### REMARKS BY SENATOR HUBERT H. HUMPHREY

### ARMY RESERVE RESEARCH AND DEVELOPMENT NATIONAL SYMPOSIUM

Minneapolis, Minnesota

August 5, 1974

First of all, a word about the Army Reserves:

I am a strong supporter of our armed forces Reserve and National Guard system.

Maintaining a strong, well equipped, well trained Reserve force is a key element in our national defense structure. The Army Reserve program embodies one of the best principles of the unique American system of military service: the citizen-soldier. Army reservists are making great contributions to the strength of our nation and to the health and welfare of our communities.

There is no danger that the American military establishment will become out of touch with the mood and trends of our nation because the Reserves -- Army, Navy, Air Force -- are members of our communities -- working, living and serving in the cities and towns of the nation.

II

I want to say that the Congress has an obligation to the Reserve system. And this obligation is to make the Reserves an attractive place to serve for the men and women in our state and elsewhere. This means that the Congress must provide the proper pay, education and retirement incentives for our reservists.

There is no getting around the fact that if we are to attract well-motivated, capable men and women, we should offer them the benefits they deserve, the benefits to keep them in the Reserves. There are some people who think we can demand a first class Reserve system and pay it second class salaries with low benefits. Well, that won't work. And if the Department of Defense isn't willing to recognize this and recommend what is needed to maintain a strong and well-trained Reserve system, the Congress will have to take the matter into its own hands and act.

## III

I am not an expert on the subject of the Research and Development. However, I am an elected public official who believes very strongly that the economic health of this nation and the soundness of its defense structure rest on the preeminence of American research and development efforts.

The state of Minnesota can be justly proud of its extensive involvement in research and development programs of all types. In agriculture, industrial development, energy, medicine, computers and other important fields, Minnesota is making a tremendous contribution to the research and development endeavors of this nation.

Government and private support of R & D is vital to the people of this state and to the Nation in general. It is clear that in a competitive world where more affluent nations now possess the means and have the highly trained personnel, the American lead in research and development must be maintained and strengthened.

The Europeans, the Japanese and even the socialist nations of the world have learned that the competitive advantage in so many industrial fields goes to the firm or the nation that has the most advanced and well-funded R & D efforts. The Russians certainly know this, as does any nation that aspires for world economic leadership.

However, R & D is expensive, and we must explain to the public what's at stake if the United States falls behind in research and development efforts. And the public must understand that the educational excellence in our Nation -- especially in the fields of pure and applied science and medicine -- is due in large part to the aggressive R & D efforts of American industry and agriculture.

Could we have maintained our leadership in the aerospace field without the far-flung research and development programs? Certainly not. And this goes for civilian and military aircraft, guidance systems and weapons systems.

Could we have gone from the sputnik crisis of 1957 to land a man on the moon in 1969 without intensive R & D efforts? Certainly not. And the American space program is a prime example of the commercial and scientific spinoffs from the development of advanced technology based on well-funded research and development. In medicine, weather prediciton, communication and a host of other fields, our lives were made better by the space program.

And in the field of agriculture, greater research and development efforts will certainly mean the difference between life and death for millions of people around the world in the coming years.

Present levels of food production, as we all know, will not be able to keep up with rising population and growing affluence. We must find better ways to grow food more efficiently, process it and transport it.

For example, we must find the secret of expanded soybean yield. We must find ways to farm and harvest in the seas and tidelands where protein is so bountiful. We must develop new seed varieties for the world's arid regions. This is where research and development are needed and have such an important role to play.

As a Minnesota senator, I also want to say that the R & D efforts undertaken in this state have enriched the educational and intellectual lives of our citizens. Our universities and businesses depend on continuing government and privately sponsored research and development. And, of course, we are all well aware of the fact that R & D is a clean industry, a non-polluting industry that is much desired by any community.

Let me say, finally, that military research and development is the only way to maintain our military strength and also to find better ways to eliminate waste and inefficiency. Military research and development must receive the highest priority from the Congress and the Executive branch. It is expensive, and special attention must be paid to Department of Defense R & D efforts to see that they are, indeed, in keeping with our defense and foreign policy priorities.

I strongly believe that greater efforts should be made within the research and development field to find ways to cut waste. Too often we over-design and over-engineer our weapons -- aircraft, for example. Those involved in R & D have a responsiblity to the taxpayers to hold down the cost of their work as well as to design weapons made to do a job but without all the unnecessary frills we so often hear about.

This is a challenge. But it must be done. If the public and the Congress are to support military R & D, then engineers, scientists and technicians have an obligation to the public to achieve savings and cut costs.

The concerns of this National Symposium merit the attention of the public and certainly of members of Congress. All of us have to be better informed of the needs of those conducting R & D in all fields of endeavor. The benefits of research and development to all people in this State and our Nation are such that more of our citizens have to be aware of what these programs mean to their lives.

# # # # #

Bred.

# REMARKS BY SENATOR HUBERT H. HUMPHREY

# ARMY RESERVE RESEARCH AND DEVELOPMENT NATIONAL SYMPOSIUM

MINNEAPOLIS, MINNESOTA

August 5, 1974

FIRST OF ALL, A WORD ABOUT THE ARMY RESERVES:

I AM A STRONG SUPPORTER OF OUR ARMED FORCES RESERVE
AND NATIONAL GUARD SYSTEM.

MAINTAINING A STRONG, WELL EQUIPPED, WELL TRAINED

RESERVE FORCE IS A KEY ELEMENT IN OUR NATIONAL DEFENSE

STRUCTURE. THE ARMY RESERVE PROGRAM EMBODIES ONE OF THE

BEST PRINCIPLES OF THE UNIQUE AMERICAN SYSTEM OF MILITARY

SERVICE: THE CITIZEN-SOLDIER. ARMY RESERVISTS ARE MAKING

GREAT CONTRIBUTIONS TO THE STRENGTH OF OUR NATION AND TO THE

HEALTH AND WELFARE OF OUR COMMUNITIES.

THERE IS NO DANGER THAT THE AMERICAN MILITARY ESTABLISHMENT WILL BECOME OUT OF TOUCH WITH THE MOOD AND TRENDS OF OUR NATION BECAUSE THE RESERVES -- ARMY, NAVY, AIR FORCE -- ARE MEMBERS OF OUR COMMUNITIES -- WORKING, LIVING AND SERVING IN THE CITIES AND TOWNS OF THE NATION.

I WANT TO SAY THAT THE CONGRESS HAS AN OBLIGATION TO

THE RESERVE SYSTEM. AND THIS OBLIGATION IS TO MAKE THE

RESERVES AN ATTRACTIVE PLACE TO SERVE FOR THE MEN AND WOMEN

IN OUR STATE AND ELSEWHERE. THIS MEANS THAT THE CONGRESS

MUST PROVIDE THE PROPER PAY, EDUCATION AND RETIREMENT

INCENTIVES FOR OUR RESERVISTS.

THERE IS NO GETTING AROUND THE FACT THAT IF WE ARE TO ATTRACT WELL-MOTIVATED, CAPABLE MEN AND WOMEN, WE SHOULD OFFER THEM THE BENEFITS THEY DESERVE, THE BENEFITS TO KEEP THEM IN THE RESERVES. THERE ARE SOME PEOPLE WHO THINK WE CAN DEMAND A FIRST CLASS RESERVE SYSTEM AND PAY IT SECOND CLASS SALARIES WITH LOW BENEFITS. WELL, THAT WON'T WORK.

AND IF THE DEPARTMENT OF DEFENSE ISN'T WILLING TO RECOGNIZE

THIS AND RECOMMEND WHAT IS NEEDED TO MAINTAIN A STRONG AND

WELL-TRAINED RESERVE SYSTEM. THE CONGRESS WILL HAVE TO TAKE THE

MATTER INTO ITS OWN HANDS AND ACT.

# III

I AM NOT AN EXPERT ON THE SUBJECT OF THE RESEARCH AND DEVELOPMENT. HOWEVER, I AM AN ELECTED PUBLIC OFFICIAL WHO BELIEVES VERY STRONGLY THAT THE ECONOMIC HEALTH OF THIS NATION AND THE SOUNDNESS OF ITS DEFENSE STRUCTURE REST ON THE PREEMINENCE OF AMERICAN RESEARCH AND DEVELOPMENT EFFORTS.

THE STATE OF MINNESOTA CAN BE JUSTLY PROUD OF ITS

EXTENSIVE INVOLVEMENT IN RESEARCH AND DEVELOPMENT PROGRAMS

OF ALL TYPES. IN AGRICULTURE, INDUSTRIAL DEVELOPMENT, ENERGY,

MEDICINE, COMPUTERS AND OTHER IMPORTANT FIELDS, MINNESOTA IS

MAKING A TREMENDOUS CONTRIBUTION TO THE RESEARCH AND DEVELOPMENT

ENDEAVORS OF THIS NATION.

GOVERNMENT AND PRIVATE SUPPORT OF R & D IS VITAL TO

THE PEOPLE OF THIS STATE AND TO THE NATION IN GENERAL. IT

IS CLEAR THAT IN A COMPETITIVE WORLD WHERE MORE AFFLUENT

NATIONS NOW POSSESS THE MEANS AND HAVE THE HIGHLY TRAINED

PERSONNEL, THE AMERICAN LEAD IN RESEARCH AND DEVELOPMENT

MUST BE MAINTAINED AND STRENGTHENED.

THE EUROPEANS, THE JAPANESE AND EVEN THE SOCIALIST NATIONS OF THE WORLD HAVE LEARNED THAT THE COMPETITIVE ADVANTAGE IN SO MANY INDUSTRIAL FIELDS GOES TO THE FIRM OR THE NATION THAT HAS THE MOST ADVANCED AND WELL-FUNDED R & D EFFORTS. THE RUSSIANS CERTAINLY KNOW THIS, AS DOES ANY NATION THAT ASPIRES FOR WORLD ECONOMIC LEADERSHIP.

However, R & D is expensive, and we must explain to the public what's at stake if the United States falls behind in research and development efforts. And the public must understand that the educational excellence in our Nation — especially in the fields of pure and applied science and medicine — is due in large part to the aggressive R & D efforts of American industry and agriculture.

COULD WE HAVE MAINTAINED OUR LEADERSHIP IN THE AEROSPACE
FIELD WITHOUT THE FAR-FLUNG RESEARCH AND DEVELOPMENT PROGRAMS?

CERTAINLY NOT. AND THIS GOES FOR CIVILIAN AND MILITARY

AIRCRAFT, GUIDANCE SYSTEMS AND WEAPONS SYSTEMS.

COULD WE HAVE GONE FROM THE SPUTNIK CRISIS OF 1957

TO LAND A MAN ON THE MOON IN 1969 WITHOUT INTENSIVE R & D EFFORTS?

CERTAINLY NOT. AND THE AMERICAN SPACE PROGRAM IS

A PRIME EXAMPLE OF THE COMMERCIAL AND SCIENTIFIC SPINOFFS

FROM THE DEVELOPMENT OF ADVANCED TECHNOLOGY BASED ON WELL-FUNDED RESEARCH AND DEVELOPMENT. IN MEDICINE, WEATHER PREDICITON,

COMMUNICATION AND A HOST OF OTHER FIELDS, OUR LIVES WERE MADE BETTER BY THE SPACE PROGRAM.

AND IN THE FIELD OF AGRICULTURE, GREATER RESEARCH

AND DEVELOPMENT EFFORTS WILL CERTAINLY MEAN THE DIFFERENCE

BETWEEN LIFE AND DEATH FOR MILLIONS OF PEOPLE AROUND THE

WORLD IN THE COMING YEARS.

PRESENT LEVELS OF FOOD PRODUCTION, AS WE ALL KNOW, WILL

NOT BE ABLE TO KEEP UP WITH RISING POPULATION AND GROWING

AFFLUENCE. WE MUST FIND BETTER WAYS TO GROW FOOD MORE

EFFICIENTLY, PROCESS IT AND TRANSPORT IT.

FOR EXAMPLE, WE MUST FIND THE SECRET OF EXPANDED SOYBEAN YIELD. WE MUST FIND WAYS TO FARM AND HARVEST IN THE SEAS AND TIDELANDS WHERE PROTEIN IS SO BOUNTIFUL. WE MUST DEVELOP NEW SEED VARIETIES FOR THE WORLD'S ARID REGIONS.

THIS IS WHERE RESEARCH AND DEVELOPMENT ARE NEEDED AND HAVE SUCH AN IMPORTANT ROLE TO PLAY.

As a Minnesota senator, I also want to say that the R & D efforts undertaken in this state have enriched the educational and intellectual lives of our citizens. Our universities and businesses depend on continuing government and privately sponsored research and development. And, of course, we are all well aware of the fact that R & D is a clean industry, a non-polluting industry that is much desired

BY ANY COMMUNITY.

LET ME SAY, FINALLY, THAT MILITARY RESEARCH AND

DEVELOPMENT IS THE ONLY WAY TO MAINTAIN OUR MILITARY STRENGTH

AND ALSO TO FIND BETTER WAYS TO ELIMINATE WASTE AND INEFFICIENCY.

MILITARY RESEARCH AND DEVELOPMENT MUST RECEIVE THE HIGHEST

PRIORITY FROM THE CONGRESS AND THE EXECUTIVE BRANCH. IT IS

EXPENSIVE, AND SPECIAL ATTENTION MUST BE PAID TO DEPARTMENT OF

DEFENSE R & D EFFORTS TO SEE THAT THEY ARE, INDEED, IN KEEPING

WITH OUR DEFENSE AND FOREIGN POLICY PRIORITIES.

I STRONGLY BELIEVE THAT GREATER EFFORTS SHOULD BE MADE

WITHIN THE RESEARCH AND DEVELOPMENT FIELD TO FIND WAYS TO CUT

WASTE. Too often we over-design and over-engineer our weapons -
AIRCRAFT, FOR EXAMPLE, Those involved in R & D have a

RESPONSIBLITY TO THE TAXPAYERS TO HOLD DOWN THE COST OF THEIR

WORK AS WELL AS TO DESIGN WEAPONS MADE TO DO A JOB BUT

WITHOUT ALL THE UNNECESSARY FRILLS WE SO OFTEN HEAR ABOUT.

This is a challenge. But it must be done. If the public and the Congress are to support military R & D, then engineers, scientists and technicians have an obligation to the public to achieve savings and cut costs.

THE CONCERNS OF THIS NATIONAL SYMPOSIUM MERIT THE ATTENTION OF THE PUBLIC AND CERTAINLY OF MEMBERS OF CONGRESS.

ALL OF US HAVE TO BE BETTER INFORMED OF THE NEEDS OF THOSE CONDUCTING R & D IN ALL FIELDS OF ENDEAVOR. THE BENEFITS OF RESEARCH AND DEVELOPMENT TO ALL PEOPLE IN THIS STATE AND OUR NATION ARE SUCH THAT MORE OF OUR CITIZENS HAVE TO BE AWARE OF WHAT THESE PROGRAMS MEAN TO THEIR LIVES.

# Minnesota Historical Society

Copyright in this digital version belongs to the Minnesota Historical Society and its content may not be copied without the copyright holder's express written permission. Users may print, download, link to, or email content, however, for individual use.

To request permission for commercial or educational use, please contact the Minnesota Historical Society.

