SENATOR PAUL TSONGAS

"THE WILL TO SURVIVE"
BRADFORD COLLEGE COMMENCEMENT ADDRESS
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In Washington, a Senator's time has many competing demands on it. But I save a substantial number of hours to talk with students. There is one particularly appealing quality of students. Unlike many of your parents, you're not already convinced that I'm wrong. (That gives us something in common, because I'm not convinced that I'm wrong either.)

Today you are graduates, but I hope you still think of yourselves as students, too. As the Bradford College catalog says, life is "a process of becoming, developing, reconsidering, restructuring." Those of you who are leaving formal academic pursuits now will confront a lot of closed minds out there. Adults who shut themselves off from life-long learning are handicapped by their own hand.

EARLIER THIS WEEK I WAS THINKING BACK TO MY OWN COLLEGE GRADUATION 17 YEARS AGO. I COULD RECALL NONE OF THE WISE WORDS FROM THAT OCCASION, OR EVEN WHO SAID THEM. APPARENTLY, THE RHETORIC DIDN'T RELATE TO MY OWN LIFE IN ANY IMPORTANT WAY. THIS TIME, WITH YOU AS THE LEARNED, CAPTIVE AUDIENCE, I WILL TRY TO SHARE SOME THOUGHTS IMPORTANT TO YOUR FUTURE.

FIRST OF ALL, LET'S GIVE THIS DAY ITS DUE. THIS

COMMENCEMENT AT BRADFORD CELEBRATES YOUR ACCOMPLISHMENT,

YOUR ENTHUSIASM, AND YOUR IDEALISM. IT IS AN EXHILARATING

THRESHOLD, AND I CONGRATULATE EVERY ONE OF YOU FOR EARNING IT.

One of the utterly exciting aspects today, as with any time of reflection and celebration, is that no one can know what comes next. Your values and goals were shaped in the 1960s and '70s, but how they may be expressed and fulfilled in the 1980s and beyond is unknown. It's up to you and a few lucky accidents, too. That's where the fascination of life lies.

Some of you will seek fame; some will happily put family above all other pursuits. Someone here today may become a distinguished judge; someone else may even bring in a little business as a defendant. You are individuals, free to pursue happiness wherever it may seem to be.

The good news today is your youth, your spirit, and your intelligence. One of the timeless themes for graduation days everywhere is to urge graduates such as yourselves to reach out into the world to serve others less fortunate. Today my departure from the positive news will not be the traditional call for altruism and selflessness on a global scale. In 1979 the bad news is that worldwide abuse of this earth threatens our health, our welfare and our very survival. In the well-traveled words of Pogo: "We have met the enemy, and he is us."

I HOPE YOU ALREADY KNOW -- OR ARE PREPARED TO BE CONVINCED -- THAT THE CURRENT SITUATION WITH OUR NATURAL RESOURCES IS NOT SOME ABSTRACTION, BUT A CRISIS THAT WILL AFFECT YOU PERSONALLY. I ASK THAT YOU LISTEN TO A BRIEF SURVEY OF THIS CRISIS AS IF YOU STILL HAD ONE LAST TEST TO TAKE. IN TRUTH, YOU WILL TAKE THAT TEST READY OR NOT. WE WILL ALL BE TESTED IN THE LAST FIFTH OF THE 20TH CENTURY. THE TEST INVOLVES WHETHER WE HAVE THE WILL TO SURVIVE.

THINK BACK ON SOME OF THE CRISES AND ATROCITIES OF THE LAST 50 YEARS. THE HEADLINES HAVE BEEN MIND-BOGGLING:
WORLD ECONOMY ENTERS GREAT DEPRESSION
JAPAN ATTACKS PEARL HARBOR
COMMUNIST CHINESE SWARM INTO KOREAN WAR
KENNEDY-KHRUSHCHEV SHOWDOWN OVER CUBAN MISSILES
HUNDREDS OF THOUSANDS DEMONSTRATE AGAINST VIETNAM
WAR/HUNDREDS ARRESTED

House Votes Impeachment of President Nixon Midwest out of Natural Gas: Thousands Lose Jobs

AMERICANS SURVIVED THESE CRISES BECAUSE OF THE ACTIONS
OF INDIVIDUAL CITIZENS AND LEADERS WHO CARED. WE CAN SURVIVE
THE CRISES OF ENERGY AND ENVIRONMENT ALSO, BUT THERE IS ONE
DIFFICULT DIFFERENCE. OUR SELF-INFLICTED PROBLEMS IN
RESOURCES ARE STILL TOO INVISIBLE. AND IT IS THE TRAGIC
NATURE OF ENVIRONMENTAL AND ENERGY CRISES THAT THEIR
SOLUTIONS REQUIRE INCREDIBLY LONG LEAD TIMES.

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## ENVIRONMENT

Today there's not enough time to do Justice to the Injustices we have heaped upon Mother Earth. But let me give you a sampling. The constant accomplice of environmental dangers is unchecked population growth. From its population of 3 billion in 1960, the world will reach 6 billion by the year 2000. Mexico City, for example, had about 3 million residents at the end of World War II. Over 13 million people live — or try to live — there today. At the present rate, Mexico City will have over 30 million residents by the end of this century. That's more people than the entire nation of Canada.

THIS DANGER, IRONICALLY, IS TIED TO HUMAN PROGRESS. IN
THE PAST GENERATION, THE GLOBAL DEATH RATE HAS FALLEN SHARPLY.
THERE HAVE BEEN GREAT GAINS IN MEDICAL SCIENCE AND PUBLIC
HEALTH, INCLUDING ALMOST TOTAL VICTORY OVER MALARIA, CHOLERA,
YELLOW FEVER AND PLAGUE. THE BIRTH RATE HAS REMAINED HIGH,
AND THE RESULT HAS BEEN UNPRECEDENTED POPULATION GROWTH
AVERAGING OVER TWO PERCENT A YEAR.

POPULATION GROWTH IS PUTTING IMPOSSIBLE DEMANDS ON FOOD RESOURCES. FOR EXAMPLE, THE OCEANS ARE AN IMPORTANT SOURCE OF FOOD. THEY ONCE WERE THOUGHT TOO VAST FOR HUMANS TO HARM. NOW THEY ARE OBVIOUSLY SUFFERING FROM THEIR CARELESS USE AS A GARBAGE DISPOSAL. THERE ALSO IS A GLOBAL PROBLEM OF DETERIORATION AND LOSS OF CROPLAND. WE STILL HAVE TOO LITTLE DATA ON CROPLAND LOSSES. BUT EVERY YEAR A SIGNIFICANT AMOUNT IS PAVED OVER, STRIP-MINED, ERODED OR LEFT TO DRY OUT WHEN IRRIGATION WATER IS DIVERTED.

IN THE LAST 30 YEARS, ONE-HALF OF THE EARTH'S FORESTS

HAVE DISAPPEARED. JUST THINK OF IT. AT THE PRESENT RATE OF

DESECRATION, ANOTHER TWO-THIRDS OF WHAT REMAINS WILL BE GONE

BY THE YEAR 2000. BY THAT TIME, BIOLOGISTS PREDICT THAT

DEFORESTATION WILL HAVE CAUSED THE TOTAL EXTINCTION OF ONE-HALF

MILLION SPECIES OF BIRDS, ANIMALS, AND PLANTS. THAT REPRESENTS

ONE-FIFTH OF THE WORLD'S TOTAL.

IN THE UNITED STATES DURING THE 1970s, WE HAVE MADE CONSIDERABLE PROGRESS IN RECLAIMING OUR NEGLECTED NATURAL RESOURCES. Some of the positive areas are:

- \* PROTECTION OF ENDANGERED SPECIES
- \* CONTROL OF STRIP-MINING
- \* THE HANDLING OF TOXIC SUBSTANCES
- \* PROTECTION OF WILD AND SCENIC LANDS
- \* IMPROVEMENT OF AIR AND WATER QUALITY.

OUR GAINS AGAINST POLLUTION -- AND OUR AGENDA OF UNFINISHED ENVIRONMENTAL BUSINESS -- ARE THREATENED BY THE ENERGY CRISIS.

OUR DANGEROUS DRIFT INTO ENERGY SHORTAGES HAS CREATED A GROWING DEMAND IN THE WRONG DIRECTION. Among the costly options are:

- \* OFF-SHORE DRILLING
- \* BURNING MORE COAL
- \* RELAXATION OF ENVIRONMENTAL STANDARDS
- \* INCREASED RELIANCE ON NUCLEAR POWER
- \* MORE PIPELINES FOR GAS
- \* OIL AND COAL SLURRY
- \* THE BREEDER REACTOR

JUST THIS THURSDAY, FOR EXAMPLE, WE WERE ABLE TO DE-AUTHORIZE THE CLINCH RIVER BREEDER REACTOR BY A CLIFF-HANGING, 10-8 VOTE IN THE ENERGY COMMITTEE.

## ENERGY

THE ENERGY ISSUE IS HARDER TO IGNORE THESE DAYS THAN ENVIRONMENTAL PROBLEMS, AND SO WE STRUGGLE CONSTANTLY IN WASHINGTON TO AVOID SACRIFICING THE ENVIRONMENT IN THE NAME OF ENERGY. THE THREAT OF ENERGY DEPENDENCY TO OUR SECURITY AND SURVIVAL IS ALSO MORE OBVIOUS RIGHT NOW THAN SERIOUS ENVIRONMENTAL DANGERS. AND YET WE ARE STILL FAILING TO ACT RESPONSIBLY TOWARD THE FUTURE AND OUR CHILDREN'S FUTURE.

The most recent, flagrant example came 9 days ago, when the House of Representatives voted heavily against a stand-by plan for emergency gas rationing. Many of the 246 voters against the plan will be giving fine speeches about national defense this Memorial Day. But they were willing to kill stand-by plans that would reduce the danger from our greatest area of vulnerability — the Persian Gulf. A Soviet attack to knock out oil production in the Middle East would be as devastating as a blitzkrieg sweep across Western Europe.

We need new public pressure on energy. Even though most of you will not go into Jobs directly involving energy resources, I urge you to get involved as citizens. There Just isn't much of a constituency for conservation, our best "source" of energy. We need a strong national commitment to solar-derived energy sources. Our goal should be 25% of

America's energy needs from solar by the year 2000. Yet there was nothing about energy in the last State of the Union Address, and we're still waiting for a Domestic Policy Review on Solar Energy begun one year ago.

It's later than late on energy. Over 5 years after the Arab oil embargo, the United States is importing nearly half its oil. And yet the Senate has passed a Budget Resolution blind to what's staring us in the face. According to the Budget plan, Federal funds for energy research and development would actually decline in constant dollars during the next 5 years.

I ANXIOUSLY AWAIT RESULTS OF THE DOMESTIC POLICY REVIEW ON SOLAR ENERGY. PRESIDENT CARTER BEGAN IT ONE YEAR AGO, AND ITS RELEASE HAS BEEN DELAYED. IT CAN AIM US TOWARD A SECURE FUTURE OF SOLAR-DERIVED SOURCES, WHICH ARE NOT LIMITED BY NATURE OR BY FOREIGN RULERS. THE REVIEW CAN EDUCATE AMERICANS THAT SOLAR ENERGY IS PRACTICAL TODAY FOR MANY APPLICATIONS, BUT THAT IT SUFFERS FROM THE HEAVY SUBSIDIES GIVEN TO COMPETING SOURCES LIKE NUCLEAR AND COAL.

I have urged President Carter to take a basic, businesslike step. He should provide a comprehensive accounting of Federal subsidies to conventional fuels. The tax code, research budget, pricing practices and loan programs are crammed with subsidies. According to one estimate, Federal subsidies to favored "conventional" fuels exceed \$200 billion.

AMERICANS MUST BE WILLING TO INVEST IN A SECURE, SAFE ENERGY FUTURE FOR OUR CHILDREN. THE FUTURE MEANS SAFE FORMS OF RENEWABLE ENERGY. IN THE NEAR RUN, IT INCLUDES



SOLAR HEATING AND COOLING, BIOMASS, SMALL-SCALE HYDROELECTRICITY, AND COGENERATION. OTHER SOURCES THAT DESERVE AGGRESSIVE RESEARCH AND DEVELOPMENT INCLUDE PHOTOVOLTAICS, WIND, AND SECOND GENERATION COAL TECHNOLOGIES.

We need the equivalent of an Apollo Program or a Manhattan Project.

## SUMMARY

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Your generation is the first to reach maturing in an age of resource limits. Looming shortages will threaten to pull our society apart. It seems almost inconceivable that the generations before yours have stumbled with so little care and planning into this situation. But after a hard transition, we may actually reach a more human, less reckless way of living with our fellow human beings and with our biosphere.

THINK OF A STROLL DOWN THE STREET VERSUS THE WASTEFUL OPTION OF DRIVING THE SAME, SHORT DISTANCE. THE WALK MIGHT BE FILLED WITH FRIENDLY HELLOS, WITH SMILES, AND MAYBE TIME TO EXCHANGE NEWS WITH NEIGHBORS. INSIDE THE CAR, IT'S NOT LIKELY THERE WILL BE MUCH HUMAN CONTACT. IT MAY BE FASTER, BUT WHAT A WAY TO GO! AND EVENTUALLY, WHEN EVERYONE IS LOCKED IN HIS OR HER CAR, THE TECHNOLOGY IS NO LONGER EVEN EFFICIENT. THAT'S THE POINT WE ARE APPROACHING IN OUR WOULD-BE MASTERY OF THE EARTH'S RESOURCES.

I'M REMINDED OF SAMUEL COLERIDGE'S LINES FROM THE RIME OF THE ANCIENT MARINER:

"FAREWELL, FAREWELL. BUT THIS I TELL TO THEE THOU WEDDING GUEST

HE PRAYETH WELL WHO LOVETH WELL BOTH MAN, AND BIRD, AND BEAST

HE PRAYETH BEST WHO LOVETH BEST ALL THINGS BOTH GREAT AND SMALL

For the Dear God who Loyeth us He made and Loveth ALL."

If our society is to will its survival, individuals such as yourselves must understand the threat. And you must know that individuals <u>can</u> change conditions for the better. Part of the battle is the kind of Questioning, open mind that your education has provided you. Let me just remind you of how an open mind can make a difference:

• A LAW STUDENT IN THE LATE 1950s USED TO HITCHHIKE LONG DISTANCES DURING VACATIONS. AFTER SEEING AN AWFUL LOT OF CAR WRECKS, AND THE HUMAN CARNAGE FROM THEM, HE STARTED STUDYING WHAT HE CALLED "THE SECOND COLLISION" IN AN ACCIDENT -- THE COLLISION WHEN THE PASSENGER HITS THE CAR. HIS NAME WAS RALPH NADER, AND HIS WORK SINCE THEN HAS SAVED THOUSANDS OF LIVES.

MY THREE YEARS IN THE PEACE CORPS TAUGHT ME THAT YOU CAN NEVER KNOW WHEN YOUR INDIVIDUAL EFFORT WILL MAKE A MAJOR DIFFERENCE. I HAVE RE-LEARNED THE LESSON MANY TIMES SINCE THEN. DECADES AGO EDMUND BURKE STATED THE FUNDAMENTAL TRUTH I WOULD LEAVE WITH YOU: "ALL THAT IS NECESSARY FOR THE TRIUMPH OF EVIL IS THAT GOOD MEN DO NOTHING." AND SINCE I KNOW THAT BRADFORD COLLEGE BEGAN AS A SCHOOL FOR WOMEN, I HASTEN TO ADD THAT NEITHER MR. BURKE NOR I MEANT TO EXCLUDE HALF OF HUMANITY. WE MUST HAVE THE WILL TO DO SOMETHING FOR OUR SURVIVAL, AND FOR THE SURVIVAL OF OUR CHILDREN IN THE FUTURE.