Obstacles lie in path of new Panama Canal

By James Nelson Goodsell
Latin America correspondent of
The Christian Science Monitor

Panamanian nationalism and an economy-minded United States Congress are likely to inhibit construction of a new canal to replace, at least in part, the present Panama Canal.

A proposal to construct the new canal, at a cost of $3 billion, was contained in a report delivered Nov. 30 to President Nixon based on the findings of a special study commission named by President Johnson three years ago.

The proposal urges early construction of the new facility and favors a route in Panama west of the present canal. These recommendations did not come as a surprise, for the land route between the Caribbean Sea and the Pacific Ocean is shortest through the Isthmus of Panama—and building a new canal at this point is technically feasible and practical.

Politically, however, a new canal through Panama would probably prove difficult, at best, and perhaps impossible in light of that nation's growing hostility toward United States control of the present Panama Canal. In fact, any proposal affecting new canal facilities might well founder on the shoals of Panamanian nationalism.

In 1964, following violent clashes along the Panama Canal Zone frontier, Panama broke relations with the United States and resumed them only after a difficult period of negotiations. Subsequently, three draft treaties were drawn up in 1967 providing for a new canal and administration leading to a turnover of the present facility to Panama in 1999—continuation of United States military bases within the Canal Zone, and provision for construction of a new sea-level canal through Panama.

All three draft treaties were rejected by Panama's military government in early September of this year. Gen. Omar Torrijos Herrera, the nation's strong man and commander of Panama's National Guard, says that the drafts "do not go far enough in restoring sovereignty over the canal to Panama."

Under terms of the 1903 Hay-Bunilla treaty, by which the canal was built, Panama leased the 553-mile corridor across the isthmus to the United States "in perpetuity" and accorded the United States the right to act "as if it were sovereign" in the zone. The zone bisects Panama.

Shipping problems

Panamanian observers say that the mood in Panama now is clearly against a new canal which would grant Washington even the right to manage a new canal. It is also doubted that General Torrijos and his nationalist government would accede to bilateral arrangements toward construction of the canal.

A budget-minded Congress would probably also stand in the way of early approval of the $3 billion or more needed to construct the canal. Washington sources earlier this year openly questioned whether Congress, knowing the attitude in Panama, would be willing to commit a sum of this sort to a project which easily could run into political difficulties even before construction begins.

Still, there is need for a new canal facility. The present canal, using three different sets of locks to raise and lower ships going across the continental divide, is 56 years old and cannot accommodate the large tankers and container ships now plying the oceans or on the drawing boards. Recent improvements in facilities through the present canal have provided for more rapid transit of the canal, but nothing short of building new and wider locks would permit the wide-bottomed new ships now on the oceans to use the canal.

A recent study by the Panama Canal Company has proposed a series of additional improvements costing up to $93 million to expand and augment the present canal facilities, and it is expected some of these will be approved. If implemented, these changes would also speed transit time for ships using the canal.

Finally, there is also talk of construction of pipelines and conveyor-belt systems paralleling the present canal through the Canal Zone to carry oil and other cargo across the isthmus. The technical problems in this sort of operation would be numerous, but engineers both at the canal and elsewhere believe these problems could be worked out and that construction of such systems would be technically feasible.

Moreover, it is estimated that such an arrangement would cost upwards of $600 million which, even if costs soared to half a billion dollars, would be significantly less than the $3 billion envisioned by the study commission.
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tions which hearings have been held. This step
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on pending measures for solving the basic
canal modernization problem by the economi-
cal and time-tested terminal lake solution.
In order that the indicated news-
stories may be readily available to the
Congress at its leisure, I quote three of them as parts of my remarks:

[From the Washington Daily News, Nov. 13, 1970]

CANAL AT SEA LEVEL URGED
( By James R. Whelan)

Nearly 4 months after beginning its work, a presidential commission is
about to recommend construction of a sea-
level canal in Panama by conventional
means, Congress and the Nation at large,
along with the Atlantic-Pacific Interocen-
(mand the Panama Canal into another Suez.

None of the new stories so far read
even note or discuss the major modern-
ization of the existing canal, known as the
Double-rock terminal lake plan, for
which legislation is now pending in both
the House and Senate and which is
strongly supported by independent ex-
erts as offering the only sensible solu-
tion of the canal problem. This plan
would retain the fresh water barrier
between the two oceans thus avoiding the
danger of upsetting the marine ecological
balance that many speculated its fear would result from a sea level under-
taking.

These dangers include the invasion of
the Atlantic by Pacific sea snakes, which are as deadly as the cobra and related
to it and might spread as far as Virginia
and Brazil. Moreover, the major modern-
ization of the existing canal is covered
by present treaty provisions and a new
treaty would not be required, thus enabling the United States
to retain its indispensable sovereignty
over the protective frame of the Canal
Zone.

Mr. Speaker, the facts that I have
enumerated are paramount considera-
tions and cannot be ignored by the
Congress. The present canal is abso-
olute but is approaching capacity satu-
ration.

It is obvious from reading the news-
stories that their authors are not suffi-
ciently grounded in the canal subject
to provide the clarifications required. To
meet this need I would recommend a
1968 volume of my addresses on Isthmian
Canal Policy Questions—House Docu-
ment No. 474, 88th Congress—and my
testimony on August 3, 1970, before the
House Subcommittee on Foreign Affairs
in hearings on Cuba and the Caribbean,
pages 203-231. In the latter, I quoted a
1970 "Memorial to the Congress" by the
Committee for Continued U.S. Control of
the Panama Canal, which gives in simple
form the essentials of a highly compli-
cated problem and what is required to
increase its capacity and operational effici-
cency.

One point that I would like to stress
is the fact that the much propagandized
and costly sea level proposal hinges. If I
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cover defense, the building of a new canal and disposal of the present canal.

TERRAIN SIMILAR.

The proposed route for the new canal runs through territory that is the same as that through which the present canal runs. To excavate a sea-level canal would require cuts down to 600 feet, and some places, cuts of 800 feet, in sections of the existing canal.

The sources said that controlling the Caribbean and Pacific tides at either end of the canal was technically feasible. But they said the commission did not have enough knowledge to estimate whether the expected difference in the two oceans would be up to the sea-level canal.

The commission, which has been in existence six years, spent $114 million on 400,000 acres of land along both sides of the Panama Canal Zone through which the present canal canals through the sea. The commission plans to build a sea-level canal with a capacity of 85,000 tons, which means it can accommodate most of the supertankers now used in the Panama Canal.

The present canal cannot handle ships larger than 65,000 tons, and it is expected to be unable to take on the large U.S. aircraft carriers, whose decks are too wide for the canal's system of locks.

The speaker pro tempore, under a previous order of the House, the gentleman from New York (Mr. Lowenstein), is recognized for 30 minutes.

[Mrs. Lowenstein addressed the House. His remarks will appear hereafter in the Extensions of Remarks.]
As surely as Abraham Lincoln recognized the tragic consequences of his presidency a century ago, others in positions of duly determined authority today know there can be no acceptable dissent outside obvious channels of communication.

Violent revolution transgresses any plausible label of justifiable grievance, because widespread ignorance of the rights of taking a people's understanding or faith in our democratic processes. These processes are not infallible, but they do allow more unfettered criticism and opposition than any government yet devised on this earth. When radicals attempt to enforce their views the clock of history is bound to move forward.

As Americans of each generation look for better and more enlightened avenues toward personal fulfillment, they also contribute to their democracy's continuation. One of the most important elements of this nation's strength through its democracy is its ability to allow for weakness, but this requires intelligent debate and unremitting self-appraisal.

At times, our citizens have reflected tendencies evident throughout all centuries—a tendency to recognize and claim their own rights, while at the same time ignoring or infringing upon the rights of others. True liberty, in this fashion, because true liberty is a product of sincere and effective recognition and respect for the rights of others.

It is logical that some segments of our population, inflamed over personal grievances, seek a means of redress, change, or malstationary, should become resentful. It is logical that some of them find words of fiery promises attractive as final resolutions to their problems. It is not at all surprising, why, when they follow leaders who promise to take the process of curing poverty and at worst will put a complete stop to it: More study, more enlightenment and practice, are still years away.

This cannot be allowed to be done. We must remain in this fashion, because we must be assured adequate protection for the maintenance in the same fashion as each of you to this system of protection for our physical well-being. Law and order are not one-way streets. I cannot bend to my own purposes, or flout it, and neither must anyone else be allowed to do so.

No responsible citizen in this nation can be a partner in the dissolution of our moral strength or forget that in any civilization murder is murder, arson is arson and stealing is stealing—regardless of real or alleged reasons given for them. We cannot exist in chaos because it is weakening and debilitating to any society founded for mutual protection and progress.

No individual or group—regardless of their cause—can be allowed to share in the rewards of accepted and recognized laws only breeds suffering, terror and tragedy. Our democracy is a family as it governs can be improved by orderly change. Never can it be made better and stronger by senseless violence and destruction. These, ladies and gentlemen, are principles in which we believe. We may strongly oppose Republican leaders for what they have done to our country, and they may oppose Democrats on other issues, but on the crucial matter of building a better nation within the law we are united.

I believe Abraham Lincoln, a Republican, gave us guidance along those lines a century ago when he stated that the fate of the nation. And I believe another man from Illinois, a Democrat, gave us inspiration and leadership on the same topic in this century.

I know that the American Bankers Association, forward to the time forecast by the late Adlai Stevenson, the father of your distinguished candidate for the Democratic ticket, who envisioned a day when "no man rattles a saber and no man drags a chain."

Mr. PATMAN asked and was given permission to extend his remarks at this point in the Record and to include extra-necious matter.

Mr. PATMAN's remarks will appear hereafter in the Extensions of Remarks.
THE CASE FOR A SEA-LEVEL Isthmian CANAL

The building of a sea-level canal, either in the existing Canal Zone or at several other possible locations, has long been under study by the U. S. Army Corps of Engineers and the Panama Canal Company in coordination with the U. S. Atomic Energy Commission. Congress, in Public Law 88-609, authorized the establishment of a Presidential Commission to make an investigation of the feasibility of constructing such a canal and to formulate an appropriate recommendation for the President to forward to the Congress.

The Atlantic-Pacific Interocianic Canal Study Commission, appointed by the President under Public Law 88-609, is currently engaged in evaluating the case for a sea-level canal. Its findings, when reached, will be forwarded to the President for transmittal to the Congress. Until that time, it is the Commission's policy to make no statements as to its own views as to the feasibility, location, or method of construction of such a canal. The statements in the following summary of the case for a sea-level canal have been drawn from previous studies, congressional hearings, and numerous other sources. They comprise the arguments that led to the initiation of the current study and are not necessarily indicative of its eventual findings yet some years off.

Need for a Sea-Level Canal

A sea-level canal in the Central American Isthmus could provide many advantages over the present Panama Canal. The existing canal requires an extensive system of locks, together with dams and associated water supply facilities. It is vulnerable and has capacity limitations which will become serious in the future. The presence of a large U. S. operating staff and the U. S. control of the Canal Zone have long been sensitive issues in Panama. Negotiations with Panama are currently under way for new treaties to resolve these issues and permit the eventual construction of a sea-level canal, should it be determined to be feasible and necessary.

An analysis made in 1965 indicated that by about the end of this century, traffic through the Panama Canal will have grown from the current rate of 12,000 ships a year to about 19,000, but that the canal if optimized by certain improvements should usually be able to accommodate the traffic without critical delays until approximately that level is reached. However, as the volume of traffic approaches capacity the variations in numbers of ships arriving daily will result part of the time in substantial delays to shipping and a fluctuating backlog of ships awaiting transit. By the year
2000, or even sooner, the limitations imposed by the traffic capacity of the lock canal will result in substantial inconvenience to world shipping and particularly to the U. S. (60 to 65 per cent of the tonnage through the canal in recent years was to or from U. S. ports). Well before the year 2000 additional water, probably pumped sea-water, will be required to operate the locks. Even now the size of the locks prevents use of the canal by more than 50 existing commercial ships, and 24 U. S. Navy aircraft carriers. More than 500 other ships cannot transit the locks when fully laden. The numbers of out-size ships in both categories are steadily increasing. As a related point, the canal has been a limiting influence on the design and construction of larger ships, although it is impossible to state to what extent.

While construction of a new canal within the next 25 years might not be justified on the sole grounds of inadequate service to commercial shipping, it follows that a new sea-level canal would aid the world’s commerce. By the turn of the century, if not sooner, the inadequacies of the present canal will undoubtedly become a real obstacle to commercial progress. A sea-level canal, with a channel sufficiently wide and deep and free of the numerous bottlenecks of the present canal system, could solve completely and forever all foreseeable commercial traffic needs for a transoceanic canal in the Central American area.

The present canal system is vulnerable to sabotage as well as a major overt attack, not only because of the locks but because of the associated vital dam and water supply facilities required for the operation of the canal. A sea-level canal would be relatively invulnerable to long-term interruption other than by a major nuclear attack.

The ability to transit readily between the Pacific and the Caribbean-Atlantic is of major strategic importance to the United States. Thus a sea-level canal would offer significant strategic advantages to the United States, because of the reduced vulnerability, and the ability to handle larger ships as well as move traffic faster.

The operation and security of the present lock canal requires the presence of a large number of Americans. Even though the U. S. employs Panamanians extensively (about 10,800 by the canal organization and about 4,000 by U. S. forces there), there are about 4,000 U. S. citizens (supervisory and support) currently employed by the canal organization. Many of these American employees and their dependents are long-term
residents, as distinguished from the U. S. military personnel, who come and go. A sea-level canal would require relatively few Americans for its operation, and their presence under mutually acceptable treaty terms should present no great problems for the host country.

Although economic, strategic, or political considerations taken separately might not now dictate early construction of a sea-level canal, when these considerations are linked together they make a very strong case. In summary, these factors provide a compelling basis for going ahead now with all of the necessary preliminary measures which will be necessary for final decisions as to the route, method of construction, costs and funding arrangements, and necessary treaty arrangements.

Routes, Construction Methods, and Costs.

Several possible routes have long been considered for a new canal. The most pertinent for current considerations are the present Canal Zone, the Sasardi-Morti route in Panama, the Atrato-Truando route in Colombia, and the Nicaragua-Costa Rica border route.

Besides conventional (non-nuclear) means of construction, the use of nuclear explosives for excavation now appears technically feasible and safe. This opens up exciting new possibilities for canal construction and promises substantial savings in time and money.

A sea-level canal in the present canal site would have to be by conventional means, since there the nuclear method could not be used. According to a 1960 estimate, converting the present canal to sea-level would take about 12 years and cost about $2,176 million, less than half the cost of conventional construction at the shortest of the other sites. The canal could be kept in operation during construction, with some difficulty, except for a short shut-down of about two weeks at change-over time. The resulting canal would be narrow. Nevertheless, constructing a new canal at the present site would offer many obvious advantages.

Construction of a sea-level canal by conventional means at any of the other possible routes appears to be economically infeasible.

The feasibility and safety of nuclear excavation has already been demonstrated by actual experiments such as the PLOWSHARE series in Nevada
in 1962, although further work has to be done to develop the technology to a point where a canal project can actually be undertaken. The means of canal construction would be a great new application of atomic energy, but the fact that nuclear detonations are involved raises problems with respect to the 1963 Test Ban Treaty; apparently some internationally agreed solution will be needed.

Extrapolations from the PLOWSHARE data indicate, for example, that a sea-level canal could be dug across the Sasardi-Morti route in Panama with about 300 nuclear explosives of varying yields. Excavating the canal in sections, a number of devices would be simultaneously detonated in a row to produce a ditch. Careful measures would be taken to limit radio-activity and ensure safety. Detonations would be carefully scheduled, considering prevailing winds and other factors. There would be close coordination with the governmental authorities of the host country and with the local inhabitants. Provision would be made for resettling some people, by agreement of their government. The plans would assure that no person would be exposed to radioactivity in excess of internationally-accepted safety standards. Nuclear construction at any of the other possible routes would follow similar procedures, although the numbers and yields of nuclear devices needed and other details would vary with the site.

Below is a table of cost estimates from studies made between 1947 and 1954. New estimates are expected to vary considerably from these earlier estimates because of changes in construction costs and new developments in both conventional and nuclear excavation technology:

<table>
<thead>
<tr>
<th>Route</th>
<th>Length (Miles)</th>
<th>Cost of Conventional Construction (Millions)</th>
<th>Cost of Nuclear Construction (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panama</td>
<td>46</td>
<td>$2,176</td>
<td>---</td>
</tr>
<tr>
<td>Panama (Sasardi-Morti)</td>
<td>48</td>
<td>5,132</td>
<td>747</td>
</tr>
<tr>
<td>Nicaragua (Greytown-Salinas Bay)</td>
<td>140</td>
<td>4,135*</td>
<td>1,850</td>
</tr>
<tr>
<td>Colombia (Atrato-Truando)</td>
<td>100</td>
<td>5,261</td>
<td>1,440</td>
</tr>
</tbody>
</table>

*1947 estimate for lock canal only. No estimate has been made for a conventional sea-level canal through Nicaragua.
Financial Arrangements

Because of the low operating costs of a sea-level canal, construction costs could be amortized in a reasonable period of time.

The present canal receives about $65 million in tolls annually. After payment of the annuity to Panama and interest on the U. S. investment the canal barely breaks even.

By contrast, a sea-level canal earning $65 million a year in tolls would, because of the small labor force and low operating costs, provide a far greater operating profit before interest, amortization, or annuity payments. Interest payments would take a considerable part of this, because of the large capital investment, but even after interest there should be a substantial amount left for amortization and an annuity payment to the host country. Thus, if construction cost is not too great, the United States could eventually be repaid for its capital investment in the new canal. The payment of a substantial annuity to the country in which the new canal is located should also be possible.

Panama is certain to demand a larger annuity for a sea-level canal. There the termination of the present canal operations would have a significant economic impact, due to the loss of employment in the Zone and the withdrawal of most of the American canal community other than military. On the other hand, the country in which the new canal is located will derive great benefits from the expenditure locally of a major part of the funds required for the new construction. Further, Panama will still derive revenues from the continuation of U. S. military installations in the present zone. Depending upon the exact arrangements made for the operation and support of the bases, Panama could continue to receive from the bases alone one-third to one-half the current total revenues accruing to Panama from the canal and bases combined.

Conclusion

Much needs to be done in the preliminary work of site surveys, detailed studies, and experimentation before final decisions are made on whether the sea-level canal should actually be undertaken and, if so, on the route and method of construction, and the necessary international arrangements will have to be negotiated. Investigations will take at least three years from their initiation in mid 1965. Additional time will be required for U. S. legislation and negotiations with the host country. After that the total time for actual construction of the sea-level canal will be from 6 years (for the shortest nuclear canal) to 12 years (for conventional construction at the site of the present canal). Thus, the dream of a transoceanic sea-level canal could be materialized sometime in the period 1975-1981.
OPERATIONS OF THE PANAMA CANAL

U. S. AND FOREIGN SHIPPING

TUESDAY, JULY 17, 1973

House of Representatives,
Subcommittee on the Panama Canal of the
Committee on Merchant Marine and Fisheries
Washington, D. C.

The subcommittee convened at 10:10 a.m., in Room 1334,
Longworth Office Building, the Honorable Robert L. Leggett
(Chairman of the Subcommittee), presiding.

Present: Representatives Leggett, Murphy, Metcalfe,
Ginn, Studds, Bowen and Snyder.

Staff present: Ernest Corrado, Esq., Chief Counsel and
William Hamilton, Esq., Counsel to the Subcommittee.

Mr. Leggett. Gentlemen, I think we are ready to proceed.

This is the first regular meeting of the Subcommittee on
the Panama Canal Zone. We are indeed pleased today to have
members of the press here, the Governor of the Panama Canal,
representatives of the Panamanian Embassy in the United States,
and representatives from shipping associations which will be
scheduled to testify, and we also have interested observers.

I see that Captain DuVall is here, a particular authority
could come up with some favorable responses or some practical responses as to whether or not they could deepen the canal.

Governor Parker. I think possibly you are addressing the possibility of the sea level canal, are you not?

Mr. Metcalfe. That is right.

Governor Parker. As to the impact of the movement of Biot back and forth between the Pacific and Atlantic.

This is a rather controversial subject and the studies undoubtedly, more studies would be necessary before one could embark upon a sea level canal project.

I am not capable of providing an estimate of how long such studies might take, but there are in fact various ways of handling the problem, such as installing a thermal barrier in the middle of a sea level canal.

Mr. Metcalfe, there is a wide range of opinion on the impact of a sea level canal, under harmful impact of such a canal that is somewhat outside my field of expertise, but I am familiar with some of the articles that have been published by the Smithsonian and others on the subject.

Mr. Metcalfe. Thank you.

Moving into another area, there is some feeling of discontent among the Panamanians about the educational program in the Panama Canal.

Have there been any changes in the educational system?
Mr. May. Thank you very much, Mr. Chairman.

Mr. Chairman and members of the committee, I have accompanying me Miss Barbara Burke, Legislative Director for AIMS.

Mr. Leggett. Barbara, we are glad to have you here.

Miss Burke. Thank you, Mr. Chairman.

Mr. May. As you stated, I am Albert E. May. I am Vice President of the American Institute of Merchant Shipping, commonly referred to as AIMS, which is a national trade association of the United States-flag steamship industry.

Our 34 member companies own and operate approximately 430 oceangoing vessels of all types. These U.S.-flag vessels aggregate over eight million deadweight tons and are engaged in the foreign and domestic trades of the United States.

We appreciate this opportunity to present our views on the present and future commercial importance of the Panama Canal. Insofar as possible, we will comment in our testimony upon the subjects set out by Congressman Robert Leggett, Chairman of the Panama Canal Subcommittee, when he announced these hearings.

Our member companies operate a substantial number of
manufactured products, the rate of increase over the next 21 years should equal or exceed that of the past 21 years.

This projection will, of course, be affected by possible construction of a trans-isthmus pipeline and the success of the "landbridge" and other factors.

With regard to the "land-bridge", it is interesting to note that several of our liner company members question whether the concept is viable, as one company stated, "As container ships become larger and faster and they are introduced to the various routes, we think that the land-bridge traffic will continue to diminish and ultimately may even disappear."

A majority of AIMS member companies are of the opinion that the vessel size limitations of the present Canal are reasonably adequate to meet their needs. This is true in large part because companies trading through the Canal have constructed or are building vessels to meet existing size limitations.

Specifically all container vessels under the U.S. flag, and as far as we are aware, under all foreign flags, can transit the existing Canal as can LASH and SEA-BEE barge carrying ships.

Tankers and bulk carriers are primarily those affected by existing vessel size limitations. As a rule of thumb, only light loaded tankers of up to 70,000 DWT can presently transit.
As you have already heard, larger ships, depending upon the configuration of the ship itself, the volume of cargo it has, can transit.

During our 1971-1972 study, 17 of our member lines commented on whether construction of a sea level canal or the Terminal Lakes Third Locks Plan would increase their usage of the Canal.

The majority indicated that they did not believe that the construction would materially increase their use of the Canal in the near future.

The following reasons were given by these companies for their position:

The trades in which Canal transits are required in our petroleum movements employ tankers that are small enough to use existing Canal facilities without penalty. . . . There would probably be no increase in usage because the value of cargo and the route of the vessels between ports would not change. Loading and discharge port restrictions often govern the size of vessels used for transit of the Canal. . . .

Vessel usage is controlled by cargo availability and market distribution. . . .

Company vessels are in many cases built to transit the present Canal. . . .

Our companies' liner operations would transit the Canal approximately 72-75 times per year regardless of construction.
Another company's basic marine supply pattern is from U. S. Gulf to East Coast Ports and there are no plans to alter this pattern.

Do not believe this modification would affect our schedule except to minimize delays in transiting the Canal.

Our usage of the Canal is determined by the volume of trade on our trade route between U. S. Atlantic and Gulf Ports and Australia and New Zealand.

We are of the opinion that this construction plan would eliminate delays but doubt that this improvement would increase usage of the Canal.

Time saved would not induce more voyages.

A sea level canal was preferred to the Third Locks Plan and six member companies felt that a sea level canal would materially change their usage as compared with the present lock canal.

Four of the companies answering in the affirmative are operators of tankers and other bulk carriers and the other two are operators of dry cargo vessels. The following reasons were given for their position:

Additional usage of the Canal would result if it was constructed to accommodate tankers up to 150,000 DWT transporting Alaskan crude oil to U. S. East Coast in excess of West Coast requirements.
A sea level canal having greater depth and width than present lock canal and with no ship length restrictions would result in increased usage by bulk carriers. Large crude oil carriers designed for the Alaska to U. S. East Coast trade would be special beneficiaries of a sea level canal.

Appreciable saving in time would result and expenses of tugs and lock line handlers would be eliminated.

AIMS believes that the United States must retain the option of being able to improve the physical capability of the Canal or build a new one.

Although the existing Canal is adequate for most who use it today, operational problems, such as the recent delays caused by labor difficulties, always have an adverse effect on commercial use of the Canal.

AIMS hopes that every effort will be made to assure that transits are expedited in the future. This is especially important in view of the fact that the Canal has almost reached its maximum potential for handling ships of the size that can transit the Canal.

Then we list a half-page of their comment, basically that you could take larger ships and would not have the delay in the locks.

Future requirements are difficult to predict because they are dependent upon a wide variety of factors, as Governor Parker has already discussed with you.
Mr. Murphy. I think it goes to the basic arguments that Mr. Flood used, and therefore it is probably in support of that position and not to go to the extent of the United States as spending a great deal of money for a sea level canal, because there is probably improvement in the present area.

Of course, the politics of the Canal many times outweigh the economic advantages of the Canal, and I just wanted, in the figures in the Governor's statement, as to the commerce of a country like Peru that is dependent upon the Canal and basic Canal tolls, and yet, Peru would go to the extent of supporting a Panamanian position that inevitably would cost their shipping, in fact, to price them out of business in their basic types of commodities, and there is where the political considerations far outweigh, in practical analysis, the economic considerations of the Canal.

Mr. Chairman, that seems to be the overriding point.

We do have the change in Ambassadors now, whose responsibility is conducting those treaty negotiations, and whether or not they will open up again, I do not know.

I think the cost of living in Panama is probably more of a factor than the cost of living for operating American vessels or operating the Canal Zone, as such.

I appreciate the opportunity to engage in the colloquy with the committee, and we will be communicating.

Mr. Leggett. Thank you very much, Mr. Murphy.
Mr. May. Yes, especially the dry bulk carriers and tankers.

Mr. Hamilton. In regard to the sea level concept which has been stated as being enormously expensive, between $3 billion and $10 billion, if such a canal were built and provision through tolls made to pay for it, how would your member companies feel about these new tolls which would certainly be higher than those now being paid?

In other words, if asked a question about a sea level canal in the context of considerably higher tolls, would they still be in favor of it?

Mr. May. I believe its concern over just that point, Mr. Hamilton, that resulted in eleven of the seventeen of our companies who use the Canal stating that they thought that the present facility was adequate. We have only six companies who opted for a new canal. They all preferred a sea level canal because they felt that the Third Lock would also be expensive, and the sea level canal would permit the use of much larger ships, so that they would get economies during the voyage that would offset the higher tolls to some extent; and, in addition, they would have a faster transit time because of the elimination of the locks.

It would be, I suspect, the dry cargo carrier who may have come quite close to the optimum size ship that he can use that would be most affected by an over-all increase in
tollage tolls on a new canal.

Mr. Leggett. If I can interrupt, that would leave, then, some seventeen companies, I guess, that had no opinion.

Mr. May. Yes, those companies, I believe without exception, Mr. Chairman, do not currently use the Canal. Those companies are perhaps trading from the East Coast to the Mediterranean.

Mr. Leggett. Was there any strong support for the sea level canal among the six companies that said they favored a sea level canal?

Mr. May. Far less than I had anticipated.

Mr. Leggett. Proceed.

Mr. Snyder. Can I pursue that a little bit?

Mr. Leggett. Yes.

Mr. Snyder. While six of your companies preferred a facility that would handle a larger ship, it is also consistent with your testimony, is it not, that such a facility, if constructed, would also eliminate roughly 21 percent of the traffic now handled through the Canal by the other eleven companies, because of the higher tolls which would be incident to the new facility; is that not correct?

Mr. May. It might well be, yes.

Mr. Snyder. That is what your testimony said.

Mr. May. Yes, sir.

Mr. Snyder. Thank you.
However, in the interest of brevity, I will try to summarize it as well as I can here, and simply say that the Canal in the past, of course, has been a very great value to our membership.

Mr. Leggett. Your statement will appear in the record at this point as though given, and you may excerpt from it as you see fit.

Mr. Maskin. Mr. Chairman and members of the committee:

My name is Alfred Maskin and I am the Executive Director in Washington for the American Maritime Association, which consists of 50 companies operating 166 American-flag merchant ships in the foreign and domestic commerce of the United States.

In behalf of these companies, I would like to express my thanks to the committee for the opportunity to appear here today to present the views of our association with respect to the Panama Canal.

To begin with, I might note that the canal, even as it exists today, has been of extreme importance to our members, both in the movement of breakbulk and containerized liner cargoes and in the movement of such bulk cargoes as oil, coal, ores, steel products and lumber, which move in the intercoastal and non-contiguous trades, as well as in the movement of Government-impelled military and foreign aid cargoes moving from the Atlantic and Gulf coasts to the Far East, Southeast Asia, and as far west as the east coast of India.
The movement of these cargoes, of course, has been facilitated by the significant reduction in voyage costs, and thus the reduction in freight rates which the canal makes possible.

It takes a vessel of 16 knots, for example, approximately 11 days to make a voyage from New Orleans through the canal to Los Angeles. It would take the same ship 34 days -- or nearly three times as long -- to make the same voyage around Cape Horn or through the Strait of Magellan; and the additional costs, occasioned not only by the longer voyage but by the need to carry less cargo because of additional fuel requirements, would be sufficient to drive at least marginal operators from the trades.

With the exception of some enlargement of the Gaillard Cut and some channel improvements, and despite the increase in traffic, the canal today is still pretty much what it was when it first opened half a century ago.

There have, however, been a number of proposals made over the years for modernization and expansion of the canal's facilities, including the proposals set forth in H. R. 958 and 4849, by Mr. Rarick, and H. R. 1517, by Mr. Flood, which have been introduced during the current session and referred to the Merchant Marine Committee.

All of these bills basically call for expansion and modernization of the present canal facilities by implementing
particularly through the provisions of the new Merchant Marine Act of 1970, to become competitive in those trades.

2. However, canal traffic has been increasing over the years and, according to all projections, will continue to increase. Thus, even if our members do not make greater use of the canal, they could face more severe transit delays unless steps are taken to deal with the problem of increasing traffic congestion.

It is not our wish to become embroiled in the controversy which seems to have arisen between proponents of modernization of the present canal and the advocates of construction of a new sea-level canal.

We believe, however, that no discussion of the canal's value can be meaningful without some reference to the proposed sea-level canal; and while we recognize that there are considerations beyond the parameters of our expertise -- military considerations, ecological considerations, and considerations relating to the technical feasibility of such construction -- nevertheless there are a few points we would like to make:

1. Based on the considerations we have already pointed out, it would appear that expansion and modernization of the present canal facilities would be desirable, but there would appear to be no urgent economic necessity for the construction of an entirely new canal, particularly since, according to
be done at a cost which appears moderate compared with the
cost of a new canal, reducing the possibility of substantial
toll increases.

c) In any event, every effort should be made to keep
tolls at their present levels or as low as possible,
consistent with the requirements of the law that tolls shall
be prescribed at rates calculated to cover as nearly as
practicable all costs of maintaining and operating the canal.

Mr. Leggett. Let me ask you this. You represent some
50 companies operating 166 American-flag merchant ships.

Do any of those 50 companies include the AIMS carriers,
or is this a mutually exclusive organization?

Mr. Maskin. It is a mutually exclusive organization,
save one.

I know of one company which is a member of both
associations. That happens to be an intercoastal carrier,
which makes great use of the canal, incidentally.

Mr. Leggett. What percentage of your 50 companies
use the canal?

Mr. Maskin. Well, I believe virtually all of them.

Now, I should make clear, and it is not stated in the
statement here, that up until the time of the passage of the
1970 Act, what is generally considered to be the tramp segment
of the industry was not eligible for subsidy.

As a result, all of our member companies were not
the Alaskan oil, then there is a possibility that a good part of the Alaskan output might be siphoned off and go to Japan.

I think expansion of the present canal facilities, as they have been spelled out in some of the legislation that has been introduced and pending in the House would be helpful to us.

Not only that, but this would permit not only the passage of larger ships through the canal and eliminate some of the bottlenecks, facilitate the canal transit and reduce some of the navigational hazards.

In so far as a sea-level canal is concerned, I have been unable to see, and I know none of my members who are able to see, any real compelling economic necessity for starting construction of sea-level canal.

The expansion of the present canal facilities would be helpful, but we do not see any overriding demand for an entirely new canal, particularly since my understanding is that according to present plans even a sea-level canal would only be able to take vessels of 150,000 tons or so; so that would not help with the very large ships.

Furthermore, Mr. Chairman, a sea-level canal would be considerably more expensive than modernization of the present canal, and that could result in an increased toll structure.

There are certain ecological and military considerations,
Mr. Leggett. Very good. Proceed.

Mr. Maskin. The only other point I want to make with respect to tolls is that if the canal were modernized and expanded according to present plans, it would both permit the transit of larger ships and facilitate the transit of a number of ships and so that since the toll structure is based on the ship's tonnage, this would have a double impact and you would be collecting money on larger ships and more ships, and this would have the tendency to reduce the need for toll increase.

In conclusion, I would make these observations.

First of all, the canal has been of great benefit to our members in the past and will continue to be of benefit to our members in the future if it can keep pace with our needs.

Expansion of the present facility would be helpful in enabling us to use somewhat larger ships in the canal and facilitating canal transit and reducing navigational hazards, and I see no purpose for the construction of a new sea-level canal, and I hope every effort will be to keep the tolls as low as we can possibly keep them.

Mr. Chairman, there is a provision of law that the tolls should cover the cost of operation and maintenance, but to the extent we can cover those with the tolls, I think we should attempt to keep the tolls as low as possible, and I agree with Mr. May that we should not use the tolls for a-anything else except that purpose and certainly not to achieve any political
about an existing limitation on the use of the canal of something like 26,000 annual transits.

What would be the capacity, or what would be the increase if those two programs were undertaken, or are you able to give an estimate?

Governor Parker. No, those programs are required to get to 26,800. That is with all the improvements that I talked about this morning are necessary to get to the 26,800.

The capacity of the canal, as it stands right now, would be limited in a couple of years if we did not start adding or doing some of these things, such as deepending, adding tugs and getting on with intermediate levels of locomotive purchase, until we get to the final merry-go-round solution.

Mr. Leggett. You feel the on-going program of modernization is a program essentially that keeps ahead of your demand curve as far as the needs of the canal; is that correct?

Governor Parker. Yes, sir.

Mr. Leggett. And now I indicated an item there that perhaps you would like to address yourself to, the Third Locks Project.

That normally concerns itself with, as I understand it, digging a set of locks both at Pedro Miguel and Mira Flores, the sites there, and at the Gatun site, and perhaps raising the level then of Gatun Lake.

Are any of these projects what you would call or consider
some extent, Mr. Chairman, and will be prepared to respond in
some way.

I am not sure we could have a recommendation for you
along those lines within a reasonable time period. But I
understand the question and would like to review that further,
and my organization will correspond with you further on the
subject, if I may.

Mr. Leggett. And it might be even worthwhile that we
keep the information confidential.

Governor Parker. I would like to review that further
with my staff.

Mr. Leggett. I am going to have to vote on the Chair-
man's bill, the DELTA QUEEN or I may not be in this position
very long.

Do you have a few minutes more, Governor?

Governor Parker. Your pleasure.

Mr. Leggett. Very good. I will be back in exactly
seven or eight minutes.

(Short recess.)

Mr. Leggett. The meeting will come back to order.

Counsel, I am going to let you ask your own questions.

Governor, what I would like to pursue is some of the
things that we just finished.

Now, I believe that you indicated that you, like your
predecessors in your position have supported formally the sea