IE WINISTER'S DEPARTA 2 9 MAR 1967 OPENING OF HONEYSUCKLE CREEK STACE TRACKING A.C.T. SPEECH BY THE PRIME MINISTER, MR. HAROLD HOLT 17th March, 1967. Senator Henty, Mrs. Henty, Dr. Seamans and Mrs. Seamans, Mr. Buckley, any other distinguished guests here today and ladies and gentlemen and all associated with this great project: It is a personal pleasure for me for a variety of reasons to be here at this time if for no other reason than because, like you, I am enjoying this bracing Canberra air and this beautiful Australian setting. At least, Dr. Seamans, you will be able to report that Australia does live up to its travel brochures as to its sunshine and the seauty of its quite unique fauna and reagraphy as you see it around us geography as you see it around us. It is not a very frequent occasion, of course, for a Frime Minister to be addressing himself to a matter of this kind. I have done so very rarely. Prime Ministers, if they are to succeed, are not so much concerned with outer space as keeping their feet firmly on the ground. Sometimes their opponents accuse them of being up in the air, even their most fervent admirers are not unknown to say they are out of this world. So I come before you as one who addresses you with all the valour of ignorance on this rather esoteric are: of human activity which is exemplified for us in this rather awesome piece of equipment under which some of us at least are sheltering this morning. But it is a notable occasion in a chain of events which had considerable significance for Australia and which we hope are enabling Australia to play a useful and helpful part, not only in the space programme of the United States itself but in what has become one of the happier ventures of mankind in which politics tend to be submerged and the aspirations of mankind, the achievements of science, can be largely shared throughout the world. This particular tracking station, so auspiciously situated and so happily named — I think Honeysuckle Tracking Station is a delightful name for an institution such as this. Attractive in relation to almost any activity. If you were to come here, Dr. Seamans, and say you were tracking square at Honeysuckle Creek there might be a different interpretation placed on your activities by Australians who would be familiar with that vernacular. But it is a notable occasion in a chain of events which have But here we have a new tracking station which is to play its own useful part in a great human adventure. This venture into space is something which an older generation such as my own can scarcely comprehend. It's the stuff of science fiction, of space fiction of earlier times made reality in our own day and generation. And as we reflect on these things it is fitting that we should give due tribute and regard to those pioneers in science down through the centuries, who have made possible by their earlier adventures in the human mind and body, by the achievements of these pioneers of genius. They by their efforts have given us the kind of instruments and the scientific method of experiment which makes this sort of achievement possible. I mentioned at the outset that it is a happy circumstance that those great powers who have interested themselves in this particular area of human achievement, have approached their tasks with the objective of bettering mankind's knowledge of its environment, and of contributing to peaceful purposes and to an improvement of man's standards of living. This vital aspiration is shared by two great powers, the United States of America and the Soviet Union, and with amazing technical .../2

achievements to be put at the disposal of man's efforts to shape his world for meeting his material needs and opening new doors to his understanding himself and the universe in which he lives, we owe much to these two great countries.

The United States Aeronautics and Space Act became law on the 29th of July 1958, less than ten years ago. It was then stated, officially, as United States policy in that legislation, that activities in space should be devoted to peaceful purposes for the benefit of mankind. In a modest way Australia had commenced to co-operate actively in the International Jeophysical Year in 1957, by operating a tracking system known as Minitrack at Woomera, and now we have from that beginning added Carnavon in Western Australia, Coby Creek in Queensland, Woomera in South Australia, Tidbinbilla, Orroral Valley and now Honeysuckle Creek (all of these last three in the A.C.T.). The United States has financed the cost of construction, and by the end of the year the Space Authority will have spent more than 2000 million in Australia. You are used to juggling figures in billions, Dr. Seamans, but for Australia this is a considerable sum to be spent inside the borders of our continent for these scientific purposes. The cost of operating the six Australian stations, apparently, is about 8½ million dollars a year.

There is an appropriateness, I think, that Australia should be in the picture in this particular field, because Captain Cook's own voyage of exploration which led to the settlement of Australia, was made on behalf of the Royal Society to observe a transit of Venus across the sun almost two hundred years ago. So we feel that we are appropriately placed to be playing a part now in another great exploration, that of space.

We have been associated with the United States programme since its early days as the illustration I gave earlier would suggest. For nearly ten years now we have joined in facilitating American space activities. We have helped to select sites and construct stations in Australia and their manning includes scientists and technologists from the Department of Supply and Australian industry altogether some seven hundred persons from these sources. The Australian Jovernment purchased and made available to the Space Authority nine hundred acres of freehold land for this present station. A practicable contribution to the space programme itself.

This station is directly concerned with Project Apollo which will launch into space three manned capsules as a part of an experiment which will culminate in a voyage of some three days duration to the moon, 250,000 miles away. The Australian group of stations represent the largest complex of Space Authority stations outside the United States. I think I am correct in saying, Dr. Seamans, that in the Apollo Project there will be three tracking stations which will be following the course of the moon vehicle beyond the 10,000 mile limit. One in the United States, one in Spain and this one here in Australia. And I think we can feel gratified and take some pride, indeed satisfaction, that in what proves to be one of the great historic events of man's exploration of his universe we shall be one of the three countries right in the picture, literally, so far as the concluding phases of the flight are concerned.

Some people wonder whether all this vast expenditure that goes into the space programmes can be justified. The answers are not difficult to find. Already we have been deriving great benefits from the programme of space adventure. If you take meteorology alone, and there is not a human being on earth who isn't daily concerned with the state of the weather. It is our most familiar personal greeting when we see each other in the course of the day.

Weather can now be viewed on a global scale several times a day. This can be done regularly in regions of the earth which have previously defied around-the-clock meteorological observation. The poles, the oceans, the sparse areas of the Southern Hemisphere have now been brought into the range of weather forecasting, and this also has an aspect which could commend itself to all of us in enabling us to avoid the worst effects of the havoc of hurricanes, cyclones and typhoons.

For example, in 1961 quite early in the programme, people were evacuated from the path of Hurricane Carla as a result of warning data received from the Tyros Satellite. In navigation satellites can play a helpful role. In international communication we have already received the first telecast between Britain and Australia. We are but at the beginnings of this improvement in communication, and before we are all very much older the world can be in television contact as a normal and everyday event.

There has been a notable contribution to the knowledge of geography, the study of geology. Our understanding is assisted by the information we receive from the special satellites designed and equipped for these purposes.

Man's superior ability to explore and record details will provide valuable information as to measurements, direct photographs, soil and rock samples, a vast array, in short, of scientific data. The initial landing on the moon proposed by 1970, may lead to longer journeys and wider exploration and culminate in the establishment of a permanent moon base. A project which a few years ago would have been thought quite fanciful even if it were to appear in the realm of fiction.

There have been other benefits, already directly attributable to the space exploration efforts. Freat advances in materials such as ceramics, metals and plastics. Metal alloys specially developed have led to improvements. For example, they have been found ideal for the manufacture of artificial parts for the human body, such necessary assistance to hip and elbow joints. Special knowledge of foods developed for astronauts may help the world in its search for the solution of food problems.

For Adstralia we have a growing number of men and women technically trained to handle complicated concepts and the complicated equipment associated with space technology. Australia has found already many benefits to its own technological development. It may interest you to know that last month Qantas, with the co-operation of the tracking station at Cooby Creek, experimented in air-to-ground voice communication by satellite with encouraging results.

Mankind needs the incentive of space exploration in order to develop to full potential some of these great possibilities. This vast spurt of human imagination and technological progress is opening new doors to experience and achievement. It carries with it at first its own hazards. Fortunately disasters have been few but we should all remember here today the sacrifice made by Grissom, White and Chaffey as they were playing their part in this scientific evolution.

We welcomed here, and some of us in this gathering will no doubt recall with great pleasure the visit of Jalter Schirrar and Frank Borman and their vives. We pay tribute to the courage, skill and determination of these brave pioneers of tomorrow, who make it possible for us to realise the aspirations of this great venture.

Finally, ladies and gentlemen, may I refer to this as

another welcome illustration of the friendly and mutually helpful teamwork which over the years, and more particularly over recent years, has been demonstrated between the United States of America, our great ally, and our own country of Australia. This stands as a symbol for that firendship and for that teamwork and an alliance which, we hope, will endure for as long as our two countries remain national entities.

So, as I open formally this tracking station and have with you a vision of what it can contribute to this programme in the future, may I adopt the words of Tennyson as a fitting conclusion:

"Forward, forward, Let us range, Let the great world spin forever Down the ringing grooves of change."

I declare this station formally open.