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UTILIZATION OF HANDICAPPED WORKERS

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UTILIZATION OF HANDICAPPED WORKERS

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GENERAL HOLMAN: Gentlemen, in planning this lecture today the Industrial College became a claimant agency in manpower. We became a claimant among many others for the services of Dr. Howard A. Rusk to come and talk to us. He is one of the busiest men in Washington, in the Medical Profession, and in the rearmament program. He is a director of the Institute of Physical Medicine and Rehabilitation, New York University--Bellevue Medical Center; a special adviser to Mr. Symington, serving with the NSRB on their Health Resources Advisory Committee; he is a Brigadier General in the Air Force, and an Associate Editor of the "New York Times." Just yesterday he was appointed by the President to head an advisory group to the Selective Service System on the selection of medical, dental, and allied professions in the military program.

Our subject today is the "Utilization of Handicapped Workers." I am sure that after you hear Dr. Rusk on this subject, your eyes will be opened to the possibilities of using personnel from this source to increase production and to increase our manpower potential.

Doctor Rusk, it certainly is a pleasure to have you here at the college today.

DR. RUSK: General Vanaman, General Holman, and gentlemen: One of the high lights of my career was talking to this group last year. I don't know when I have ever enjoyed an experience more, because of the deep interest taken and the provocative discussion.

I'll talk at the drop of a hat about the problems of rehabilitation and handicapped people. I am particularly interested in talking to you about it because you are going to be in a position to use them.

I think it is particularly important now, because we are in full production and a program of mobilization. In 1940, when we were in the same position, we had 8 million people unemployed. Today we have but 2.5 million persons unemployed--most of them marginal workers or part-time workers from the schools. When you talk about production, the synonym is manpower. We must have more manpower if we are going to increase our production. There are only two sources. One source is between 4 and 5 million disabled people, who need to be screened, trained, selected, and placed in the proper jobs. The other source is 11.5 million individuals in this country beyond the age of 65.

But to tell you the story I will have to go back to 1942, when my assignment was medical officer in the Air Force, chief of medical service

in a 2,000-bed hospital. I was fresh from civilian life. I was amazed to see 80 percent of my patients up wandering around the hospital corridors in their purple bathrobes, bored to death, getting into all sorts of trouble, doing nothing to get readied to go back to duty except drinking soft drinks in the PX. Being naive, I took the list, examined my patients, and sent about 75 percent back to duty within the first three days that I was on duty there.

I was amazed and chagrined to find that about 90 percent of the 75 percent were back in the hospital within 24 hours. Then I realized that it was a little different in the armed forces. There was no "Go home and take it easy a couple of weeks and then come down to the office and we'll talk about when you are going back to work." You are either in the hospital or on duty; and if you are on duty, that might mean a 10-mile hike your first day out. You didn't get ready for 10-mile hikes with the sort of regime that I have described.

So it seemed to me that, in order to conserve time and do something about this problem, we might set up a program that would bring the teacher to the individual, when the individual wasn't able to go to class. Also, if a man had a broken arm or had had an appendix out, there was no reason why we couldn't keep the rest of his body in top physical condition. So we set up a program based on those two simple premises, and we found that it worked. We cut the time of our pneumonia patients by five weeks and the convalescent period of our orthopedic patients by 50 percent. We found we were having less AWOL and morale problems, and it worked.

Seventy-five percent of the teachers in this program were patients. When an individual came in, he filled out a questionnaire, showing his education, experience, training, work, service, and so forth. If we found that he had some information that we felt would be valuable to pass on to his fellow patients when he was a convalescent, he became a convalescent teacher. In June 1944, I remember, in one Air Force hospital alone we taught 752 different subjects in that month, which ranged from trigonometry to the training of radio operators.

Our radio schools were a very interesting experiment. It had been noted that if an individual in the middle of his six-week radio course came into the hospital, he would lose his code speed in a week. So we wired all the wards for code, and code started coming over periodically from eight in the morning and continued until five in the afternoon. The patients who were not acutely ill could take the code and practice while they were in bed.

We found that when the program was perfected, if we had an individual in the hospital as long as ten days, his code speed would increase by ten words a minute. The program of education was so arranged that if an individual came into the radio school and got sick the first day and remained

in the hospital the entire school period, he could still graduate with his class and never attend a class, because he got the entire program in the hospital.

Well, that was a beginning. We soon saw that this was a totally inadequate program for the psychological and physical casualties returning from overseas. We were pretty well at the bottom of the manpower barrel then, and it seemed to us a little silly that a man on whom the Government had spent thousands of dollars and many valuable months in training, just because he had lost a foot or a hand or something else, couldn't be utilized in some capacity. We realized that ordinary medical care wasn't enough. So a program was set up on a trial basis that would allow an individual to be trained within the limits of his disability but up to the hilt so far as his ability was concerned.

It was unbelievable the number of individuals who could be salvaged by such a program. After setting up certain trial programs in various hospitals, certain centers were set up that were known as rehabilitation centers. After an individual had finished his definitive medical care, he was transferred there. They were a cross **between** a hospital, a country club, a technical workshop, a school, and an athletic field, all tied into one package.

If the program was a success--and I can speak only for the Air Force program, because that was the only one I had any experience with--it was due to one individual. There was a person whom we called the personal physician. He had his office in the barracks with the boys. In the Air Force in those days about 60 percent of our casualties were so-called flying fatigue--emotional problems. This man saw them in the noncommissioned officers' club and in the officers' club. He lived with his patients. So we said to the boys when they came in: "This is your family doctor. He is just like your family doctor at home. You can go to him with any problems that you might have and he will try to help you solve them."

We had an interesting experience up at Fort George Wright in the early days of the program. This new patient came in from the Pacific theater. He had a terrific back and malaria and three or four other things. He was given this orientation when he came in about his relationship with the doctor. He came in late at night, and the next morning he was in the doctor's office. He said, "I'd like to have a 48-hour pass." "Well," the doctor said, "I can't give you a pass. You just came in the hospital last night. What do you want a pass for?" He pulled out a letter and said "Read this." The letter said: "This is to tell you that I don't give a d--- about you any more and haven't for a long time, and I just want you to know that I am going out with the first, second, and third man that invites me. Yours very truly, Your wife." He said, "We haven't agreed for a long time so I feel the same way about her, but I have a three-year-old boy and I've got to know that he is taken care of." Naturally, he got his pass. He was due in

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on Sunday night. He got in late. When the doctor made the rounds in the ward the next morning and counted his patients, he had one extra. The soldier had his three-year-old boy in the bed with him. He said, "What in the world are you doing with that kid in here in the bed with you in the hospital?" He said, "Doctor, you told me if I had any problems to bring them to you." He said, "Here is my problem."

The doctor thought fast on his feet. He said, "You did exactly right." He arranged with the Provost Marshall to institute divorce proceedings and arranged with the Red Cross to see about the family situation. He got the child in a home near the base as long as the Father was in the hospital. Eventually the child went to the soldier's sister to be cared for, and that man went back to fight. You could have bled his back or treated his malaria or done anything that you wanted to with that person and if you hadn't solved that one problem, you would have had a CDD just as sure as you're alive. The program was set up to treat the individual and to meet his problems.

Well, then, the war was over and we found an inadequate program in the Veterans Administration. Then in August 1945 General Bradley and General Hawley came in with a lot of ideas, and soon a dynamic program was established there. The individuals coming back disabled were transferred into the Veterans Administration Service.

The medical program of the VA has been an excellent one. Let me give you one or two examples. In World War I we had 400 paraplegics, individuals with their spinal cord severed. Those individuals are paralyzed. They are without sensation below the level of the hips. They weren't any problem really in World War I because 98 percent of them died the first year either of bed sores or kidney infection. But this time they didn't die. We had streptomycin, penicillin, the sulfanilomides, and now surgical techniques. We know how to take care of them and they didn't die. Here they were, strong in the uppers and capable of thinking, but paralyzed in their bowels, bladders, and legs. What could you do with those people?

We thought that something could be done for them. I saw the first paraplegic that was gotten on his feet in this war. I'll never forget it. He was a red headed boy; he had crashed a B-26 in a little town and broken his leg, his collar bone, and his back. He had severed his spine right in the middle.

We got our first group of doctors in the Institute for the crippled and disabled in New York and taught them how to train paraplegics. Two of the doctors who were there said: "We have a boy who is just our meat. Everybody has given him up. He has a tube in his bladder. He is a gone chicken. He weighs only about 75 pounds. If we can teach him to walk, then the program is in our hand."

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They left school in October and I had a report the first week in January. They came back and went to work on this kid. They gave him some hope and some desire to live. They fitted him with braces and they got him up. On the first of January the two doctors took this kid on his braces and crutches to the Orange Bowl football game. He was from Alabama and Alabama played that year. The letter said: "I shall always remember that of all the Alabamans in the stadium this red headed kid yelled the loudest." His father runs a chicken farm outside of Jacksonville, Florida, where he is making his own living.

Of the 2,500 cases resulting from World War II, 80 percent are either in school or in jobs, up walking on their dead legs, on braces and crutches. But, while we got 2,500 as a result of the war, we got 15,000 in the same period in civilian life. There is no place for them to go, no program.

We got 19,000 amputees as a result of combat and accidents in training in the war. We got 120,000 in civilian life. In the first ten days on the Normandy beachheads we had 11,000 wounded. Those were the days of our highest casualties. During the same period on the highways in America we had 26,000 people injured, and that was with gas rationing. There are four times as many individuals permanently injured every year in farm accidents alone as were injured in the seven bloody days of Iwo Jima.

If you get into the categories, disability resulting from disease, you get astronomical. We have in this country 10 million people who have had some type of heart disease. There are a million who have had strokes. There are about 6 million who have arthritis. There are 2.5 million with orthopedic disability. There are half a million who have had polio and another half million with cerebral palsy. Another half million individuals have multiple sclerosis. And so on down the line. It totals up to approximately between 23 and 28 million disabled people in this country.

A recent survey was made in New Haven; a careful statistical check by the Department of Public Health at Yale, which showed that in the city of New Haven there were 121 individuals per thousand of population physically disabled or chronically ill, 40 of whom were so severely disabled that they were homebound, and 40 were under the age of 25. This is our backlog of manpower at the present time, and what we do with these people is going to mean our final score.

We have enough experience to come to some conclusions. In the past we have been more profligate with our human resources than we have with our natural resources. I think the armed forces have been worse than anybody else about it. I think that the present figures you see about draft rejection are perfectly absurd and they give an entirely erroneous impression.

I can understand the point of view of the armed forces; but I still don't feel that it is necessary. If a man has a perforated eardrum, naturally

he can't fly high altitude. But there are nine hundred and ninety-nine other jobs that he can do if he is selectively placed—that goes for everything from flat feet to psychoneurosis. I recognize that in time of war and terrifically hurried mobilization, as we had it the last time, certainly in the early days, you don't have time to screen and sort. But in long-term planning, with adequate personnel studies and policies, it seems to me that by rejecting for a simple physical defect you are often losing a most valuable addition to the armed forces.

A friend of mine recently came back from Sweden, where he had made a 2-year study for the government of Sweden and two of the leading universities there of job analysis and the selection of disabled people in industry. He studied ten industries, including an underground airplane factory, an underground iron mine and smelter, and then a cross section of industries. He is the man who set up the program for the utilization of disabled in the Kaiser West Coast shipyards during the last war. The other day he said: "I have come to a new conclusion about the able and the disabled. Thousands of years ago you couldn't have come to this conclusion, because man had to protect his family with a club and kill his meat with a rock—everything was for strength and brute force. Today you don't pay for that; you pay for brains and technological skill." He said: "From my experience, plus my recent experience documented in Sweden, not one man in a hundred is physically able to do all types of work. Therefore I don't talk about abled and disabled any more. I talk about men, women, and children." I think he is right.

We have had three major surveys that bear out this point. The first was the experience in our own Air Technical Service Command during the war, when we had 50,000 disabled working in a 300,000 labor force. They varied from the congenital dwarf who did the riveting in the tails of the B-29's to the bilateral amputees and the severe cardiacs. They had a better production rate, a lower accident rate, a lower absentee rate, and nine times less labor turnover than the normal persons working side by side with them.

In 87 major industries in this country, employing from 100 to 10,000 workers each, they have for ten years been employing disabled persons ranging from amputees to tuberculosis to epilepsy; and they have had exactly the same experience. A recent survey made by the Bureau of Labor Statistics comparing 11,000 disabled with 18,000 normal in a cross section of jobs nationwide, found exactly the same thing.

Now, your first reaction is going to be one of complete skepticism, but I am going to tell you why; and if I leave one thought with you today, I would leave the "why." Adler's whole psychology of inferiority was based on this. You who are very active use only 25 percent of your physical capacity in your daily living. The reason I can do a fairly good job practicing medicine is because nature has given us such tremendous powers

of recuperation and overcompensation. The blind man learns to see with his ears and with his sense of touch. He carries a white cane; he carries a cane because when he hits the ground, his ears become so sensitive that when the echo comes back, he can tell whether it is coming from a wall or from open space or from a serrated area like you get where there is a group of trees. That is why he doesn't bump into anything, and that is why he taps his cane. Put that man in a job where he can use his hearing acuity or where he can use his sense of touch, put him in an X-ray darkroom, and I know that his production will be 25 percent above normal, for the simple reason that he walks in and takes his hat off in the morning and goes to work. He doesn't have to wait for his eyes to accommodate. Second, his fingers become so sensitive that he can tell one or two degrees change in the temperature of water without a thermometer. Third, his sense of temperature becomes so acute that he knows when to take the films out of the water before the alarm clock goes off.

Put the deaf man in a factory where there is great din and confusion, where we know in certain types of environment it will destroy the hearing in a certain decibel range, which will destroy the emotions very quickly of the emotionally insecure, inept individual, and it is a natural environment for the deaf man. Our paraplegics, who walk with their finger flexors and their arm muscles, develop such powerful arm muscles that one of our paraplegic women would make any man in this auditorium look like a pygmy in that respect, because they carry their whole weight with their arms. They must have musculature to meet their needs. If you make use of these overcompensated senses and put these individuals where they can take advantage of what they have developed, they can give the average man cards and spades and outwork him.

In this Swedish study they took a hypothetical case which interested me. This was a man with both legs off, blind in one eye and color-blind in the other eye, deaf, with an old chronic tubercular arthritis of the spine that kept him in a certain stooping position, allergic to certain types of chemicals so that he got a skin rash on his hands, and had an old congenital heart lesion from rheumatic fever. This individual had all these afflictions. The men who made the study went into this leather shop and by matching above and below tried to see whether or not this poor old beat-up hunk of pathology could do any kind of work. They found that he could do four of the eight operations just as adequately as the normal people, because these operations didn't require a certain visual acuity, didn't require color, didn't require physical effort particularly that would cause him to be short of breath, and so forth. That is a very extreme case but it demonstrates what can be done by matching.

We had an interesting case in our own wards last year, a newspaper girl 26 years old who in an automobile accident in Colorado broke her neck. Her spine was severed where 80 percent of them are—between the fifth and sixth cervical vertebrae, a bad place because it serves the biceps. You

can draw your hands up gradually and let them down, but you have no push-muscles and you can't crutch walk. It catches the finger reflexes, so you can only slightly move your hands. You might say, What can you do with individuals like that, with broken necks? You can do a great deal. You can teach them to live a very complete and full life in a wheel chair although they are paralyzed.

This girl had sensation from the breast on down. With special hand-grips and so forth, special handles, special knives, forks, spoons, tooth-brush, comb, this and that and the other, you can teach them to take care of their daily needs, to have an automatic bladder and an automatic bowel. They can live a life of sorts. Seventeen out of the last twenty-one that we have had we have been able to get back in some gainful work. This girl was a particular problem because she was an artist, a textile designer.

We have learned one thing in our program--that you don't tell people what they can't do. You give them an opportunity and they will show you whether they can or cannot, because you don't know it until you have given them an opportunity. So we made for this girl with the paralyzed hands a glove that fastened around her wrist with a thong so she could close it herself, made two holes in the end, put a paint brush in and said "Paint." To our amazement, she could paint practically as well as she could before she was hurt. Then we realized that you don't paint with your fingers; you paint with a broad sweep and she had that.

Well, what difference does it make? It made this difference: The mother and father were both at work and two brothers were in foster homes. It meant that she is now at home with a job, and she and her father support the family. The family is back together. The two brothers are at home and the mother is looking after them. Instead of costing the city twelve dollars a day, the daughter is looked after for six dollars a week. Instead of being an individual relegated to a life in a chronic hospital, which is a pretty drab, unpleasant life, she is living a full life within the limits of her ability.

I am sure that there are thousands upon tens of thousands upon tens of thousands who could be doing the same thing. We have just had an interesting experience with a very difficult group of individuals who have had a stroke of apoplexy and are paralyzed on one side of the body. Eighty percent of them will have difficulty in speaking--what we call aphasia. Their minds are clear, but they can't get the words out. They see that this is a light, but they can't say "light." Multiply for them by infinity the frustration that you feel when you can't remember some friend's name and you can realize to a degree what frustration such a thing is.

We just analyzed our first hundred cases. They average 63 years of age and are typical Bellevue patients. They are paralyzed, and their paralysis has existed from two days to twenty-one years. Ninety-nine of

the hundred were able to get back out of the hospital to their homes. They were able to dress and undress themselves and take care of their toilet needs. Forty percent of them we got back to some gainful work.

There is no reason why these individuals can't be utilized. To you who are interested in production it is a problem now. If we should get into a total conflict, this is our only possibility to meet the manpower and the personnel needs.

I would like to say a word or two about my pet gripe and that is the older age group and compulsory retirement. We in this country have created a situation which is now our number-one problem in medicine, and, I think, democracy's number-one problem; that is, we are living in a country with an aging population. Two thousand years ago a man's expectancy was 26. In 1900 it was 47, and today it is 67.2 years for men and 70 for women on the day they are born. A man of 65 today has an expectancy of 13.8 years and a woman 14.3 years. There are more people in the United States today beyond the age of 65 than there are at the age of puberty. If we don't do something about utilizing handicapped people within their skills and utilizing those over 65 within their skills, by 1960 for every able-bodied worker in America there will be one individual physically disabled or one beyond the age of 65 on that worker's back, and they tell me that no economy can carry it. I believe it to be true.

But even beyond all of that, it seems to me that we are losing one of the most precious things, if not the most precious thing, that we have developed in this democracy of ours and that is wisdom. You get wisdom only with experience, and you get experience only with time. So if individuals are physically capable of putting out that wisdom at 60, 65, 75, 80, or whatever it is, that essence should be retained for the good of the country at all costs. I think some people should retire at 35. I think they are incapable physically and emotionally. I think others should go on indefinitely.

All people are different. Their psyche and their physique are different. You can't pick up a calendar and say, "Yesterday, when he was 64 years and 364 days old, he was capable of running this great company or being a foreman in this shop and he was doing a good job; but today he is 65 and he is gone, he is retired." It is profligate and we can't do it.

There are some beautiful illustrations of that. Mr. Baruch was 80 on 17 August 1950. Had he retired at 65, we would have no rubber program, we would have no atomic energy program, and we would have lost 15 years of his wise counsel in a very critical time. Winston Churchill wouldn't have been allowed to take his place in England in World War II. It was interesting to me that Walter Gifford at 65 could not go on as head of the AT&T Company because of old age; but within two weeks after he retired, he was given the greatest diplomatic post that it is possible to give in this country.

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General Marshall, although he was retired from the Army, was called back as Secretary of Defense at 69. The Commander-in-Chief of the United Nations forces in Korea is 71. And so on across the board.

An Army general, a very capable one, told me once--and I shall never forget it--"I will retire at or about the time that the average senator becomes eligible for committee chairmanship." It just doesn't make sense. It is the easy way to do it, too easy; but it is going to financially bankrupt us if we continue to make medical strides and prolong life. It is up to us not only to add years to life, but we must also add life to the years.

A program of utilizing the handicapped that makes money is a pretty easy program to sell, because, if you have something like mother love, of helping the disabled, and you can make money with it at the same time, then you have a product. I am not talking philosophy; I am talking facts. In 1943 an amendment to the National Civilian Rehabilitation Act of 1920 was passed, which said that if an individual's employment can be improved or if he can be made employable, the Government will match dollars with the state to give that individual vocational training, certain medical care, prosthetic devices, and rehabilitation. The first year after the amendment was passed, in 1944, 44,000 people were cared for under the act. There is now a backlog of about 2.5 million. Their average income before treatment or training was 148 dollars per annum per person and 90 percent were not employed. The next year this same group averaged 1,768 dollars per annum per person. The average cost of their training was 300 dollars. The average cost of their relief payment prior to training was 500 dollars per year, a recurring cost. I can't understand why this hasn't been made of more use politically, because, when you have a do-good program that can make you dollars, then you have something. Just gradually are we beginning to become conscious of the opportunities available to us in such a program.

Well, I think that pretty well covers my feeling about this total program. If I were to summarize, I would say this: Because a man can't do everything, please don't make it impossible for him to do anything. Yesterday from my shop in New York I had a report from a former patient, a boy Della Donna 27 years old. Three years ago, working in a spaghetti factory, he caught his hands in a grinder and took them both off above the wrist. He had a beautiful surgical procedure done, cinoplasty, where you tunnel under the muscle and put an ivory peg through and then fasten a rawhide thong on a prosthetic device. He was referred to us with this device. He was almost suicidal when I first saw him. He could do nothing for himself. He couldn't open a door, he couldn't put a nickel in the telephone. When he wanted to leave home and ride on a subway, he put a nickel in his mouth to pay his fare, so he wouldn't have to ask somebody to stick his hand in his pocket and get a nickel out. The first three days he was down at Bellevue he almost ruptured his bladder because he was ashamed to ask anybody to help him while in the lavatory.

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So we sat down and started to work on this kid. We fitted him with a conventional pair of arms and hands that had been developed. He learned to use them beautifully in six weeks. He could do everything for himself. He could get eight cents out of a coin purse and make change on two busses that he had to go home on. We gave him a job teaching down at our shop at a very modest sum, because in this business there isn't much money to be had. He worked for a year and a half. I always told the boy that if we could better his job, we were going to do it.

We have been experimenting with a job placement service at Bellevue. It is headed by a young fellow who was born with both legs off. If he walked in here, you couldn't tell it. He set up the first rehabilitation program at Walter Reed at the beginning of this war, when the first casualties came back from the Red Cross. I have a group of young veterans headed by a young layman who lost one leg and a good part of the other in the war.

We have organized a committee we call the JOB. It means "just one break." We take a disabled individual as a package to one of ten major businesses that we have been working with this past year. We say: "Here is an individual paralyzed in the lower extremities. Here is a paraplegic. He can type 70 words a minute. Here is a family situation. He can walk and travel. He has no problem with any of the toilet needs around the office. He has an IQ of 146. Here he is in a package. Do you have a place for him? If you have, you give him a job; and if he doesn't work out, we will take the man off your hands and replace him ourselves."

We have placed a hundred of these people with Sperry Gyroscope, IBM, the hotel industry of New York with its 65,000 employees and five labor unions, Gimbel Brothers, and a number of others since we started this experimental program, and we have not had to replace one single individual. So this 27-year old patient went to Sperry Gyroscope 3 October 1950. We had him out the week before and they offered him a job as a mechanic's helper. With two artificial hands, hooks, he had to carry a 40-pound box of tools around. He had to handle them adeptly and so forth. We took him out the week before and gave a service test with a 60-pound box and got the most crotchety mechanic that he was to assist. He came through with flying colors and on Monday took a job. He called to report that his first day had gone by without a bubble and he wasn't even tired.

His wife told me the week before he had gotten this job, "You know, Ernie is a greater man than he was before he was hurt. He was a little guy then, little spiritually. He wasn't the man he is now." That is the thing that Hitler overlooked. When he put into the gas chambers first the disabled, those who had overcome handicaps, he lost his bid. You and I who haven't been through it don't know anything about it. You don't get fine china by putting the clay out in the sun. You get it only after it goes through the kiln. If you take one of these individuals with a great disability, give him the opportunity, and let him overcome the disability, then

give him an opportunity to use the ability he has, he becomes one of the spiritually great. To me it is one of the basic tenets of this democracy. It is not an obligation to give these people an opportunity; it is a privilege, for that is democracy.

QUESTION: Doctor Rusk, about three weeks ago I was talking to a man from Pratt and Whitney Aircraft about this subject of employing handicapped, and he came out with the amazing statement: "We don't have any handicapped people in Pratt and Whitney. We break down our jobs to specific requirements. If they can meet those requirements, then they are not handicapped." So I was wondering just what effort is being put forth to induce other industrial firms to break down their jobs to specifications and then hire people according to those so that they weren't being hired as handicapped people.

DR. RUSK: I will have to get in a plug for the "New York Times." They have pioneered since the war in an educational program to the general public and to industry, and, I think, have unquestionably taken the leadership in a national program of education.

You first have to educate the people on what they have a right to expect. Then you have to educate industrialists as to what these people can deliver. All we have to do in our JOB program is to get one good person in a plant and then representatives of that plant will come to us for more people. If Eddie Rickenbacker were here today, he would tell you that his whole industrial relations program in Eastern Airlines—and, if you will recall, he had no strikes—is based on a corps of disabled people. He wired General Arnold back in 1943 and said: "Any disabled men from the Air Force who can get to Miami I will give a job." We shipped a lot of them to him and he gave every one that could get down there a job. That is the corps. These people have a loyalty and they know they can deliver.

First it is adequate evaluation and training of the individual. Then it is matching what he has to the analysis of the job. If you do that, just as they said in Pratt and Whitney, they are not disabled people.

QUESTION: You mentioned what could be done with these people, but it seems to me that each case requires a great deal of time and skill on the part of the people training them. Do we have the necessary amount of skilled doctors and personnel to train these people? Isn't that one of the problems?

DR. RUSK: You hit right at the core of the sore spot. Again I can speak best from my own experience. When we started our Bellevue program four years ago, we had one doctor in training. Today we have 25.

We have to go back to basic medical education. Young doctors have to learn that there is a kind of thrill that you get out of this. In the past

all of our interest has been focused on acute medicine, high fever, and fancy diagnoses and special surgical skills, and these people have been considered as crocks. They have been in the back beds. Some of them are not very interesting. The doctor is frustrated because he doesn't know what to do about them.

Once you can teach these youngsters to get an inner satisfaction and a warmth out of taking a poor old beat-up hemiplegic out of a wet bed and teaching him to walk and care for himself and not be wet any more and to be a person again, then we see it mounting in leaps and bounds. But we are in terribly short supply. I can tell you that we have more people training in our shop than in all the Veterans Administration put together. I could place twice as many tomorrow in key teaching jobs and in key hospital jobs as I have in training, but they won't start to come out until a year from now.

QUESTION: Doctor, you mentioned the standards set by Selective Service and the ridiculous character of their standards in selecting people for the military service. It occurred to me that one of the things that is considered a disqualifying affliction is hay fever or asthma. I am not sure about this, but I believe it is. It seems to me that a practical application of the doctrine you have been discussing would be to work out some way whereby we might be able to use these people either in the zone of the interior or in the communications zone, in those jobs they would not be required to put out a maximum effort such as, for instance, a combat man may from time to time. If they can use these handicapped people effectively as a starting point for the whole program of trying to find places in the military service, they can use people who have certain disabilities. I wonder if you would care to remark on that.

DR. RUSK: I think you are absolutely right. But, again, you remember in the early days of mobilization in the last war, when they were just running them through, the armed forces said, "We haven't time to screen and place." If you received a communication that said, "You will have 50 individuals by tomorrow night at gunnery school in such-and-such a place," I remember, if you couldn't get the 50 from the cards, then you went out and got a cook or a baker or anybody that was a body that you could get there.

Of course, a man with hay fever or asthma assigned to combat—say he went to Korea and there happened to be one of the grasses that he was sensitive to, and in the middle of a night operation he should get an asthmatic attack or a sneezing spell—might not only endanger himself but his fellows. But I think that with selective placement such individuals would be very easy to use, maybe in the zone of the interior or in the communications zone. It would seem to me that with the adequate personnel system that has been developed, it wouldn't be too difficult to place these individuals.

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Of course, so many of the disabilities are correctible. I think that would be one great advantage of universal military training. If you got 17-year olds in camp for six months, the ones with hernia, a bunion, or any of these minor things that they are turned down for could be corrected during that period; then minor ailments wouldn't be a problem. But when you come in and say we have 65 to 70 percent rejections, it looks like we are a nation of nincompoops. I don't think that is true at all, and I think we have received an awful lot of criticism for having this policy, because people say, "You remember, Joe Blow was disqualified from the Army, but then he pitched baseball during the whole period of the war" and so forth.

QUESTION: We know it is better to place the handicapped in jobs where they can do as well as the nonhandicapped person rather than to put them on jobs where they can just get by. In order to put the handicapped where they can produce with an ability commensurate to the job, is industry conducting any research and development in mechanical devices to aid them?

DR. RUSK: It is. It might be very interesting to show a film that is available and could be obtained through the Publicity Department of General Motors; it is one of General Motors' plants outside of London. That company has even devised a machine so it can take the less handicapped in during a convalescent period, an individual with a broken leg in a cast, who needs a certain type of exercise, and with this machine he can go on with his work and still get that type of exercise. It is an excellently documented film. It runs only 20 to 25 minutes. I am sure the Publicity Department would be delighted to supply it to you. There are many industries that are doing a modicum of research in this field, but I think this particular plan of General Motors has done the most.

QUESTION: It has been very uplifting to learn that industry is doing something for these handicapped individuals. I am wondering if you happen to know what efforts are being made on the part of the Civil Service Commission to get these people to go out into industry where they are required to deal with Navy equipment and so forth. If they prove satisfactory, they might well contribute their IQ to the Federal Government. Would you care to comment on that?

DR. RUSK: I will have to comment bilaterally on that. The Federal Civil Service has an excellent program for the placement of the handicapped, on paper. I think in actuality it is a very difficult one. I can only speak from experience here and there, but people are turned down all the time. Some of the state civil services are very inconsiderate, in my experience. They will turn down people for the least little thing, although they may be perfectly capable; I think that is exactly where consideration for the handicapped should start.

Think what it would save. I was in a veterans hospital in California in a paraplegic center about three months ago. The man who operated the hospital said: "I could get forty paraplegics out of this hospital within thirty days if I had an adequate vocational counsel and job placement service." The boys want to get out, but somebody has to take that next step, like we have been doing on the JOB, to match these things and then find the person.

This was the hospital that was in such a bright spotlight. They switched down to Long Beach. The Long Beach community was tremendously interested in getting this hospital there and did a great deal for these boys. There is this big industrial community only a couple of miles away from the hospital. I know that all you would have to do is to go to the Chamber of Commerce and say: "We have forty boys who want to work and live in Long Beach, in this community. We have government funds to build their homes. Here is what they can do. Do you have jobs for them?" I bet you could place them in two minutes through the Chamber of Commerce.

You must have a little bit of imagination, a little warmth, and a little go in this thing. You can't do it just by the rule book. I think much more could be done. I might say that in a recent survey that I participated in for the President to review the medical service in the Veterans Administration, that was one of our very strong recommendations--that the ground rules be broadened and that the Government should take the leadership in the placement of these individuals.

QUESTION: I have been one of the upholders of high standards of physical condition in the Navy. My reasons have been based on the fact that if you take someone not up to the standard, he becomes an early retirement case; and also because someone in the service like that has a general feeling that the Government owes him a living for the remainder of his life. Am I wrong about that?

DR. RUSK: I think you are wrong about retirement. I don't mean that you should open the bars and let everybody in. You are not going to take in an individual who has rheumatic fever and a damaged heart, although we had an interesting experience with that in the Air Force. We were discharging 85 percent of our rheumatic fevers from the service all on a CDD and all pensionable. We set up a program for these individuals, taking them from areas of high incidence to areas of low incidence. It was a program of gradual activity, a program of rehabilitation. We started with ten minutes on the first day and in the last month of the six months program it was eight hours a day of assigned duty on the base where the hospital is located.

This was a trial period. We reversed our figures. We kept 85 percent in the service, some on full duty and some on limited duty. I know only one that got his pilot's license after that, but we reversed the figures entirely.

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QUESTION: Many employers in this country are reluctant to hire a disabled person because of the workmen's compensation laws. If an employee who is partially disabled receives another injury and becomes totally disabled, the employer is assessed the entire disability. The insurance companies also seem to discourage the hiring of such employees. Is anything being done along the line of educating the employers or the insurance companies without being assessed? Of course I know that there is a second injury fund in some of the states, but that only partially covers the situation. Would you care to discuss that further?

DR. RUSK: Yes. I can't give you the exact figures, but I think the second injury fund now operates in most of the states. In New York we have had an excellent experience. The second injury fund, as you know, is a fund to which all the disability insurance companies make a very small contribution, a tenth of a cent on the dollar or something like that. This forms a special fund for a second injury. So, if you hire a man with one eye and he loses his other eye, he is compensated for total blindness, but you pay him only the same compensation you would have paid him had he lost one eye. The additional comes out of the second injury fund. So it doesn't cost the employer any more.

I can't speak for all the states. I know there are a few that don't have it. But where there is a second injury clause, it doesn't cost the employer a cent. In fact, in some disabilities it saves him a little money. The experience in New York was so excellent with the second injury fund that they had accumulated several million dollars in surplus last year. So they raised their sights to include certain types of cardiac disability and consumptive cases that they didn't cover before, in order to broaden the coverage. I think it is a bugaboo that has been used by industry itself, a red herring, if you will. I think it is primarily due to the fact that the industrialist has never had time to look into the truth of the matter.

COLONEL ENNIS: Dr. Rusk, I see that our time has run out. I think it is very apparent that all of us agree with General Holman when he said that what you had to say would be an eye opener. I would also like to add that I believe all of us are fully aware that you have a very great warmth for these people about whom you have been talking. So, on behalf of the Commandant, the faculty, and the student body, I thank you for a very, very interesting lecture.

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