

Dr. Hellbary - Am. Nuclear Society

Mr. Kenneth Davis - Atomic Industrial Forum

REMARKS

VICE PRESIDENT HUBERT HUMPHREY

AMERICAN NUCLEAR SOCIETY -

ATOMIC INDUSTRIAL FORUM

WASHINGTON, D.C.

NOVEMBER 15, 1965

(Mr. Glenn Seaborg)

Power failure - Joe Sudder Pina at on the Canadian White House

✓ Congressman Dolefield
✓ Congressman Price
✓ Commissioner of AEC
Ramey
Tapes
Palfrey

Charles F. Kettering once said, "My interest lies in the future because I am going to spend the rest of my life there."

Scripted Truth

He expressed the spirit of America. We look to the future. We are a nation endowed with a healthy optimism and a faith in our ability to make tomorrow better than today.

and Today we have good reason for our faith.

(Energy - not fossil fuel)
Success - Vitamin

↳ We live in the midst of scientific revolution --
a "Third Revolution," as ~~Chairman~~ Chairman Seaborg
~~is fond of calling it~~ ^{is} which at the same time is a
political, economic and social revolution.

I have been aware, during my career of public
service, of the increasing degree to which ^{grave international} problems
have depended on science and technology for at least
partial solution.

~~The space program is an obvious example.~~

↳ The whole field of disarmament and of relieving
international tensions ~~is another~~ ^{through negotiation} ~~which~~ involves
^{involves} creation of technical means for peaceful accomodation
between nations.

Arms control

For instance: Extension of the Limited Test Ban Treaty to cover underground tests is closely related to the technical ability to identify seismic events. And the use of nuclear materials for peaceful purposes ~~around the world~~ is dependent on the technical ability to safeguard such materials from diversion to military purposes.

Here at home our ~~whole~~ national effort to create a Great Society -- to increase man's potential for life, liberty and the pursuit of happiness -- is partially dependent on the growth of science and technology.

Science and technology already have given us longer and healthier lives, and more material goods than previous generations could imagine.

↳ The urgent problems ~~we face in America~~ -- problems of urban and rural living, of housing, of education, of poverty -- cannot be solved by a return to a simpler life. ↳ They will require for solution continued scientific and technical progress -- and the wise use of ~~it~~ by *Sciences & Technology*

by those with responsibility to make decisions.

↳ If anyone doubts the impact that science and technology have had on our society, in just the past 20 years, he need look only to the new industries employing many thousands of people ~~which have come into existence during that time~~ -- industries based solely on the evolution of new products and services. These include -- and I mention only a few -- television, the computer, the jet engine and nuclear energy -- *and many chemicals + medical products*

↳ Some of these industries have sprung from the application of a single invention or chain of scientific thought.

*new industry
science & technology*

During these past 20 years, too, we have seen in the United States the creation of a constructive partnership unknown in our previous history -- a partnership of government, university, management, labor, science and citizen -- a partnership devoted to maximum development of science and technology not for the narrow interest of any single group, but for the common good.

new statk
↳ To witness the space launchings at Cape Kennedy, as I have, is to see this partnership in action.

↳ And the lessons of this constructive partnership have not been lost on other parts of our society.

But - ↳ Science alone will not solve man's problems. If misused it can harm or destroy man. But, with wise use, it can extend and make more rewarding man's life on earth.

↳ In this knowledge, our American government has made its commitment to the future.

~~In the United States~~ ⁷ ~~this year we~~ will spend about ~~the~~ 21 billion dollars -- more than 3 per cent of our Gross National Product -- on research and development. ~~about~~ ~~approximately~~

almost two-thirds of this amount will come from the federal government. This amounts to more than 100 dollars for every man, woman and child in the United States.

↳ This is one of the best investments any country has ever made in its future. It is an investment which stimulates every sector of our economy . . . which raises our standard of living . . . which improves our level of education. Above all, it is an investment which will enable us to maintain our role of constructive leadership in the world.

New Power
Newsweek

Educ

History tells us that those who turn inward -- those who give up the search for new knowledge -- are in time consigned to extinction. I, for one, have no intention of becoming extinct.

Keep Yes, we are committed to fullest possible development of science and technology. And that commitment includes development of nuclear energy. Keep

Twenty years ago there were those who were convinced that the nuclear age would bring man's destruction or salvation within a generation.

For nuclear energy does carry with it the seeds both of annihilation and of unprecedented human progress.

But Man has restrained himself during these 20 years and nuclear holocaust has not been launched.

↳ Man continues today to create conditions which may prevent that holocaust. And so we live precariously and work for the future.

↳ The peaceful atom today is coming of age and its promise is beginning to be fulfilled.

↳ ~~Today~~ Nuclear power is emerging from its experimental and expensive stage to the status of a reliable and competitive source of energy.

And to a former Senator who worked for passage of the 1954 Atomic Energy Act and the development in 1957 of the Elk River demonstration project, this is good news indeed.

↳ I know this is good news to Chet Holifield, ^{Mel Price} ~~John~~ ^{other} Pastore and members of the Joint Atomic Energy Committee who have had such faith in nuclear power.

∟ I know that in these early years manufacturers and utilities have made large investments in nuclear development with little hope of immediate return. ∟ We have had some dry years. But I think the oasis is in sight.

∟ You who have lived through this difficult early period deserve full credit for your faith and work.

∟ Now, in the next phase of civilian nuclear power development, we can look forward to advanced converter and breeder reactors which will result in more efficient and economical use of our nuclear fuel resources.

∟ I hope that, in design of nuclear reactors, efforts will be taken so that "blackouts" such as the one last week may be prevented.

↳ One aspect of nuclear power -- one I know is of special interest to Commissioner Ramey -- is now attracting worldwide attention, and rightly so. I mean the potential use of nuclear power for desalting of sea water. ↳ This is a field which holds promise not only for parts of the world literally thirsting for water -- but also for our own nuclear industry.

↳ Today we have cooperation agreements for desalting studies with Mexico and Israel and agreement for desalting information exchange with the Soviet Union. ↳ I am sure that desalinization will be a technology to contribute a great deal to the betterment of international affairs, as well as to the lives of many people.

↳ Nuclear power occupies a great deal of our attention. But the peaceful atom is at work in other places.

Radioisotopes

I have seen the work being done on medical uses of radioisotopes at the UCLA Laboratory of Nuclear Medicine and Radiation. And I know of the wide application of radioisotopes in research, agriculture and industry, as well as in medicine. It seems clear that the future of the radioisotope will be limited only by man's imagination -- which at the moment does not seem very limited.

As chairman of the National Aeronautics and Space Council, I am particularly concerned with the atom's work in space.

In 1961 our first operating space radioisotopic power source was orbited. And in 1965 our first space reactor was operated in orbit.

name?

The atom will soon become a major power source for our space program -- an auxiliary source for spacecraft and life support systems and a necessary source of propulsion for extended space exploration.

↳ I can, in fact, foresee the time when our space efforts will be able to continue only through use of rocket and nuclear power units transported and assembled in space.

and ↳ There is also the frontier of the sea.

The N.S. Savannah and the advent of the nuclear submarine can be the beginnings for use of nuclear technology on and under the sea.

↳ Perhaps today's most important nuclear work -- and greatest opportunity -- lies in basic nuclear research.

↳ Our national laboratories are exploring the very nature of matter. They are creating new materials and technology. And they are in general stimulating the growth of science itself.

↳ The development of the peaceful atom has high national priority.

∟ Five years ago about 75 per cent of the AEC budget was used for military purposes. Today, fully half of AEC funds are devoted to the peaceful atom.

∟ This does not reflect any weakening of our military strength. We maintain a powerful nuclear arsenal.

∟ But, it does reflect our faith in and commitment to the peaceful uses of nuclear energy.

∟ We hope the day may come when the Limited Nuclear Test Ban Treaty may be followed by wider progress in disarmament and arms control. And we have made dramatic international proposals to that end. — *specific*

∟ But, until such progress is made, the peaceful atom can of itself aid the cause of peace.

Danger of Nuclear Proliferation — Greatest Threat to the Peace!

↳ Our Atoms-for-Peace and International Atomic Energy Agency programs not only touch directly the health and welfare of millions of people -- they create forces in themselves that demand ^{and initiate} international cooperation.

↳ We have long since recognized that modern science creates a functional international society.

↳ Science thrives on cooperation. It withers in isolation,
insularity.

↳ And it helps make possible a material well-being ^{that nations are reluctant to lose through} ~~that people anywhere are reluctant to lose through~~ international misunderstanding or aggression.

↳ The extension of international nuclear power and technology does carry with it, however, some dangers.

↳ We recognize that this power and technology must be properly safeguarded so that it may not be bent to military use, with the resulting obvious risk to mankind.

↳ This is why our Atoms-for-Peace program, from its beginning, has been carried out in strict adherence to safeguard systems, both bilaterally, and wherever possible, ~~trilaterally~~ multilaterally, through the International Atomic Energy Agency.

↳ Chairman Seaborg recently reported to me on the results of the 9th General Conference of the International Atomic Energy Agency. The Conference, as you know, adopted a United States resolution approving revision of the Agency's safeguards system, to provide even more effective international inspection. *

International Inspection

↳ We shall continue in our efforts toward international sharing of the peaceful atom's benefits just as we shall continue to seek disarmament and reduction of the threat of nuclear destruction.

↳ As a non-scientist I am stimulated by the possibilities of nuclear energy for mankind's use

↳ We have long since found that it does not hold all the answers. It is, in fact, still in its infancy as a tool of man.

↳ Yet I believe we can take heart from the fact that, twenty years after its inception, the nuclear age has not eliminated man -- in fact, it has imposed a greater discipline in his conduct.

↳ We can also be gratified that the atom has been used for peaceful and constructive purpose.

↳ In the years ahead we will continue to make the atom a source of man's cooperation and progress.

↳ May the atom, as all science, be in time to come a tool for understanding . . . for well-being . . . for betterment of the human condition.

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