCUME	-4222217	-5152065	-6284123	7						
DEPRECIATION	35452	35452	35452	-7466815	-9335518	-21431894	~13972620	-17069788	-20055228	~25492470
LONG-TERM LDAMS	4,77,6	2272	32772	35452	35501	35452	35452	35452	35452	35452
UTHER LUNG-TERM DEBT,	,	2	ŭ	Ģ	a	0	0	٥	0	0
INCREMENT	v	U	Ū	0	0	0	Ó	Ō	ō	Ō
OTHER LIABILITIES, INCREMENT	0	0	٥	6	0		_	_		
CAPITAL, INCREMENT	G	Ö	ŏ	ň	ň	ŏ	0	0	٥	0
TOTAL	-4166765	-5116613	-6246671	-7631363	-033803	-11396442			0	0
APPLIATIUN:			•• •• ••	-1072703	-4250011	-11340445	~13937168	-17034336	-20819776	~25457018
TAXES & DIVIDENDS	0	٥	n	•	o	_	_	_		
ADDITIONS TO FIXED ASSETS	39240	ň	ň	ž			o o	O.	0	0
REPAYMENT OF LONG-TERM LUANS	26219	26219	25409	15117	2460	73350	Q.	0	9	95430
OTHER ASSETS, INCREMENT	Ó	-0	13107	*2773	5923	Q	0	a	0	0
TOTAL	65459	26219	25409		0	0	0	0	0	O
INCREASE IN WORKING CAPITAL	-4252224	-5142832	-6274080	15117	8383	73350	Þ	0	0	95430
Indianae in allienting the line		31-4835	-0214000	-7646480	-9328400	-11469792	-13937168	-17034336	-20819776	-25552448
INCREASE COMPONENTS										
CASH, INCREMENT	n									
RECEIVABLES, INCREMENT	ň	ž	ň	ō	0	Ō	0	٥	0	0
INVENTORIES, INCREMENT	ň	č	Ž	ū	0	0	Q	Q	0	0
UTHER CURRENT ASSETS,	ž	ž	, ,	0	0	0	٥	C	0	Ó
INCREHENT	•	u	U	0	0	0	0	0	0	0
TOTAL	0	0	0	0	٥	0	0	ů.	0	o
DECREASE CUMPOMENTS										
SHORT-TERM LOAMS, INCREMENT	4252224	5142832	6274080	7646480	9328400	11469792	13937168	17034336	2001077	*****
DIHER CURRENT LIABILITIES.	0	0	0	0	0	-4-07172	12431100	71474770	20819776	25552448
INCREMENT		•	•	•	•	U	U	Ų	0	0
TOTAL	4252224	5142832	6274080	7646480	9328400	11469792	13937168	17034336	20819776	25552448

Table A-11-3 (Re-study of Tariff in Case-1)

		a) L	COME STATE	MENT						
(YEAR)	1981	1982	1983	1984	1965	1986	1987	1986	1989	1889
ubtating menenge										
PORT DIV.		33101	29568	31531	33494	35590	37686	39781	39781	39781
SEC.1 1	25643	27606 33190	33215	33241	33266	33916	34565	35214	35214	35216
2	33164 578	33170	33213	701	742	776	809	843	863	84.
3	89783	95574	101366	107157	112948	116626	120304	123982	123982	12398
4		27629	31929	36228	40527	43450	46372	49295	49205	49295
, <u>, , , , , , , , , , , , , , , , , , </u>	23330	31886	31786	31685	31584	32782	33980	35179	35179	35179
. <b>6</b>	31987	216504	228524	240543	252561	263140	273716	284294	284294	284294
TOTAL	204485		29568	31531	70755	35590	37686	39781	397A1	39781
101AL 1	25643	27606 33190	33215	31241	33266	33916	34565	35214	35214	35214
2	33164 578	619	33217	701	742	776	809	843	863	84
3		95574	101366	107157	112948	116626	120304	123982	123982	12398
4	89783		31929	36228	40527	43450	46572	49295	49295	49295
\$	\$3330	27629	31786	31685	31584	32782	33780	35179	35179	35179
6	31987	31886		240543	252561	263140	273716	284294	284274	284274
TOTAL	204485	216504	228524	2*U2*3	535361	203140	213719	0	0	
RENTAL DIV.	0	0	0	D	6	Ď	ŭ	ŏ	ŏ	ì
OTHER DIV.	0		0	240543	252501	263140	273716	284294	584564	28429
TOTAL OPERATING REVENUES	204485	216504	228524	240343	535301	203148	213710	200279	154174	804211
PERATING EXPENSES								86361	84377	84396
OPERATIONS	84213	84238	44595	84286	84311 20452	84327 20452	20452	20452	20452	2045
MAINTENANCE	20452	20452	2045Z	20452	20863	20452	20863	20863	20863	2209
DEPRECIATION	70863	20863	20843	20863			33440	33440	33440	33440
ADMINISTRATION	33440	33440	33440	33440	33440	33440				33440
OTHERS	0	0		0	0		159099	159114	159132	16037
TOTAL OPERATING EXPENSES	158968	154993	159017	150041	159066	159082		125178	125162	123916
(IDPIBEDING INCOMECHOL)	45517	57511	69507	81502	93495	104058	11461 <i>3</i> 135480	146041	144025	146008
(40) REFORE DEPRECIATION)	66380	78374	90370	102365	114358	124921	122400	140041	140013	******
THEM INCOME		_					48109	69704	96409	12605
INTEREST	63	1405	5390	11312	19564	31649		6410	70407	12003
OTHERS	0	_0	. 0	0	0	0	đ		96409	12605
TOTAL	63	1405	5390	11312	19564	31649	48109	69704	40+04	12003.
OTHER EXPENSES						****	****		48443	1260
INTEREST ON LONG-TERM LOAMS	33566	31709	29851	27666	25153	22442	20133	17623	15112	1204
INTEREST ON SHORT-TERM LOAMS	0	0	0	0	Ō	Q	0	0	0	
OTHERS	0	<u> </u>	0		0	5	0	0		1740
TOTAL	33566	31709	29851	27666	25153	55445	20133	17623	15112	12601
INCOME BERORE TAX	12014	27207	45046	65148	87906	113065	142593	177259	206459	23736
TAX	0		0	0	0		0	0	0	23736
NET INCOME	12014	27207	45046	65148	87906	113065	142593	177239	206459	23/30
LEGAL RESERVE	0	_ 0 _		٥	0	. 0	0	ō	. Ç	
DIVIDENDS	0	7 70 7		. 8	0	0	D	0	0	47774
SURPLUS	12014	27207	45046	65148	87906	113065	142393	177259	206459	237368

OPERATING REVENUES PORT DIV.  SEC. 1 1 39781 397	9781 39781 \$214 35214 843 35214 1782 12398 7295 47295 \$3179 35179 \$274 284294 9781 39781 \$3214 35214 843 35214 843 35214 843 35214
## ORT DIV,  SEC.1 1 39781 397	\$214 35214 #45 #45 \$1982 123987 \$295 49295 \$179 35179 \$294 284294 \$781 35214 \$35214 35214
SEC.1 1 39781 843 843 843 843 843 843 843 843 843 843	\$214 35214 #45 #45 \$1982 123987 \$295 49295 \$179 35179 \$294 284294 \$781 35214 \$35214 35214
3 35214 35214 35214 35214 35214 35214 35214 35214 35214 35214 3 3 843 843 843 843 843 843 843 843 843 84	\$214 35214 #45 #45 \$1982 123987 \$295 49295 \$179 35179 \$294 284294 \$781 35214 \$35214 35214
3 843 843 843 843 843 843 843 843 843 84	#43 843 1982 123987 9295 49295 5179 35179 1274 284294 9785 39781 5214 35214 843 843
4 123082	1782 123987 9295 49295 3179 35179 1234 281294 9781 39781 3214 35214 843 843
\$ \\ \begin{array}{cccccccccccccccccccccccccccccccccccc	9295 49295 3179 35179 1274 284294 9781 39781 13214 35214 843 843
6 35179 3517	\$179
TOTAL 284294 284	1294 284294 9781 39781 3214 35214 843 843
TOTAL 1 3978	3214 35214 843 843
2 35214 3521	3214 35214 843 843
\$ \$43 843 843 843 843 843 843 843 843 843 8	
4 123982 123982 123982 123982 123982 123982 123982 123982 123982 12 5 49295 49295 19295 19295 19295 19295 19295 19295 1	3982 123982
\$ 49295 <u>49295 19295 49295 49295 49295 49295 4</u> 9295 <u>4</u>	
	<u>9295</u> 49295
	5179 35179
TOTAL 284294 284294 284294 284294 284294 284294 284294 284294 284294	F587 5845A4
RENTAL DIV. 0 0 0 0 0 0	0 0
OTHER DIV	0 0
TOTAL OPERATING REVENUES 284294 284294 284296 284296 284296 284294 284296 284296 284296 284296	4294 284294
OPERATING EXPENSES	
OPERATIONS 84405 86422 86436 86450 86666 84681 86698 86515 8	4533 84450
	0452 20452
	0863 21612
**************************************	3440 33440
OTHERS O O O D O O O	0 0
	9288 160054
wer menuntum suchuridass think tening tening tening tening tening tening	3006 124240
ENOT BEFORE DEPRECIATION) 145994 145980 145966 145952 145938 145921 145904 145887 14	5869 145652
OSHER INCOME	
10,000	<u> </u>
OTHERS 0 0 0 0 0 0	2107 1020923
	2107 1020923
OTHER EMPENSES	
THISHES, ON CONDICATE FORMS 10000 10000 1000 1000 111 2000 111	i i
taithean an analysis and a second and a second and a second and a second and a second and a second and a second	, ,
91666	• •
TOTAL 10090 7581 5070 2560 979 327 1 1	•
INCOME BERGRE TAX 276328 522757 377265 665247 509618 596789 703349 829280 91	7112 1145162
INCOME BERGRE TAX 276328 322757 377263 443247 509618 596789 703349 829280 97	n n
	7112 1145162
LEGAL RESERVE D D O D D O D O D O D O D O D O D O D	0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<del>- 1</del>
SURPLUS 276328 372757 377 <u>263</u> 441247 <u>19</u> 9618 596789 703349 829280 97	7112 1165162

		t	HEOME STAT	EMENT						
(YEAR)	2001	2002	2003	2004	2005	2006	2007	2004	2009	2010
OPERATING REVENUES PORT TIV.									2-02	,0
SFC.1 1	39781	39781	59781	39781	14101					
?	35214	35214	35216	35214	39781 35214	39781	39781	39781	39781	39781
*	845	843	843	843	843	35214	35214	35214	35216	35214
4	123982	123982	123982	123982	125982	843	843	843	843	845
5	49295	49295	49295	49295	49295	125982 49295	123982	123982	123985	123982
6	35179	35179	35179	35179	35179	35179	49295	49295	49295	49295
10141	284294	284294	284294	784294	286296	284294	15179	33179	55179	55179
TOTAL 1	39761	39781	39781	59781	39781	39781	284294	284294	284294	284294
?	35214	35714	35214	35214	35714	35214	39781	39781	59781	39781
1	843	843	843	843	843	843	35214	35214	35214	35214
4	123982	123982	123982	123982	123982	123982	843	843	843	843
5	49295	49295	49295	49295	49295	49295	123982	123982	123982	123982
6	\$5179	35179	35179	35179	35179	35179	49295	49295	49295	49295
TOTAL	284294	284294	284294	284294	286294	286296	35179	35179	35179	35179
RENTAL DIV.	O	Δ	0	0	0	0	284294	58450ĕ	584594	584504
OTHER DLV.	. 0	0	0	Ö	ō	Ď	ů	Ü	0	Ĕ
TOTAL OPERATING REVENUES	284294	281294	584584	284294	284294	284294	284294	284294	0	- c
OPFRATING EXPENSES					•		254576	204544	284294	284294
OPERATIONS	84568	84585	84602	84619	84637	84654	84671	84689	0.7-1	
MATHTENANCE	20452	20452	20452	20452	20452	20452	20452	20652	84706	84723
DEPRECIATION	20863	20843	20843	20863	20712	20863	20863	20863	20452 20443	20452
ADMINISTRATION	33660	33440	33440	33440	35440	33440	33440	33640	33440	20563 33440
OTHERS	n	. 0	a	α	0	0	0	23440	33440	33460
TOTAL OPERATING EXPENSES	159323	159340	159357	159374	159441	159409	159426	159446	159461	159478
HET OPERATING ENCOMECHOLS	124971	124954	124937	151650	124853	124885	124868	124850	124833	124816
CHOI BEFORE DEPRECIATIONS GIHER INCOME	145834	145817	145800	145783	145765	145748	145731	145713	145696	145679
ENTEREST	1219096	1456473	1755132	2062245	2446036	2896568	3425662	4046768		
OTHERS	0	Ò	0	0	0	0	3463005		4775889	5623528
TOTAL	1219094	1456473	1735132	2042245	2446036	2896568	3425662	0 4046768	0	
OTHER EXPENSES						10.0300	30012005	*******	4775889	5623528
INTEREST ON LONG-TERM LOAMS	1	1	1	1	1	1	1	1		
INTEREST ON SHORT-TERM LOAMS	a	a	Ó	0	۵	à	'n	'n	1	
OTHERS	0	O	0	0	ō	ŏ	ő	Ď	D	0
TOTAL	1	1	1	1	1	ĭ	i	ĭ	0 1	1
INCOME BERGRE TAX	1344066	1561426	1860068	2187164	2370888	3021652	3550529	4177617	4900721	5748343
NET INCOME	1344066	1581426	1860068	0	0	0	Ð	0	0	0
LEGAL RESERVE	1344000	1201420		2187164	2570888	3021452	3550529	4171617	4900721	5748343
DIVIDENDS	ŭ		<u></u>	0	0	0	0	0	6	٥
SURPLUS	1344064	1581426	1860068	2187164	0 2570888	0 3021452	3550529	0 4171617	4900721	0
								1917	4400151	5748343

		(2) 画	ALANCE SHE	ET						
LŦ	EAR) 1981	1982	1983	1984	1985	1966	1987	1988	1989	1990
ASSETS										
CASH MINIMUM	Ô	0	e	0	0	0		0	0	
CAZM EKCESS	795	16783	\$0610	90803	153754	241864	359502	511806	693310	882362
TOTAL CASH	795	14783	50610	90803	153754	241864	359502	511806	693310	885365
MECEIVABLES	0	٥	0	0	0	0	2377302	3.,,000	מובנים	005305
INVENTORSES	0	D		ō	ō	ŏ	ă	ň	Ď	5
OTHER CURRENT ASSETS	a	0	٥	o	_ <del>_</del> a	- ā	ă	ŏ	- ŏ	ŏ
TOTAL CURRENT ASSETS	795	16783	50610	90803	153754	241864	359502	511806	693310	882362
LAND					• •	-			0.55.0	5-130-
PORT DIV.	78991	98991	78991	98991	98791	92991	95991	98991	98991	98791
RENTAL DIV,	0	0	0	0	0	0	0	0	D	0
OTHER DIV.	٥		<u>D</u>	b	_ 0	Ď	D	0	Ď	0
TOTAL	98991	98991	98991	98991	98991	98991	98991	98991	96991	98991
OTHER PROPERTIES										
PORT BIY,	860BB?	940054	619161	598298	577435	\$56572	535700	514846	493983	495481
RENTAL DIY.	ğ	Q	0	Q	٥	a	0	0	0	Đ
OTHER DIV.	0	0	0	0	0	0	0	0	8	0
TOTAL	660887	91005r	419141	398298	\$77432	556572	535,709	514846	493983	696681
TOTAL FIXED ASSETS	759878	739015	718152	497289	676424	655563	634700	613837	592974	595472
OTHER ASSETS	0	0	9	0	0	D	٥	0	0	. 0
TOTAL ASSETS	760673	755798	768742	788092	830180	897427	99+5D5	1125663	1285286	1477834
LIABILITIES & EQUITY										
LONG-TERM LOAMS, CURREN!	32085	32022	45818	45818	45818	45818	45818	45818	45818	45818
SHORT-TERM LOAMS	0		O	٥	0	ີ່ 0	Ö		0	0
OTHER CURRENT LIABILITY		0	D	0	0	0	0	٥	٥	r.
TOTAL CURRENT LIABILITY		32082	45818	45818	45818	45818	45818	45818	45818	45818
LONG-TERH LOAMS	563577	531495	485677	439859	394041	348223	302405	256587	210769	164951
OTHER LONG-TERM DIBS	0	0	0	0	0	0	0	O	0	Đ
TOTAL LONG-TERM BEST	56357?	531495	485477	439850	384043	7:8553	302405	256587	210769	164951
OTHER LIABILITIES	0	0	0	0	0	0	0	G	0	Đ
TOTAL LIABILITIES	595659	563577	531495	485877	130859	394041	348553	302405	256587	210749
CAPITAL A	153000	153000	153000	153000	153000	153000	153000	153000	153000	153000
CAPITAL B	0	٥	O	0	0	0	a	0	0	D
TOTAL CAPITAL	153000	155000	153000	153000	153000	153000	153000	153000	113000	133000
LEGAL MESERVE	0	0-	0	0 7		0	Ö	0	0	0
SUMPLUS	0	39221	84267	119115	237321	350386	492979	670238	876697	1714065
RETAINED EARNINGS	. 0	12014	26551	86267	146112	52525	350384	492979	670238	874497
HET INCOME	12014	27207	45046	65148	87904	113065	142593	127259	206459	237368
TOTAL EQUITY	165014	192221	237267	302415	390321	303386	645979	823238	1027697	1247065
TOTAL LIABILITIES & EQU	1174 760673	755798	768762	-588065	<u>8</u> 30180	841451	994202	1125643	1589584	1477834

		P.	ITARCE SHE	ΕŢ						
CAENES	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS				_	_	0	O	0	o	Q.
CASH MINIMUM	O	O.	0	Ō	0		3976531	4826674	5824649	6936873
CASH EXCESS	1133735	1431537	1783845	2200137	2648403	3252319	3976531	4826674	5824649	6936873
TOTAL CASH	1113735	1431537	1783845	2200137	2648403	3252319	3970331	1020011	n	0
RECEIVABLES	Û	0	0	ņ	0	ă	ő	ă	ň	Ö
INVENTORIES	0	0	0	ō	ŭ	ň	0	ň	ň	0
OTHER CHARENT ASSETS	6				*****	3252319	3976531	4826674	5824649	6936873
TOTAL CLARENT ASSETS	1133735	1431537	1783845	2200137	2648403	3535314	3410331	4000014		*
LAND				98991	98991	98991	98991	98991	98991	98991
POST DIV.	98991	98991	98991		76991 D	70771	7	'n	Ď	Q.
BENTAL DIV.	ū	<u>o</u>	0	<i>B</i>	ž	ň	ñ	'n	ā	Ú
OTHER DIV.	0	0	0.0004	98991	98991	98991	98991	98991	98991	98991
TOTAL	98991	98991	98991	40141	76771	70777	,,,,,	, , , , ,		_
DINER PROPERTIES				413029	460645	439782	418919	398056	377193	410131
PORT DIV.	475618	454755	433892	\$1302¥	400043	434.05	Ó	0	0	D
REWIAL DIV.	D	D	0	ŭ	ň	ñ	ă	ō	Ď	D
OTHER DIV.	0	154755	433892	413029	440645	439782	418919	398056	577193	410131
TOTAL .	475618	454755	532883	512020	559636	538773	517910	497047	476184	509122
TOTAL FIXED ASSETS	574609	553746 D	334003	317020	7,7,0,30	330.75	,,,,,	0	0	0
OTHER ASSETS	0	1985283	2316728	2712157	3208039	3791092	4494441	5323721	6300833	7445995
TOTAL ASSETS	1708344	1492503	2310145	21.2131	3500031	31.110.0		2002		
LIABILITIES E FOUTTY				13736	13736	٥	0	0	0	o
ONG-TERM LOAMS, CURRENT	45818	45818	45818	(3/30	13730	ň	õ	Ö	ŏ	
SHORT-TERM LOAMS	0	0	0	Ď	Ď	ŏ	ñ	ŏ	Ö	D
NTHER CURRENT LIABILITIES		-		13736	13736	ŏ	ŏ	č	ā	0
TOTAL CURRENT LIABILITIES	45818	45818	45818 27497	13761	25	25	25	25	25	25
LONG-TERM LOAMS	119133	73315 0	2/493	13,51	í	í	Ġ	-ó	ā	Ð
OTHER LONG-TERM DEST	0	73315	27497	13761	25	25	25	25	25	25
TOTAL LONG-TERM DEBT	119133	73313	- (1477	13.01	ń	ō	Õ	Ď	0	0
OTHER LIABILITIES	0	119133	73315	27497	13761	25	25	25	25	25
TOTAL LIABILITIES	164951	(14133	73313		-					
CAPITAL A	155000	153000	153000	123000	153000	153000	15300D	153000	153000	153000 0
CAPITAL R	0	0	0	453555	153000	153000	153000	153000	153000	153000
TOTAL CAPITAL	153000	153000	153,000	153000	133400	133000	133000	1,5000	13355	0
LEGAL RESERVE	0	0	0		3041278	3638067	4341416	5170696	6147808	1292970
5td PLUS	1390393	1713150	2090413	2531660 2090413	2531660	3041278	3638067	4341416	5170696	6147808
RETAINED EARNINGS	1114065	1390393	1713150	441247	509418	594789	703349	829280	977112	1145162
HET INCOME	276328	372757	377263	2684660	3194278	3791067	4494416	5323696	6300808	7445970
YOTAL EQUITY	1543393	1866150	2243413	2712157	3208039	3791092	4494461	5323721	6300833	7445995
TOTAL LIABILITIES & EQUITY	1708344	1985283	2316728	2116131	3200037	3/11072	*******	,		

			ē	ALANCE SHE	ET				•		
(	YEAR)	2001	2002	- 2003	2004	2005	2006	2007	2005	2009	2010
ASSETS								0	D	0	D
LUZM WEMENEN LUZM WEMENEN		8301802	9904091	11785022	13993049	16582389	19624704	75196096	27588576	32310140	37983936
I-TAL CASH		8301802	9904091	11785022_	13993049	_16582389	19625704	23196096	27388576	25710190	37983936
RECETVABLES		Õ	ō	0	D	0	ň	Ÿ	0	ŏ	õ
INVENTORIES		9	- 0	- 0	<del></del>	<del></del>	<u>K</u>	6		ŏ	Ď
OTHER CURRENT ASSETS		8301802	9904091		13993049	16582389	19624704	23196096	27388576	32310160	37983936
FARD COMMENT MASELY		0301001	A. K. K.								50001
PORT DIV.		98991	98991	98991	95991	98991	98991	98991	98991	98991	98991 0
RENTAL DIV.		ō	0	0	0	ü	, a	o o	ă	ŏ	ŏ
DIHER DEV.		98991	98991	98991	98991	98991	98991	98991	98991	98991	98991
TOTAL OTHER PROPERTIES		70771	,,,,,	,,,,,							<b>-</b>
PORT DIV.		389268	368405	347542	326679	308227	287344	266501	245638	224775	299342
RENTAL DIV.		0	0	_ 0	9	9	g	ğ	0	ŭ	ŏ
OTHER DIV.		0	******	347542	326679	308227	287364	266501	245638	224775	299342
TOTAL		359268_ 488259	368405 467396	446533	425670	407218	386355	365492	344629	323766	398333
TOTAL FIXED ASSETS OTHER ASSETS		0	40,3,0	á	Ö	0	_ 0	0	0	Đ	
TOTAL ASSETS		8790061	10371487	12231555	16658719	16989607	20011059	23561588	27733205	32633926	78785596
LIABILITIES & EQUITY										_	
LONG-TERM LOAMS, CURRI	NT	0	0	0	Q		0	0	. <u>D</u> .	D	0
SHORT-TERM LOAMS		٥		٥	0	0	Ď	9	Ž	ŭ	ň
OTHER CURRENT LIABELS		٥	9		ŏ	ŭ	ň	'n	ř	ŏ	ŏ
TOTAL CURRENT LIABILE	TES	25	25	25	25	23	25	52	25	25	25
CONG-TERR LOAMS OTHER LONG-TERM DERT		2,3	'n	6	ő	ő	ó	Ŏ	0	0	Q
TOTAL LONG-TERM DEBT		25	25	25	25	25	25	25	25	25	25
OTHER LIABILITIES		D	0	٥	Ô	<u></u>	0	20	.0	25	0 25
TOTAL LIABILITIES		25 .	25	25	25	25	25	25	25	23	•
CAPITAL A		153000	153000	153000	153000	153000	153000	153000	153000	153000	153000
CAPITAL B		D	467000	******	153900	153000	153000	1530DD	153000	153000	153000
TOTAL CAPITAL		153000_	153000	153000	133000	0000	- 132000	0		0	D
LEGAL MESERVE SURPLUS		8637036	10218462	12078550	14265694	16836582	19858034	23408565	27580180	32480901	28558544
RETAINED EARNINGS		7292970	8637036	10218462	12078530	14265694	16836582	19858034	23408563	27580180	32480901
HET INCOME		1344066	1581426	1860068	2187164	2570888	3021452	3550529	4171617	4900721	5748343 58382744
TOTAL EQUITY	_	8790036	10371462	12231330	14418694	16989582	20011034	23561563	27733180 27733205	32633901	38382269
TOTAL LIABILITIES &	EQUITY	8790061	10371487	12231555	14418719	16989607	20011059	53291289	5.1,33503	3.033740	

			•						
198)	1982	1983	1984	1985	1986	1987	1988	1989	1990
12014	27207	43044	4514B	03004					
								206659	237368
0	0	12027	1,1003	24883	58892	20865	20863	20843	25025
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מ דא	n	n		_	_				
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12822		45000	8.011		0	0	0	ø	0
<b>34,</b> 1	400,0	03707	69011	108769	135928	163456	198122	227322	25946D
	٥			_					
ň	ň	, v	ŭ	Ō	0	0	0	O	D
	23062	£2082		0	0	0	Ð	Ū	24590
n seegt	, , , , , , , , , , , , , , , , , , ,	25005		43818	45818	45818	45818	45818	45818
12002	23082	12012		0	0	D	0		
							45818	45818	70408
	1,7740	33027	40147	02951	88110	117638	152304	181506	189052
									****
705	15088	11127	70107						
ň	.,,,,,	13055	40173	02951	88110	117638	152304	181504	189052
ň	ñ			u	ď	0	0	0	0
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11	-	u	U	n	0	a	0	Ō	0
	1000	21075							
177	1,740	23011	• Ü 1 A Z	05421	85110	117638	152304	181504	189052
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	0 70843 0 12014	12014 27207 20863 20863 0 0 0 0 0 0 0 32877 48070 0 0 32877 48070 0 0 32082 32082 0 0 32082 32082 795 15988 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12014 27207 45046 20843 20863 20863 0 0 0 0 0 0 0 0 0 0 0 0 0 32877 48070 65909  188 32082 32082 52082 0 0 0 0 32082 32082 32082 795 15988 33827  795 15988 33827  795 15988 33827	12014 27207 45066 6514R 20863 20863 20863 20863 0 0 0 0 0 0 0 0 0 32877 48070 65909 86011  0 0 0 0 0 32877 48070 65909 86011  188 32082 32082 52082 45818 0 0 0 0 0 32082 32082 32082 45818 795 15988 35827 40193 0	12014 27207 45046 65148 87906 20863 20863 20863 20863 20863 0	12014 27207 45046 65148 87906 113065 20863 20863 20863 20863 20863 20863 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12014 27207 45046 65148 87906 115065 142593 2086	12014 27207 45046 6514R 87906 113065 1425V5 177259 20863 20863 20863 20863 20863 20863 20863 20863 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12014 27207 45046 65148 87906 113065 142595 177259 206459 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

		SBURCE	& APPLICAT	ION OF FUR	FD S					
(YEAR)	1901	29 <b>9</b> 2	1993	1994	1985	1996	1997	1998	1990	2000
SOURCES					-				-	
NET INCOME	276328	322757	371263	441247	509618	596789	703349	829280	927112	1145162
DEPRECIATION	20863	20863	20863	20863	23224	20863	20843	20643	20863	21012
LONG-TERM LOAMS	0	0	0	0	D	0	Ŏ	0	0	0
OTHER LONG-TERM DEBT, INCREMENT	0	0	ō	G	Ó	Ġ	ő	ō	ŏ	0
OTHER LIABILITIES, INCREMENT	0		0	· · · · · ·	0	- 0	ń	n		
CAPITAL, INCREMENT	ā	ō	ā	ő	ñ	ň	ň	ñ	ň	ō
TOTAL	297191	343620	398126	462110	532842	617652	724212	850143	997975	1166774
APPL 347304:	.,,		3.0.00		,	0.,,,,	,		******	
TATES I DIVIDENDS	o	0	<u>n</u>	ň	_ <u>ñ</u>	ñ	ñ	n	n	n
TITIONS TO FIXED ASSETS	ň	ŏ	ŏ	ň	70840	ñ	ň	ň	ñ	34550
REPAYMENT OF LONG-TERM LOAMS	45818	45818	45818	45818	13736	13736	<u>\</u> _		<del>X</del>	74770
OTHER ASSETS, INCREMENT	-,0,0	7,0,0		7,010		13,70	ř	ň	'n	ň
TOTAL	45818	45818	45818	45818	84576	13736	ž	ř	ž	54550
INCREASE IN WORKING CAPITAL	251373	297802	152300		448266	A03916	724712	850143	277925	1112224
Insurance in sources able time	27.317	4.1344	717766	4.36.2	4-07.20	Do71.6	1 6 4 6 7	456145	3 3 2 3	1.,524-
INCREASE COMPONENTS										
CASH, INCREMENT	251373	297802	352308	416292	448266	603916	724212	850143	997975	1112224
RECEIVABLES, INCREMENT	Ō	0	0	Ó	Ò	0	ő	0	Ö	0
INVENTORIES, INCREMENT	ā	ā	0	ã	ã	Q.	ă	ō	ō	Q
OTHER CURRENT ASSETS,	ō	. <u> </u>		Ō	Q	Ō	Ö	Ŏ	Ō	C
INCAEMENT		307403		444203		404014	*****	9504/3	407076	1112224
TOTAL	251373	77/04	152300	416292	448564	603916	134513	6 <u>3</u> 9143_	997975	1112224
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCHEMENT .	O	-`` <b>a</b>	0	Û	0	0	0	đ	9	0
OTHER CURRENT LIABILITIES,	Ō	0	Ò	0	Ó	0	0	0	ō	0
INCREMENT		_								
TOTAL	ô_	0	0_	0	0	_ 0	_ 0	0	0	0

(YEAR)	200 t	2092	2003	2004	2005	2006	2007	2008	2009	2010
SAURCE			1015510	249744	3730401	1035163	3550579	4171617	4900721	5748343
ver sucome	1344046	1581426	1860068	2187164	2570888	3021452		20863	20843	20863
herbelatinh	\$0863	19802	50862	50842	50815	20863	\$0863	2U8D3	<0003	\$11007
LONG-PERM LOAKS	ŋ	Ď	Đ	9	ט	Ų	0	ų,	Ü	č
OTHER LONG-TERM DEBT.	0	0	0	0	0	0	0	u	<b>u</b>	-
OTHER LIABILITIES . INCREMENT	0	a	U	9	0	0	0	a	0	ū
CAPITAL . INCREMENT	0	0	ø	O	0	Ġ	C C	0	0	. 0
TOTAL	1364929	1602289	1880931	2208027	259180D	3042315	3571392	4192480	4921584	5769206
enviletton:	•									
TARES & DIVIDENOS	0	Ð	0	D	0	D	0	Ð	0	0
ADDITIONS TO FIRED ASSETS	G	0	Ó	C C	2460	0	a	0	G	95430
REPAYENT OF LONG-TERM LOUNS	ā	à	ă	0	0	Đ	0	0	0	0
OTHER ASSETS, INCREMENT	ñ	ō	ă	ä	2	0	0	a	0	a
	ñ	ň	ň	ñ	2460	ā	ō	Ó	Ğ	95430
IACKEAZE IA MUBKIAR CTHILUF JOLYF	1364929	1602289	1880931	2208027	2589340	3042315	3571392	4197480	4921584	5673776
INCREASE COMPONENTS										
CASH, INCREMENT	1564929	1602289	1880931	2208027	2589340	3042315	3571392	4192480	4921584	5673776
RECEIVABLES INCREMENT	ā	0	à	a	٥	0	G	0	C C	0
1441 ALDET STACE LES	ã	ū	à	ā	a	Q	Q	0	0	0
OTHER CURRENT ASSETS.	ň	ō	ă	ō	0	Ó	0	á	0	0
14CREMENT	•									******
707#L	1364929	1402289	1880931	2208027	2589340	3042315	3571392	4192480	4921584	5673776
DECREASE COMPOMENTS				_	_	_	_	_	_	
SHORT-TERM LOAMS, INCREMENT	0	0	0	Ģ.	Ğ	ā	Q	ū	O	ŭ
ATHER CURRENT LIBELLIFE, INCREMENT	0	0	Q	0	0	0	0	O	0	U
TOTAL	0	0	D	0	0	0	0	0	0	0

Table A-11-4 (Re-study of Tariff in Case-2)

		(1) £N	COME STATE	MENT						
(YEAR)	1981	: 962	1983	1984	1965	1986	1987	1988	1989	1990
OPERATING REVENUES PORT DIV.										
\$EC.1 1	25643	27606	29568	31531	33494	35590	37686	39781	41877	43973
<u> </u>	33164 578	53190 619	33215 660	33241 701	33266	33916	34565	35214	35863	36512
Ž.	89783	95574	101366	107157	742 112948	776 116626	809	843	876	910
į.	23330	27629	31929	36228	10527	43450	120304	123982 49293	127660 52217	131358
6	31987	31886	31786	31685	31584	32782	33980	35179	36377	5514D 37574
TOTAL	204485	216504	228524	240543	252561	263140	273716	284294	294870	305449
TOTAL 1	25643	27606	29568	31531	33494	35590	37686	39781	41877	43973
2	33164	33190	33215	33241	33266	33916	34565	35214	35863	36512
ž	578	619	660	701	742	776	_ 809	843	876	910
<u> </u>	89785	95572	701386	107157	112948	116626	120301	123982	127660	131338
<u> </u>	23330 31987	27629 31886	31929	36228	40527	43450	46372	49295	32217	5514G
TOTAL	204485	216504	31786 228524	31685 240543	31584	32782	33980	35179	36377	37576
RENTAL DIV.	204403	110304	550350	2-03-3	25 <u>25</u> 61	562160	273716	284294	547910	305449
OTHER DIV.	ŏ	ă	ŏ	ŏ	ň	ň	0	ŏ	. 0	0
TOTAL OPERATING NEVENUES	204485	21830	228524	~ 246543~	252561	263140	273756	284294	294870	305449
OPERATING EXPENSES						203140	273770	204274	2740/4	303448
GPERATIONS.	84213	84238	84262	84286	84313	93894	93911	93928	73944	73961
MAINTENANCE	20452	20452	20452	20452	20452	31566	31566	31566	31566	31566
DEPARCIATION	20863	20863	20863	50292	20863	28157	35452	35452	35452	36681
ADMENISTRATION	33440	33440	33460	33640	33440	33439	33439	33439	53439	33439
OTHERS	0	0	n	QQ	0	0	. 0	ů	Q	Q
TOTAL OPERATING EXPENSES	158768	158993	159017	159041	159066	187056	194368	194385	194401	195647
NET OPERATING INCOME(NOI) (NOI BEFORE DEPRECIATION)	43517 , 66380	37511 78374	89507	a 1502	93495	76084	79348	89909	100449	109802
CINES INCOME DESMETTERITORS	, 66340	. 0.31.4	90370	105392	114358	104541	114800	125361	135921	146483
INTEREST	63	1381	5790	25110	51582	51431	42669	36183	74252	94660
OTHERS	- <del></del> - <del>- 6</del>			0			44001	_ 35,43	79635	A COOL
TOTAL	63	1381	5790	23110	31582	51431	42669	56183	74252	9466D
OTHER EXPENSES		-								******
INTEREST ON LONG-TERM LOANS	33566	31983	34066	39158	42879	42991	40482	37972	35441	32629
INTEREST ON SHORT-TERM LOAMS	0	Ō	. 0	Q.	0	0	0	٥	٥	Đ
OTHERS	0	0	0	0	0	0	0	0	0	0
TOTÁL	33566	31983	34066	39158	45830	42991	401.83	37972	35441	32625
INCOME BERORE TAX	12014	28909	41231	43151	102198	86526	81535	108120	139280	171833
TAX	ŏ	0	Ó	ō		0	0.,,,	0	134500	11,1033
NET INCOME	12014	26909	41231	45454	102198	84521	81533	108120	139280	171833
LEGAL RESERVE	0	0	0	0	0	0	G	ō	0	ő
DIVIDENDS	0	0	0	0	0		0	— - <u>5</u>	ō	Ď
SUAPLUS	12014	26709	41231	65454	192198	84524	87535	108120	139280	171833

		11	COME STATE	MENT						
(TEAR)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2900
OPERATING REVENUES										
PORT DIV.										
SEC.1 1	45834	47695	49556	31417	53278	55128	56978	58828	6D678	62528
2	18328	40143	41936	45773	45588	47448	49349	51220	33110	5699D
2	946	982	1019	1055	1091	1134	1177	1220	1263	1306
4	136837	142326	147820	153314	158808	165214	171620	178025	184431	190837
\$	57393	59646	61900	64153	66406	69187	71969	74750	77532	80313
6	38903	40230	41558	42565	44212	45690	47169	48647	50126	51604
TOTAL	318236	531022	343811	356597	369383	383821	398262	412699	427145	441578
TOTAL 1	45834	47695	49554	51417	53278	55126	56976	58828	81606	62526
2	38328	40143	41958	43773	45588	47468	49349	51229	53110	54990
	946	982	1019	1055	1091	1134	1177	1220	1263	1306
•	136832	142326	167820	153314	158808	165214	171620	178025	184431	190857
,	57393	59666	61900	64153	66406	69187	71969	7475D	77532	80313
6	38903	40230	41558	42883	44212	45490	67169	48667	50126	51604
TOTAL	318236	331022	343811	356597	369383	383821	398262	415988	427140	441578
PENTAL DIV.	D.	0	0	ō	o o	D	0	9	0	Ų
GIMER DIV.	0	0	0	4			Ď	0	D	4
TOTAL OPERATING REVENUES	518236	331022	343811	\$56597	795387	183821	398262	412699	427140	461578
OPERATING EXPENSES	93975	93989		94017	94031	94048	94065	94082	4.455	
SPERATIONS.			94603				31566	31566	9110D 31566	94117 31566
MAINTENANCE	31566	31566	31566	31566	31566	31566				36201
DEPALCIATION	35452	35452	35452	35452	37813	35452	35452	35452	35452 33440	33440
ADMINISTRATION	33439	33438	33439	33439	33439	53440	33440	33440	33440	33440
DTHERS	0		0	0	0		0	394540	194558	195324
TOTAL OPERATING EXPENSES	194432	194446	194460	194674	196849	194504	194523			246254
MET OPERATING INCOME(NOT)	123804	136574	149351	162123	172534	189315	203739	218159	232582	282455
(NOT REFORE DEPRECIATION)	139256	172028	184803	197575	210347	224767	239191	253611	268034	205433
OTHER INCOME							464108	551366	721819	384494
INTEREST	119487	152296	193189	244105	103335	372599		0 00	721817 D	204074
DTHERS	0	G	0	0	0	0	0	581385	721819	884694
TOTAL	119487	152296	193189	244105	303335	372599	464108	301300	121017	004674
OTHER EXPENSES						12654	10675	9220	7768	6313
INTEREST ON LONG-TERM LORMS	26562	22220	21556	17592	14558			7220	77.00	0313
INTEREST ON SHORT-FERM LOAMS	<u>o</u>	0	ā	0	ò	Ď	0	ő	ň	õ
OTHERS	0	0	0		1144	12454	10675	9220	7768	6313
TOTAL	29295	25520	21556	17592	14554	12434	_			
INCOME BERGRE TAX	213996	592225	320984	388636	461311	\$49460	657172	790325	946633	1124635
TAX	0	0	D	0	44444	410146	65797Z	790325	P46633	1124635
MET INCOME	213996	592225	250884	356634	461311	349460	93/1/2	, Angs 2	440033	
LEGAL MESERVE	0	0	0	å	Ä	ŏ	ů	ň	0	ň
DIATOCHOR	Đ		0			549460	457172	790325	946633	1724635
SURPLUS	213996	593325	250884	358636	461311	344400	931112	170323	********	. 144033

		1	HEORE STAT	EMENT						
(YEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2008	2010
PERATING REVERUES										
PORT DIV,				40000		22425	27474	****	73628	73628
\$EC.1 1	64378	46558	68074 60632	69928 62512	71778 44393	73428 46273	73628 66273	73628 46273	64273	64273
2	56871	58751	1435	1478	1521	1564	1564	1564	1566	1564
3	1349	1392	210054	216460	222866	229272	229272	229272	229272	229272
4	197243	203649	88657		94220	97001	- 5,66	97001	97001	97001
5	83094	85876	56039	57518	58996	60474	40474	60474	60474	60474
<b>6</b>	53082	54561	464695	499333	313774	528212	528212	528212	528212	528212
TOTAL	456017	470457	66078	69928	71778	73628	73628	73628	73628	73628
TOTAL \$	64378	66228	60632	62512	64393	66273	66273	66273	46273	66273
2	56871	58751	1435	1478	1521	1564	1564	1564	1564	1564
	1349 197243	- <u>1392</u> 203649	210054	216660	522866	-229272	- 229272	220272	229272	220272
•		85876	88657	91439	91550	97001	97001	97001	97001	97001
5	83094	54541	56039	57518	58994	80474	60474	80474	40474	60474
8	53082	470457	484895	499335	\$13774	528212	528212	528212	528212	528212
TOTAL	45 <u>6</u> 017	-T0-31	#0.617	- ****	- 17(1)	350476	Seneit	250615	Si fe I	7502.7
MENTAL DIV.	ă	ŏ	ž	ň	č	č	ň	ŏ	ň	Ž
OTHER DIV.	436017	470457	484893		\$13774	528212	528212	528212	528212	528212
TOTAL OPERATING REVENUES	430017	410431	404011	477323	313114	268616	350515	340615	350615	320212
PERATING EXPENSES	- 94135	94152	94169	94186	94204	94221	94238	94256	94273	94290
OPERATIONS		31566	31566	31566	31566	31566	31566	31566	31566	31546
MAINTENANCE	<u> 31566</u> 33452	35452		33452	35301	35432	35432	33432	33452	33652
DEPRECIATION	33440	33440	33445	33440	3344D	33440	3344D	33440	33640	33440
IDMINISTRATION	一 <sup>//*</sup> **	33##U D	23440	23000	73440	33440	22440	33440	33445	33440
STHERS	194593	194610	194627	194644	194713	194679	194696	194714	194731	194748
TOTAL OPERATING EXPENSES ET OPERATING INCOME(NOI)	251621	275847	290248	301291	319043	\$\$3\$\$\$	333316	333498	333681	333444
NOT BEFORE BEPRECIATION)	296876	311299	325720	340143	334364	365985	368968	348950	366733	368916
THER INCOME	Tiãoto	311533	35 4 1 2 4	120123	33550	200443	345.20	240256	100133	560110
	1075245	1306438	1584077	1913700	2304800	2761417	3299449	3937435	4686380	5557247
INTEREST	1013243	1208430	136401	1713130	1304800	-2101711	<del>- 31,7737/-</del>		4000380	
	1075245	1306438	1584077	1913700	2304800	2761417	3299449	3937435	4486380	5557267
TOTAL	1013545	1300430	170401		Y 204000	6.01411	*****	3,3,433	400000	222120
THER EXPENSES INTEREST ON LONG-TERM LOANS	4861	3408	1974	621	158	•			•	٩
INTEREST ON SKORT-TERM LOAMS	- 30-4	- 3400			<del>198</del> -	- <del>à</del>			i	á
STHERS	ň	ŏ	×	ŏ	ŏ	ň	ŏ	ň	ŏ	ŏ
TOTAL	4861	3408	1974	821	188	<del></del> -	<del>-</del>			— <del>-</del> *
OINE	4001	,400			150	•	•	•	•	•
SCOME BERGRE TAX	1331808	3578877	1872371	2217570	7623675	394444	3432941	4270932	5019860	5890730
erdue preder iva	,351000	מינו	10.23.1	2617310	1023013	20-4747	0	72,0772	70.7000	0,0,00
ET INCOME	1331808	1373677	T872371	2212370	2623675	3002025	343564	4270932	5019840	5890730
EGAL RESERVE	0	1376571		22.17.0	.01,01,0	b		70.0732	n	0,0130
ATDEND2	<del> 6</del>	<del>- 6</del>	<del></del>	<u>_</u>	———— <u> </u>	<del> </del>	- <del></del>	<del> </del>	<del></del>	
JENTUS EATDEMD2	1331808	1578877	1872371	2217570	2623675	3094949	3632964	4270932	5019840	5890730

			(2) 8 /	LANCE SHE	ET						
	(RASY)	1981	1982	1963	1984	1985	1986	1987	1988	1989	1990
ASSETS									_	_	_
CASH MINIMUM		0	٥	D	Ð	Ð	٥	0	O	0	0
CASM EXCESS		795	16485	55902	232976	451799	231102	302271	400025	528129	655143
TOTAL CASH		795	16485	\$\$902	535619	411799	231102	302271	400025	528129	655133
RECEIVABLES		0	0	Ū	0	0	O	a	0	0	Q.
INVENTORIES		Đ	Ω	Ċ	G	0	0	0	0	a	Q
OTHER CURRENT ASSES	s	G	a	0	a	0	a	a	σ	Œ	· · · · · · · · · · · ·
TOTAL CURRENT ASSET		795	16485	55902	235619	411799	231102	302271	400025	528129	655153
LAND											
PORT DIV.		98991	101256	123786	185076	185286	185286	185286	185286	185286	185286
RENTAL DIV.		0	· o	Ď	0	0	D	0	٥	Ü	C
OTHER DIV.		D	Đ	Ď	٥	0	Ď	Q	G	Q	D
TOTAL		98991	101256	123786	185076	185286	185286	T85286	185286	185286	185286
OTHER PROPERTIES											
PORT DIV.		660887	440024	619161	598298	577435	919733	884281	848829	813377	801266
RENTAL DEV.		8	a	ā	a	a	a	a	0	0	0
OTHER DIV.		ā	ō	ō	Ū.	Ō	o.	0	0	a	Ü
TOTAL		650887	640024	619141	598298	577435	919733	884281	848829	813377	801286
TOTAL FIXED ASSETS		759878	741280	742947	783374	762721	1105019	1069567	1036115	998665	986572
OTHER ASSETS		0	9605	136575	101580	122895	ß	۵	0	C	U
TOTAL ASSETS		760673	767170	935424	1717930	1297415	1334121	1371438	3436140	1526792	1641705
LIABILITIES & EQUITY	,										
LONG-TERM LOAMS, CUI		32082	32082	45818	45818	43818	45518	45818	46628	56920	66114
SHORT-TERM LOAMS		Ö	0	G		0	0	Ö	D	O	0
OTHER CURRENT LIAM	LITTES	Ď	Ō	Ď	Ġ	Ō	6	0	0	0	٥
TOTAL CURRENT LIAB!		32082	32082	45818	45818	45818	45818	45818	46628	54920	66114
LONG-TERM LOAMS		563577	542850	661137	724049	761166	715348	669330	622902	565982	499868
OTHER LONG-TERM DE	t f	6	ā	n	b	0	Ď	0	0	0	D
TOTAL LONG-TERM DEL		563577	542850	641137	724049	761166	715548	669530	622902	565962	499868
OTHER LIABILITIES		Ó	ō	0	Ò	6	ß	a	ō	0	0
TOTAL LIABILITIES		595659	574932	686935	769867	206984	761166	715348	669530	422902	565982
CAPITAL A		153000	153315	168315	202455	242625	242625	242625	242625	262625	242425
CAPITAL B		0	Ò	ő	0	0	0	0	0	٥	0
TOTAL CAPITAL		153000	153315	168315	202455	242625	242625	245457	242625	242425	242623
LEGAL RESERVE		0	0	ó	D	0	D	0	0	Ō	0
SURPLUS		õ	18923	80154	145608	247804	152330	413865	\$21985	461765	633098
RETAINES EARNINGS		ă	12016	58925	80154	145606	247806	532330	413865	521945	661265
NET INCOME		12014	26909	41231	65454	102198	84524	81535	108120	139280	171633
TOTAL EQUITY		165014	192238	248469	348063	490431	574955	636490	764610	903890	1075723
TOTAL LIABILITIES		760673	767170	935424	1117930	1297415	1336121	1371838	1434140	1526792	1641705

BALANCE SHEET

. (	YEAR)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS											
CASH "INTHUM		0	0	0	0	0	n	0	0	0	
LASH EXCESS		838467	1065234	1349633	1701684	2090013	2547470	3233875	4033433	4989299	6069366
TOTAL CASH		838467	1065234	1349633	1701664	2090013	2567470	3233875	4033433	4989299	6069366
RECEIVABLES		0	0	. 0	۵	0	0	0	0	1,0,2,7	0
INVENTORIES		Ø		_ 0	g	0	0	ŏ	ā	ă	ŏ
OTHER CURRENT ASSETS		0	0	Ō	Ō	Õ	a	Ö	õ	<u>Š</u>	Ď
TOTAL CURRENT ASSETS		838467	1065234	1349633	1701684	2090013	2567470	3233875	4033433	4989299	6069366
LAND											
PORT DIV.		185286	185286	185286	185286	185286	185286	185286	185286	185286	185286
RENTAL DIV.		ō	Q	Ō	0	Q	0	0	0	Đ	0
OTHER DIV.			7 KT 1 KT -		- ABA 1 -	0	0	. 0	Q	<u>D</u>	0
TÔTĂL		185286	185286	185286	185286	185286	185286	185286	185286	185286	185286
OTHER PROPERTIES		54564	730382	454050	659478	403505	******				
PORT DIV.		765834	120305	694930	024410	692505	724553	689101	653649	618197	636546
RENTAL DIV.		ž	ž	ž	ň	- 1	×	,	Ď	0	Ö
OTHER DIV,		765834	730382	694930	659478	692505	724553	689101	453649		
FOYAL Total fixed assets		951120	913668	880216	844764	877791	909839	874387	838935	<u> 518197</u>	<u>836546</u> 821832
OTHER ASSETS		75,,120	71,7000	0002.0	0	ů.,,,ů	70,03,	417301	4,64,6	0D3403	0¢103F
TOTAL ASSETS		1789587	1980902	2229849	2546448	2967804	3477309	4108262	4872368	5792782	6891198
SOLVE WASELS			,,,,,,,				34	4100505	40.4305	2176106	0071170
LIABILITIES & EQUITY			-								
LONG.TERM LOAMS, CURRE	NT	72037	72037	72037	39955	39955	26219	26219	26219	26219	26219
SHORT-TERM LOAMS				0	0			0	0	0	0
OTHER CURRENT LIABILS		_ 0	0	0	0	0	Ģ	٥	0	0	D
TOTAL CURRENT LIABILI	<b>7165</b>	72037	72037	72057	39955	39955	26219	26219	26219	26219	26219
LONG-TERM LOAMS		427831	355794	<u> 283757</u>	3 € 2 <u>9</u> 0 5	503845	177428	151409	125190	9,8771	72752
OTHER LONG-TERM DEST		Q		0	0	0		0	0	Û	0
TOTAL LONG-TERM DEST		427831	335794	283757	243002	203847	177628	151409	125190	98971	72752
OTHER CLARICITIES			/27824	*******	283757	243802	203847	177628	151100	475455	50073
TOTAL LIABILITIES		144898	427631	355794	503.31	5.42008	203047	11/050	151409	125190	96971
CAPITAL A		242625	242625	242625	242625	242625	242625	242625	242425	242625	242625
CAPITAL B		ŭ		Ö	o			0	Δ	Q	0
TOTAL CAPITAL		242625	242625	242625	242625	242625	242625	242625	242625	242625	242625
LEGAL RESERVE		0	- 0	- 0	0	0	0	0	<del>-</del>	0	0
SURPLUS		1047094	1310446	1631430	2020066	2481377	3030837	3688009	4474334	5424747	6549602
RETAINED EARNINGS		853098	1017091	1210228	1631430	5050099	2481377	3030837	3462000	4478354	5424967
NET INCOME		213996	263332	250887	388636	461311	549460	657172	790325	946633	1124635
TOTAL EQUITY		1289719	1553075	1474055	2262691	2724002	3273462	3930634	4720959	2661345	6792227
TOTAL LEABILITIES & (	41110	1789587	1980902	2229849	2546648	2967804	3477309	4108362	4872368	5792782	6891198
			-								

		B	ALANCE SHE	ET						
(TEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ASSETS					_	_		_	_	٠.
CASH MINIMUM	G	đ	G	0	0		0		D	
CASH EXCESS	7371167	8959277	10841691	13079596	15730389	18787440	22455856	26762240	31817552	37648504
TOTAL CASH	7371167	8959277	10841691	13079596	15730369	18787440	22455856	26762240	31817552	37648304
RECEIVABLES	C	G	Ð	0	ō	ū	Ō	Ů.	D	ŭ
INVENTORIES	0	٥	O.	0	ō	ē.	0	ņ	0	ŭ
OTHER CURRENT ASSETS	O-	0	D.	0	C	. 0	0	0	0	
TOTAL CURRENT ASSETS	7371167	8959277	10841691	13079596	15730389	18787440	22455856	26762240	31817552	37648304
LAND										
PORT DIV.	185286	185286	185286	185286	185786	185286	185286	185286	185286	185286
RENTAL DIV.	0	0	Ð	C	0	ū	ō	ō	0	ñ
OTHER DIV.	0	0	Đ		. 0	0		0	0	
TOTAL	185286	185286	185286	185286	185286	185286	185286	185286	185786	155286
OTHER PROPERTIES										
POST DIV.	640354	604882	569430	533978	500937	538855	503383	467931	432679	492457
RENTAL BIV.	0	Ω	0	0	0	D	٥	ō	0	v
DTHER DIV.	0	0	0	٥	0	D			0	
TOTAL	640334	604882	56943D	533978	500937	538835	103383	467931	432479	492457
TOTAL FIRED ASSETS	825620	790168	754716	719264	686223	724121	688669	653217	617765	677743
OTHER ASSETS	D	0	0	0	٥	0	0		0	
TOTAL ASSETS	8196787	9769665	11596407	13798860	16416612	19511561	23144525	27415457	32435317	38326047
LIABILITIES & EQUITY						_		_	_	
LONG-TERM LOAMS, CURRENT	26219	25409	15117	5923	Q	o.	Ō	0	õ	Ž
SHORT-TERM LOAMS	· O	0	0	0	0	C	٥	ā	ū	ž
OTHER CURRENT LEARLLITIES	Ġ	0	0	٥	0	ō	0	Ģ	0	v
TOTAL CURRENT LIABILITIES	26219	25409	15117	5923	0	٥	. 0	g		
LONG-TERM LOAMS	46533	21124	1007	86	84	54	84	84	8 4	54
OTHER LONG-TERM DERT	ū	0	8	0	0	Ď	٥	.0	_0	84
TOTAL LONG-TERM BERT	46533	21124	6007	B.L	3.6	84	84	84	54	9.
OTHER LIABILITIES	0	0	0	¢	0	0	٥	,0	.0	- 0
TOTAL LIABILITIES	72752	46533	21124	6007	84	84	84	84	84	84
CAPITAL A	242625	242625	242625	242625	242625	545952	242625	242625	245952	242425
CAPITAL B	_ O	G	0	. 0	. 0	0	0	2424		242625
TOTAL CAPITAL	242625	242625	242625	242625	242625	242625	242625	242625	242625	145053
LEGAL RESERVE		0	D	0	0	0	D	2-4-27-19	7746746	38083338
SURPLUS	7887410	9460287	11332658	13550228	14173903	19268852	22901816	27172748	32192668	32192608
RETAINED EARNINGS	6549602	7881410	9460287	11332458	13550228	16173903	19268832	22901816	27172748	5890730
HET INCOME	1331608	15/8877	1872371	7217570	2623675	3094949	3632964	4270932	5019860	38325963
TOTAL EQUITY	8124035	9702912	11575283	13792853	16416528	19511677	23144441	27415373	32435233	38326047
TOTAL LIABILITIES & EQUITY	8196787	9749445	11596407	13798860	16416612	19511561	23144525	27415457	32435317	1035044

		(B) ZOURCE	& APPLICAT	TOH OF FUH	35					
(YEAR)	1981	1982	1983	1984	1985	1986	1987	1988	1589	1490
UNCES	43044	26909	41231	65454	102198	84524	81535	108120	139280	171833
ET INCOME	12014 20863	20863	20863	20863	20863	28157	35452	35452	35452	36661
FPRFEIATION	(4003	11555	144105	128730	82935	٥	Ò	0	٥	Ō
ONG-TERM LOAMS	ū	1,777	,-4103	150.20	D	Ö	Ď	0	C	a
THER LONG-TERM DEBT.	U	·	U	-	_	_				
INCHEMENT	`o	ō	0				. 0	Ö	· · · · · · · · · · · · · · · · · · ·	0
THER LIABILITIES, SHOREMENT	ň	315	15000	34140	40170	¢	0	0	٥	D
APSTAC. INCREMENT	32877	59442	221199	249187	246166	112483	116987	143572	114175	208514
DIAL	25011	2,		- •		-				_
PLIATIONS	0	ō	0	O	6	0	0	Q	G	. 0
ARES & DIVIDENDS	ŏ	2265	22530	61290	210	370455		0	Q	24590
DOITIONS TO FIXED ARRETS	32082	32082	35085	45818	45818	45818	43818	45818	\$5058	36930
EPHYMENT OF LONG-TERM LOAMS	71001	9405	127170	-34995	21515	-122595	Ū	Q	Q	. 0
THER ASSETS, INCREMENT	32082	43752	181782	72113	67343	293378	45818	45818	46628	81510
OTAL	795	15690	39417	177074	178823	-180697	71169	97754	128104	127004
CREASE IN WORKING CAPITAL	,,,	. 20. 4	,	12						
CREASE COMPONENTS		45.00	39417	177074	178823	-180697	71169	97754	128104	127004
ASH, IRCHEMENT	795	15690	34415	17/014	110013	- 10007	11110	.,,-	d	0
ECETVABLES, INCREMENT	2	<u> </u>	ų.	ž	ž	ň	ň	ň	ă	0
HVENTORIES, INCREMENT	0	Ď	ŭ	ž	ň	ň	ă	ā	ă	0
THER CURRENT ASSETS,	0	U	U	•	·	•	•	•	•	
INCAEMENT		4	4011-	177074	178823	-140697	21169	97754	128104	127004
OTAL ~~	795	15690	39417	103004	((40£)	- (400)		:1	#2142	
CREASE COMPONENTS				_	_		_			0
NORT-TERM LOAMS, INCREMENT	0	0	Ō	9	ō	ă	ň	0	Ä	ñ
THER CURRENT LIABILITIES,	Ο.	Ġ	0	ā	୍ଷ	ų	Q.	ų	ų	v
INCREMENT				_	_	_	_			ð
OTAL	0		0	0_	0_	<u>_</u>				

		Squ≅¢€	& APPLICAT	tian as sur	2.0					
(YEAR)	1991	1992	1993	19#4	1995	1996	1927	1988	1989	2000
\$QURCE:										
NET INCOME	213996	263352	350984	388634	461311	549460	657172	790325	948633	1124633
DEPRECIATION	35452	35452	35452	35452	37813	35452	35432	35452	35452	36201
LONG-TERM LOAMS	0	0	ā	0	Ö	0	ō	ō	0	O
CTHER LIGGETERM GEBT, INCREMENT	a	a	G	g	Ġ	ā	ā	Ġ	0	9
GTHER LIABILITIES, INCREMENT	a	O	π	O	σ	a	a	0	n	a
CAPITAL, INCREMENT	ň	ō	ň	ō	ň	ň	ň	ň	ň	ň
TOTAL	269668	298804	356136	434088	699124	384912	492457	823777	982085	1160336
APPLIATION:		2.000	3,00-20	~~~~	*****	3047.2	9,5054	0534.4	405003	1100020
TAXES & DIVIDENDS	0	a	0	а	0	o.	a			n
ADDITIONS TO FIXED ASSETS	ň	ă	ň	ŏ	70840	47500	ŏ	ň	ň	54550
REPAYMENT OF LONG-TERM LOAMS	66114	72037	72037	72057	39933	39955	26219	26219	28219	26219
OTHER ASSETS, INCREMENT	0	0	7.021	1,203,	*****	7,776	202.7		40217	*01.0
TOTAL	66116	72037	72057	72057	110795	107455	26219	26219	26219	80769
INCREASE IN WORKING CAPITAL	183334	226767	284399	352051	388329	477457	644405	799358	935866	1040067
INCREASE COMPONENTS										
CASH, INCREMENT	183334	226767	284399	352051	346329	477457	666403	799558	933864	1080087
RECEIVABLES, INCREMENT	۵	0	- n	0	n	D	0	0	0	0
INVENTORIES, INCREMENT	ă	ā	ă	ă	ň	ō	ń	ā	ň	ă
OTHER CURRENT ASSETS,	ŏ	Ğ	ŏ	ŏ	Ď	ō	Ď	Ď	ŏ	ő
INCREMENT TOTAL										
IOIAL	185334	226767	284399	352051	388329	477457	666403	799558	955866	1080067
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	0	0	0	0	0	C	G.	C	9	C
OTHER CURRENT LIABILITIES, INCREMENT	0	p	Ü	0	0	¢	Q.	D	Ö	Ů.
TOTAL	0	0	0	0	0	0	D	0	D	٥

(YEAR)	2001	2007	2003	2004	2005	2006	2007	2008	2009	2010	
\$OURCE:											
NET INCOME	1331808	1578877	1872371	2217570	2623675	3094949	2635464	4270932	5019860	5890730	
DEPRECIATION	35452	35452	35452	35452	\$5501	35452	35452	35452	35452	35452	
LONG-TERM LOAMS	0	0	0	0	0	0	Ď	Ö	u,,,,,	2,7-2	
OTHER LONG-TERM DEBT. INCREMENT	a	σ	0	0	0	ō	0	ō	ŏ	ŏ	
OTHER LIABILITIES, INCREMENT	0	ū	D	Ď	0	0	a	0	0	n	
CAPITAL, INCREMENT	٥	0	Ď	0	0	ä	ō	ŏ	ŏ	ŏ	
TOTAL	1367260	1614329	1907825	5522055	2659176	3130401	3668416	4306384	5055312	5926182	
4=PL34\$10N1											
TARES & DIVIDENDS	a	Q.	G	Q	8	0	8	Đ	Ð	Ð	
ADDITIONS TO PIXED ASSETS	59240	0_	0	· · · · · · · · · · · ·	2460	73350	Q	_0	. 0	95430	
REPAYMENT OF LONG-TERM LOAMS	26219	26219	25409	15117	5923	0	Q	G	~ <del>-</del> 5	a	
OTHER ASSETS, INCREMENT	0	0	0	0	. 0	0	0	0	0	0	
TOTAL	65459	26219	25409	13117	8383	73350		0	a	95430	
INCREASE IN WORKING CAPITAL	1301801	1588110	1882414	2237905	2650793	3057051	3668416	4306384	5055312	5830752	
INCREASE COMPONENTS											
CASH, INCHEMENT	1301801	1586110	1882414	2237905	2650793	3057051	3668416	4306384	5055312	5830752	-
RECEIVABLES, INCREMENT	0	B	Ď	5	Ď	D	מ	901000	2023215	2020126	
INVENTORIES INCREMENT	ŏ	Ò	õ	Ō	ă	õ	ŏ	ň	ň	ñ	
OTHER CURRENT ASSETS.	ō	ā	Ŏ	Ö	š	Ğ	ā	ň	Š	ŏ	
INCREMENT	_		-		_	•	-	-	-	-	
TOTAL	1501491	1588110	1882414	2257905	2650793	3057051	3998619	¥3 <u>0</u> 9284	5055312	2830325	
BECREASE COMPONENTS	,										
SHORT-TERM LOAMS, INCREMENT	0	0	0	В	0	0	O.	đ	0	0	
OTHER CURRENT LIABILITIES,	Ō	ø	Ō	0	Ö	Ö	ō	Ď	ō	Ğ	
INCREMENT	_			_							
TOTAL	<u>0</u>	9	9	Õ	0	<u>. 0</u>	0	2	<u>o</u>	ō	

Table A-11-5 (Interest on short-term loans = 0 in Case-1)

		a) 1:	NCONE STATE	MENT						
(YEAR)	1981	1987	1983	1984	1985	1956	1987	1988	1989	1990
OPERATING REVENUES										
PURT DIV.	14599	15717	16834	17592	19069	20262	21435	22649	22649	22649
SEC.1 1	18579	10877	18908	18922	18937	19307	19676	20046	20046	20046
2	330		377	401	424	443	462	482	462	452
3	53078	354 56493	59909	63324	66739	68382	70025	71668	71668	71668
4		15727	18174	20620	23067	24730	26393	24057	28657	28057
5	13261		18163	18106	18048	18733	19418	20102	20102	20102
#	18278	18221	132365	138965	146284	151857	157429	163004	163004	163004
TUTAL	114445	125405	16834	17592	19069	20262	21455	22649	22649	22649
TUTAL 1	14599	15717	18906	16922	18937	19307	19676	20046	20046	20046
2	18879	18893	377	10922 401	424	14307	462	482	482	482
3	330	394	59909	63324	66739	68382	70025	71668	71668	71668
•	53078	56493				24730	26393	20057	28037	28057
5	13281	15727	18174	20620	23067 18048	18733	19418	20102	20102	20102
6	18278	18221	16163	10106			137429	163004	163004	163004
TOTAL	118445	125405	132365	138965	146284	151857	121767	103004	10,004	102004
HENTAL DIV.	٥	0	Ü	ŭ	0	0	Ö	ŭ	ŏ	ž
DTHER DIV.	٥	0			0			163004		143004
THITAL OPERATING REVENUES	115445	125405	132363	138965	146284	151857	157429	163004	163004	163004
OPERATING EXPENSES								8+361	84377	*****
OPERATIONS	84213	84230	84262	84286	84321	84327	84344			84394
PAINTENANCE	20452	20452	20452	20452	20452	20452	20452	20452 20863	20452	20452
DEPRECIATION	20863	20863	20863	20863	20863	20863	20863		20863	22092
ADMINISTRATION	33440	33440	33440	33440	33440	33440	33440	33440	33440	33440
BTHERS	0	0	0	0	0				0	
TUTAL OPERATING EXPENSES	158968	158993	159017	159041	159066	139052	159099	159116	159132	160378
WET OPERATING INCOME (NOI)	-40523	-33586	-24652	-20076	-12782	~7225	-1670	3888	3672	2626
(NOT BEFORE DEPRECIATION)	-19660	-12725	-3789	787	8081	13638	19193	24751	24735	24718
OTHER INCOME								_	_	_
INTEREST	O.	ō	0	Ō	ō	ō	ò	ō	ō	ō
UTHERS	0	٥	D	D	0	Ó	õ	ō	ō	0
TOTAL	0	0	0	q	0	0	٥	o	0	0
DTHER EXPENSES			_	_						
INTEREST ON LONG-TERM LOANS	33566	31709	29851	27666	25155	22642	20133	17623	15112	12601
INTEREST ON SHORT-TERM LOANS	C	0	0	0	0	0	Ò	0	o o	Ō
OTHERS	Ð	0	0	D	Φ	0	0		. 0	0
TOTAL	33566	31709	79851	27666	25153	22642	20133	17623	15112	12601
INCOME BERORE TAX	-74089	-65297	-56503	-47742	-37935	-29867	-21403	-13735	-11240	-9975
TAX	D.	0	0	. 0	. 0	Q	Q	0	0	0
NET INCOME	-74089	-65297	-56503	-47742	-37933	-29867	-21803	-13735	-11240	-9975
LEGAL RESERVE	O.	0_	0	0	0	٥	0	0	0	0
DIVIDENDS	0	∂ <sup>-</sup> -65297	0	0	0	0	0	٥	0	-9975
SURPLUS	-74089		-56503	-47742	-37935	-29867	-21603	-13735	-11240	

		IN	COME STATE	MENT						
(YEAR)	1991	1992	1993	1994	1995	1996	1997	1988	1900	2000
OPERATING REVENUES										
SEC.1	22649	22649	22649	22649	22649	22649	22649	22649	22649	22649
5-41-	20046	20046	20046	20046	20046	20046	20046	20046	20046	20046
i	482	482	482	482	482	482	482	482	482	482
	71668	71665	71666	71668	71668	71668	71468	71668	71666	71660
5	28057	28057	26057	28057	28057	28037	28057	28057	28057	28057
á	20102	30103	20103	20102	50105	20102	20102	20102	20102	20102
TOTAL	163004	163004	163004	163004	163004	163004	163004	163004	163004	163004
TOTAL 1	22649	226 <u>49</u>	22649	22649	22649	22649	22649	22649	22649	22649
2	30046	20046	20046	20046	20046	30046	20046	20046	20046	20046
ž	71668	482	71658	71668	71668	482 71668	482 71668	71668	71668	71668
<u> •</u>	28057	7146# 28057	25057	28057	28057	28057	28057	28057	28057	26057
• • • • • • • • • • • • • • • • • • •	20102	20102	20102	20102	20102	20102	20102	20102	20102	20105
TOTAL	163004	163004	163004	163004	163004	163004	163004	163004	163004	163004
RENTAL DIV.	102000	20,000	. 40,500	10,500	223000	40,000	0	Ġ	20000	ó
DTHER DIV.	ă	ā	ă	ă	ŏ	ŏ	ò	õ	ŏ	ō
TOTAL OPERATING REVENUES	163004	163004	163004	163004	163004	163004	163004	163004	163004	163004
OPERATING EXPENSES				•••					_	
DPERATIONS	84408	84422	64436	84450	44464	64461	84492	64515		84550
MAINTENANCE	20452	20452	20452	20452	20452	20452	20452	20452	20452	20452
DEPRECIATION	20863	20065	20863	20863	23224	20863	20867	\$0865	20863	21612
ADMINISTRATION	33440	33440	33440	33440	33440	33440	33440	33440	33440	33440
OTHERS	٥	0	- 0 -	- 0	0	0	0	0	. 0	¢
TOTAL OPERATING EXPENSES	159163	159177	159191	159205	161580	139236	159253	159270	159288	160054
NET OPERATING INCOME(NOT)	3841	3827	5013	3799	1424	3768	3751	3734	3716	2950
(HOT BEFORE DEPRECIATION)	24704	2469 <u>0</u> _	_ 24676	24662	24648	24631	24614	24597	24379	24562
DTHER INCOME									•	٥
INTEREST DTHERS	6 -			- 6	Ş b	0	0	ò	0	ž
TOTAL	ů	ő	ů	ů	ů	0	ŏ	ă	õ	X
OTHER EXPENSES	•	v	U	U	U	U	U	v	v	•
INTEREST ON LONG-TERM LOAMS	10090	7581	5070	2560	979	327	•	1	•	1
INTEREST ON SHORT-TERM LOAKS	20070	,,,,,	30.0	2200	".á	~~i	Ď	ô	â	ō
OTHERS	ŏ	ň	ŏ	ŏ	ŏ	ŏ	ŏ	ă	ő	ŏ
TOTAL	10095	7581	3070	2560	979	327	ī	ī	ĭ	ī
	20070		,				-	•	•	_
INCOME BERGRE TAX	-6249	-3754	-1257	1239	445	3441	3750	3733	3715	2949
TAX	Ö	0	٠ ٥	Ö	ā	O	Ø	0	0	0
NET INCOME	-6249	-3754	-1257	1239	145	3441	3730	3733	3715	2949
LEGAL RESERVE	Đ	0		0	Ď	Ō	0	0	Q	0
DIVIDENDS	٥			Ó	Õ	Ö	0	0	G	0
SURPLUS	-6249	-3754	-1257	1239	445	3441	3750	3733	3715	2949

			11	SCOME STATE	MENT						
	(YEAR)	2001	200z	2003	2004	2005	2006	2007	2008	2009	2010
UPERATING REVENUE PURT DIV.	s										
SEC.1 1		22649	22649	22649	22649	22649					_
2		20046	20046	20046	20046	20046	22649	22649	22649	22649	22649
3		482	+82	482	482	482	20046	20046	20046	20046	20046
Ā		71668	71668	71668	71668	71668	482 71668	462	482	482	482
5		28057	28057	28057	28057	28057	28057	71668	71668	71668	71668
6		20102	20102	20102	20102	20102		28057	28057	28057	26057
TOTAL		163004	163004	163004	163004	163004	20102	20102	20102	20102	20102
TOTAL 1		22649	22649	22649	22649	22649	163004	163004	163004	163004	163004
Ž		20046	20046	20046	20046	20046	22649	22649	22649	22649	22649
ۆ		482	482	482	482	482	20046	20046	50046	20046	20046
Ă		71668	71668	71668	71668	71668	482 71668	482	482	482	482
5		28057	28057	28057	28057	28057	28057	71668	7166B	71666	71668
6		20102	20102	20102	20102	20102	20102	28057	28057	28057	28057
TOTAL		163004	163004	163004	163004	163004		20102	20102	20102	20102
HENTAL DIV.		0	D	0	203007	203004	163004	163004	163004	163004	163004
UTHER DIV.		Ö	ō	ň	ň	ŏ	Ö	Ŏ	0	٥	0
TOTAL OPERATING .	REVENUES	163004	163004	163004	163004	163004		D	0	. 0	D
UPERATING EXPENSES	5			200044	102004	103004	163004	163004	163004	263004	163004
OPERATIONS	_	84568	84585	84602	84619	84637	84654	84671	84669		
MAINTENANCE		20452	20452	20452	20452	20452				84706	84723
DEPRECIATION		20863	20863	20463	20863	20912	20452 20863	20452	20452	20452	20452
ADMINISTRATION		33440	33440	33440	33440	33440	33440	20863	20863	20863	20863
OTHERS		0	Ď.	23.10	3340	3340	33440	33440	35440	33440	33440
TOTAL OPERATING	EXPENSES	159323	139340	259357	159374	157441	159409				0
NET OPERATING INC		3661	3664	3647	3630	3563	3595	159426 3578	157444	159461	159478
(NOT BEFORE DEPRE		24544	24527	21510	24493	24475	24458	24441	3560 24423	3543	3526
OTHER INCOME	· · · · · ·				67772	24413	24470	21	24423	24406	24389
INTEREST		G	0	0	٥	0	٥	0		_	_
OTHERS		Ó	ŏ	ŏ	ō	ŏ	ŏ		<u>o</u>	0	0
TOTAL		Ō	ō	ŏ	Ď	ŏ	ŏ	0	ö	Ö	Ģ
OTHER EXPENSES			•	Ū	U		U	0	0	0	0
INTEREST ON LONG.	TERM LOANS	1	1	1	1	1				_	
INTEREST ON SHORT		ō	ō	ő	â	ō	1	1	10	1	1
OTHERS	· · · · · · · · ·	ō	ā	ŏ	ō	ě	ŏ	ŭ		٥	٥
TOTAL		i		Y	ĭ	ĭ	ĭ	Ÿ	Ó	Ō	D.
•		-	•	•	•	•	1	1	1	1	1
INCOME BERORE TAX		3680	3663	3646	3629	3562	3594	3577	3559		
TAX			6	35-0	3029	7702	2274	3511		3542	3525
NET INCOME		3680	3663	3646	3629	3562	3594	3577	0 3559	0	0
LEGAL RESERVE		0			3023	2305	7344	3311		3542	3525
DIVIDENDS		٥	ö	<del></del>	ŏ	č	Ď.	õ	0	0	0
SURPLUS		3680	3663	3646	3629	3562	3594	3577		0	0
<b></b>			2003	2070	2067	2205	2274	2217	3559	3542	3525

		(20 8	ALANCE SHE	ΕT						
(YEA	R) 1981	1982	1981	1984	1985	1986	1987	1988	1989	1990
ASSETS				-		-				
CASH MINIMUM CASH EXCESS	٥	ğ	0	0	٥	Q	Ģ	0	. 0	0
TITAL CASH	V	0	0	0	0	0	0	0	٥	o
+CEIVABLES	Ň	¥	Ď	0		0	õ	0	0	0
INVENTORIES	ā		Ď	č	Ď	Ň	ž	Ď	5	Ď
OTHER CURRENT ASSETS	å	0	- 6	č	<del>-</del>	- <del>- X</del>	ă	<del>8</del> -	· Y	V
TOTAL CURRENT ASSETS	Ó	ō	ŏ	ŏ	ō	ŏ	ŏ	č	ŏ	ŏ
LAND							•	•	•	-
PORT DIV.	98991	98991	98991	98991	98991	96991	98991	98991	95991	98991
RENTAL DIV. OTHER DIV.	0	ō	Q	Ō	o.	Ō	0	٥	0	0
TOTAL	98991	98991	98991		0	<del></del> 0	98991	2.20		
OTHER PROPERTIES	70771	70771	98991	16696	98991	98991	48447	98991	98991	98991
PORT DIV.	F85034	640024	619161	598298	377435	336372	535709	514846	493983	496481
RENTAL DIV.	0	0	01,100	3,41,40	2,,433	0	0	4	7525	7,0-01
OTHER DIV.	0	Ö	ő	à	ŏ	ŏ	ō	ŏ	Ď	ŏ
TOTAL	660687_	640024	619161	598291	377435	556572	225709	214846	193983	496481
TOTAL FIXED ASSETS	759876	739015	714152	697269	676426	633363	634700	613837	392974	595472
OTHER ASSETS TOTAL ASSETS	759878	71000	716132	407740	674.00	0	0		0	0
1014F 423512	137816	739015	\$TRT35	697289	676426	655563	634700	613837	592974	595472
LIABILITIES & EQUITY		~								
LONG-TERM LOANS, CURRENT	32082	32082	45818	45818	45818	45815	45818	45818	<u>4</u> 5818	45818
SHORT-TERM LOAMS	#530k	161024	229546	302243	365133	419955	466713	505403	541598	599889
OTHER CURRENT LIABILITIES		0	0	. 0	٥	٥	0	0	٥	0
TOTAL CURRENT LIABILITIES		193906	275364	348061	410951	463773	512531	551221	587416	645707
DINER LONG-TERM DEST	363577	531495	485677	439859	394041	348223	302405	236587	210769	164951
TOTAL LONG-TERM DEBT	563577	531495	485677	439839	394041	244222	302495	256587	210769	164951
OTHER LIABILITIES	, v., i		70.74		47.78.TV		544.23	6.	770.00	104,7,2
TOTAL LIABILITIES	640967	72540 <u>1</u>	761041	7,87920	\$04992	813996	814936	807808	798185	610658
CAPITAL A	193000	133000	153000	153000	153000	153000	153000	153000	153000	153000
CAPITAL B	0	0	0	0	0	0	0	0	, o	0
TOTAL CAPITAL	12280 <u>0</u> ′	153000	153000	153000	113000	133000	152000	322000	133000	123000
LEGAL RESERVE	o o			0	30.00	0	0	- 444071	0	0
SURPLUS RETAINED EARNINGS	0	-139386 -74089	-195889 -139386	-243631 -193889	-281 <u>56</u> 6 -243631	-311433 -281566	-333236 -311433	-346971 -333236	-358211 -346971	-368186 -358211
NET INCOME	-74089	-65297	-26303	-47742	-37933	-27867	-21603	-13735	-11240	-9975
TOTAL EQUITY	78911	13614	-42889	-90631	-120566	-158433	-180236	-193971	-205211	-215186
TOTAL LIABILITIES & EQUIT		739013	718152	697289	676426	635363_	634700	613837	392974	595472
										-

BALANCE SHEET

C	(EAR) 199	1 1992	1993	1994	1995	1996	1997	1998	1999	2600
ASSETS										
CASH MINIMUM		0 0	0	D	0	O.	0	۵	0	Đ
CASH EXCESS		0 0	0	0	0	0	0	0	٥	0
TRIAL CASH		0 0	0	Đ	٥	٥	٥	Đ	₽	0
PECEIVABLES		0 0	0	0	9	g.	0	0	0	0
INVENTORIES		0 0	0	٥	٥	0	٥	D	0	Ð
EITHER CURRENT ASSETS		0 0	0	0	0	0	0	Ö	0	Ö
TUTAL CURRENT ASSETS		0 0	Đ	0	٥	0	٥	0	٥	0
LAND										
עות דתוק.	989	91 98991	98991	98991	98991	98991	98991	98991	98991	98991
RENTAL DIV.		0 0	Ò	Q	. 0	. 0	0	Ō	Ō	Ö
DTHER DIV.		0 0	0	٥	٥	0	٥	٥	0	Ď
TUTAL	989	91 98991	98991	98991	98991	98991	98991	98991	98991	98991
DINER PRUPERTIES										
PORT DIV.	4756	18 454755	433892	413029	460645	439782	418919	398056	377193	410131
RENTAL DIV.		0 0	Ď	0	0	Ö	Ď	0	0	Ö
DTHEN DIV.		0 0	Ō	0	Ó	Ō	Ō	ā	á	Ŏ
TOTAL	4756	18 454755	433892	413029	460645	439782	418919	398056	377193	+10131
TUTAL FIXED ASSETS	5746	09 553746	532883	912020	559636	538773	517910	497047	476184	509122
DTHER ASSETS		0 0	o .	0	0	0	0	0	0	0
TOTAL ASSETS	5746	09 553746	532883	512020	559636	538775	517910	497047	476184	509122
LIABILITIES & FOULTY										
LONG-TERM LOAMS, CURREN	17 458	18 45818	45818	13736	13736	0	0	0	٥	n
SHORT-TERM LOANS	6310		656014	709730	770637	760069	733456	710860	686282	716271
DTHER CURRENT LIABILIT		0 0	0			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.52450		000200	,,,,,,,,
TOTAL CURRENT LIABILIT		11 705620	731832	723466	784373	760069	735456	710860	686282	716271
LONG-TERH LOANS	1191		27497	13761	25	25	25	25	25	25
DTHER LONG-TERM DEST		0 0		0	č	- 6	• กั	Ťń	-6	Ťó.
TOTAL LONG-TERM DEBT	1191	33 733 <u>15</u>	27497	13761	25	23	25	25	25	25
OTHER LIABILITIES		0 111 6		/ G	ő	ő		-6	-ć	ñ
TOTAL LIABILITIES	7960	44 778935	759329	737227	784398	760094	735481	710885	686307	716296
CAPITAL A	1530	00 153000	133000	153000	155000	153000	153000	153000	153000	153000
CAPITAL B		0 7,550		22220			0		7,7,7,0	7,400°
TOTAL CAPITAL	1530	00 153000	153000	153000	153000	153000	153000	153000	193000	153000
LEGAL RESERVE	4,220	0 0		6		2,3440	0	2-3000		2,0000
SURPLUS	-1744	35 -378189	-379446	-378207	-377762	-374321	-370571	-366838	-363123	-360174
RETAINED EARNINGS	-3681		-278189	-379446	-378207	-377762	-374321	~370571	-366838	-363123
NET INCOME	-62		+1237	1239	445	3441	3750	2733	3715	2949
TOTAL EQUITY	-2214		-226446	-225207	-224762	+221321	-217571	-213838	-210123	-207174
TOTAL LIABILITIES & EQ			532503	312020	357636	538773	517910	497047	476184	509122

		BALANCE SH	EET						
(YEAR)	2001	2002 2003	2004	2005	7006	2007	2008	2009	2010
. SFTS	. ~						<del>-</del>	<del></del>	
CASH MINIMUM CASH EXCESS	Č.			0	2	0	Ď	Ď	0
TOTAL CASH	ň	0 0	•	Ň	Š	0	ņ	ŭ	ý
RECELVABLES	ŏ		- · .	ŏ	ŏ	ă	ň	ŏ	ň
INVENTORIES	ŏ	Ď ŏ	Ö	ō	ŏ	ă	Ď	ŏ	ŏ
OTHER CURRENT ASSETS	₹~	0 0			- 6	~ ~ .	C	0	<del></del>
TOTAL CURRENT ASSETS	0	a 0	0	Ó	0	Ó	Ò	ō	Ö
LAND									
PORT DIV.	98991	98991 98991	98991	98991	98991	98991	98991	98991	98991
RENTAL DIV.	0	o o	Ō	0	ō	o o	Q	0	Ģ
OTHER DIV.	0	0 0	·		<u></u> Q	Q.			O
TOTAL DTHER PROPERTIES	98991	98991 98991	98991	98991	98991	98991	98991	98991	98991
PORT DIV.	389268	368405 347542	326679	308227	287364	266501	249638	224775	299347
RENTAL DIV.	207200	341742	320013	209551	<0130+	700301	247038	224(12	543545
DTHER DIV.	ŏ	- 5	ŏ	ň	č	ň	ŏ	ď	ň
TOTAL	389268	368403 347542	326679	308227	. 287369	_ 266301	245638	229172.	297342
TOTAL FIXED ASSETS	481259	467396 446533	425670	407218	386355	365492	344629	323766	398333
DTHER ASSETS	0	0	0	0	0	Ō	Ö	0	0
TOTAL ASSETS	486259	467396 446533	425670	407218	386335	365492	344629	323766	398333
LIABILITIES & EQUITY									
LONG-TERM LOANS, CURRENT	0	0	0	0	0	Q.	. 0		. 0
SHORT-TERM LOANS	691728	667202 642693	614201	396187	371730	547290	522868	498463	569305
DIHER CURRENT LIABILITIES	0	0	0	0	0	0	0	Q	5
TOTAL CURRENT LIABILITIES	691728	667202 642693	618201	596187	571730	547290	222868	498463	369305
LONG-TERM LOANS	25	2335	25	25	25	23	25	25	25
OTHER LONG-TERM DEBT	.0	.0 .0	.0		.0	.0	.0	.0	.0
TOTAL LONG-TERM DEBY DIMER LIABILITIES	2월	25 25	25_		72 .	25	25	25	25
TOTAL LIABILITIES	691733	667227 642718	618226	396212	371733	547315	522893	498488	569530
CAPITAL A	133000	133000 _ 153000	153000	153000	153000	153000	153000	153000	153000
CAPITAL B	177000	173000	V 0000¢I	193000	123000	122000	U DOOCT	133000	72000
TOTAL CAPITAL	153000	153000 _ 123000	153000	153000	153000	_ 153009	153000	153000	153000
LEGAL RESERVE	23300	0 0				مُ مُحَادِدُهُ الْحَادِ	2-2000	0	22200
SURPLUS	-356494	-352631 -349185	-345556	-341994		-334823	-331264	-321722	-324197
RETAINED EARNINGS	-360174	-356494 -352831	-349185	-343556	-341994	-338400	-334823	-331264	-327722
NET INCOME	3680	36633646	3629	_ 3562	3594	3577	3559	3542	3525
TOTAL EQUITY	-203494	-199831 -196185	-192556	-188994	-183400	-181823	-178264	-174722	-171197
ICTAL LIABILITIES & EQUITY	488259	467396 446533	425670	407218	386355	365492	344629	323766	398333

(YEAR)	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
SUURCE:										.,,,,
NET INCOME	-74689	-65297	c02a2~	-47742						
DEPRECIATION	20863	20863	20843		-37935	-29867	-21803	-13735	-11240	-9975
LUNG-TERM LDAS	Ď	10000	20003	20863	20863	50867	20863	50963	20863	22092
UTHER LONG-TERM DEBT.	ň	ň	ŭ	0	0	٥	Ô	٥		22072
INCREMENT	•	•	U	i)	0	0	C	Ò	ň	ň
WHEN LIABILITIES, INCREMENT	٥	٨	_	_				-	•	U
CAPITAL, INCRUMENT	ň	ň	v	0	0	Q	0	đ	n	•
TOTAL	-53226	-44434	+35640		_ 0	O	0	Ď	ň	
APPLIATIONS	-11220	-44474	+33040	-24879	-17072	-9004	-940	7128	9623	12117
TAXES & DIVIDENDS		0		_					7023	12111
ADDITIONS TO FIXED ASSETS	×	ž		0	0	٥	0	Ð	٥	
REPAYMENT OF LONG-TERM LOAMS	32082	32082		. 0	0	0	Ō	ŏ	ŏ	24590
UTHER ASSETS, INCREMENT	25005	22082	32082	45818	45818	45818	45818	45818	45818	45518
TOTAL	32082	32082			. 0	0	Ö	0	-30.0	47974
INCREASE IN WORKING CAPITAL	-65304	-76516	32082	45818	45818	45818	45818	45818	45818	70408
The second of the second secon	-63,304	-10370	~6 <i>1</i> 722	-72697	-62890	-54822	-46758	-38690	-36195	-58291
INCREASE CUMPOMENTS										205 31
CASH, INCREMENT	^	0	_	_						
RECEIVABLES, INCREMENT	ž	ž	o o	0	0	9	Q	G	ð.	•
INVENTORIES, INCREMENT	×	ŭ	D	ō	0	0	٥	ŏ	ñ	ž
OTHER CURRENT ASSETS,	ž	ŭ	ō	Q	0	G	0	ä	ŏ	ř
INCREHENT	v	v	O.	0	0	0	0	Ď	ň	ž
TOTAL	D	_	_	_				•	•	v
1017	v	0	0	0	٥	0	0	0	0	c
DECREASE COMPONENTS								-	•	U
SHURT-TERM LOAMS, INCREMENT	85308									
OTHER CURRENT LIABILITIES.		76516	67722	72697	62890	54822	46758	38690	36195	58291
INCREHENT	0	Ų	0	٥	0	0	Ō	0		70271
TOTAL								•	•	Ü
AIRE	65306	76516 _	67722	72697	62890	54822	46758	38690	36195	58291
									1,2	20271

		SOURCE	& APPLICAT	TION OF FU	NDS					
(YEAR)	1991	1992	1993	1954	1995	1995	1997	1998	1999	2000
SOURCE										1000
NET INCOME	-6249	-3754	-1257							-
DEPRECIATION	20863	20663	20863	1239	445	3441	3750	3733	3715	2949
LONG-TERM LOAMS	1000	20003	\$0007	50993	23224	20863	20863	20863	20863	21617
OTHER LONG-TERM DEBT,	ă	×		ŭ	0	Q	Đ	Ç	0	Ö
INCREMENT	•	·	U	ū		Q	0	0	0	0
OTHER LIABILITIES, INCREMENT	٥			^	1	- 1	_			
CAPITAL, INCREMENT	ă	ň	,	ž	ŭ	g	ø	0	a	G.
TOTAL	14614	17109	19606	22102	9	0	. 0	¢	C	0
APPLIATION:	41021	11447	14900	22102	23669	24304	24613	24596	24378	24561
TAXES & DEVIDENDS	٥	6	- ^				_			
- DITIONS TO FIXED ASSETS	ã	ň	ž	ž	0	0	Q	٥	0	0
TEPAYMENT OF LONG-TERM LOANS	45818	45818	45818	45818	70440	13736	ō	9	Q	54550
DTHER ASSETS, INCREMENT	0	7,010	47018	45978	13736	13736	0	D	0	٥
TOTAL	45818	45818	43018			0	0	0	0	0
INCREASE IN WORKING CAPITAL	-31204	-28709	-26212	45818	84576	13736	0	_ 0	0	54550
		- 20107	-20215	-23716	-60907	10568	24613	24596	24578	-29969
INCREASE COMPONENTS										
CASH, INCREMENT	Ó				_	_	_			
RECEIVABLES, INCREMENT	ŏ	ň	ň	Ň	ō	ō	ō	0	C	0
INVENTORIES, INCREMENT	ŏ	ň		ŭ	0	Ō	0	٥	0	0
OTHER CURRENT ASSETS.	Š	ň	ž	ŭ	0	0	Ō	Q	O,	0
INCREMENT	•		· ·	u	Q	D.	0	0	0	0
TOTAL	0	٥	6	n	_	_	_			
-	×	<del>-</del>		•	<u>0</u>	٥	C	0	0	0
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	31204	28759	26212	23716	60907					
DTHER CURRENT LIABILITIES,	4	*****	0	43740	90401	-1056\$	-24613	-24596	-24578	29989
INCREMENT	•	•	v	v	Ü	Q	D	o	0	9
TOTAL	31204	28709	26212	23716	60957	-40046				
		- <u> </u>	20212	47170	00401	-10568	-24613	-24596	-24578	29949

(KYZK)	2001	2002	2003	2004	2005	2005	2007	2008	2009	2010
Source:										
NET INCUME	3680	3663	3646	3629	3562	3594	3577	3559	3542	3525
DEPHECIATION.	20863	20863	20863	20863	20912	20863	20863	20863	20863	20863
LING-TERM LPANS	. 0	0	٥	0	0	0	0	6	0	٥
"THER LANG-TERM DEBT. INCREMENT	O	0	0	0	٥	٥	٥	0	0	0
STHER LIABILITIES, INCREMENT	ð	0	0	0	٥	0	0	0	0	0
CAPITAL, INCHE"ENT	Ö	0	٥	٥	0	٥	0	0	0	0
TOTAL	24543	24526	24509	24492	24474	24457	24440	24422	24405	24368
APPLIATION:							•			
TAXES & DIVICENOS	0	٥	Q	0	٥	Q	٥	D	Đ	0
ADDITIONS TO FIXED ASSETS	0	٥	o	0	2460	á	e	Ó	Ó	95430
HEPAYMENT OF LONG-TERH LOANS	ŏ	Ō	Ō	Õ	0	õ	Ō	Ď	ŏ	
UTHER ASSETS, INCREMENT	Ò	0	0	0	0	0	٥	à	Ċ	Ò
TOTAL	0	0	ō	ō	2460	Ō	ō.	Ö	ò	95430
INCREASE 1/4 WORKING CAPITAL	24543	24526	24509	24492	22014	24457	24440	24422	24405	-71042
INCREASE CUMPONENTS										
CASH, INCREMENT	Đ	٥	٥	٥	٥	0	٥	D	0	0
RECEIVABLES, 1-CREMENT	0	0	0	0	0	ø	Q	0	0	0
INVENTORIES, INCREMENT	0	0	0	0	0	0	٥	0	0	0
ÖTHER CURRENT ASSETS, INCREMENT	0	0	٥	0	0	0	0	D	0	0
TOTAL	0	o	0	0	0	٥	0	0	0	0
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	-24543	-24526	-24509	-24492	-52014	-24457	-24440	-24422	-24405	71042
OTHER CURRENT LIABILITIES, INCREMENT	Ö	o	0	٥	0	å	ø	Ö	0	D
TOTAL	-24543	-24526	-24509	-24492	-22014	-24457	-24440	-24422	-24405	71042

Table A-11-6 (Interest on short-term loans = 0 in Case 2)

		a) It	COME STATE	MENT						
~ (YEAR)	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
OPERATING REVENUES PORT DIV.			<del></del>				<del></del>	·		
SEC.1 1	14599	13717	16834	17952	19069	20262	21455	22649	===	
ž	18879	18893	18908	10922	11937	_ 19307	19676	20046	23842	25035
3	330	354	377	401	124	443	462	482	20 <u>415</u> 501	20785
4	53 <u>97</u> 8	26493	59909	63324	66739	68382	70025	71668	73311	520 74954
5	13281	15727	18174	20620	23067	24730	26393	28057	29720	31383
6	18276	18221	10163	15106	10048	18733	19418	20102	20727	21472
TOTAL	115445	125405	132365	139325	146284	151857	157429	163004	168576	174149
TOTAL 1	14399	1,717	14834	17952	19069	20262	21455	22649	23842	21015
2	18879	18893	18908	18922	18937	19307	19676	20046	20415	20785
<b>1</b>	220	354		401	424	443	462	482	501	520
•	53078	56493	59909	63324	66739	68382	70025	71668	73311	74954
5	13581	12727	14174	20620	22067	29730	26393	23057	29720	31383
6_	16278	18221	10163	18106	18648	16733	19418	20102	20787	21472
TOTAL	118445	125 <u>402</u>	132265	129325	196289	151857	157329	163004	168576	174149
RENTAL DIV.	9	Ď	٥	Q.	D	0	0		8	471471
OTHER DIV.		<u> </u>							ŏ	ŏ
TOTAL OPERATING REVENUES	118445	125405	132365	139325	146284	151857	157429	163004	168576	174149
OPERATING EXPENSES				- 20, 5 - 3						• • • • • • • • • • • • • • • • • • • •
OPERATIONS	84213	84238	84262	84286	64331	93894	93911	93928	93944	93961
HAINTENANCE	20452	20472	20472	20432 .	20432	31566	31366	21566	31566	31566
DEPRECIATION	20863	50863	20863	20863	20863	28157	35452	35452	35452	36681
ADMINISTRATION	33440	33440	33440	32440	33440	33439	33439	33439	73439	23439
OTHERS	0	0	0	0	0	0	0	0	0	0
TOTAL OPERATING EXPENSES	150968	158993	159017	139041	129066	187926	194368	194385	_ 194401	193647
NET OPERATING INCOME (NOT)	-40523	-33586	-26652	-19716	-12782	-35199	-36939	-31361	-25825	-21498
(NOT BEFORE DEPRECIATION)	-12660	-12725_	=>789	_141 <u>_</u>			-1487	4071	9627	. 15183
INTEREST			_	_						
OTHERS	<del></del>	<u> </u>	<del></del>	<del></del> -	<u>0</u>	<u> </u>			. 0	0
TOTAL	ŏ	Ž	-	0	0	0	-	٥	0	0
DTHER EXPENSES			<b></b> _	~		9	<u>Q</u>	0	. 2	Q
INTEREST ON LONG-TERM LOANS	24447									
INTEREST ON SHORT-TERM LUANS	35566	31 <u>903</u>	34066	37128_	42879	42991	49412	27972_	_ 35441	12629
OTHERS	Š	Ď	ŏ	ō	ò	ò	ō	Ō	0	٥
TOTAL	33566	31983	34066			- 10000		- 0		
				39156	42679	42991	40482	37972	33441	32629
INCOME BERORE TAX	-74089	-65571	-60718	-58874	-55661	-78190	-77421	-69353	-61266	-54127
NET INCOME	74049	-64411	-6071	-44174			_ <del>0</del>			9

INCOME STATEMENT										
(YEAR)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
OPERATING REVINUES										
PriRT DIV.										•
SEC.1 1	26095	27134	28214	29273	30333	31386	32439	33493	34546	35599
2	21818	22851	23885	24918	25951	27022	28092	29163	30233	31304
3	541	562	582	603	624	648	673	697	772	746
4	78066	81176	84290	87402	90514	91161	97816	191464	105117	108768
5	32666	33948	35231	36513	37796	39379	40962	42546	44129	45712
. 6	22230	22949	23747	24506	27264	56109	26754	27796	26643	29486
TOTAL	181416	188682	195949	203215	210482	218709	226936	235163	243390	251617
TOTAL 1	26095	27134	28214	29273	30333	31386	32439	33493	34546	35599
2	21818	22851	23885	24918	25951	27022	28092	29163	30233	31304
3	541	562	582	603	624	_648	673	697	722	746
4	78066	81175	84290	B7402	90514	94165	97816	101466	105117	108768
5	32666	33948	35231	36513	37796	39379	40962	42546	44129	45712
_ 6	22230	22947	23747	24506	25264	26109	26954	27798	28643	29488
TUTAL	181416	188682	195949	203215	210482	218709	226936	235163	243390	251617
RENTAL DIV.	Ō	0	0	0	0	0	0	٥	0	٥
GTHEN DIV.	0	0	. 0	0	_ 0	. 9	Q	Q.	Q	Q
TOTAL OPERATING REVENUES	181416	188682	195949	203213	210482	210769	226936	235163	243390	251617
OPERATING EXPENSES										
OPERATIONS	93973	93989	94003	94017	94031	94048	94065	94082	94100	94117
MAINTENANCE	31566	31566	31566	31366	31366	31566	31366	31366	31366	31566
DEPRECIATION	35452	35452	35452	35452	37813	35452	35452	35452	35452	36201
AOMINISTRATION	33439	33439	33439	33439	33439	33440	33440	33440	3344D	33440
OTHERS	0	0	0	0	0	Q	٥	a	0	٥
TUTAL OPERATING EXPENSES	194432	194446	194460	194474	196849	194506	194523	194540	194558	195324
NET UPERATING INCOME (NUI)	-13016	-3764	1489	8741	13633	24203	32413	40623	48832	56293
CHOI BEFORE DEPRECIATIONS	22436	29688	3694L	44193	31446	59655	67865	76075	64264	35+6+
OTHER INCOME	_			_		_	_	_	_	
INTEREST	ō	o	0	Ç	⊈	Ö	Q	Q	0	0
OTHERS	ō	0	ø	0	Ģ	ō	D	0	٥	D
TOTAL	ū	C	9	٥	0	0	0	a	C	٥
OTHER EXPENSES								****		
INTEREST ON LUNG-TERM LOAMS	24295	25520	21556	17592	14558	12454	10675	9220	7765	6313
INTEREST ON SHORT-TERM LOANS	0	a	C	0	ō	ō	0	٥	Đ	D.
OTHERS	0	0_	0	<del>Q</del> _			Q		<u> </u>	<u>C</u>
TOTAL	29295	25520	21556	17592	14558	12454	10675	9220	7768	6313
INCOME BEFORE TAX	-42311	-31264	-20067	-8851	-925	11749	21738	31403	41064	49980
TAX	G	D	0	0	0	0	0	0		0
NET INCOME	-42311	~31284	-20067	-8651	-925	11749	21738	31403	41064	49980
LEGAL RESERVE	ā	õ	<u>9</u>	Q	<u>p</u>	<u> </u>	<u>Ş</u>		<u>\$</u>	🕺
DIVIDENOS	0	0	0	a a	0	0		21.50		D
SURPLUS	-47311	-31284	-20067	-8851	-553	11749	21730	31403	41064	49980

		11	NCOHE STATE	MENT						
(YEAR)	2001	2092	2003	2004	2005	7006	2007	2000	2009	2010
ERATING REVENUES	-		~							
ORT DIV.	36652	37703	38739	39812	40865	41918	41918	41918	41918	<b>♦1918</b>
;	32375	33445	34516	32266		32728	32728	_32728 _	32128	32728
•	770	705		844	868	892	892	392	192	892
Ž.	112419 _	116070	119720	123371	127022	130673	. 130673	130673	130673	130673
\$	47293	46676	50462	32043	53628	35211	35211	35211	55211	35211
6	30333	31175	32022	32867	23712	14557	34557	34517	29557	34557
TOTAL	259844	268071	276298	184525	292152	295979	295979	295979	295979	293979
TOTAL 1	36652	37705	38739_	19612	40465	41918	- 1916	41918	41918	31910
ž	32375	33445	34516	35586	36657	32728	32728	32728	32726	32728
		795	819	844	868	N92	892		A92	
4	112419	116070	119720	123371	151055	139673	130673	130673	130673	130673
2.	<u> 47295.</u>	48878	50462	52045	23628		55211	55211	35211	55211
_ 6	30333	31178	32022	32867	33718	34557	34557	34557	34557	34557
TOTAL	259844	268071	276298	284525	292752 .	295979	. 295979	227979_	295979	295979
NTAL DIV.	Ď	0	0	0	9	0	٥	O.	0	9
HER DIV.			<u> </u>	<u> </u>						<del></del> =
TAL OPERATING REVENUES	259844	268071	276298	284525	292752	293979	295979	295919	293979	295979
RATING EXPENSES	94133	94152	94169	94186	94204	94221				
ERATIONS INTENANCE							94238	94256	94273	94290
PRECIATION	21266		21266	31566	31566	31386	31366	_ 21366	_21566_	
MINISTRATION	35452 33440	35452 33440	35452 33440	35452	35501	35432	35452	35452	33452	35452
HERS	33440				33440	33440	33440	<u>22440</u>	<del></del>	<del>3344</del> g
TAL OPERATING EXPENSES	194593	194610	194627	194644	194711	194679_	194696	194714	194731	10.540
OPERATING INCOME(HOI)	65251	73461	81671	89881	98041	101300	101283	101265	101248	121748
BEFORE DEPRECIATION)	100703	108913	117123	123333	133542	136752	_136735	136717		101231
ER INCOME	TARIAS	-AV9.742					T30133.	138TH-"	136700	136683
TEREST	•						•	•		
HERS	- š	- 6	ď	<del></del>	<del></del>	<del></del>	<del></del>	<u>~</u> _	<del></del>	<del></del>
TAL	Ď	ŏ	ŏ	ň	ň	ŏ	7	Ň	ž	ř
ER EXPENSES	•	~ =			<del>_</del>	·	× -	· ·		Y
TEREST ON LONG-TERM LOANS	4861	3408	1974	921	188	1	t	,	1	•
TEREST ON SHORT-TERM LOAMS		0	<u> </u>	~ - <del>2</del>		<del></del>				
HERS	Õ	ă	ă	ŏ	ñ	ŏ	ň	ŏ	ă	ă
TAL	4851	3408	1974	821	186	1	1	1	1	
OME BERORE TAX	60390	70053	79697	89060	97833	101299	101282	101264	101247	101230
<u>-</u>	C	0	0	0	0	. 0	ā	0	٥	
I INCOHE	60390	70053	79697	89060	97833	101299	101282	101264	101247	101230
AL RESERVE	0	. 0	Ó	0	0	0	- c	0	0	0
IDENDS	0			0	· ·	<del></del>		6	0	0
PLUS										

CYEA	F) 1981	1982	1983	1984	1985	1986	1987	1988	1959	1990
ASSETS									-	
CASH M153300	α	٥	0	0	0	0	٥		0	<i>o</i> '
CASH EXCESS	ō	ň	ň	ŏ	ň	, ,	ŏ	Ň	ŏ	ž
TUTAL EASH	ō	ň	ž	ă	ž	ă	3	č	,	ă
HECETVANLES	ă	Ň	ž	ő	ň	ž	×	ŭ	ŏ	, ,
INVENTIBLES	ā	ă	č	č	ř	ž	ž	ž	č	X
UTHER CURRENT ASSETS	ň	ž	ŭ	ő	<u>u</u> .	ž	Ž	×	Ž	×
TOTAL CURRENT ASSETS	ă	ñ	ň	ŏ	ă		ž	0	ŭ	×
LAND	•	U	•	U	v	4	U	U	v	U
VIC *HO4	98991	101256	123786	185076	185286	185286	185286	185286	155286	
HENTAL DIV.	7077	TOTEND	153,40	107010	707500	142500	103580	10,500	193690	182586
DTHEP DIV.	ă	ř	v	, i	5	ž.	<u> </u>	, ,	ŭ	ž
TUTAL	98491									
UTHEN PODPENTIES	39437	101256	123786	185076	183286	185286	185286	185286	185286	183266
PORT DIV.										
HENTAL DIV.	680687	640034	619161	598298	577435	919733	684281	446629	613377	801266
OTHER DIV.	0		0	ō	Q	ā	Q	0	0	0
TOTAL		0				0		0	D	0
TOTAL FIXED ASSETS	660287	640024	619161	598298	277423	919733	884281	841829	613377	107519
OTHER ASSETS	759678	741280	742947	783374	762721	1105019	1069567	1034115	998663	986572
	0	9405	136575	101300	122895	Φ	D	0	. 0	
THITAL ASSETS	759478	750665	879522	884954	\$85616	1105019	1069567	1034115	998663	986572
LIABILITIES & EQUITY										
LING-TEHM LOANS, CURRENT	32082	32082	45818	45818	45818	45818	45818	45628	54920	56114
SHERT-TERM LOANS	85308	142098	224630	171884	150920	494331	382118	661437	73.279	833233
DIHER CURRENT LIABILITIES	i	a		4		17122	701-10	0-421	,,,,,,	427274
TOTAL CURRENT LIABILITIES		194180	270448	217702	196738	540149	627936	708465	791199	899349
LONG-TERM LOAMS	563577	542650	641157	724049	761166	715348	669530	622902	565982	499868
DTHER LONG-TERM DEBT	0	0	à	6	.0.140	.17776	00,320	0+-748	202.40	777948
TOTAL LONG-TERM DEST	563577	54285D	641137	724049	761166	715348	669330	622902	565982	499866
DINER LIABILITIES	1035	4	04223	(104)	101100		467330	021702	20520	-4,1000
TOTAL LIABILITIES	680967	737030	911585	941751	957904	1255497	1297466	1331367	1357181	1399217
	2447		,,,,,,,	*****	,,,,,,,	-433-11	2271400	2354301	7331584	2417621
CAPITAL A	153000	153315	168315	202455	242625	242625	242625	242623	242623	242625
CAPITAL E	233500	-3334.6	100-10	241-32	71013	77027	174022	2-1023	244063	472023
TOTAL CAPITAL	153000	153315	168315	202455	242625	242625	242625	242625	242625	241424
LEGAL PESERVE	.,,,,,	5				455053	1-1027	******	7-457	593632
SURPLUS	ŏ	-139660	-200378	-259252	-314913	-393103	-470524	~539877	-601143	-635270
PETAINED EARNINGS	ň	-74089	-139660	-200378	-259252	-314913	-393103	~470524	-539877	
NET INCOME	-74089	-65571	-60718	-58874	-35661		-77421	-69353		-601143
TOTAL EQUITY	78911	13615	-32063	-56797	-72284	-78190 -150478	-227899	~247252	-61266 -358518	-54127
TOTAL LIABILITIES & EQUIT	Y 759678	750685	879522	E84954	885616					-412645
=: = = :::: Pitiles a faat.		120001	41,324	204424	663979	1105019	1069567	1034113	998663	986572

BALANCE SHEET	
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(YEAR)	1991	1992	1993	1984	1995	1995	1997	1998	1999	2000	
ASSETS											
CASH MINIMUM	0	0	0	0		•		_	_		
CASH EXCESS	0	Ö	Ď	0	¥-		ž	- — <u>\$</u>	<u>Q</u>	Q	
TOTAL CASH	D	Ō	0	Š	ă	ž	ž	ý	0	9	
RFCEIVARLES	٥	Ō	Ď			X	v	- N	_₫	9	
TURIES	_ 9	0	0	<u> </u>	ō	ň	ž	Ň	,	Ų	
THER CURRENT ASSETS	0	0	0	0	0	0	0	0		<del></del>	
TOTAL CURRENT ASSETS	Q	Q	Q	Q	و	_ ö	ŏ	ŏ	ŏ	ŏ	
LAND						-	-	•	- 2	•	
PORT DIV.	185286	185286	183286	195246	167286	185286	185286	195286	189286	185286	
RENTAL DIV.	D	0	0	٥	0	ā	3	0		0	
OTHER DIV.	******		0	0	0_					Q	
OTHER PROPERTIES	105286	185286	185286	185286	185286	185286	145286	143286	165266	185286	
PORT DIV.	763834	730582	066469	659478		<b>-</b> 2000					
RENTAL DIV.	75.654	12020%	DAAAA	234412	692505	724553	689101	633649	618197	636546	
OTHER DIV.	ň	· ×	7	×	, V	<u>-</u>	9		<u>P</u>	٥	
TOTAL	762834	730382	694930	_659478	692505	724553	400104		0	a a	
TOTAL FIXED ASSETS	931120	913668	880216	844764	877791	909839	689101 374387	653649 838935	618197	<u> 626246</u>	
DIHER ASSETS	, a constant	0	0	07.707	******	707037	214361	030733	803483	621632	
TOTAL ASSETS	951120	915668	B80216	844764	877791	909339	874387	838935	803483	******	
	1		24-5-5	2		101231	014561	020133	007403	451435	
LIABILITIES & EQUITY		•			-						
LONG-TERM LOAMS.CURRENT	72037	72027	72037	39955	39955	26219	26219	26219	26219	26217	
SHORT-TERH LOAMS	906208	974077	1030729	1076165	1150072	1210326	1179355	1135719	1088422	1083010	
OTHER CURRENT LIABILITIES	0	0	. 0	ū	Q	_ 0	O	Ö	ō	0	
TOTAL CURRENT LIABILITIES	978245	1046114	1102766	1116120	1190027	1236545	1205574	1164938	1114641	1109229	
LONG-TERM LOAMS	427831	355794	203757	243602	203447	_ 177620	151409	122190	96971	72752	
OTHER LONG-TERH DEBT			0	0	0	. 0	. 0	. 0	0	- <b>p</b>	
TOTAL LONG-TERM DEBT	427831	355794	283757	243802	203847	177628	151409	125190	91971	72752	
TOTAL LIABILITIES	1406076	1401908	1444873	1.550000	1207070	g	0	0	0	. 0	
inium etunifilites	1400010	TANTANG	1206523	13599 <u>22</u>	1393874	1414172	1356983	1530150	1213612	1181981	
CAPITAL A	242625	242625	242625	242625	243435	212448	747608	242626			
CAPITAL B		1,100,0	2-10-2	2-2-2	243625	_242625	242625	345952	242625	242625	
TOTAL CAPITAL	242625	242625	242625	_ 242625	2 <u>42625</u>	242625	242625	242625	242625	242428	
LEGAL RESERVE	<del></del>	0	C C	<del></del>				474062		202622	
SURPLUS	-697581	-728865	-748932	-757783	-758708	-746939	-725221	-693818	-652754	-602774	
RETAINED EARNINGS	-655270	-697581	-728865	-746932	-757703	-75870B	746939	-723221	-693818	-652734	
NET INCOME	-42311	-31284	-20067	-8851	-925	11749	21738	31403	41064	49980	
TOTAL EQUITY	-434956	-486240	-506307	-515158	-516083	-504334	-482596	-451193	-410129	-360149	
TOTAL LIABILITIES & EQUITY	951120	913668	880216	844764	877791	909839	674387	838935	603463	821832	_

		B	ALANCE SHE	C ?						
(YEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
455£75										
CASH MINIMUM	٥	0	0	0	В	Ó	٥	٥	£.	٥
CASH EXCESS	ò	ō	ä	ã	õ	ă	ā	ā	ě	Ď
THTAL CASH	Ö	ŏ	ň	ō	ā	ō	ō	ō	ō	ō
RECEIVABLES	ě	ā	ā	ā	ā	ā	ā	Ď	ō	Ď
INVENTORIES	Š	ŏ	ā	Ď	ŏ	ā	ā	ā	ò	Ö
UTHER CURRENT ASSETS	Ď	ā	ň	ň	6	ة	ā	2	ō	ā
TOTAL CURRENT ASSETS	ō	ŏ	õ	ō	õ	ő	ءَ	ō	ō	ō
LAND		-	•	•	•	-	-	-	_	-
PURT DIV.	185286	185286	185286	135786	185286	105286	185266	185286	185286	185286
RENTAL DIV.	0	Đ	0	0	Ď	ä	0	Đ	D	
DIMER DIV.	D	Ď	č	Ď	Š	ä	ã	Ō	ō	٥
TOTAL	105286	185286	285286	185286	185286	185286	185286	185236	195286	185284
UTHER PHOPERTIES	******	42220				*****				
PURT DIV.	640334	604882	569430	533978	500937	538835	503383	467931	432479	492457
RENTAL DIV.	0	0	0	Ö	0	0	Ö	0	0	0
DINEH DIV.	Ď	ŝ	ã	ā	ŏ	ň	Ď	ō	Ď	Ō
TUTAL	640334	604882	569430	533978	500937	538835	503383	467931	432479	492457
TUTAL FIRED ASSETS	825620	790168	754716	719264	686223	724121	688669	653717	617765	677743
UTHER ASSETS	0	0	0	0	0	o	0	0	0	٥
TOTAL ASSETS	825620	790168	754716	719264	686223	724321	688669	653217	617765	677743
LIABILITIES & EQUITY										
LONG-TERM LIVA'S CURRENT	26219	25409	15117	5923	٥	0	٥	0	0	0
SHORT-TERM LITANS	1052627	973341	883601	774206	649235	583634	449100	312384	175685	134433
DYHER CURRENT LIABILITIES	٥	Ō	ō	0	0	0	0	0	0	0
TOTAL CURRENT LIABILITIES	1078846	998750	898718	780129	649235	585834	449100	312384	175685	134433
LING-TERM LDANS	46533	21124	6007	84	84	84	64	24	84	54
DTHEN LUNG-TERM DEPT	0		0	٥	0	6	0	٥	Q	0
TOTAL LUNG-TERM DEET	46533	21124	6007	84	5	4.5	84	84	8.4	84
UTHER LIABILITIES	Q	0	0	Ď	³ō	~ ~ <b>o</b>	٥	0	0	0
TOTAL LIABILITIES	1125379	1019874	904725	760213	649319	585918	449184	312468	175769	134517
CAPITAL A	242625	242625	242625	242625	242625	242625	242625	247625	2+2625	242625
CAPITAL B	. 0	P	D	0	٥	0	0	. 0	0	Q.
TOTAL CAPITAL	242625	242625	242625	242625	242623	242625	242625	242625	242625	242625
LEGAL RESERVE	0	0	. 0	Ťó.	0	a	0	0	C C	٥
SUPPLUS	-542384	-472331	-392634	+303574	-205721	-104422	-3140	98124	199371	300601
RETAINED EARNINGS	-602774	-542384	-472331	-392634	-303574	-205721	-104422	-3140	98124	199371
NET INCOME	60390	70053	79697	89050	97833	191299	101242	101264	101247	101230
TOTAL EQUITY	-299759	-229706	-150009	-60949	36904	136203	239485	340749	441996	543226
TOTAL LIABILITIES & EQUITY	825620	790168	754716	719764	686223	724121	644664	653217	617765	_ <u>6</u> 71 <u>7</u> 43

(YEAR)	1981	1982	1963	1984	1985	1986	1987	1088	1889	1995
SOURCE:					<del></del> -					
NET INCOME	-74089	-65571	-60718	-38874	-35661	-78190	77471 _	-69233	-61766	-24127
DEPRECIATION	20863	20863	20063	20863	20863	28157	35452	35452	35452	36681
LONG-TERM LOAMS	0	11335	144105	128730	82935	D	0	0	٥	Ď
OTHER LONG-TERM DEBT, INCREMENT	0	0	0	0	0	0	Ö	0	0	0
" LIABILITIES, INCREMENT	0	- D	0	0	0	0		0		0
ITAL, INCREMENT	0	315	15000	34140	40170	0	ō	, o	Õ	ŏ
TUTAL	-53226	-33038	119250	124859	88307	-50033	-41969	-33901	-25814	-17446
APPLIATION:				_						
TAXES & DIVIDENDS	â	0	0	õ	0		٥	0	O	<b>•</b>
ADDITIONS TO FIXED ASSETS	<u>o</u>	2265	22530	61290	210	370455	Q		. 0	21390
REPAYMENT OF LONG-TERM COANS	32082	32082	35085	45818	45818	45818	45518	45616	46628	56920
OTHER ASSETS, INCREMENT	0	9405	<u> 127170</u>	-34995	21315	-122595	9	0	. 0	0
TOTAL	32082	43752	181782	72113	67343	295378	45816	45818	46628	81510
INCREASE IN WORKING CAPITAL	-85308	-76790	42522	52746	20964	-242411	-82787	-79719	-12552	-91956
INCREASE COMPONENTS										
CASH, INCREHENT	. 0		0	0			<u> </u>	0	0	0
RECETVABLES . INCREHENT	0	Ō	0	_ 0	0	9	0	Q	. 0	. 0
INVENTORIES, INCREMENT	0	0	O	0	0	Q	Þ	0	0	0
OTHER CURRENT ASSETS.	0	<u>o</u>	_ 0	0	.Q	_0	٥	. 9	0	0
increment.										
TOTAL	o -	0_		<u></u>						Q
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	85308	7679Ŏ	62532	-52746	-20964	343411	87787	79719	72442	98956
OTHER CURRENT LIABILITIES, INCREMENT	0	ō	O	Ō	0	_ 0	0	0	0	0
TOTAL	85308	76790	62332	-52746	-20964	343412	07797	79719	72442	98936

		SDURCE	& APPLICAT	ION OF FU	NOS					
(YEAR)	1991	1992	1993	1994	1995	1885	1997	1998	1299	2000
SCURCE:										
NET INCOME	-42311	-31284	-20067	-8651	-925	11749	21736	31403	41064	49980
DEPRECIATION.	35452	35457	35452	35452	37813	35452	35452	33452	35452	36201
LONG-TERM LOAMS	G	Ö	0		0	â	23.70	7,7,7		70201
UTHER LING-TERM DEBT. INCREMENT	õ	9	8	Đ	ō	Ď	Ď	ŏ	Ď	ő
STHER LIABILITIES, INCREMENT	G	G	٥	٥	Ġ	á	a	Δ.	· · ·	- 0
CAPITAL, INCREMENT	9	0	Ō	õ	ŏ	ŏ	š	ŏ	ŏ	ž
TOTAL	-6859	4168	15385	26601	36888	47201	57190	66833	76516	66161
APPLJATION:						41242	212.0	0-437	10720	20101
TAXES & DIVICENDS	٥	٥	۵	۵	0	a	A	6		o
ADDITIONS TO FIXED ASSETS	ũ	ŏ	ă	ă	70440	67300	ž	ĕ	X	54550
HEPAYHENT OF LONG-TERM LOAMS	66114	72037	72037	72037	39955	39955	26219	20219	26219	26219
GIHER ASSETS, INCREMENT	0		4000	,,,,,	2,7,7,0	37733	40+47	40447	20274	10114
TOTAL	66114	72037	72037	72037	110795	107455	26219	26219	26219	80769
INCREASE IN WUNKING CAPITAL	-72973	-67869	-56652	-43436	-13901	-60254	20971	40636	50297	5412
INCREASE COMPONENTS										
CASH, INCREMENT	a	a	A	á						٠ .
RECEIVABLES, INCREMENT	ŏ	ō	ž	ă	ž	Š	ŭ	v	ŭ	Ų
INVENTORIES, INCREMENT	ď	ă	ă	ň	ž	ž	ž	v	ý	
DIHER CURRENT ASSETS,	ŏ	ň	ő	ŏ	ž	Ž	Ž	ŭ	ų.	Ü
INCREMENT	•	•	•	•	U	U	v	U	U	U
TOTAL	۵	ø	0	0	٥	•		_		_
	•	v	v	•	Y	· ¥	0	Q	0	_ D
DECREASE COMPONENTS										
SHORT-TERM LOANS, INCREMENT	72973	67869	16652	43436	73907	60254	-30971	-40636	-50297	
DTHEN CURRENT LIABILITIES,		0	10415	4.30	.246.	0	-20711	-40638	• - :	-5412
INCREMENT	•	•	,	•		9	U	Ü	C	0
TOTAL	72973	67869	56652	45436	73907	40254	-30971	-40636_		

(YEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SOURCE: NET INCOME	/0000	70053			48444					
DEPRECIATION	60 <u>39</u> 0 35452	35452	79697	- 89060 - 35452	- <u>97853</u> 35501	101299	101282	101264	101247	101230
LONG-TERM LDANS	2,77,0	0	3,772	3,77,2	22201	35452	35452	35452	35452	35452
OTHER LONG-TERM DEBT.	Õ			·		<del>-</del>	<del></del>	<del>-</del>	<u>y</u> _	- Š
INCREMENT	_			-		_	•	•	•	v
LIABILITIES, THEREMEN	T 0	0	0	0	0	0	0	0	0	0
LTAL INCREMENT	0	D	Q	9_	Q	. 9	0	. 0	ŏ	ŏ
TOTAL APPLIATIONS	95842	103505	115149	124512	133354	136751	136734	136716	136699	136682
TAXES & DIVIDENDS	0	_	-5	ā.	·					
ADDITIONS TO FIXED ASSETS	39240	ō	ŏ	ň	2460	73350	ů	o o	Ď	D
REPAYMENT OF LONG-TERM LOA	NS 26219	26219	25409	15117	5923	13330	<del></del>			95439
OTHER ASSETS, INCREMENT	0	_0_	0_	0	0		ŏ	č	Ö	ŏ
TOTAL	65459	26219	25409	15117	8383	73350	ŏ	- 16	~ -3	95430
INCREASE IN WORKING CAPITAL	30583	79256	\$9740	109395	124971	63401	_136734_	136716	136699	+1252
INCREASE COMPONENTS										
INCREASE COMPONENTS CASH, INCREMENT		- 0								
RECEIVABLES, INCREMENT	ŏ	ō	ŏ	ŏ	ŏ	ŏ	ŏ	, ,	5	ž
INVENTORIES, INCREMENT	ō	Ò-	ō	7	0		ŏ	ă	, L	ň
OTHER CURRENT ASSETS,	0	Q	0	Q	0	Ω	. 0	. Ď.	. 0	ŏ
INCREMEN	IT .	_								-
TOTAL	<u></u> 9_			<u></u>			0		0	0.
DECREASE COMPONENTS										
SHORT-TERH LDANS, INCREMENT	-30383	-79284	-69740	-109395	-124971	-63401	-136734	-136716	-136699	-41252
OTHER CURRENT LIABILITIES.			9	-10,,,,	7/2	-83402		0,000	-476623	-71232
INCREHEN	T	_		-			•	•	4	•
TOTAL	-30383	-79286	69740_	-109395	-124971	-63401	-136734	-136716	-136699	-41252

Table A-11-7 (Case 2-A)

		(0) [	NCOHE STAT	EMENT						
(YEAR)	1981	1982	1983	1984	1985	1986	1987	1988	1969	1990
PERATING KEVE UES										
Phat Biv.										
SEC.1 3	14599	15717	16834	17952	19069	20262	21455	22649	23842	25035
?	18879	18893	18906	18922	18937	19307	19676	20046	20415	20785
3	330	354	377	401	424	443	462	482	501	520
4	53078	56493	59909	63324	66739	68382	70025	71668	73311	74954
5	13281	15727	18174	20420	23067	24730	26393	28057	29720	31363
_ 6	18278	18221	18163	18106	18048	18733	19418	20102	20787	21472
TUTAL	118445	125405	132365	139325	146284	151657	157429	163004	168576	174149
TOTAL 1	14599	15717	16834	17952	19069	20262	21455	22649	23842	25035
2	18879	18893	18908	18922	18937	19307	19676	20046	20415	20785
3	330	354	377	401	424	443	462	+82	501	520
4	53078	56493	59909	63324	66739	68382	70025	71668	73311	74954
5	13281	15727	18174	20620	23067	24730	26393	28057	29720	31383
6	18276	18221	14163	18106	18048	18733	19418	20102	20787	21472
TOTAL	118445	125405	132365	139325	146284	151857	157429	163004	168576	174149
HENTAL DIV.	0	Q	0	O	0	0	٥	0	0	0
DTHER DIV.	O.	0	. 0	0	0	0	9	0	0	0
TOTAL OFERATING REVENUES	118445	125405	132365	139325	146284	151857	157429	163004	168576	174149
UPLRATING EXPENSES										
UPERATIONS.	84213	84238	84262	64286	84311	93894	93911	93928	93944	93961
MAINTENANCE	20452	20452	20452	20452	20452	31566	31366	31566	31566	31366
DEPRECIATION	20863	20863	20863	20863	20863	28157	35452	35452	35452	36681
ADMINISTRATION	33440	33++0	<u>33</u> 440	33440	33440	33439	37439	33439	33439	33439
UTHERS	a	0	0	Đ	0	0	0	٥	0	0
TUTAL UPERATING EXPENSES	158968	158993	159017	159041	139066	187056	194368	194385	194401	195647
NET OPERATING INCOME(NUI)	-40523	-33588	-26652	-19716	-12762	-35199	-36939	-31381	-25825	-21498
(NOT BEFORE DEPRECIATION)	-19660	-12725	-5789	1147	8081	-7042	-1487	4071	9627	15183
DIHER INCOME										
INTEREST	o	0	0	٥	8	•	a	ø	0	0
OTHERS	0	Ç	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	G	O	0	٥	0	0
OTHER EXPENSES										
INTEREST IN LONG-TERM LOAMS	33566	31971	33441	36568	37317	33822	33313	30803	28273	23506
INTEREST ON SHORT-TERM LOAMS	9478	29593	51579	63772	68847	118560	191224	250757	321766	410605
OTHERS	G	0		g.	G	Q	σ	¢	Ø	ø
TOTAL	43044	61564	85020	100340	106164	154382	224531	281540	350041	436111
INCOME BERORE TAX	-83567	-95152	-111672	-120056	-118946	-189381	-261476	-312921	+375846	-457609
TAX	0	. 0	.0	0	0	0	0	0	0	0
NET INCOME	-83567	-95152	-111672	-120056	-118946	-189581	-261476	-312921	-375846	-457609
LĒGAL RĒSĒRVE	٥	- <u>\$</u> -	<u> </u>	0	Q.	. 0	Q	Q	_ 0	0
DIVIDENDS	٥		0	0	Ò.	Ō	Ò	õ	Ŏ	Ó
SURPLUS	-83367	~95152	-111672	-120056	-118946	-189561	-261476	-312921	-375666	-457609
			· - · <del>-</del>				· ·			/ • • ·

INCOMÉ STATEMENT											
(YEAR)	1991	1992	1993	1994	1993	1996	1957	1998	1444	2000	-
OPERATING REVENUES PORT DIV.			<del></del> -		<del></del> -		~				
SEC.1 1	26095	27134	26214	29273	30333	31386	32439	33493	34546	35599	
4	21818 541	22851 362	2388 <u>5</u> 562	24918 603	25951 624	27022 648	28092 673	29163 697	20322	31304	
í	78066	81178	84290	87402	90514	94145	97816	101466	722 105117	746 108768	
5	75929	33948	35231	36513	37796	39379	40962	42546	44129	45712	
<u></u>	22230	22989	23747	24506	25264	26109	26954	27798	28643	29488	
TOTAL TOTAL	181416	168682	193949	203215	210462	218709	226936	235163	243390	251617	
10174 1	26095 21818	27154 22851	25214 25885	29273 24918	30333 25951	31386	32439	33493	34546	35599	
5	541	362	382	603	624	27022 648	2#092 673	29163 697	30233	31304 746	
Ă.	78066	81178	84290	87402	90514	94165	97816	101466	103117	100768	
5	32666	33948	35231	36513	37796	39379	40962	42546	44129	45712	
- <u>6</u>	22236	22969	23747	24506	25264	26109	26954	27798	28643	29488	
TOTAL RENTAL DIV	181416	106602	195949	203215	210462	218709	226936	235163	243390	251617	
OTHER DIV.	ŏ	ŭ	ò	ž	ō	0	0	0	0	0	
TOTAL OPERATING REVENUES OPERATING EXPENSES	181416	188682	195949	203213	210482	215709	226936	235163	243390	251617	
OPERATIONS	93975	93989	94003	94017	94031	94046	94065	94082	94100	94117	
MA INTENANCE	31566	31566	31366	31566	31566	31566	31566	31366	31566	31566	
DEPRECIATION ADMINISTRATION	35452	35452	35452	35452	37813	33452	35452	35452	35452	36201	
OTHERS	33439	33439	33439	33439	33439	33440	33440	33440	23449	<b>3344</b> 0	
TOTAL OPERATING EXPENSES	194432	194446	194460	194474	0 196849	0 194506	194523	194540	194558	0	
NET OPERATING INCOME(NOI)	-13016	5764	1419	8741	13633	24203	32413	40623	48832	193324 36293	
(NOI BEFORE DEPRECIATION) OTHER INCOME	22436	29688	36941	44193	32446	39633	67865	76073	84264	92494	
INTEREST	<u>•</u>	0		0	0	٥	0	0	0	0	
OTHERS TOTAL	<u> </u>	0	0	0	٥	70	0	á	Ť	0	
OTHER EXPENSES	٥	0	0	0	0	0	0	٥	0	0	
INTEREST ON LONG-TERH LOANS	22358	18980	15327	12076	9554	1961	6694	4744			
INTEREST ON SHORT-TERM LOANS	518878	647232	B02079	988938	1219396	1502802	1637647	3 <i>752</i> 2235803	4 <i>811</i> 2720410	3869 3316736	
OTHERS	٥	0	ó	, , , , ,	0	2,0000	10,,041	1237003	2720410	2270120	
TOTAL	541256	666212	317606	1001034	1228950	1510763	1844341	2241555	2725221	3320605	
INCOME BERORE TAX TAX	-554252	-671976	711516- T	-992293	-1215317	-1416560	-1611928	-2200932	-2676389	-3264312	
NET INCOME LEGAL RESERVE	-554252	-671976	-816117	-992293	-1215317	-1486560	-1611925	-2200932	-2676389	-3264312	
DIVIDENDS	ă.		<del></del>	<del></del>	· 🕌		X	ŏ	- 0	0	
SURPLUS	-554252	-671976	-916117	-992293	-1572311	-1486560	-1811928	-2200912	-2676389	-3264312	

INCOME STATEMENT

(YEAR)	2001	2002	2003	2004	2095	2006	2007	2006	2009	2010
OPERATING REVINUES PORT DEV.										
SFC-1	36652	37705	38759	39812	40865	41918	41916	41918	. 1014	
2	32375	33445	34516	35586	36657	32728	32728	32728	41918 32728	+1918
;	770	795	819	844	868	892	892	892	892	32728
*	112419	116070	119720	123371	127022	130673	130675	130673	130673	892
Ţ.	47295	48878	50462	52045	53628	55211	55211	55211		130673
i	30333	31178	32022	32867	33712	34557	34557	34557	55211	55211
TOTAL	259844	261071	276298	284525	292752	295979	293979	295979	34557	34557
ToTAL 1	36652	37705	38759	39812	40865				295979	295979
111176 ]	32375	33445	34516	35586	36657	41918	41918	41918	41918	41918
<u> </u>	770	795	819	844		32728	32726	32728	32728	32728
ب	112419	116070	119720	123371	868 127022	892 130673	892	892	892	892
*	47295	48878	50462	52045			130673	130673	130673	130673
•	30333	31178	32022	32867	53628 33712	55211	55211	55211	55211	55211
, b		268071	276798			34557	34537	34557	34557	34557
TOTAL	259844		210278	284525	292752	295979	295919	295979	295979	295979
HENTAL DIV.	0	Q.		0	ū	ō	o.	ō	Q	0
DTHEH DIV.	0	2.22	0		0	0	0	0	0	. 0
TUTAL OPERATING REVENUES	259844	268071	276298	284525	292752	295979	295979	295979	295979	293979
OPERATING EXPENSES										
DPERATIONS	94135	94152	94169	94186	94204	94221	94238	94256	94273	94290
HAINTENANCE	31566	31566	31566	31566	31566	31566	31566	31566	31566	3156 <del>6</del>
DEPRECIATION	35452	35452	35452	35452	35501	35452	35452	35452	35452	35452
ADMINISTRATION	33440	23440	33440	33440	33440	33440	33440	33440	33440	33440
DTHERS	_ 0	Q	.0	0	0	0	0	٥	0	0
TOTAL OPERATING EXPENSES	194593	194610	194627	194644	194711	194679	194696	194714	194731	194748
NET OPERATING INCOME(HOI)	65251	73461	81671	89881	98041	101300	101283	101265	101248	101231
(NO! BEFORE DEPRECIATION)	100703	108913	117123	125333	133542	136752	136735	136717	136700	136683
OTHER INCOME										
INTEREST	٥	0	0	0	0	0	0	0	0	٥
OTHERS	0	Ó	•	0	0	ō	0	O	ō	ō
TUTAL	0	0	٥	٥	9	٥	0	٥	Ó	Ō
OTHER EXPENSES										
INTEREST ON LONG-TERM LOANS	2928	1987	1064	379	73	1	1	1	1	1
INTEREST ON SHORT-TERM LOANS	4047900	4933443	6009300	7321144	8921059	10882249	13278302	16198668	19767995	24141124
OTHERS	0	Ò		0	٥	0	0	0	0	0
TOTAL	4050828	4933430	6010364	7321523	8921132	10882250	13278303	16198669	19767996	24141125
INCOME BERORE TAX	-3985577	-4861969	-5928693	-7231642	~6523091	-1D780950	-13177020	-16097404	-19666748	-24039894
TAX	ō	. 0	0	Q	. 0	Q		. 0	0	0
NET INCOME	-3985577	-4861969	-5928693	-7231642	-8823091	-10780950	-13177020	-16097404	-19666748	-24039894
LEGAL RESERVE	0	<u>0</u>	0	0	0	0	٥	٥	0	0
DIVIDENDS	0	₹	0	0	0	0	5	0	0	0
SURPLUS	-3985577	-4661969	-5928693	-7231642	~8823091	-10780950	-13177020	-16097404	-19666748	-24039894
						-				

		(20 BA	LANCE SHEE	T						
CYEAR	) 1981	1982	1983	1984	1985	1986	1937	1985	1989	1990
ASSETS	-									
11 4UM	0	0	0	Q	Õ	0	o	٥	0	<u>o</u>
: XCLSS	o o			٥	à	ō	0	0	0	0
TUTAL CASH	Ō	Q	<u>Q</u>	. 0	Ď	ō	0	0		ŏ
RECEIVABLES	Ŏ	0	0	Ď.	0	0	0	ŭ	Č	×
INVENTORIES	<u>0</u> _	<del></del>	<u> </u>			— ¥	<del></del>	X	<del>-</del>	ĕ
OTHER CURRENT ASSETS	V	Ů,	Ž	ž	ň	ž	ŏ	ž	n	ŏ
TOTAL CURRENT ASSETS	v	· <u>'</u>	<u>v</u>		<b>u</b>	- Ā	•			•
PORT DIV.	98991	101236	123786	185076	185286	185286	185286	185286	185286	185286
RENTAL DIV.	70772		447.70	0	0	-1,110	Ĉ	0	Ō	0
OTHER DIV.	Ď	ŏ	Ď	ŏ	õ	ŏ	0	0		0
TOTAL	98991	101256	123786	185076	185286	185286	185286	185286	185286	165286
OTHER PROPERTIES										
PORT DIV.	660887	640024	619161	598298	377435	919733	884281	848829	813377	801286
RENTAL DÍV.	0	0	0	0	Õ	~ Q	0	ō	<u>Q</u>	Q
DTHER DIV.	Q	0	0	0	0	v			******	401046
TOTAL	4 660887	640024	619161	595298	577432 762721	919733 1105019	38428I 1069567	<u>848829</u> 1034115	998663	986572
TOTAL FIXED ASSETS	159818	741280	742947 136575	783374 101580	122895	1105014	1007261	703-113	770005	,,,,,,,
OTHER ASSETS	0 759878	9405 730685	19522	884954	885616	1105019	1069567	1034115	998663	986572
TOTAL ASSETS	(34810	130067	017246	504734	407020	4203027	100,000			
LIABILITIES C COUITY										
LONG-TERM LOANS, CURRENT	32082	32082	45818	45818	45818	45616	42618	46606	55027	62583
SHORT-TERH LOANS	94786	201157	314643	323079	365400	820202	1092044	1415331	1802351	2303696
OTHER CURRENT LIABILITIES	0	0		0	0	0	0	0	0	0
TOTAL CURRENT LIABILITIES	12686A ~	233239	360461	368897	411218	066020	1137862	1461937	1858178	2366279
LONG-TERM LOAMS	563577	342535	625822	674594	671541	625723	579905	533299	477472	414889
OTHER LONG-TERH DEBT	0	0		0	47751	428723	579905	533299	477472	414589
TOTAL LONG-TERM DERT	263577	342535	625822	674594	671541	625723		323535	۵	424007
OTHER LIABILITIES	690443	774774	De6181	1043491	1082759	1491743	1717767	1995236	2335650	2781168
TOTAL LIABILITIES	670443	_ 775774	986283	7043447	*******	7.15T.		-		
CAPITAL A	133000	153630	143630	251910	332250	332250	332250	332230	337250	332250
CAPITAL B	433440	ð		0	0	0	0	0	٥	0
TOTAL CAPITAL	153000	153630	163630	251910	332250	332250	332250	332250	<u> 33</u> 225 <u>0</u>	332290
LEGAL RESERVE	==		0	- 6	- 0	0	0	0	0	-313(816
SURPLUS	Ģ	-178719	-290391	-410447	-529393	-718974	-980450	-1293371 -980450	-1669237 -1293371	-2126846 -1669237
RETAINED EARNINGS	.0	- (356)	-176719	-240391	-410447	-529393	-716974 -261476	-312921	-375866	-457609
HET INCOME	-83567	-95152	-111672	-120056	-118946 -197143	-189381 -366724	-648200	-981121	-1336987	-1794396
TOTAL EQUITY	69433	-25089	-106761	-158537 884954	885616	1105019	1069367	1034115	998663	986572
TOTAL CLABICITIES & EQUIT	Y 759878	750665	879522	554734	203010	********		*** . * * * *		

BALANCE SHEET

(YEA	K) 1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS.										
CASH MINIMUM	0	٥	0	٥	0	0	٥	٥	0	0
CASH FACESS	0	0	ō	0	٥	0	0	0	0	٥٠
TUTAL CASH	0	0	a	0	0	0	q	٥	0	Q.
NECT IVAPLES	0	٥	0	٥	0	O.	٥	0	Q	0
INVE ITURIES	C	0	0	0	٥	0	0	٥	D	0
I THEY CURKENT ASSETS	0	0	O-	0	0	0	0	0	٥	0
TOTAL CURRENT ASSETS	0	0	0	0	0	0	0	0	0	O
LAND										
PUHT DIV.	185286	185286	185286	185286	185286	185286	165286	165286	165286	185286
HENTAL DIV.	0	0	٥	٥	0	0	0	0	0	0
UTHER DIV.	٥	٥	0	Q	Q	0	0	٥	. 0	. 0
TUTAL	185286	185286	185286	165286	185286	185286	105286	185286	185286	185286
LTHER PHUPFRTIES										
POHT DIV.	765834	730382	694930	659478	692505	724553	689101	653649	618197	636546
HENTAL DIV.	0	0	0	0	0	0	Ģ	Ō	0	0
UTHER DIV.		D	0	0	0	. 0	0	0	D	0
TOTAL	765834	730382	694930	659478	692305	724553	689101	653649	618197	636546
TOTAL FIXED ASSETS	951120	915668	880216	844764	877791	909839	874387	838935	803483	821832
OTHER ASSETS	0	Q		0	0	0	0	0	0	0
TOTAL ASSETS	951120	915668	880216	844764	877791	909839	874387	838935	803483	621832
LIABILITIES & FOUTTY										
LONG-TERM LOANS, CURRENT	65637	65637	65637	33555	33555	19819	19819	19819	19819	19819
SHORT-TERM LOAMS	2885079	3387240	4433542	5456020	6737919	6290082	10086377	12271676	14932432	18234912
UTHER CURRENT LIABILITIE		0	0	0	0	0	Û	0	0	Q
TOTAL CURRENT LIABILITIE		3652877	4499179	5489575	6771474	8309901	10106196	12291495	14952251	18254751
LUNG-TERM LUANS	349252	283615	217978	164423	150868	131049	111230	91411	71592	51773
OTHER LONG-TFOM DEBT	Q.	0	D	0	0	0	a	0	0	0
TOTAL LONG-TERM DEBT	349252	283615	217978	184423	150868	131049	111230	91411	71592	51773
UTHER LIABILITIES	q	· · · · · · · · ·	0	O	0	0		0		C C
TOTAL LIABILITIES	3299968	3936492	4717157	5673998	6922342	8440950	10217426	12362906	15023843	18306504
CAPITAL A	332250	332250	332250	332250	332250	332250	332250	332250	332250	332250
CAPITAL B		. 0	0	0	Q	0	0	0	0	0
TOTAL CAPITAL	332250	33225 <u>0</u>	332250	332250	332250	332250	332250	332250	332250	332250
LEGAL RESERVE	Q		0	. 0	0	0	q	0	. 0	0
SURPLUS	-2681098	-3353074	-4169191	-5161484	-6376801	-7863361		-11076221		
RETAINED EARNINGS	-2126846	-2681098	-3353074	~4169191	-5161484	-6376801	-7863361		-11876221	
NET INCOME	-554252	-671976	~816117	-992293	-1215317	-1486560	-1811928	-2200932		-3264312
TOTAL EGUITY	-2348848	-3020824	-3836941	+4829234	-6044551	-7531111	~9343039		-14220360	
TOTAL LIABILITIES & EQUI	TY 951120	915668	860216	844764	877791	909839	874387	138935	803483	821832

		(	BALANCE SH	EET						
(YEAR)	2001	2002	2003	2004	2905	2006	2007	2008	2009	2010
SETS	_			_	-		_			
IASH MINIMUM IASH EXCESS	0	ō.	<u> </u>	0	9	Š	Ó	0	Q 0	0
TOTAL CASH	õ	ō	ŏ	ă	ō	õ	ŏ	ŏ	ŏ	ō
RECEIVABLES Inventories	0	0	0	٥	0	0	Þ	0	0	0
"" * CURRENT ASSETS	Ü	<u>_</u>	<del></del>	<u>~</u>	<u>_</u>	<del></del>	<del></del>	<del>-</del>		<del></del>
" CURRENT ASSETS	ŏ	ŏ	. <u> </u>	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ
PORT DIV.	185286	185286	185286	185286	185286	185286	185286	185286	185286	185286
RENTAL DIV.	707200	103260	Yeared	10,280	10,260	193280	103200	102200	10,200	10,500
DIHER DIV.	_0			0	ē		ě	š	قـــــ	. 0
TOTAL THER PROPERTIES	185286	185286	155286	185286	185286	185286	185286	145246	185286	185286
PORT DIV.	640334	604882	569430	533978	500937	338835	502383	467931	432479	492457
RENTAL DIV.	0	0	Ō	o	٥	Ō	0	Ō	0	0
OTHER DIV. TOTAL	640334	0 258406	569430	533978	500937	0	2003	467931		
OTAL FIXED ASSETS	825620	790168	754716	719264	686223	<u> </u>	593393 64669	633217	432479 617763	<u> 492497</u> 677743
THER ASSETS	0	0	0	0	Ö	0	٥	Ō	0	0
GTAL ASSETS	825620	790168	754716	719264	686223	724121	688669	653217	617765	677743
ABILITIES & EQUITY				-						
ONG-TERM LOAMS CURRENT	19819	19031	9810	3054	0	0	QQ	0	9	
HORT-TERM LOAMS THER CURRENT LIABILITIES	22244096	27090432	33002704	40206704	49001808	39420636	72962224	89024176	108655472	132755344
DTAL CURRENT LIABILITIES	22263915	27109463	3351251	40211758	49001808	59820656	72962224	89024176	108655472	132755344
DNG-TERM LOANS	31954	12923	3113	59	39	59	59	39	59	59
THER LONG-TERM DEBT OTAL LONG-TERM DEBT	31954	12923	3115 2115	9	0 39	.0	0 99	.0	.0	.0
THER LIABILITIES	72.7 <u>7</u>	- 22723		7	· <del></del>		75		23	7
OTAL LIABILITIES	22295869	27122386	33015627	40211817	49001867	59820715	72962283	89024235	108655531	132755403
APITAL A	332250	332250	337250	332250	332250	332250	352250	332250	332250	332250
APITAL B	0	_ Q	0		ø	, D	0	Ò	0	0
ITAL CAPITAL EGAL RESERVE	3322 <u>50</u>	332250	332250	332750	332750	337250	332250	332230	222250	332250
JAPLUS	-21802499	-26664468	-32593161	-39824803	-46647894	-59428844	-72605864	-88703268	-108370016	-132409910
RETAINED EARNINGS	-17616922	-21802499	-26664468	-32593161	-59624105	-48647894"	-34478844	-72603664	-44703268	-108370016
HET INCOME	-3985577		~5928693	-7231642	-1123091	-10780950	-13177020	-16097404	-19666748	-24039894
DIAL LIABILITIES & EQUITY	825620	790168	754716	719264	686223	-59096594 724121	688669			-132011660 677743

(8) SOURCE & APPLICATION OF FUNDS

(YEAR)	1961	1952	1863	1984	1985	1986	1987	1988	1989	1990
SHURCES										
NET 1 ICTIME	-83567	-95152	-111672	-120056	-110014					
DEPRECIATION	20863	20863	20863	20863	-118946 20863	-189581	-261476	-312921	-375866	~457609
LUNG-TERM LOAIS		11040	129105	94590		28157	35452	35452	35452	36681
ATHEN LUNG-TERM DERT.	ō		12.100	77790	+2765	Q	0	0	٥	Š
INCREMENT		•	•	U	0	0	0	0	C	Ö
ATHER LIABILITIES, INCREHENT	0	O-	C	0	٥		_			
CAPITAL, I ICHEMENT	ō	630	30000	68280	80340	0	0	0	٥	0
TUTAL	-62704	-62619	68276	63677			O	0	Õ	Ó
APPL[ATION:			04470	02411	25022	-161424	-226024	-277469	-340414	-420928
TAKES & DIVIDENDS	٥	0	٥	0	0	_	_			
ADDITIONS TO FIXED ASSETS	ō	2265	22530	61290		470.00	O.	Q	0	0
REPAYMENT OF LONG-TERM LOAMS	32062	32082	32082	45818	210 42618	370455	0	. 0	Ç	24590
OTHER ASSETS, INCREMENT	0	9405	127170	-34995	21315	45818	45818	45818	+6606	55827
TOTAL	32082	43752	181782	72113	67343	-122895	0	0	c	۵
INCREASE IN MORKING CAPITAL	-94786	-106371	-113486	-8436	-+2321	293378	45818	45816	46606	80417
				4436	442321	-454802	-271842	-323287	-387020	-501345
INCREASE COMPONENTS										
CASH, INCREMENT	0	0	0	0	•					
RECEIVABLES, INCHEMENT	0	٥	Ď	ă	ň	Ž	0	ā	Ō	0
INVENTORIES, LUCREMENT	0	0	ò	ā	×	×	Ÿ	Ģ	Ò	٥
OTHER CURRENT ASSETS,	0	Ó	ō	ň	×	ň	a a	Ġ	0	0
INCHEMENT			-	-	•	v	V	Q	O	0
TOTAL	0	0	0	0	0	D	0			_
					•		U	0	٥	٥
DECREASE CUMPONENTS										
SHORT-TERH LOAMS, INCREMENT	94786	106371	113486	8436	42321	454802	271842	323287	****	
DIHER CURRENT LIABILITIES,	0	0	0	Ö		7,7002	5.7045	252501	387020	501345
INCREHENT				_	•	•	•	v	U	B
TOTAL	94786	106371	113486	8436	42321	454802	271842	323287	387020	501345
									201050	JV2343

		SOURČE	L APPLICA	Ť[ON OF FU	NDS		-			
(YEAR)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GURCE:			<del></del> .							
NET INCOME DEPRECIATION	-554252 35452	~67197 <u>6</u> 35452	-816117 37452	-992293 35452	-1215317 37813	-148656D 35452	-1811928 35452	-2200932 35452	-2676389 35452	-3264312 36201
LONG-TERM LOAMS	0	.0	. 0	0	0	2,772	23432	33432	33432	36201
OTHER LONG-TERH DEBT. INCREMENT	0	Ō	D	- 0	ō	ō	Ó	ō	ō	õ
OTHER LIABILITIES, INCREMENT	0	0	0	0	0	0	0	ō	0	0
CAPITAL, INCREMENT TOTAL	-518800	+636524	740445							
PLIATIONS	-375900	-636324	-780665	-956841	-1177504	-1451108	-1776476	+2163460	-2640937	-3226111
TARES & DIVIDENDS	0	0	Ö			ō	ō	0	٥	G
ADDITIONS TO FIXED ASSETS REPAYMENT OF LONG-TERM LOANS	62583	65637	65637	65637	70840 33355	<u>67300</u>	19819	19819	- 0	24250
DTHER ASSETS, INCREMENT	0		00	. 0	. 0	23333	74074	17019	19819	19819
TOTAL NOREASE IN WORKING CAPITAL	62583	65637	65637	62637	104395	101055	19819	19819	19819	74369
MCHEASE IN MOREING CAPITAL	-581383	-702161	-846302	-1022478	-12 <u>818</u> 99	-1592163	-1796295	-2185299	- <u>26</u> 69724	-3302480
HCREASE COMPONENTS										
Cash, increhent Receivables, increment	0	0	Ŏ	0	ŏ	0	0	0	0	0
INVENTORIES, INCREMENT	ŏ	ŏ		ŏ	ő	č	ŏ	č	ŏ	ŏ
OTHER CURRENT ASSETS,	٥	0	0	٥	٥	ō	ō	Ď	ō	Ō
INCREMENT TOTAL	0	0	0	0	_ 0	0	0	٥	. 0	٥
ECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	581383	702161	846302	1022478	1281899	1552163	1796295	2165299	2660756	3302480
DTHER CURRENT LIABILITIES, INCREMENT	٥		0	٥	0	_ 0	0	D	0	۵
TOTAL	381383	702161	846302	1022478	1281899	1552163	1796295	2185299	2660756	3302480
			•							
									-	
					_					

SUURCE & APPLICATION OF FUNDS

(PASY)	2001	2002	2003	2004	2005	2906	1001	2008	2004	2010
ST JACE:										
THE T INCOME	-3985577	-4861969	-5928693	-7231642	-8623091	-10780950	-13177020	-16097404	-19666748	-24039894
GEP4ECIATITA	35452	35452	35452	35452	35501	35452	35452	35452	35452	35452
LAMG-TERM LEA S	0	0	0	Q	0	0	0	0	0	0
THER LUNG-TERM DEBT     INCREMENT	٥	٥	o	0	0	0	٥	0	0	0
ETHER CIABILITIES, INCREMENT	0	٥	0	0	0	0	5	0	0	0
CAPITAL, INCREMENT	O	0	0	0	Ó	Ó	0	Ó	ō	Ó
TLYAL	-3930125	-4826517	-5893242	-7196190	-8787590	-10745498	-131+1568	-16061952	-19631296	-24004442
APPLIATION:										
TAXES & DIVILANDS	٥	0	0	Q.	0	٥	٥	Q	0	0
AUDITIONS TO FIXED ASSETS	39240	0	0	0	2460	73350	0	a	0	95430
HEPAYMENT OF LONG-TERM LOANS	19819	19819	19031	9810	3054	0	D	0	0	0
OTHER ASSETS, INCREMENT	0	0	0	0	0	ė	0	0	0	0
TUTAL	59059	19819	19031	9810	5514	73350	Ð	0	0	95430
INCHEASE IN WIRKING CAPITAL	-4009164	-4846336	-5912272	-7206000	-8793104	-10815548	-13141568	-16061952	-19631296	-24099872
INCREASE CUMPILLENTS										
CASH, INCREMENT	٥	0	0	٥	0	٥	0	0	0	٥
RECEIVABLES, INCREMENT	۵	Ů	0	0	0	Q	0	0	0	0
Inventuries, increment	۵	٥	0	0	0	0	¢	0	0	٥
UTHER CURHENT ASSETS, INCREMENT	٥	0	0	0	0	٥	0	0	٥	0
TUTAL	٥	¢	0	Q	0	q	0	0	ō	0
DECREASE CUMPOSENTS										
SHORT-TERM LDAMS, INCREMENT	4009184	4846336	5912272	7206000	6773104	10818848	13141568	16061952	19631296	24099872
OTHER CURRENT LIABILITIES, INCREMENT	٥	0	0	0	Q	0	å	0	٥	0
TOTAL	4009184	4846336	3912272	7206000	8793104	10816648	13141568	24061952	19431296	24099872

Table A-11-8 (Case 2-B)

III INCOME STATEMENT

(YEAR)	1981	1982	1983	1984	1935	1986	1987	1988	1989	1998
OPERATING REVENUES										
PORT DIV.										
SEC.1 1	14599	15717	16834	17952	19069	20262	21455	22649	23842	25035
2	18879	18693	18908	18922	18937	19307	19676	20046	20415	20785
3	330	354	377	401	424	443	462	482	501	520
	22074	56493	59909	63324	66739	68382	70022	72668	72321	24954
?	13281	15727 18221	18174	20620	23067	24730	26393	28057	29720	31383
TOTAL	18278 118445	125405	18163	18106	18048	18733	19418	20102	20787	21472
TOTAL 1	14599	15717	132365 16834	139325 17952	146284	151857	157429	163004	168576	174149
3	18879	10893	18908	18922	19069	20262	21455	22649	23842	25035
•	330	354	377	401	18937 424	19307	19676	20046	20415	20765
i	33078	56493	59909	63324	66739	443 68182	462	482	501	520
4	13261	15727	18174	20620	23067	24730	70025 26393	71668 28057	73311	74954
í	18278	10221	18163	18106	18048	18733	19418	20102	29720	21383
TOTAL	118445	125405	132365	139325	146284	151857	157429	163004	20787	21472
RENTAL DIV.	0	0		ó	110200	131031	431727	102004	165576	174149
OTHER DIV.	_ 0	0	ō	ŏ	ŏ	ŏ	š	ž	ŏ	ŏ
TOTAL OPERATING REVENUES	118445	125405	132365	139325	146284	151857	157429	163004	168376	174149
OPERATING EXPENSES							23	103004	100710	11-1-7
OPERATIONS	84213	64238	84262	84286	84311	93894	93911	93928	93944	93961
MAINTENANCE	20452	20452	20452	20452	20452	31566	31266	31366	31566	21266
DEPRECIATION	20863	24663	20863	20863	20863	28157	35452	35452	35452	18661
ADMINISTRATION	33440	33440	33440	33440	33440	32439	22429	33439	33439	21419
OTHERS		0	0	0	. 0	0	0	0	. 0	0
TOTAL OPERATING EXPENSES	158968	158993	159017	159041	159066	187056	194368	194385	194401	195647
NET OPERATING INCOME(NOI) (NOI BEFORE DEPRECIATION)	-40523	-33588	-26652	-19716	-12782	-35199	-36939	-31381	-25825	-21498
DTHER INCOME	-19660	-12725	-5789	1147	8081	-7042	-1487	4071	9627	15183
INTEREST		0				_		_		
OTHERS	<del>- 0</del> -	ŏ-	0	0	0	- 0	Ď.	ō	ـ ہِـ	_ <u>Q</u>
TOTAL	ă	ŏ	ŏ	v D	ŏ	0	0	ō	0	0
OTHER EXPENSES	•	•			v	V	U	0	0	0
INTEREST ON LONG-TERM LOANS	33566	31840	31646	32117	31234	29231	26722	24212	21691	19052
INTEREST ON SHORT-TERM LOANS	9478	29579	51348	62795	66483	114262	184506	241062	308435	392261
DTHERS	٥	Ó		Ď	D	0	104700	D	0	~. 9
TOTAL	43044	61419	82994	94912	97717	143493	211228	265274	330126	411313
			-			* . 4 . 7 . 2		202214	234564	444444
INCOME BERDRE TAX	-83567	-93007	-109646	~114628	-110499	-178692	-248167	~296635	-355951	-432811
TAX	_ 0	0	0	Ó	0	0	Ö	0	0	0
NET INCOME	-83567	-95007	-109646	-114628	-110499	-178692	-248167	-296635	-355951	-432611
LEGAL RESERVE	0	9	0	<b>9</b>	. 0	Q	0	و	_ 0	9
DIVIDENDS	ā	0	0	0	٥	a	0	Ó	٥	- o
SURPLUS	-83567	-95007	-109646	~114628	-110499	-176692	-248167	-296635	-355951	-432811

		ı	NCOME STAT	EMENT						
(YEAR)	1991	1992	1993	1994	1995	1996	1997	1995	1999	2000
OPERATING REVEWES										
SEC.1 1	26095	27154	28214	29273	30333					
2	21818	22851	23885	24918		31386	32439			35599
<b>;</b>	541	562	382		25951	27022	28092		30233	31304
3	78066	81178	84290	603	624	648	673		722	745
2	32666	33948		87402	90514	94165	97816		105117	108768
?	22230		35231	36513	37796	39379	40962	42546	44129	45712
TOTAL		22989	23747	24506	7526	26109	26954		28643	29488
TOTAL 1	181416	168682	193949	203215	210482	218709	226936	235163	243390	221617
19175 1	26093	27154	28214	29273	30333	31386	32439	33493	34546	35599
2	21818	22851	23085	2491B	25951	27022	26092	29163	30233	31304
ş	541	562	582	603	624	648	673	697	722	746
<u>*</u>	78066	B1178	84290	87402	90514	94165	97816	101466	105117	108766
3	32666	33948	35231	36513	37796	39379	40962	42546	44129	45712
6	22230	22989	23747	24506	25264	26109	26954	2779B	28643	29488
TOTAL	181416	166682	195949	203215	210482	218709	226936	235163	243390	251617
HENTAL DIV.	0	0	٥	٥	٥	0	C	٥	٥	٥
CTHER DIV.	٥	0	0	0	٥	0	0	Ó	٥	G
TOTAL OPERATING REVENUES	181416	164682	195949	203213	210482	218709	226936	235163	243390	251617
OPERATING EXPENSES										
OPERATIONS	93975	93989	94003	94017	94031	94048	94065	94082	94100	94117
MAINTENANCE	31566	31566	31366	31366	31366	31566	31366	31566	31566	31566
DEPHECIATION	35452	35452	35452	35452	37813	35452	35452	35452	35452	36201
ADHINISTRATION	33439	33439	33439	33439	33439	33440	33440	33440	33440	33440
OTHERS	0	٥	0	0	6	2,740	22.70		25110	
TOTAL OPERATING EXPENSES	194432	194446	194460	194474	196849	194506	194523	194540	194558	195324
NET OPERATING [NCOHE(NOI)	-13016	-5764	1489	8741	13633	24203	32413	40623	48632	56293
(NOT BEFORE DEPRECIATION)	22436	29688	36941	44193	51446	39655	67865	76075	84254	92494
OTHER INCOME		E,000	307-1	77292	2,744	27022	6000	100.7	D-60-	72777
INTEREST	0	٥	0	0	0	0	0	0	6	0
OTHERS	ă	ŏ	ŏ	ŏ	ŏ	ă	ŏ	ŏ	ŏ	Š
TOTAL	ō	ŏ	ŏ	ŏ	Ž	č	ō	ò		Ď
OTHER EXPENSES	•	•		٠		v	U		v	·
INTEREST DN LONG-TERM LOANS	16223	13279	10297	7317			****	2021	2404	1934
INTEREST ON SHORT-TERM LOAMS		612954			5265	4143	3346	2876		
DIHERS	0	017774	736766	930263	114445D	1408100	1718899	2067780	2536701	3089502
TOTAL			0				0	22224	24424	****
_	309794	626233	767063	937580	1149715	1412243	1722245	2090656	2539105	3091436
INCOME BERGRE TAX	-522810	-631997	-765574	-928839	-1136082	-1386040	-1689832	-2050033	-2490273	-3035143
TAX	Ö	Ö	٥	Ó	ō	0	0	0	0	0
NET INCOME	-522810	-631997	-765574	-928839	-1136082	-1386040	-1689832	-2050033	-2490273	-3035143
LEGAL RESERVE	ā	Ö	0		0	7	0	0	۵	3
DIVIDENDS	ŏ	ă	ň	ň	ă	ň	ă	ň	ă	ŏ
SURPLUS	-522810	-631997	-765574	-928839	-1136087	-1368040	-1689832	-2050033	-2490273	-3035143

INCOME	STATEMENT
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(YEAR)	2001	2092	2003	2004	2005	2006	2007	2008	5000	2010	
OPERATING REVENUES											
PORT DIV.				30040	4044		41014	41918	41918	41918	
SEC.1 1	36692 32375	37705 33445	38759 34516	39812 35586	40865 36657	41918 32728	41918 32728	32728	32728	32728	
Š	770	793	819	844	868	692	892	892	892	892	
<u> </u>	112419	116070	119720	123371	127022	130673	130673	130673.	CTAPET .	120673.	
<u> </u>	47295 30333	48878	50462 32022	52045 32867	53628 33712	55211	55211 34557	55211 34557	55211 34557	55211 34557	
TOTAL	259844	31178 268071	276298	284525	292752	34557 295979	295979	295979	293979	295979	
TOTAL 1	36652	37705	38759	39612	40865	41918	41918	41918	41918	41918	
Ž	32375	33445	34316	35586	36657	32728	32728	32728	32728	32728	
3	110	795	619		868	892	492	892			
•	112419 47295	116070 48878	119720 30462	123371 52045	127022 33628	130673 55211	130673 55211	130673 35211	130673 32211	130673 35211	
2	30533	31176	32022	32867	33712	34557	34557	34557	34557	34557	
TOTAL	239844	268071	276298	264525	292752	295979	295979	295979	295979	295979	
RENTAL DIV.	0	D	- 0	0	0	0	. 0	0	0	0	
DTHER DIV.	0	0	30	20	2002.0			200.000		:	
TOTAL OPERATING REVENUES  OPERATING EXPENSES	259644	268071	276298	284525	292752	295979	295979	295979	295979	295979	
OPERATIONS	94135	94152	94169	94186	94204	94221	94238	74256	94273	94290	
HAINTENANCE	31566	31366	31566	31566	31566	31566	31566	31566	31366.	31566	
DEPRECIATION	35452	35452	35452	35452	35501	35452	35452	35452	35452	35452	
ADMINISTRATION	33440	33440	33440	33440	37440	<u> </u>	_ 33440	22440	33440	11440	
TOTAL OPERATING EXPENSES	194593	194610	194627	194644	194711	194679	194696	194714	194731	194748	
NET OPERATING INCOME (NOI)	65251	73461	81671	69881	98041	101300	101263	101565	101246	101231	
(NO! BEFORE DEPRECIATION)	100703	108913	117123	125333	133542	136752	136733	136717	136700	136683	
OTHER INCOME	0	٥		•							
INTEREST	<del></del> ö-		<del></del>		g	· <del>\</del>			<u>_</u>	ă	
TOTAL	ŏ	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ō	ŏ	
OTHER EXPENSES			<del>-</del>		-					-	
INTEREST ON LONG-TERM LOANS	1464	994	532	190	37	1	1	1	1	1	
INTEREST ON SHORT-TERM LOANS OTHERS	3767394 0	4588394 0	3385252	6801150 0	8284782	10104409	12327398	15036684	19341803	22405332	
TOTAL	3769058	4589388	3585784	6801340	8284819	10104410		15036685	18347804	22405333	
	. <b></b>				••						
INCOME BERORE TAX	-3703807	-4515927	-5504113	-6711439	-8186778	-10003110	-13536310	-14935420	-18246556	-22304102	
NET INCOME	-9703607	-4515927	-5504113	-6711459	-8186778	-10003110	-1222631	-14935420	-18246556	-22304102	
LEGAL RESERVE	<u> </u>		Q	0			Q	Q			
DIVIDENDS	G	0	0	0	0	0	0	0	0	0	
SURPLUS	-3703807	-4515927	-3504113	-6711439	-6146778	-10003110	-12226316	-14935420	-15246556	~22304102	

			20 8	ALANCE SHE	ĘΤ						
(Y	EAR)	1981	1982	1983	1984	1985	1986	1987	1968	1989	1990
455675											
CASH MINIMUM		0	O.	9	G	٥	0	0	0	0	0
CASH EXCESS		D	0	0	0	Ç.	Ō	0	0	0	a
TUTAL CASH		٥	0	0	O.	0	0	٥	٥	٥	0
PECETVABLES		0	O	Ó	.0	0	à	0	a	0	Q
INVENTURIES		Ď	Ď	Ď	ō	Ď	ă	Č	Ġ	Ó	D
THER CURRENT ASSETS		Ó	ā	6	ā	ā	ō	è	ò	Ď	ō
TOTAL CURRENT ASSETS		ó	ň	ň	ō	ň	ň	ŏ	Ď	ŏ	ō
AND		•	•	_	-	•	•	•	-	•	-
PERT 11V.		98991	101256	123786	185076	185286	185286	189286	185284	185226	185286
RENTAL DIV.		0	0	0		0	0	ā	0	0	
PTHER DIV.		ō	õ	Ď	Ď	á	ŏ	Ď	ň	ñ	ň
TITAL		98991	101256	123786	185076	185286	185286	185286	183286	189286	185286
CTHER PROPERTIES			1011-0	125.00	1020.0	2072-0	20,200	.,,	200210	.,,,,,,	.47240
PORT DIV.		660887	640024	619161	598298	577435	919733	884281	848829	813377	801286
RENTAL DIV.		G C	040014	01,101	77840	211732	717133	G	Q	0122.1	501550
UTHER DIV.		õ	0	ó		ž	č	Ö	ŏ	ŏ	č
TE TAL		660387	640024	619161	598298	577435	919733	884281	848829	813377	801286
TOTAL FIXED ASSETS		759878	741280	742947	783374	762721		1069367	1034115	996663	
THER ASSETS				136575			1105019	1059361	102-113	ČODOKK	986572
		0	9405		101580	122895	0		4.54.44.0		244438
TITAL ASSETS		759878	750685	879522	884954	885616	1105019	1069567	1034115	998663	986572
_IABIL'TIES & FOUTTY											
L ING-TERM LOANS, CURPEN	7	32082	32082	45818	45818	45818	45818	45818	46212	50822	54200
SHORY-TERM L. ANS	,	94786	201012	312472	315480	349354	793267	1051800	1358621	1725531	2197074
THEH CUPRENT LIABILIT	IFS	0	0		0	020	0	0		0	0
TITAL CUPPERT LIABILIT		126868	233094	358290	361298	395172	839083	1097618	1405033	1776334	2251274
LUNG-TERM LUANS		563577	537015	355749	557226	532791	486973	441155	394943	344121	289921
THER LING-TERM DEBT		٥	33.013	0	33,550	7,71,72	0	4-7123	3,1,77	37711	£07723
TUTAL LONG-TERM DEBT		563577	537015	595749	557226	532791	486973	441155	394943	344121	289921
THER LIABILITIES		0	337013	222/49	22.220	732131	-007/3	*****	7,4,47	24475	207721
T TAL LIANILITIES		690445	770109	914039	918524	927963	1326038	1538773	1799976	2120475	2541195
		070445	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		720,24	,,,,,,	1520030			1200113	.,,
CAPITAL A		153000	159150	253703	369278	471000	471000	471000	471000	471000	471000
CAPITAL B		0	٥	. 0	C	٥	C	Ö	. 0	0	0
"TTAL CAPITAL		153000	139130	233703	369278	<b>471000</b>	471000	471000	471000	471900	+71000
LEGAL RESERVE		0	0	0	0	0	0	0	0	0	0
1 AP_ JS		0	-178574	-288220	-402848	-513347	-692039	-940206	-1236861	-1592812	-2025623
RETAINED EARLINGS		O	-83567	-176574	-288220	-402848	-523347	-692039	~940205	-1236861	-1592812
NET INCOME		-83567	-95007	-109646	-114628	-110499	-178692	-248167	-296655	-355951	-432811
TOTAL EQUITY		69433	-19424	-34517	-33570	-42347	~221039	-469206	-765861	-1121812	-1554623
TITAL LIABILITIES & EQ	ULTY	759878	750685	679522	884954	485616	1105019	1069567	1034115	998663	986572

BALANCE SHEET

(YEAR)	1991	1992	1993	1994	1993	1996	1997	1998	1999	2000
ASSE7S										
CASH HINIHUM	٥	0	0	•	۵			_		
CASH EXCESS	ō	ō	č	ň	ű	0	0	ō	Ď	¢.
TOTAL CASH	ō	ă	ñ	ň	č	ŭ	٥	0	0	0
RECEIVABLES	Ó	ō	ñ	ň	š		0	9	ō	Ō
INVENTORIES	Ō	Ď	ă	ă	ž	9		0	0	0
THER CURRENT ASSETS	Ò	č	ŏ	ň	ă	Ž	9	ō.	ō	<u>.</u>
"AL LURRENT ASSETS	0	Ğ	ă	ŏ	č	,	ŏ	Ů.	ō	0
£ 8140			•	_	•	Ų	U	U	Ū	0
PORT DIV.	183286	185286	185286	185286	185286	185286	165286	185286		
RENTAL DIV.	0	0	0	Ď		10,200	107100	10/200	185286	165286
OTHER DIV.	0	0	Ó	õ	ā	ň	ņ	ŏ	ŏ	ň
TOTAL	183286	185286	165286	165266	695691	185286	185286	185286	185286	185286
DTHER PROPERTIES			-			201200	107600	14,700	701560	103200
PORT OIV.	763834	730382	694930	659478	692505	724553	689101	653649	618197	436546
RENTAL DIV.	0	0	Ō	0	a		00,101	0,504,0	070711	0
DTHER DIV.	٥	0	0	Ō	ŏ	ŏ	ň	ň	×	×
TOTAL	762834	730382	694930	459478	492505	724553	689101	653640	616197	636546
TOTAL FIXED ASSETS	951120	715668	880216	844764	877791	909139	874387	838935	803483	621632
OTHER ASSETS	Ø	0	0	0	D	0	0	0.77.50	002403	01177
TOTAL ASSETS	951120	915668	880216	844764	877791	909839	874387	838935	803483	821832
						,,,,,,,	2. 174.	224722	005-05	021436
LIABILITIES & EQUITY										
LONG-TERM LOAMS-CURRENT	55727	55727	33727	23645	23645	9909	_ 9909	9909	2902	9909
SHORT-TERH LOAMS	2738632	3390904	4176753	5125667	6316621	7762354	9426643	11451133	13915463	16979264
OTHER CURRENT LIABILITIES	0	0	0	٥	0	0	0	Ó	C	Ġ
TOTAL CURRENT LIABILITIES	2794359	3446631	4232480	5149512	6342266	7772263	9436552	11461042	13925772	16989173
LONG-TERM LOANS	734194	178467	122740	99095	75450	65541	55632	45723	35814	25905
OTHER LONG-TERM DEBT	0	0	. 0	D	0	٥	0		Ö	
TOTAL LONG-TERM DEBT	234194	<u> </u>	122740	99095	73450	45541	25632	43723	35614	25905
OTHER LIABILITIES	0		0	0	0	0	Ö	0	Ö	č
TOTAL LIABILITIES	3026353	3623098	4355220	5248607	6417716	7837804	9492184	11506765	13961586	17015078
CAPITAL A	471000	<b>471000</b>	471000	471000	471000	471000	471000	471000	471000	.7.000
CAPITAL B	0	0		712000	412000	711000	411000	********	417000	471000
TOTAL CAPITAL	471000	471000	471000	471000	471000	471000	471000	471000	471000	471000
LEGAL RESERVE			77.02.56	2.0288	*******	4 TTANA	-TITA AN	317A00	\$71000	471000
SURPLUS	~2548433	-3189430	~3946004	-4674843	-6010925	-7398965	_ane4707	-11138830	-11630103	14464344
RETAINED EARNINGS	-2025623	-2548433	-3180430	-3946004	~4874843	-6010923	-7398963	-9018107	-11138830	-1167017640
NET INCOME	-522810	-631997	-765574	-928839	-1136032	-1388040	+1689832		-2490273	-3035143
TOTAL EQUITY	-2077433	-2709430	-3475004	-4403843	-5539925	-6927965		-10667830		
TOTAL LIABILITIES & EQUITY	991120	913660	880216	444764	877791	909639	174387		603463	
		/ <del>**</del> * * * *		H 1 187	Z:17X7	352052	_ 14.44	- 37° L32	EV # 7 D.2	_P41926

BALANCE SHEET										
(PEAR)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ASSETS										
CASH MINIMUN	0	0	Ð	٥	Ð	0	a	n	0	
CASH EXCESS	٥	ŏ	ă	õ	õ	ŏ	õ	Ď	ã	š
TOTAL CASH	0	G	ò	ō	ō	ō	ŏ	Ď	Ď	ō
RECEIVABLES	0	٥	ō	ō	٥	ä	ā	Č	ě	š
INVENTORIES	t)	0	Q	٥	٥	Ó	· ·	i û	Ď	D
MIMER CURRENT ASSETS	0	G	C	0	0	Ó	þ	. 5	ō	Ġ
TUTAL CUPRENT ASSETS	0	0	0	ð	9	0	Ċ	C	Ō	C
LAND										
PORT DIV.	185286	195286	185286	185786	185288	185286	135286	185284	145286	185286
HENTAL DIV.	0	0	0	D.	0	0	0	0	Ţ.	0
DTHER DIV.	0	0	0	0	O	0	o	_ 0	ø	5
TOTAL	185286	185286	185256	165286	185286	185286	185286	185286	183286	185286
DINER PHOPERTIES								_		
PURT DIV.	640334	604882	569430	533978	200937	538835	503383	467931	437479	492457
RENTAL DIV.	0	0	ò	0	٥	0	Ċ	٥	Ĉ	Ģ
DIHER DIV.				Đ				J	ΩΩ	3
TOTAL	640334	604882	569430	533978	500937		503383		432479	492457
TOTAL FIXED ASSETS DIHER ASSETS	623620	340168	754716	719264	666223		688669	653217	617765	677743
TOTAL ASSETS	*25.70	700110	0				0			, Ç
INIAL #22512	625620	790168	754716	719264	686223	154151	638669	653217	617765	677743
LIABILITIES & FOULTY										
LUNG-TENM LDAYS CURRENT	9949	9315	4905	1327	a	c	D	n	a	O
SHORT-TERM LOAMS	20696768	25187152	30665328	37346240			67733376	62633344	10084448	123208528
UTHER CURRENT LIABILITIES	0	0	0	0	0	0	0	D	0	5
TOTAL CURRENT LIABILITIES	20706677	25196667	30670233	37347767	45501504	35542512	67733376	82633344	10084448	123208528
LONG-TERM LOAMS	15996	6481	1376	49	49	49	49	49	49	49
DIMER LONG-IFAM DEBT	0	0	ō	٥	Ö	Ø	Ó	Đ	c	Ď
TOTAL LONG-TERM DEBT	15996	6481	1576	49	49	49	49	49	49	49
OTHER LIABILITIES	0	٥	0	σ	o	σ	0	ð	σ	ø
TOTAL LIABILITIES	20722673	25203146	30671809	37347816	45501553	55542561	67733425	02633393	100644497	123208577
CAPITAL A	471000	471000	471000	471000	471000	471000	471000	47100p	471000	471000
CAPITAL B	G	Ď	0	0	0	ů.	0	0	0	0
TOTAL CAPITAL	471000	471000	471000	471000	471000	471000	471000	4710c0	471000	471000
LEGAL RESERVE	0	Ö	Ö	0	Ó	0	Č		0	- C
SURPLUS	-20368053	-24883980	-30388093	-37099552	-45286330	~55289440	-67513756	-82451176-	100697732-	123001634
HETAINED EARNINGS	-16664246	-20368053	-24883960	-30368093	-37099552	-45266330	-55269440	-67515756	*82451176·	100697732
NET INCOME	-3703007	-4313927	-5504113	-6711459	~8186778	-10003110	-12226316	-14935420	~18246556	-22304102
TOTAL EQUITY	-19897053	-24412980	-29917093	-36628552	-44815330	-54818440	-67044756	-81980176-	-100226732:	122535834
TOTAL LIABILITIES & EQUITY	825620	790168	754716	719264	686223	724121	688669	6532 <u>1</u> 7	617765	677743

(8) SOURCE & APPLICATION OF FUNDS

(YEAR)	1981	1982	1983	1984	1985	1986	1987	1986	1989	1990
SQURCE:							-			
NET INCOME DEPRECIATION LONG-TERM LOANS	-83567 20863 0	~95007 20863 5520	~109646 20863 64552	-114628 20863 47295	-110499 20863 21383	-178692 28157 Q	-248167 35452 0	-296655 35452 0	-353951 35452	-432811 36681
OTHER LONG-TERM DEBT.	0	0	٥	0	0	Ó	Ò	ő	0	
DIMER LIABILITIES, INCREMENT CAPITAL, INCREMENT TOTAL	0 0 -6270 <del>4</del>	6150 -62474	94553 70322	115575 69105	101722 33469	0 0 -150535	-212715	0 -261203	-320499	0000
APPLIATION: TAXES & DIVIDENDS ADDITIONS TO FIXED ASSETS REPAYMENT OF LONG-TERM LOANS	0	2365	55220	61290	0	0 - 370452	0	0	a	-34590 
OTHER ASSETS, INCREMENT TOTAL INCREASE IN WORKING CAPITAL	32082 0 32082 -94786	-32062 9405 43752 -106226	32082 127170 151742 -111460	45818 -34995 72115 -3008	45618 21315 67343 -33874	45818 -122893 293378 -443913	45618 0 45818 -236333	45818 0 45818 -307021	46212 0 46212	50822 0 75412
INCREASE COMPONENTS				-5400	-32414		-676547	~3010 <u>5</u> T	-366711 _	. <del>=1</del> 7134 <u>2</u> ,
CASH, INCREMENT RECEIVABLES, INCREMENT INVENTORIES, INCREMENT	_ 0	_ 0	_0	0	0	0	<u>a</u> 9	0	0	0
DTHER CURRENT ASSETS, INCREMENT	ŏ	ŏ	ŏ	o	ő	0	ů	9	Q	0
TOTAL	0	0_	0	0	0	0	0	0	n	
DECREASE COMPONENTS						- · <del></del>	¥		<u></u>	
SHORT-TERM LOANS, INCREMENT OTHER CURRENT LIABILITIES, INCREMENT	94786	106226	111460 0	3008 0	33874 0	443913 0	256535 0	307021 0	366711 D	471542
TOTAL	94786	106226	111460	3008	33474	441712	_228523_	307021	266711	471542

SOURCE & APPLICATION OF FUNDS										
(YEAR)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
SOURCE:										
NET INC IME	-522810	~631997	-765574	-928839	-1134003					
BEPRECIATION	35452	35452	35452	35452	-11360B2		-1689832	-2050033	-2490273	~3035143
LUNG-TERM LLA'S	0	3,436	23422	33-32	37813	35452	35452	35452	35452	36201
(THER LIMG-TEAM DEST.	ā	ĭ	ž	ž	Š	ō	Ü	0	Ģ	Q.
INCHEMENT	•	•		U	U	ď	Ū	٥	0	0
UTHER LIABILITIES, INCREMENT	a	ć		•				_	_	_
CAPITAL, INCREMENT	ō	ň	ž	ž	Š	ň	Ű	å	ō	0
TUTAL	-487358	-596545	-730122	-893367	-1098269	-1352568	-1654380	-16115	0	0
APPLIATIONS	,,,,,,,,	2,03.3	-130002	-042301	-1030103	-1335300	-7034360	-2014581	-2454821	-2998942
TAXES & DIVICENDS	0	0	n	n	0	۵	•		_	
ADDITIONS TO FIXED ASSETS	ā	č	ŏ	ă	70840	67300		Ū	0	0
REPAYMENT IN ING-TERM LOANS	54200	55727	55727	55727	23645	23645	9909	9909	222	34550
LITHER ASSETS, INCREMENT	0	٥	à		0	23073	7,07	7747	9909	9909
THTAL	54200	55727	35727	55727	94485	91145	9909	9909	9909	
INCREASE IN WIRKING CAPITAL	-541556	-652272	-785849	-949114	-1192754	-1443733	-1664289	-2024490	-2464730	96445 1046306-
INCREASE CUMPONENTS										
CASH, INCREMENT	Δ				_	_	_	_		
RECEIVABLES, INCREMENT	ň	Š	ž	Ď	Ū.	0	Ō	0	0	0
INVENTORIES, INCREMENT	ă	ŏ	ž	ŭ	,	ō	0	Ō	Q.	0
UTHER CURRENT ASSETS.	ă	ñ	Č	ň	Ý	· ·	Đ	D	Ď	Ď
INCREMENT	•	•	•	•	U	· ·	U	0	0	Ç
TOTAL	ō	b	_	6	a		_			
<del>-</del>	•	•	•		3	0	C	٥	Ú	0
DECREASE CJUPTILENTS										
SHORT-TERM LOANS, INCREMENT	341358	652272	785849	949114	1192754	1443733	1664289	2024400	444.500	
DTHER CURRENT LIABILITIES.	0	0			4478124	1-47(2)	1054489	2024490	2464730	3063401
INCREMENT	-	_	•	•	·	v	b	Ü	D	Ç
TUTAL	541558	652272	785849	949114	1192754	1443733	1664289	2024490	2464730	3063401

SOURCE & APPLICATION OF FUNDS

(YEAR)	2001	2002	5003	2004	2005	2996	2007	2008	2709	2010
SOURCE:										
NET INCOME	-3703607	-4515927	-5504113	-6711459	-8186778	-10003110	-12226316	-14935420	-16246556	-2230ATG2
DEPRECIATION	35452	35452	35452	35452	35501	35452	35452	35452	35452	35452
LONG-TERM LOANS	. 0	0	0	٥	C	٥	0	-213	32736	23472
DTHER LONG-TERM DEBT.	Ó	0	Ō	Ò	ñ	ñ	ň	5	Č	ž
INCREMENT	-		-			•	•	•	v	
. JABILITIES, INCREMENT	0	0	0	0	n	٥	n	•		•
AL, INCREMENT	ē	ė.	Ó	Ö	ō	ŏ	ž	ž	ž	Š
TOTAL	-3668355	-4480475	-5468661	-6676007	-8151277	-9967658	-12100846	-1480004	-18211104	2224 24 20
APPLIATION:		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				- **********	-75740404	-14811108	-19511104	-42208000
TAXES & DIVIDENOS	0	٥	D	0	n	^		•		
ADDITIONS TO FIXED ASSETS	39240	ō	ŏ	ň	2460	73350		ž	Ŷ.	27.00
REPAYMENT OF LONG-TERM LOAMS	9909	9909	9315	4905	1527	٥٠٠٠	ž	Ÿ	Ý	95430
OTHER ASSETS, INCREMENT	,,,,	1,01	.,,,	7707	4361	2	v	ō	Ŏ	0
TOTAL	49149	9909	9515	4905	3987		2	9	Ÿ	22.22
INCREASE IN WORKING CAPITAL	-3717304	-4490364	-3478176	-6680912	-8155264	73350		-1480044	-1001104	95430
INCHESCO IN PORCING CON TING	-3/2/304	*******	-34,02,0	-0000312	-0133504	-10041008	-12190864	-14599968	-18211104	-22364080
INCREASE COMPONENTS										
CASH, INCREMENT	0	0	ð	٥	0	n	0	0		٥
RECEIVABLES, INCREMENT	Ó	C	ă	ō	ň	ň	Ď	ň	×	ň
INVENTORIES, INCREMENT	Ō	Ď	ă	ŏ	Ď	ň	ň	ŏ	X	ř
OTHER CURRENT ASSETS,	Ó	ā	ñ	ŏ	ň	ň	ř	0	ž	ă
INCREMENT		-	-	•	•	•	•	•	•	•
TOTAL	٥	0	0	٥	0	0	0	0	D	C C
DECREASE COMPONENTS										
SHORT-TERM LOAMS, INCREMENT	3717504	4490384	5478176	44.800.0	111111			1.0000.		200///
OTHER CURRENT LIABILITIES,	2171304	~770364	34/41/6	6680912	8155264	10041608	12190864	14899968	18211104	22364080
INCREMENT	v	U	ū	U	0	0	0	•	0	6
TOTAL	3717504	4490384	5478176	6680912	8155264	10041008	12190664	14899968	18211104	22364080

