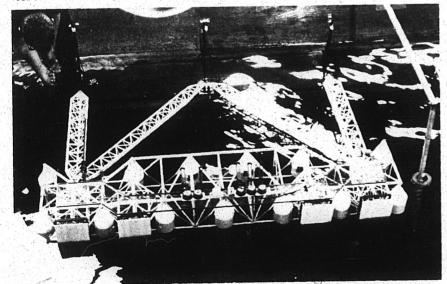
Alyeska Administrators, Advisors Testify at Hearings

MODEL SHOWS BENT construction which would be used by Alyeska Pipeline Service Company on above-ground stretches o the 800-mile trans Alaska pipeline. The line would be elevated by bents supported by piles, or on gravel berms, where prediction of differential settlement based on unstable soils and thawing exceeds allowable limits. These elevated sections would be insulated and, to protect against expansion and contraction, would be laid out in a trapezoidal zig-zag fashion.



THE LIVENGOOD to Yukon River haul road, constructed in 1969 and 1970 by Alyeska Pipeline Service Company, is bordered by quick growing annual plants shown here near full growth in the autumn of 1970. Also included in the planting for erosion the autumn of 1970. Also included in the planting for erosion control were perennial seeds to provide a holding cover until native plants gradually revegetate the area. Reseeding of the 405 acres of road border was done by the DNH Corporation, an enterprise of the Tanana Chiefs, association under contract with Alyeska. The road contractor was Burgess Construction Company



MODEL STUDIES were conducted to determine design of a floating dock at the proposed Valdez. The dock will take tankers of up to 120,000 deadweight tons and fixed docks at the site will accommodate tankers of up to 250,000 deadweight tons. Tests were performed

with the vessel in various loaded conditions and with waves acting perpendicular to and at 45 degrees to the face of the dock. The floating degrees to the face of the dock. The floating dock will be the most easterly berth at the Valdez terminal of the 800-mile trans Alaska

(Pictures of Camp, Road, Construction Models Shown)

A series of Alyeska Pipeline Service Company administrators: technical advisors and consul-tants testified at the pipeline hearings in Anchorage concern-ing the environmental safety of the trans-Alaska pipeline.

The. Anchorage hearings on environmental impacts of the pipeline continued testimony begun in Washington, D.C. by the Interior Department of Febru-

Company testimony was led off by the president of Alyeska Pipeline, Edward L. Patton, who testified on several of the issues involved in the project.

We have long been aware of the potential this project has for the employment of Native Alaskans and we are committed to their training and employment as a matter of policy.

as a matter of policy. Patton testified:

He told the hearings andience Alveska has established a Minority. Enterprise Small Busmess Investment Company with an initial capital of one million dollars. Along with federal funds. he said, this will provide several millions of dollars for invest-ment in Native owned enter-

"It is hoped that this will provide a model for local Alaska-owned investment companies to provide the means for independent local development here in the State.

Patton also explained the exration also explained the ex-tensive preparatory work Alyes-ka has done on various pipeline alternatives and designs. Besides explaining some of the engineerwork done on the pipeline.
examined several of the alternative transportation sugges-tions which have been advanced. the defended the use of the mid Alaska pipeline connected to tanker transport as providing maximum flexibility; in, delivery the crude oil

The president of Alveska was supported by several pipeline company watnesses who restified on specific aspects of the en-xironmental safety of the pipeline and its tanker terminus at the port of Valdez.

Several consultants testified as to the unprecedented geologstudies done concerning the pipeline and the engineering design which has been utilized to minimize danger in case of earth-

quake or tsunami.

Ralph R. Mighaccio, a partner in R & M Engineering and Geological Consultants who has been involved in geological studies for

the pipeline for the past 211 years told the hearings the route selection resulting from these studies would avoid "long term adverse environmental and assure a secure pipeline sys-

Among the effects the geological consultants had examined, the testified, were the removal of gravel for construction. Adverse effects of gravel removal. verse effects of graver removal, he said, can be avoided by "care-ful control of pit locations, re-moval operations and cleanup, and restoration procedures."

and restoration procedures.
Another Alyeska consultant testified at the hearings that earthquake engineering studies for the trans Alaska pipeline are more extensive than any ever undertaken for a petroleum pipeline in the U.S. pipeline in the U.S.

Robert D. Darragh, a partner

in Dames and Moore. Consulting Engineers and Geologists, said earthquake studies have excluded a route following the Alaska Railroad. Also, alternate ter-Railroad. Also, alternate ter-minal sites to Valder "would be in areas of equal or greater be in areas of equal of greater seismicity than the selected site af Port Valdez," he said.

At the point where the pipe-line crosses the Denah Fault in

the Alaska Range Darragh said. remotely controlled valves will be installed to isolate the atfeeted section of the line and a moniforme system will be established. All pipeline and storage facilities at Valdez, he said, are fair above the sea level of the 1964 tsunam.

Among the Alyeska exhibits were pictures of plans and models of pipeline features designed to minimize environmental damage

and the possibility of oil spills.

A specialist in permatrost problems testified that the aretic problems testified that the arente pipeline rivute, was chosen to minimize problems from "bad permatiost"—soil which will not support affort pipeline. Harold R. Peyton, an environ-

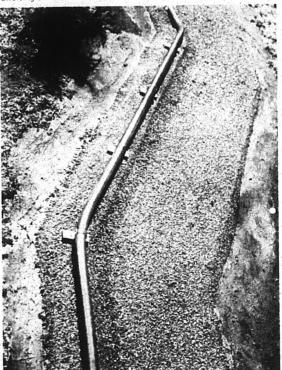
mentalist for Atlantic Richfield company, said he has been an Arctic engineering consultant on the pipeline since August 1908 and has been engaged in penna-frost study for 17 years:

frost study for 17 years:

He explained that ecological problems arising from permatros melting depends on specific conditions. Whether extensive coston with occar depends upon the kind of soil in the permafrost and the amount of ice in the trozen soft.



CONSTRUCTION CAMPS located along the proposed right of way house workers when construction of the trans Alaska piperine The camps include mobile modular housing units, modern utilities (including sewage treatment plants) and microwave com-munication. Heavy equipment can be seen stored at the camp awaiting commencement of road construction.



ABOVE-GROUND SECTIONS of the proposed 800-mile trans Alaska pipeline to be constructed by Alyeska Pipeline Service Company, would include gravel berms, shown here on a model, The elevated portions of the pipeline and pile supported bents. would be laid out in trapezoidal zig-zag fashion to protect against expansion and contraction and would be insulated to maintain pump-ability of the oil after extended periods of shutdown in the extremes of Arctic cold.