

DOCUMENT RESUME

ED 179 368

SE 028 784

AUTHOR Boyer, Robert; And Others
 TITLE Environmental Studies, Section IV: Natural Resources. Learning Carrel Lesson 6, 11: Conflicts of Interest. Study Guide and Script.
 INSTITUTION Texas Univ., Austin. Dept. of Geological Sciences.; Texas Univ., Austin. Science Education Center.
 SPONS AGENCY National Science Foundation, Washington, D.C.
 PUB DATE [75]
 GRANT NSF-GY-9935-EZ
 NOTE 42p.; For related documents, see SE 028 775-788

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Audiovisual Instruction; College Science; *Conflict Resolution; *Curriculum Development; Earth Science; Environmental Education; *Geology; *Higher Education; Individualized Instruction; Instructional Materials; Learning Modules; Natural Resources; *Role Playing; *Science Education; Undergraduate Study

ABSTRACT This is one of a series of 14 instructional components of a semester-long, environmental earth science course developed for undergraduate students. The course includes lectures, discussion sessions, and individual learning carrel lessons. Presented are the study guide and script for a learning carrel lesson on conflicts of interest. The student plays the role of a politician who must decide how to vote on an ecological issue (the Alaskan oil pipeline). The slides, audio-cassette tape, and other materials necessary to this lesson are not included. (BT)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *



SCIENCE EDUCATION CENTER
LCL

THE NATIONAL EDUCATION ASSOCIATION

GY-9335 (E2)

ED179368

STUDY GUIDE AND SCRIPT

SECTION IV: NATURAL RESOURCES

LESSON 6.11: CONFLICTS OF INTEREST

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Mary L. Charles
NSF

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

ENVIRONMENTAL STUDIES

A Cooperative Project of The Department of Geological Sciences
and the Science Education Center

The University of Texas at Austin

028 784

ENVIRONMENTAL EARTH SCIENCE

"Environmental Earth Science" is a new course developed at The University of Texas at Austin by the Department of Geological Sciences and the Science Education Center. It is offered at The University of Texas at Austin as Geology 361K and has been tried out during the spring semesters of 1972, 1973, 1974, and 1975. Revisions have been made as necessary after each tryout. The project within which the course has been developed has been supported by the National Science Foundation.

The course includes lectures, discussion sessions, and individualized Learning Carrel Lessons. Extensive use has been made of multi-media technology in the presentation of the course. Learning Carrels for individualized instruction have been especially designed for this program. The lectures introduce specific topics, suggest problems or questions, and provide background information. The discussion sessions provide the student an opportunity to ask questions and clarify ideas. The discussion sessions also provide input and feedback to the instructor.

The Learning Carrel Lessons have been written by faculty and graduate students in the geological sciences and in science education. Writers and resource contributors include Dr. Robert Boyer, Dr. Rolland Bartholomew, Dr. Keith Young, Dr. Samuel Ellison, Dr. James Underwood, Dr. David Butts, Dr. Addison E. Lee, David Keller, Melanie Lewis, Wayne Schade, Ann Lee, and William McLoda. Technicians involved in production of scripts, sound, and photography were Stan Prescott, Lee West, Charles Geffen, and William McLoda. Artists were Jesus Rivas, Alice Canestaro, Aly Knox, and Javier Flores.

Each Learning Carrel Lesson consists of a set of 2 x 2 slides, an audio cassette tape, a study guide, a script, and other materials necessary to the lesson. The study guide and script are in this booklet. Students may set their own time schedule within an announced period when slides and tapes are made available.

The student should note the list of Learning Carrel Lesson topics to place in proper context the lesson in this booklet, and then read carefully the introduction, rationale, prerequisites, and lesson objectives in the study guide. The student should follow the instructions in the study guide for the entire lesson. In some instances, these instructions are also repeated on the audio cassette tape. The slides and tapes have been synchronized to automatically advance the slides appropriate to the audiotape. However, there is a tone signal given before the change of each slide so that the lesson can be used outside of the carrel if automatic facilities are not available. When the student is ready to start the lesson, the "on" switch should be pushed. If the slides and tape are operated manually, both will need to be turned "on." The first slide is always a title slide or a blank solid colored slide. If

the slides and tape are manually operated, this title or blank slide should be on view before the tape is started. For automatic operation, the slides and tapes will be set up by the Instructor or Proctor before the lesson and between each use. It is most important to start each lesson according to these instructions in order to provide synchronization of the slides and tape. Remember that slides placed in the tray to be used with a rear view screen are reversed from those to be used with a front view screen.

The student will be instructed by the study guide and/or the tape to stop at various places to carry out certain activities. Usually the audio-tape will say, "Please stop the tape now and restart only when you have finished this exercise." Therefore, the student should wait a few seconds to finish hearing the instruction after the word "Stop." However, one should not wait long enough for the tone signal or automatic change to the next slide. This signal should be heard after you restart the tape. If the lesson is moving too rapidly, the student may stop the tape and slides at any time to consult the study guide or script, but it is NOT POSSIBLE to back up and re-examine a given slide without completing the entire cycle of the lesson.

It is particularly important for the student to carry out the instructions for activities given in the study guide. In order that a record may be maintained of these activities, each student should pick up a copy of the STUDENT RESPONSE SHEET which include questions to be answered and the other activities requiring responses. These should be completed and turned in to the instructor as required for grading, feedback for the instructor, and to provide a basis for student interaction in the discussion group.

Each Learning Carrel Lesson is independent within the context of the course. Some of them provide direct information on a given topic, but in an individualized mode requiring some activities and thought on the part of the student. Others place the student in a role-playing situation where some position must be taken on provocative questions or issues. Others deal primarily with applications of environmental information. In all the lessons, the student is expected to receive basic information that is coordinated with the lectures, the small group discussions, and the readings.

ENVIRONMENTAL EARTH SCIENCE

LEARNING CARREL LESSONS

Section I: Man's Effect on Nature

- Lesson 6.1: Population
- Lesson 6.2: Land Use
- Lesson 6.3: Urban Crisis (Field Trip)

Section II: Energy

- Lesson 6.4: Energy
- Lesson 6.5: Energy Resources
- Lesson 6.6: Future Projections

Section III: Processes Through Time

- Lesson 6.7: Geologic Time
- Lesson 6.8: Long Term Events
- Lesson 6.9: Short Term Events

Section IV: Natural Resources

- Lesson 6.10: Minerals
- Lesson 6.11: Conflicts of Interest
- Lesson 6.12: Soils
- Lesson 6.13: Water

Section V: Oceanography

- Lesson 6.14: Ocean Resources
- Lesson 6.15: Pollution of the Oceans

STUDY GUIDE FOR LEARNING CARREL LESSON

6.11

CONFLICTS OF INTEREST

ENVIRONMENTAL STUDIES

A Cooperative Project of the Department
of Geological Sciences and the Science
Education Center

THE UNIVERSITY OF TEXAS AT AUSTIN

TO THE STUDENT:

This booklet contains two sections: (1) the Student Study Guide for this lesson, and (2) the Script or printed copy of the discussion recorded on the audio cassette tape.

You are expected to begin with the printed instructions in the Study Guide and follow them continuously as you study the lesson. In many instances the same or similar instructions may also be heard on the audio cassette tape. Refer to the script only if you need to refresh your memory as to something that was said. The script is provided because you cannot back up the tape if you need to review something already said on the tape.

Specific instructions will be given in the Study Guide as to when to start and stop the tape. Do not restart the tape until instructed to do so in the Study Guide.

Questions requiring written answers should be completed on the STUDENT RESPONSE SHEETS provided by the Instructor.

 INSTRUCTIONS:

1. Start the audio cassette tape and slides. (For manually operated slide carousels, be sure the slide on the screen is the title slide or the blank colored slide in slot number one. Otherwise, the slides and tape will not be synchronized). Listen to the tape and view the slides until you are told to stop the tape. Then STOP THE TAPE AND SLIDES.
2. Read the Introduction, Rationale and Objectives for this lesson that follows. If you have any questions, check with the Instructor or Proctor.

INTRODUCTION:

This lesson was originally prepared before decisions were made concerning plans for oil drilling on the Alaskan North Slope and the construction of an Alaskan pipeline to carry the oil from the area to distribute it to other states. Even so, the pro and con arguments are still illustrative of the relationships among politics, economics, and social issues. Therefore, the lesson is still useful. You are to play the role of a newly appointed senator and you will be confronted with pressures that characterize this kind of situation.

Sometimes it is easy to be critical of other people whose views differ from your own. In fact, you may find that at times your own views cause conflict within yourself.

In this lesson you will experience some of the conflicts that confront people who are responsible for making decisions which affect our environment. You will be asked to play the role of a politician who must decide how he will vote on an ecological issue. As you will see, there is seldom a single, clear-cut, choice with which you can be satisfied.

This simulation is, of course, simplified. Every step in the decision making process is not included, although the information presented in this lesson is factual. Statements made by the various people you will encounter here are either direct quotations or statements composed by combining comments from several sources. The names of places, people, and organizations have been changed. However, the points of view you are about to hear may sound familiar to you.

RATIONALE:

Many of the propositions brought before the Supreme Court, the Senate, the House, and congressional committees are passed into law or rejected by only one vote. Under these conditions, each person's decision on an issue becomes increasingly relevant. Any official involved in making decisions is pressured from opposing points of view -- from different interest groups among his constituency, lobbyists, administration influences, or stirrings of his own conscience. Justifying any of the alternatives open to him is sometimes difficult. In order to sharpen your awareness of the complexities of environmental legislation, this lesson will allow you to participate in a situation which requires you to synthesize several varying points of view on an environmental issue and then to make the optimum decision, because some day you may face a similar dilemma "for real."

OBJECTIVES OF THIS LESSON:

After completing this lesson you should be able to:

1. identify alternatives of transporting oil from the Alaskan North Slope
2. name three advantages for each alternative of obtaining oil from the North Slope of Alaska
3. identify five environmental problems that could be caused by the construction of the Alaskan Pipeline
4. identify five protective procedures used to alleviate the environmental hazards of the Alaskan Pipeline
5. describe two problems that could occur by relying on foreign importation of oil
6. choose one of the alternatives of obtaining oil from the North Slope



INSTRUCTIONS:

3. Restart the audio cassette tape. Listen to the tape and view the slides covering your appointment as a new United States Senator and identification of some of the problems before you. Continue to listen to the tape and view the slides until told to stop the tape. Then STOP THE TAPE AND SLIDES and read the letters and other information from the American League for Environmental Protection. Remember, as the new U.S. Senator you must make decisions and vote on legislation that may be introduced on this subject.

AMERICAN LEAGUE FOR ENVIRONMENTAL PROTECTION

8067 Candlewood Blvd.

Adamsville, Opportunity State 64337



Norma Liner
President

Senator from the Opportunity State
Washington, D.C.

Dear Senator:

May I congratulate you on your appointment to the Senate. Your predecessor, Senator Heartly Horst, worked very closely with me and my associates in the American League for Environmental Protection. We will all miss him greatly.

The people of the Opportunity State are concerned about the conservation of our nation's wilderness. The defeat of the bond issue to build the atomic energy plant at Springfield demonstrated that our state will not permit the bureaucracy of government and the selfish financial motives of industry to destroy our clean lakes and streams and pollute our air.

In this regard, Senator Horst was sympathetic with the position of the League. He had personally assured me that he would do everything in his power to protect the environment of Alaska from damage caused by the construction of the Pipeline. Your indication of supporting the ideals of the late Senator will be highly regarded by the 56,000 members of ALEP here in your home state. If you vote against the Pipeline, I can guarantee you the support of our members in any future elections.

Enclosed you will find a list of major considerations which we believe conclusively prove that the Alaskan Pipeline should never be built. We would appreciate your studying this list carefully. We will all be awaiting your decision anxiously.

My best wishes to you.

Sincerely,

A handwritten signature in cursive script that reads "Norma Liner".


Norma Liner

NL/pmr
enclosure

The American League for Environmental Protection advocates that the Alaskan Pipeline not be built for the following reasons:

1. The last great wilderness areas of the United States exist mainly in Alaska and should not be destroyed.
2. The road built in conjunction with the pipeline would draw increased traffic which could adversely affect the breeding and feeding areas of the Doll Sheep species found only in this area.
3. Caribou migration would be utterly destroyed. The scattered ramps which would cross the pipeline proposed by the oil company would not be effective because these animals have no set migration paths.
4. The increased traffic would be detrimental to such Alaskan birds as the Geer Falcon. These falcon have already been endangered by sportsmen who sell them to Arabian sheiks.
5. Because of the short days, plantlife all grow very slowly. It takes 30-50 years to replace ground cover. The Atlantic Richfield Oil Company planted several varieties of exotic seed, hoping to find a quick ground cover. The results from this experiment have been unsatisfactory, and even if a quick ground cover were developed, it would disrupt the environment of the whole area.
6. The pipeline would destroy mosses, lichens, and wildflowers. The removal of this material would melt the permafrost creating a mire uninhabitable by birds and animals.
7. The pipeline will reach temperatures up to 140° F. resulting in a melting of the permafrost. This would not only affect the wildlife but would also destroy the support for the pipeline itself. Then there would be shifts and fractures in the pipe making spillage of oil over the wilderness inevitable.
8. Increased traffic would increase the number of fires caused by man. In the last 5 years, man-caused fires have increased to the point that they are much more destructive and numerous than fires caused by lightning.
9. The mass amounts of gravel necessary for the project would have to be obtained from the streams of Alaskan rivers. This would disrupt the spawning of fish and destroy the nesting areas of many species of birds.
10. The pipeline would cross an active earthquake zone. Alaska has experienced 23 major earthquakes in the last 70 years in the pipeline area, an average of one major earthquake every 3 years. The damage to the pipeline caused by earthquakes would be extensive, and what's worse would be the damage to the environment caused by the oil spillage.



**INSTRUCTIONS:**

4. Restart the audio cassette tape. Listen to the tape and view the slides until you are told to stop the tape and study the data provided by the Alyeska Pipeline Service Corporation. Then STOP THE TAPE AND SLIDES and study the statements and illustrations on the following two pages.

Below is a list of the safeguards the oil company consortium, the Alyeska Pipeline Service Corporation, will take to insure the safety of the environment in completing the Alaskan Pipeline:

1. The pipeline has been rerouted to avoid as many unstable areas as possible.
2. Because earthquakes are a hazard, engineers have designed the pipeline to sustain a horizontal movement of 20 feet and a vertical movement of 3 feet without rupture.
3. The entire line will be continuously monitored from a computer control center at Valdez. Remote control cut-off valves will detect pressure changes and seal off the line on both sides of the leak or rupture within minutes.
4. An earthquake-warning system will detect earthquakes before they occur.
5. Wildlife underpasses are planned for 177 miles of the pipeline. Incidentally, tests have already shown that the pipeline equipment does not affect migration patterns.
6. Caribou ramps will be used for 178 miles to permit the wildlife to cross under the pipeline (see Figure 1 on page 6).
7. Buried pipeline will be insulated for 70 miles so that the permafrost will not thaw. Heat sink devices will transfer the heat of the flowing oil to the air (see Figure 2 on page 6).
8. At rivers and flood plains, the pipe will be concrete coated and anchored to prevent pipe fissures resulting in environmental damage.
9. To prevent ocean oil spills, the crude oil will be carried in super-safe U.S. built ships. No dirty ballast will be dumped at sea.



Figure 1
Wildlife ramps are planned 177 miles of pipeline

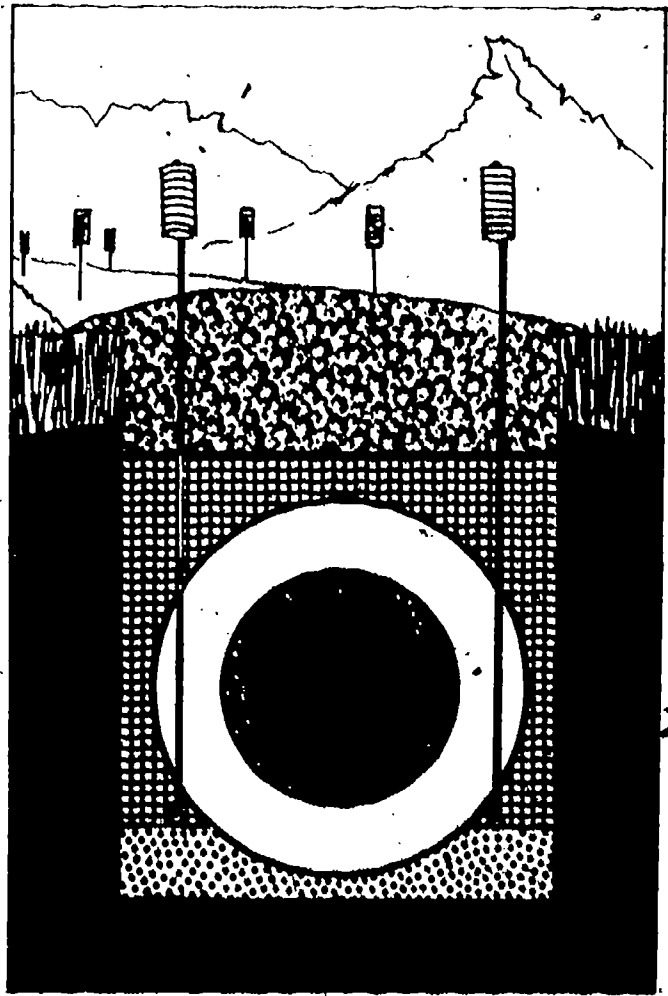


Figure 2
Metal heat sinks transfer the heat from the pipeline to above ground where the heat can be safely dissipated into the air








INSTRUCTIONS:

5. Your work as a U.S. Senator is just beginning. Before starting the tape and viewing the slides again, complete the assignment described in Frame 1, then study the letter from Gen. Mark Wayland. Next, complete the assignments in Frames 2 and 3. Written work requested in these assignments should be done on your STUDENT RESPONSE SHEET.

Frame 1

As a U.S. Senator, you have been asked to give the keynote address to the American League for Environmental Protection (ALEP), using the Alaskan Pipeline controversy as the basis of your text. In the space provided below pick five detrimental effects from the list sent to you from the ALEP which they stated would occur if construction of the pipeline is completed. Then pick 5 safeguards proposed by the oil consortium which they stated will offset these environmental hazards. Indicate your attitude toward the possible consequences by circling the appropriate figure. (USE STUDENT RESPONSE SHEET)

DETRIMENTAL EFFECTS	SAFEGUARDS	MY ATTITUDE
1.		
2.		
3.		
4.		
5.		

158 East Catawba
West Point, New York 10624

Senator for the Opportunity
Washington, D.C.

Dear Senator:

I read in the Columbus Journal the text of the speech that you made to the American League for Environmental Protection.

May I present a point of view perhaps you have not considered? In my occupation, the defense of the United States and its way of life, I have become very concerned about the reliance upon foreign countries for supplies of any resource.

It has been estimated that we will have to import more than one half of our oil by 1985. If we could rely upon Canada, Venezuela, and other Western neighbors for this oil, this might not be a problem. However, their reserves are dwindling. This forces us to purchase more oil from the unstable Middle East where 70% of the proven reserves of free world oil lie. Their oil revenues were 3 billion dollars in 1971. They are expected to reach 9 billion by 1975 and 50 billion dollars annually by the 1980's. Business Week magazine stated, "This Niagara of cash will create a major new center of financial power in the world. Libya's Prime Minister, Col. Muammar el Quaddafi, has openly boasted that he is using oil revenues to support revolutionary movements throughout the globe, from Castro's guerrillas to Irish Republic terrorists. 'We have the oil weapon, and the financial weapon, and we intend to use them both!'"

To me the course that the United States must take is obvious. We must protect ourselves from having to rely upon foreign powers for the necessities of our country. The Alaskan Pipeline is a must. This, in fact, should just be the first step. The U.S. Geologic Survey has estimated that a 300-500 year supply of oil and natural gas lies in the outer continental shelf off the East Coast and the Gulf Coast, in Alaska, and in deep untapped oil fields in the mainland states. We must encourage the development of these resources if we are going to maintain our viability as an example of freedom on the earth.

Sincerely,

Mark Wayland

Gen. Mark Wayland
U.S. Army (Retired)

Frame 2

You have been asked to write a short article for the Journal of Energy Resources stating your opinion on the Alaskan Pipeline at this time. In the space provided below, please indicate which proposal before the Energy Resources Committee you believe to be most viable. The three options are: (1) build the Alaskan Pipeline, (2) build the Canadian Pipeline, or (3) build no pipeline and forego the use of the Alaskan oil. Include at least 3 reasons why you have selected this proposal. (USE STUDENT RESPONSE SHEET)

My choice is:

My reasons for choosing this option are:

- 1.
- 2.
- 3.



INSTRUCTIONS:

6. Restart the audio cassette tape. Listen to the tape and view the slides until you are told to stop the tape. Then STOP THE TAPE AND SLIDES. Study the newspaper articles on the following page and complete Frame 3 on your STUDENT RESPONSE SHEET.

TO THE READER:

It is obvious that the oil from the North Slope of Alaska is needed. However, the government must place controls on the use of this oil.

The present fuel oil crises are actually artificial. There is plenty of crude oil for satisfying all the fuel oil needs if the federal government would not put low price controls on fuel oil. Presently oil companies convert 70 percent of the crude oil into gasoline for automatic transportation. This is because they can sell gas at a higher price. If oil companies were permitted to make a profit from fuel, they could use a higher percentage of the crude oil for making fuel oil and the energy crises would be ended.

We must build the Alaskan Pipeline but let's analyze the fuel oil and gasoline prices so that Alaska's oil will be used properly.

John Tabson
324 S. Sleight St.

Citizens of Opportunity State Polled

Results of the recent Gallup Poll in the Opportunity State on the transport system of oil from the North Slope of Prudhoe Bay in Alaska were released today. 46% were for the construction of the Alaskan Pipeline; 24% were for the construction of the Canadian Pipeline; 22% were against the construction of either pipeline; and 8% had no opinion. The Energy Resources Committee will make their final decision on this issue sometime this week.

TO THE READER,

When are the people of America going to realize that we are traveling down the river and before we notice it our paddle will have dissolved? The river I speak of is our comfortable, convenient way of life and the paddle is the energy necessary to give us these conveniences, particularly energy produced from oil.

We have talked ourselves into believing that there will never be an end to the energy resources. Every time that proven oil resources have been depleted to an alarming state, we have been fortunate to locate a new oil field in West Texas, Oklahoma, or Wyoming and now the North Slope of Alaska. These discoveries will not solve the energy crisis, but only postpone it for a few years. All of the 10 billion barrels of oil found on the North Slope of Alaska is not sufficient to supply the United States' present demands for even two years. And to get this oil we must bisect the state with an environmental force.

Any logical person must realize that the answer is not to devastate the earth to postpone the crisis but instead drastically cut back

on our energy demands. Why transport a 150 pound person in two tons of steel and rubber? Why have thousands of signs brightly proclaiming a store that is right in front of us? Why have electric dishwashers, electric canopeners, electric knives, electric toothbrushes, electric shavers, and electric typewriters?

We could save money by spending an additional five hundred dollars for the inflation alone in the average home. But instead we concern ourselves with the initial cost of housing and simply waste the energy that will be critical for tomorrow's society.

The answer to this dilemma is in the modification of our way of life. We must change priorities from convenience for the individual to the convenience of society as a unified body. This includes forced mass transportation, restructuring of convenience appliances and stricter regulations in construction of homes and other buildings.

Shall we start to solve our problems now or shall we wait until after we have devastated the entire earth and have no other choices?

Nat Stiles
1443 Marlow Avenue

Frame 3

Each of the following people will be on hand to testify at the meeting of the Energy Resources Committee. Note 2 questions you would like to ask each of these witnesses before casting your vote on the oil transport system. (USE STUDENT RESPONSE SHEET)

Nat Foiler, Department of the Interior

1.

2.

Norma Liner, President, American League for Environmental Protection

1.

2.

Doyle Greathouse, Executive Vice President for Environmental Concerns, National Oil Corporation

1.

2.

General Mark Wayland, U.S. Army

1.

2.

Marlene Monetta, Ph.D. Economics, State University

1.

2.


INSTRUCTIONS:

7. Restart the audio cassette tape. Listen to the tape and view the slides until the end of the lesson. Then STOP THE TAPE AND SLIDES.

Obviously this lesson is incomplete, even though some decisions have been made by the United States Government since it was originally written. However, it does serve to focus on an example of a controversial environmental issue.

ANSWERS TO QUESTIONS IN STUDY GUIDE

The issue being studied in this lesson is very complex. It should be obvious that there are arguments in favor and arguments against, but not necessarily right or wrong answers in the mode of established facts of science.

If you understand the pros and cons of the issue, then you have the best answers available for this lesson.

GLOSSARY

Alyeska Pipeline Service Corporation: a corporation formed by seven oil companies to engineer and construct the Alaskan Pipeline from the North Slope to Valdez.

Brooks Range: a 150 mile mountain range running east-west which must be crossed by the Alaskan Pipeline.

Heat Sink: metal conductors of heat which transfer heat from buried pipeline to the surface where the heat is dissipated by the air.

Manhattan: largest United States oil tanker. The first ship to cross the Northwest passage to Prudhoe Bay.

Permafrost: permanently frozen soil. When permafrost thaws it tends to become a mire which cannot support much weight.

Prudhoe Bay: location on the northern coast of Alaska along the Arctic Sea which is an oil field containing a minimum of 10 billion barrels of oil.

SCRIPT FOR LEARNING CARREL LESSON

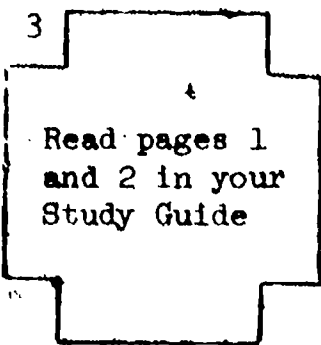
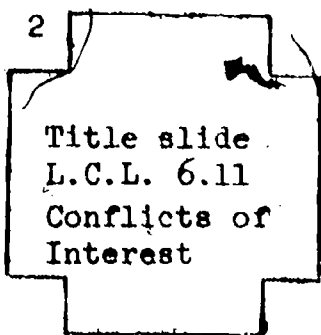
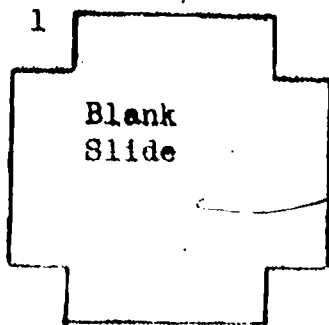
. 6.11

CONFLICTS OF INTEREST

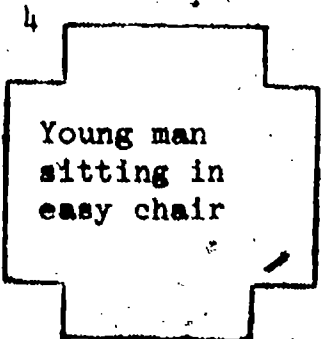
ENVIRONMENTAL STUDIES

A Cooperative Project of the Department
of Geological Sciences and the Science
Education Center

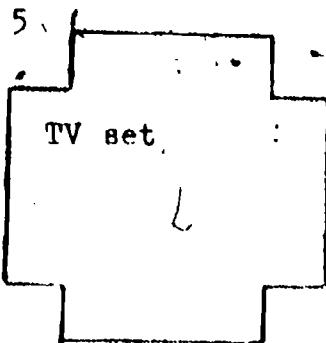
THE UNIVERSITY OF TEXAS AT AUSTIN



Before you begin this lesson, please read pages 1 and 2 in your Study Guide. Stop the tape now and restart when you are ready.

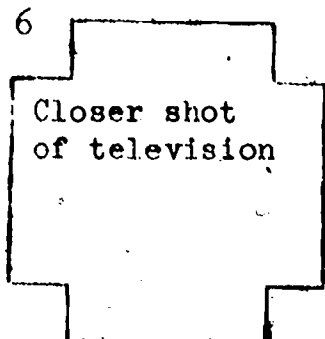


(TV Announcer) "Saigon: Former South Vietnamese political prisoners who claim they were tortured and maimed while at the Con Son Island prison two years ago say there are still 23 paralyzed inmates there and about 300 others confined to cramped tiger cage cells. They claim that many prisoners died from illness and from wounds inflicted in the beatings. A Saigon government spokesman denied last week the charges of mistreatment."

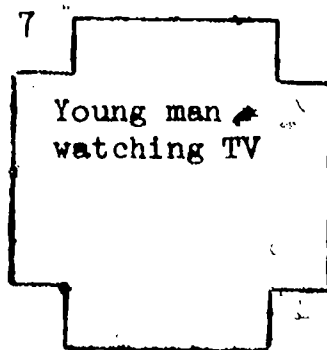


(TV Announcer) "The nation was saddened today by the sudden death of Senator Heartley Horst. Senator Horst had represented the Opportunity State for the past 22 years, and had long been considered the dominant decision-maker of his party's policies. Arrangements are being made for his funeral in his hometown of Bennington."

"On Capitol Hill, talk centered around the effect the Senator's death will have on the Energy Resources Committee's impending decision on the Alaskan Pipeline. Here with the news on this development is our Washington correspondent, Bruce Heaton."

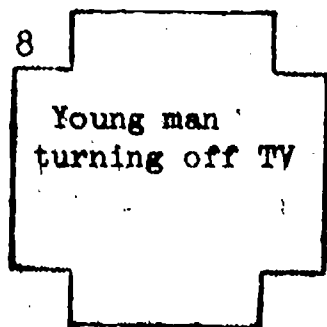


(Heaton) "Senator Horst's sudden death raises some big questions. Reliable sources had indicated that he would cast the deciding vote on the selection of the route for transporting oil from the Alaskan North Slope at Prudhoe Bay. Governor Stanton Winner is reportedly considering several people to replace Senator Horst. And Jesse Copeland, Senate Majority Leader, said today that whoever the Governor selects to fill the now empty Senate seat will also be appointed to the Energy Resources Committee. At this time, then, it looks like this appointment may well be the deciding factor in the final outcome of the Alaskan Pipeline decision."



(TV Announcer) "Monday's forecast calls for decreasing cloudiness, winds from the west and northwest at 10 to 15 miles per hour, and a high temperature near 80. The low Monday night will be in the near 50's, and the high Tuesday will be in the upper 70's."

(Young Man in Den) "Well,"



(Young Man) "... now, it looks like there might be an exciting political situation shaping up here. This Alaskan Pipeline is important all right,"

9

Young man going
toward phone

(Young Man) "... but Governor Winner will have to take a lot of other considerations into account.

(Sound of telephone ringing)

(Young Man) "I'll get it."

10

Young man hold-
ing the phone
toward camera

(Young Man) "Hello? Yes, just a moment. It's for you. Let me turn on the pictophone."

11

Pictophone

(Secretary's Voice) "This is Governor Stanton Winner's office calling. Please hold for Governor Winner."

(Governor's Voice) "Hello!"

12

Pictophone
(Governor
Winner on
screen)

(Governor Winner) "This is Stanton Winner. "How's everything in the big city? Fine ... good. I suppose you've heard about the death of Senator Horst. He did a lot for this state. He'll be mighty hard to replace, but I believe I've found the person who can handle the job. In fact, that's what I've called you about. You see, when I pick a new senator, I've got to think about all the needs of our state. Our party has been attacked right and left for not being concerned enough about young people. You know, seems to me that more than anything we need a younger person in this office. With the 18-year-olds voting, we've got to attract them, but it makes sense that this person has got to be from an industrial part of the state. If we lost the labor backing, our party would be in real trouble."

13

Pictophone
(Governor on
screen)

(Governor) "And what with this fire on about the Alaskan Pipeline, we've got to have someone who can get in there and handle the situation with a little diplomacy. On top of this, this person has got to be able to win, and I mean win big, in the fall election. Well, I imagine you've guessed my reason for this call by now. I've looked at all the qualified people for this job and all the contingencies, and I've decided that you are the most capable person for this job. Yes, yes, I knew you'd be delighted to accept. I'll get the word to Washington and let them know that you'll be filling Heartley's seat. Now I'm going to turn you over to my executive assistant, Ken Tate. He'll fill you in on the pipeline situation. Congratulations! It's great to have you working for the state!"

14

Pictophone
(Ken Tate
on screen)

(Tate) "Hello, congratulations! I'm sure pleased with your appointment. As I told the Governor, I know you'll be an asset to the state and to our party. I guess the Governor has already gone over some of the sticky problems that you're going to face, but I'll say one thing right now. If you can make everybody happy on this pipeline deal, you'll be smelling like roses come election time this fall. You need to get up to Washington as soon as possible."

15

Pictophone
(Ken Tate on
screen)

(Tate) "First thing you ought to do when you get there is to go see Nat Foiler over in the Department of Interior. I'll let him know you're coming. He'll give you the background details on the pipeline development. The vote on this issue is coming up right away, so concentrate all your efforts in that direction. Feelings about it are pretty high. You don't want to step on anybody's toes, at least not too hard. Remember, your reelection may hang in the balance. Just like the Governor always says, 'The name of the game is win!'"

16

Young man in
easy chair

(Young Man in Den) "How about that? You're a Senator now -- with the decision on oil transportation from Prudhoe Bay sitting in your lap."

Young man
looking at
camera

(Young Man) "Not exactly the catbird's seat, is it?
I guess you'd better get your bags packed and catch
the next plane to D.C. We'll miss you around here.
Send me a postcard if you get a chance.

18

View of airport

19

Aerial view of
Capitol at
Washington
D.C.

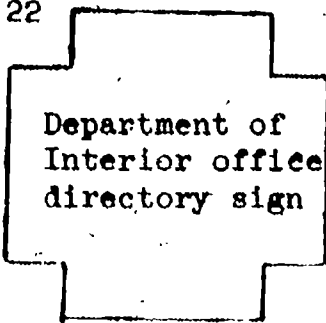
20

Lincoln
Memorial

21

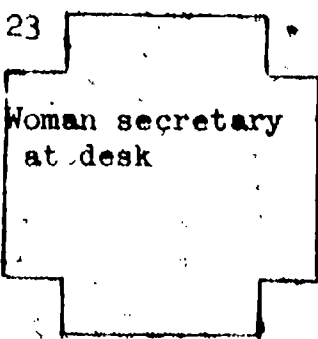
View of U.S.
Capitol
Building

22



Department of
Interior office
directory sign

23



Woman secretary
at desk

(Secretary) "Come in. You must be the new senator. Mr. Foiler is expecting you. Go right in."

24



Nat Foiler
gesturing
toward chair

(Foiler) "Come in, Senator. Welcome to the Hill! Have a seat. Ken Tate called and told me you'd be arriving today. I have been looking forward to meeting you. I have several maps and photographs collected here so I could make things a little clearer to you. I know that you are going to be real busy so I'll try to be as brief as possible."

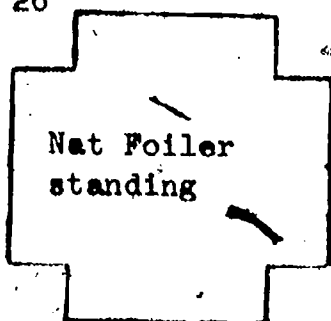
25



Nat Foiler
gesturing
toward map

(Foiler) "Back in July of 1968, two oil companies, Humble and Atlantic Richfield, brought in the first well to the North Slope of Prudhoe Bay in Alaska. Prudhoe Bay is on the coast of Alaska facing the Arctic Ocean."

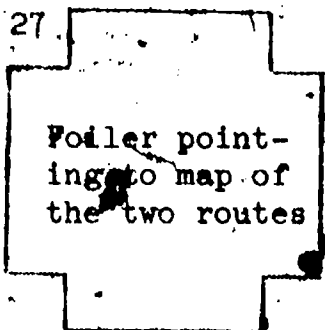
26



Nat Foiler
standing

(Foiler) "This field has twice as much oil in it as any other field in North America. The geologists tell us there's at least 10 billion barrels of crude oil there -- that amounts to one-fourth of all the United States' proven oil reserves. Because of the shortage of fuel in our country, you can see why it's generating so much interest."

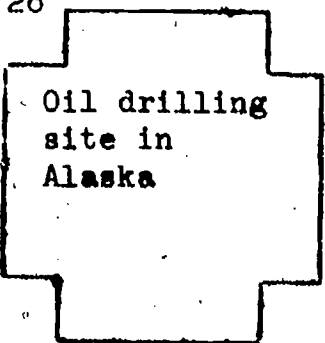
27



Foiler point-
ing to map of
the two routes

(Foiler) "The big problem about this site is its location. Because of climatic and distance factors, the cost is 10 times that of a well drilled in West Texas."

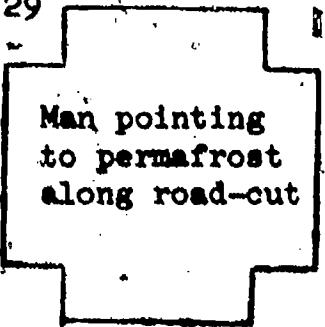
28



Oil drilling
site in
Alaska

(Foiler) "When they were drilling up there in '68 and '69, 330 thousand dollars were spent each day on airlifting supplies alone."

29



Man pointing
to permafrost
along road-cut

(Foiler) "And then the buildings presented special construction problems because the permanently frozen earth, they call it permafrost, would melt if the heat from the buildings came in contact with it, so they had to build up off the ground."

30

Nat Foiler
(standing)

(Foiler) "All right, the location causes drilling and construction problems, but this is just the beginning. The real obstacle is getting the oil from the Slope down to refineries here in the United States where we can use it. The first plan that the oil companies came up with was to transport it by oil tanker, ordinarily a fairly conventional method, except in this case it meant the completion of a 400 year dream -- the crossing of the Northwest Passage."

31

Large tanker,
the Manhattan.

(Foiler) "In 1968 an experimental trip was planned. The largest and most powerful tanker under the American flag, the Manhattan, was leased by Humble to attempt to get to the Alaskan North Slope by the Northwest Passage through these icy waters across the top of North America."

32

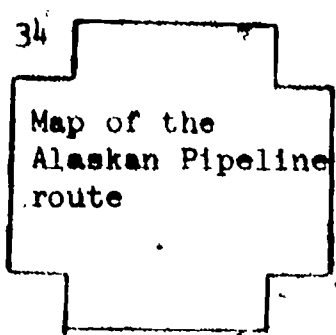
Icebreaker
ship

(Foiler) "Accompanying the tanker Manhattan were three icebreakers like this one from the Canadian and the United States governments."

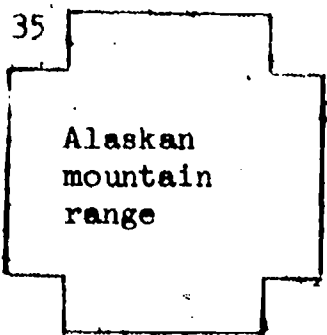
33

View of ice
blocks from
deck of the
Manhattan

(Foiler) "They used airplanes and helicopters to guide the tanker through the ice, which reached a thickness of 14 feet in some places. The Manhattan made the initial and return voyage successfully, but on both trips the ice gouged large holes into the hull. Still, technically, the trip was a success. But as you can imagine, the cost of supporting icebreakers, airplanes, and helicopters prohibited anybody from making a profit on the deal. Plus, there was a lot of concern over possible oil spills that would pollute the water, so the idea was scrapped."



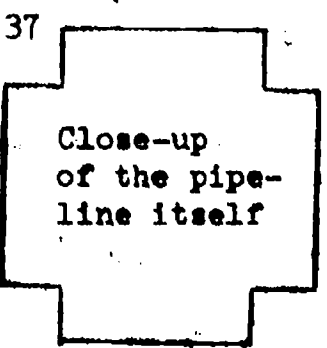
(Foiler) "At first glance, the logical alternative was a pipeline which would go from Prudhoe Bay all the way down to Valdez, here on the southern coast of Alaska. The pipeline route is a lot like an obstacle course. It would cross some of the most environmentally sensitive areas on the earth,"



(Foiler) "... three mountain ranges, including the 150 mile wide Brooks Range, 350 rivers and streams, glaciers, one earthquake zone, and 400 miles of permafrost."

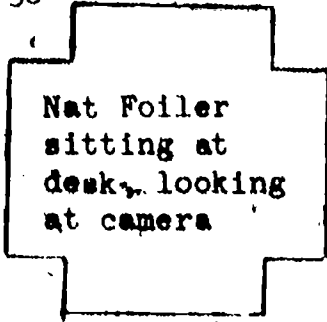


(Foiler) "Once the oil reached Valdez, it would be shipped by tanker to the refineries on the west coast of the United States."



(Foiler) "The pipeline they planned to lay would be 4 feet in diameter and 789 miles long. Initially, it would flow 600,000 barrels of oil a day, and eventually up to 2 million barrels a day."

38

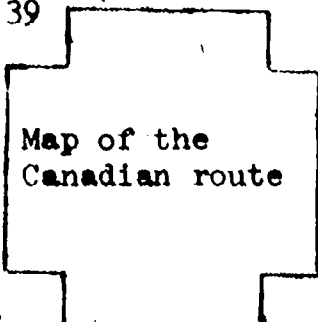


Nat Foiler
sitting at
desk, looking
at camera

(Foiler) "This project would be the largest nongovernment project in history, so big that 7 oil companies joined together into a consortium, the Alyeska Pipeline Service Company. Their transport plan didn't come cheap. The cost is estimated at 3 billion dollars."

"Then, at this juncture, the ecologists began pointing out possible damage the pipeline would cause to the environment, and the Department of Interior stepped in and issued an injunction to stop construction permits until further environmental studies could be completed."

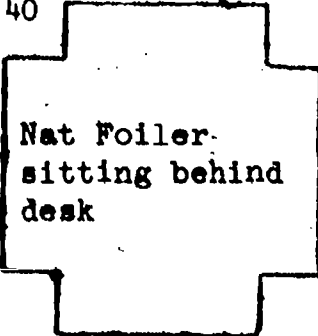
39



Map of the
Canadian route

(Foiler) "So far, the only feasible alternative seems to be the Canadian Pipeline System. It's route would go from Prudhoe Bay to the MacKenzie River Delta and then along the MacKenzie River Valley through Western Canada to Edmonton, where it would hook up with pipelines already in operation. Most people agree that the environmental consequences of the Canadian line are not nearly as severe as the Alaskan Pipeline. The earthquake zone would be avoided entirely, and permafrost areas are limited, but this route is 2,000 miles long instead of the 800 miles for the Alaskan Pipeline. This means the cost of construction would be closer to 4 to 8 billion dollars instead of 3, and it would take 3 to 5 extra years to build it."

40



Nat Foiler
sitting behind
desk

(Foiler) "And that, senator, is pretty much a rough outline of the situation the Energy Resources Committee must deal with. You can elect to build the Alaskan Pipeline, or go the alternative Canadian route, or just not build any pipeline at all and forget about using the oil from up there. I'm glad I don't have to make that decision. Now, if there's anything else that the department, or I, can do for you, please let us know. Good luck!"

41

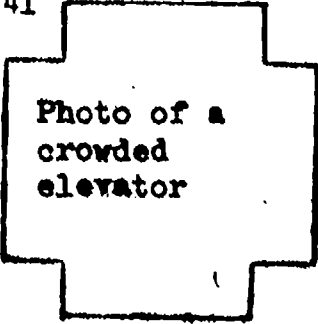
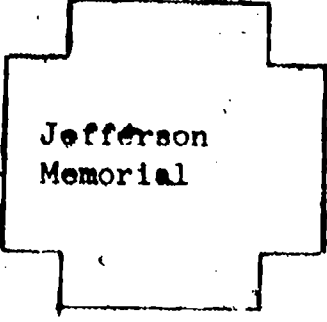


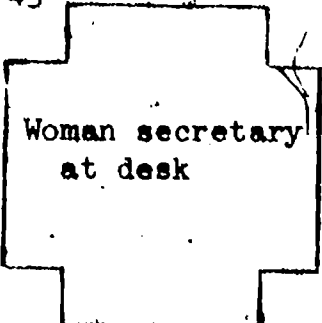
Photo of a
crowded
elevator

42



Jefferson
Memorial

43



Woman secretary
at desk

(Secretary) "Good morning, Senator. We've been expecting you."

44



Secretary

(Secretary) "You already have a lot of mail on your desk and several people have called for appointments. There's a letter from the president of the American League for Environmental Protection that you should probably look over first."

45

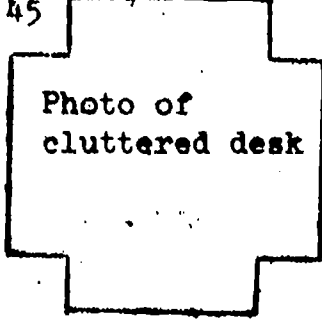


Photo of
cluttered desk

46

Letter lying
on desk.

47

Read page 3
in your Study
Guide

Please read page 3 in your Study Guide. Stop the tape and restart when you are ready.

48

Close-up view
of telephone

(Telephone buzz)

(Secretary) "Senator, excuse me, but Doyle Greathouse, Executive Vice President for Environmental Concerns, is here to see you. I'll send him right in."

49

Mr. Greathouse
coming in
door

(Greathouse) "Good to meet you, Senator, Doyle Greathouse here. I sure appreciate your giving me this time to explain the National Oil Corporation's point of view on the Alaskan pipeline proposal."

50

Mr. Greathouse seated by desk, looking at the camera

(Greathouse) "Now, I'll be honest with you. When we first formulated plans on this transport system, we sure overlooked a lot of environmental hazards, but when the Department of Interior issued that injunction to stop the construction, an environmental study on this project, unequal to any made in the past, was begun."

51

Mr. Greathouse seated, leaning back in chair

(Greathouse) "Altogether, more than 400 separate investigations have now been completed. The Department of Interior itself made a 2-year long study, and that produced a six volume environmental impact review which cost more than 9 million dollars. The Alyeska Pipeline Service Corporation has expended 350 million dollars in massive new pipeline engineering and environmental studies. Now I'll tell you, Senator, I've looked over all these studies, and I'd stake my career on our being able to build an environmentally safe pipeline. It's going to cost us a lot more, all right -- 3 billion instead of our original estimate of 1 billion, but, you know, we're prepared to spend it. I brought along a list of all the safeguards that we intend to take."

52

Close-up of list of safeguards

(Greathouse) "I'd appreciate it if you'd read it over. I think it will show you that we don't intend to take a single risk."

53

Mr. Greathouse leaning forward

(Greathouse) "This pipeline is going to be safe. The oil industry can't afford for it not to be. But we just need approval for construction now so we can get on with the job. If we don't get that oil, energy crises more severe than those we've already witnessed in both your state and all over the nation are going to keep up."

54

Mr. Greathouse
looking at the
camera

(Greathouse) "Now we sure don't want to pressure you, but it would mean an awful lot to 80,000 people in the oil industry in your state if we were assured of your support. Any information or help that we can give you, we'd sure be happy to accommodate."

55

Doyle Greathouse
going out of
the door

(Greathouse) "I've taken up enough of your time, Senator. Thanks again, and good luck on your reelection this fall!"

56

Read page 5 in
your Study
Guide

Please read page 5 in your Study Guide. Stop the tape and restart when you are ready.

57

Close-up of
telephone

(telephone buzzer)

(Secretary) "Excuse me, Senator. Marlene Monetta, Professor of Economics at the State University is here for her appointment. I'll send her in."

58

Ms. Monetta
coming in door

(Monetta) "Hello, Senator, How are you? Thank you for seeing me."

59

Ms. Monetta
seated by desk
holding folder

(Monetta) "I was thinking that you might be interested in Alaska's economic situation. You see, her economy has never been stable and that's why the discovery of oil up there meant so much to the people. There were hardly any settlers in Alaska until the Gold Rush back in the late 1800's. After it died out, the fishing industry was big business, 'till the catch dropped off. In the fifties the construction boom held up the economy, but it was still touch and go,"

60

Ms. Monetta
talking and
gesturing

(Monetta) "... so in '68 when they discovered oil up there on the North Slope, it looked like Alaska might at last be able to stabilize her economy. Now with this environmental scare, Alaska stands to lose 1.2 billion dollars in oil revenues, and Alaskans themselves will lose hundreds of millions. Each year, even in 1970 when the oil industry contributed some 50 million in payrolls and provided 5,000 jobs, the state budget still required deficit financing to the tune of a hundred million bucks."

61

Ms. Monetta
pointing to
pictures in
a book

(Monetta) "With pipeline construction halted, less than 300 men, and most of them caretakers, remain on the job. Here are some pretty sad photographs that will give you a better idea of what's happened."

62

Man walking
through an
empty warehouse

(Monetta) "Just look at those deserted campsites and equipment. Airlines and drilling supply firms have gone bankrupt overnight. Welfare roles and unemployment have soared."

63

People standing
in food line

(Monetta) "Now listen, Senator. It's time we Americans thought more about the people in Alaska than the negligible number of caribou that might die."

64

Ms. Monetta
talking toward
camera.

(Monetta) "All of the state's newspapers, banks, and businessmen support building the transport system. Right here in the Anchorage Daily Times is an editorial stating, and I quote: 'The overshadowing consideration among Alaskans today is that the pipeline opens the way for a great new era of economic growth.' End quote."

65

Ms. Monetta
standing up
to leave

(Monetta) "It just doesn't seem fair to me, Senator, to deny the people of the state of Alaska this opportunity to grow and develop. Well, that's all of your time that I'll take. I just didn't want you to miss this side of the coin. Thanks for hearing me out. Good day to you."

66

Secretary walking in with a folder

(Secretary) "Senator, here are some newspaper clippings you might like to look over from the 'Letters to the Editor' section of your hometown newspaper, and here's that list of all the people who are going to testify at the committee meeting this afternoon."

67

Close-up of newspaper clippings

(Secretary) "If you're going to make that meeting on time, you'd better leave as soon as you've finished with this list."

68

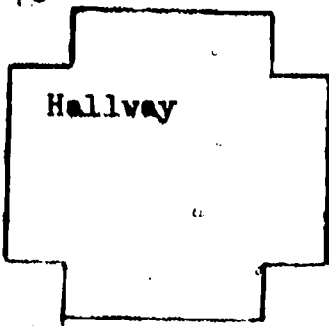
Read page 10 in your Study Guide

Please read page 10 in your Study Guide. Stop the tape and restart when you are finished.

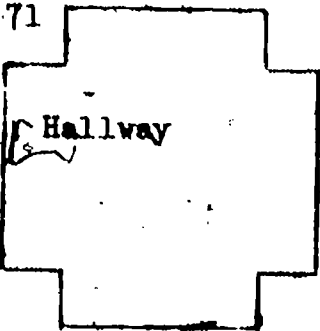
69

Hallway (acknowledgments)

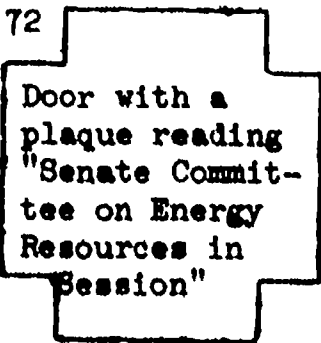
70



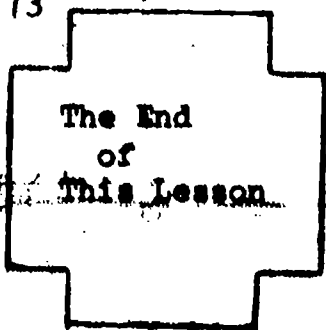
71



72



73



LESSON 6.11: CONFLICTS OF INTEREST

STUDENT RESPONSE SHEETS






Name _____

Date _____

LESSON 6.11: CONFLICTS OF INTEREST

STUDENT RESPONSE SHEET

Frame 1 As a U.S. Senator you have been asked to give the keynote address to the American League for Environmental Protection (ALEP), using the Alaskan Pipeline controversy as the basis of your text. In the space provided below, pick five detrimental effects from the list sent to you from the ALEP which they stated would occur if construction of the pipeline is completed. Then pick 5 safeguards proposed by the oil consortium which they stated will offset these environmental hazards. Indicate your attitude toward the possible consequences by circling the appropriate figure.

DETRIMENTAL EFFECTS	SAFEGUARDS	MY ATTITUDE
1.		
2.		
3.		
4.		
5.		

Name _____

Date _____

LESSON 6.11: CONFLICTS OF INTEREST

STUDENT RESPONSE SHEET

Frame 2 You have been asked to write a short article for the Journal of Energy Resources stating your opinion on the Alaskan Pipeline at this time. In the space provided below, please indicate which proposal before the Energy Resources Committee you believe to be the most viable. The three options are: (1) build the Alaskan Pipeline, (2) build the Canadian Pipeline, or (3) build no pipeline and forego the use of the Alaskan oil. Include at least 3 reasons why you have selected this proposal.

My choice is:

My reasons for choosing this option are:

1.

2.

3.

Name _____

Date _____

LESSON 6.11: CONFLICTS OF INTEREST

STUDENT RESPONSE SHEET

Frame 3 Each of the following people will be on hand to testify at the meeting of the Energy Resources Committee. Note 2 questions you would like to ask each of these witnesses before casting your vote on the oil transport system.

Nat Foiler, Department of the Interior

1.

2.

Norma Liner, President, American League for Environmental Protection

1.

2.

Doyle Greathouse, Executive Vice President for Environmental Concerns, National Oil Corporation

1.

2.

General Mark Wayland, U.S. Army

1.

2.

Marlene Monetta, Ph.D. Economics, State University

1.

2.