March 28, 1947

Leesburg, Virginia

WE ARE SENDING YOU THIS RESCRIPT OF MR. HENDRICKSON'S SPEECH BECAUSE IF YOU WERE UNABLE TO ATTEND OUR LUNCHEON YOU SHOULD NOT MISS IT. IF YOU HEARD THE SPEECH, WE ARE SURE YOU WOULD LIKE THIS FOR REFERENCE.

SUBJECT: ATOMIC ENERGY AND LOUDOUN COUNTY

Discovery and partial harnessing of atomic energy is the biggest event in the physical life of our universe for centuries. Conceived and born in secrecy, it calls for study and understanding here and now.

Its influence can be for good or evil--or both. It poses the most fundamental problems in morality, in the rules or laws by which men seek, slowly, painfully, to live peaceably one with another.

Most of us have reflected on the prospects of future world peace. I doubt if anyone can honestly say that the first contribution of atomic energy--the atom bomb--has helped insure peace.

It has doubly assured that any future war can be more horrible than any before. It has moved the battlefields, once the area between ranks of soldiers, to the whole wide world and especially to any concentration of population. Even Loudoun county, with its hills and valleys, is not immune.

To me, the most helpful discussion of the subject recently was provided by Philip Morrison, Cornell University professor of physics. He reveals that the United States Atomic Commission is now in charge of the nation's largest industry, its plant a huge investment, its payrolls long and expensive.

But he has greatly raised my hopes that sound, peacetime uses are attainable even though the main energies of the vast government enterprise are now turned to making bombs and material for most bombs. He points out that the same chain reaction which bursts a bomb in a lightning flash can be slowed down so that the energy can be used for peaceful purposes. These potential uses, now fall into two classes.

First, are medical uses. Radioactive substances are already being used for therapy of hyperthroidism and leukemia. They destroy certain cancer tissues and hold great promise of combatting this disease which ranks second among the causes of death today. But tremendous research is still needed to understand its properties for good.

The second area of promise is in generating power. Mr. Morrison estimates that in Great Britain, where coal production is behind schedule, energy needs for industrial purposes might be met by 20 pounds of nuclear fuel each day. This fuel would represent the reduction by complicated purifying processes of a vast tonnage of uranium. He is confident that the technique of controlled chain reactions, slowed down so the heat generated may be used to produce steam, is on the threshold of discovery. The steam would produce electricity because electric energy can be transported easily.

Mr. Morrison does not visualize an age where automobiles and small home devices will be driven by atomic energy. The weight of shielding materials for those who handle radioactive substances appears to be 50 tons or more-even too much for a locomotive. He sees large, central plants for generating power as the answer.

In view of some of the unfortunate uses to which new invention and technology have been put, there are many who wonder if we have the right to call many past developments by the word "progress." More airplaine miles have been chalked by pilots for war purposes than for peacetime uses. The same engine that pushes a tractor over a peaceful field pushes the tank into No-man's land.

But inventor and invention cannot be blamed for how mankind decides to use an invention. It is mankind that fails--failing signally to advance in the field of government, but, even more importantly, in sensitivity to "right" and "wrong" in the use of a new machine. "Right" or "wrong" is a matter of morality which governments come to recognize only as they are driven to it by the people. Surely, mankind knows the moral principle to meet the challenge of this and other inventions--but he is hard put to apply it.

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T oday we find a world that is restless, tired, but still warlike in the wake of the greatest war in history. The atom bomb has not

postponed the next war by a single day. The moral principle to be employed is obvious--outlaw by international agreement the useof the atomic bomb in warfare. But, man, despite some hopeful signs of progress in doing just that, is so snarled up in agreeing on the details that one is inclined to question the good faith of some who give lip service to the principle of outlawing the bomb.

The usual thing is to blame the other fellow. This is to pass up the basic rule which is to examine our own hearts first. One of the reasons given for using the bomb in the first place--which I shall always regard as criminal--was that "if the other fellow had it he would not hesitate to use it." On that basis of reasoning, our conduct would never be raised far above that of the lowest criminals in our whole society.

Discovery of atomic energy could be a big help in the practice of democracy. Just now, it is not an asset. Wrapped in secrecy, with thinking on all levels of society somewhat devoid of facts, we find apathy, and tendency to leave the whole question to our leaders.

When the rank and file of the people of this or any other country with democratic pretentions begins to feel that the determination of questions shall be left to their rulers without intense public discussion and debate we are on the highroad to authoritarian government. And that road, paved with good intentions up to the first fork, leads only to war.

Peace may be unattainable. There are men, practical, tough thinkers, who believe that. They call themselves realists. People who believe peace can be achieved for a long period of time are called "idealists," too often today a term of reproach. Clearly atomic energy challenges peace, the practise of democracy, and man's capacity to control the wild forces about him with moral principles which are not hard to find but difficult to apply and harder to live with.

Thoughtful people are deeply troubled by this challenge, but docile too. I have talked with many of them in this and other countries. I speak of men of good will, whose objectives are peace and decency--who feel that the resources we periodically throw away in warfare, if utilized in a democractic, aggressive manner between wars, might do away with the basis economic causes of war. In these conversations, I find this sentences, in many languages, repeated frequently.

"If only the people, the ordinary people, had a chance to understand; then these people, who bear the brunt of war in lives lost, treasure spent, and pain and suffering, would work to make atomic energy their servent and not their master--as it now promises to be."

They do not mean that each of us need become a physicist or chemist; they feel rather that if we would explore the meaning of this new energy, and discuss its implications, that we could and would influence wisely and effectively the course of action, not of governments alone, but of man's basic attitudes towards the proper and the improper uses of atomic forces.

Perhaps this is hoping too much. But if we adopt the premise of nontrust in the collective judgment of people, we are giving up on human society, seeking retreat where there is no retreat. I, for one, will not sell mankind short, mankind which has proven repeatedly great capacity for adaptation, for digesting change. Instead, I want to work in the hope that we may advance steadily towards the goal set by our creator.

I, therefore, welcome the opportunity, despite a busy schedule, to help the atomic energy information program of the Loudoun County Provisional League of Women Voters. Its objective is to bring to the residents of the county, through every available means, an opportunity to gain a greater understanding of atomic energy and its implications; to assist everyone in evaluating the alternatives open to us as citizens if this new force is to be made the servant of mankind and an instrument of peace and good.

It is a significant project. If it succeeds, as I know it can with your cooperation and thatof other leaders, than the project will kindle interest in other areas. And, everyone who knows atomic energy, urges intensifying of thinking, of discussion, of knowledge of this subject.

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asked to cooperate and first reactions are excellent. It is not too much--in fact, we would be guilty on non-feassance and mal-feassance, if we should fail to ask the spiritual leaders of the communities within the county, the clergy of Loudoun county, to cooperate in their own way.

I will not suggest methods. You have infinitely greater capacity for that. But I feel strongly that man here, as everywhere else, is in need of guidance and direction on the plane of the spirit, in the area of morality, in meeting the challenge of atomic energy.

There may never be an atom bomb dropped in Loudoun County; I don't know. But one does not have to be hit on the head to be struck by the influences of the greatest unleashing of energy in the history of invention.

The radiations of the atomic bomb are more than gamma rays. The failure to harness the bomb with something more substantial than concrete and lead and carbon will leave a moral vacumn. Failure to utilize the potentialities of the bomb for the good of man and the advancement of peace can be the waste of man's newest golden opportunity.

Why start in Loudoun County? Why not? A start must be made somewhere. What better place to start than in the county we all love.