

SPEECH BY THE PRIME MINISTER, MR E.G. WHITLAM, Q.C., M.P.,
AT THE INAUGURATION OF THE ANGLO-AUSTRALIAN TELESCOPE,
SIDING SPRING, NSW
WEDNESDAY, 16 OCTOBER, 1974

THERE COULD BE NO MORE FITTING SYMBOL OF THE ANGLO-AUSTRALIAN RELATIONSHIP THAN THIS TELESCOPE. IT COMMEMORATES A SPIRIT OF SCIENTIFIC ENDEAVOUR - AND A HISTORY OF ASTRONOMICAL RESEARCH - THAT BEGAN WITH COOK'S FIRST VOYAGE TO THE SOUTH SEAS. THE ASTRONOMERS OF THE ROYAL SOCIETY IN THE LATE EIGHTEENTH CENTURY SET OUT TO OBSERVE THE TRANSIT OF VENUS. COOK FINISHED UP CHARTING THE EAST COAST OF AUSTRALIA. ASTRONOMERS - WHO IN SUCH MATTERS, AS IN ALL THINGS, TAKE THE LONG VIEW - WILL DOUBTLESS CONTINUE TO ARGUE WHICH OF THESE PHENOMENA WAS MORE IMPORTANT.

THE FACT REMAINS THAT THE COLONISATION OF AUSTRALIA BY EUROPEANS HAD ITS ORIGINS IN AN ASTRONOMICAL PROJECT. TRADE FOLLOWED THE FLAG, BUT THE FLAG FOLLOWED THE TELESCOPE. IT MAY NOT BE TOO ROMANTIC TO SUGGEST THAT THE TELESCOPE ON THE ENDEAVOUR WAS AS POTENT A SYMBOL OF BRITAIN'S IMPERIAL GREATNESS AS NELSON'S TELESCOPE ON THE VICTORY. MORE THAN TWO CENTURIES AFTER COOK'S VOYAGE, BRITISH AND AUSTRALIAN ASTRONOMERS CAN NOW PURSUE THEIR OBSERVATIONS OF THE SOUTHERN SKIES WITH THIS NEW ANGLO-AUSTRALIAN TELESCOPE - THIS BRILLIANT EXAMPLE OF ADVANCED TECHNOLOGY AND PRECISION ENGINEERING WHICH WE SEE BEFORE US.

I COMMEND PROFESSOR HOYLE'S VIEW THAT "A TELESCOPE IS A GOOD EXAMPLE OF THE THINGS WHICH OUR CIVILIZATION DOES WELL". IT IS A GOOD EXAMPLE OF THE THINGS WHICH A TRUE CIVILIZATION ALONE CAN DO. ASTRONOMY IS ONE OF THE FEW SCIENTIFIC PURSUITS - CERTAIN BRANCHES OF MATHEMATICS, CERTAIN BRANCHES OF THEORETICAL NUCLEAR PHYSICS ARE OTHERS - WHICH EXIST FOR NO OTHER PURPOSE THAN THE PURE SEARCH FOR KNOWLEDGE. NO ONE DOUBTS THAT ASTRONOMY HAS ITS PRACTICAL USES. GOVERNMENTS ARE FREQUENTLY REMINDED OF THEM BY ASTRONOMERS THEMSELVES. NEVERTHELESS, THE TRUE GLORY OF ASTRONOMY LIES IN THE VALUE IT PLACES ON KNOWLEDGE FOR ITS OWN SAKE - KNOWLEDGE OF AN ABSOLUTE AND FUNDAMENTAL KIND. NO CIVILIZATION CAN REMAIN INDIFFERENT TO THE ORIGINS OF THE EARTH OR ITS PLACE IN THE COSMOS.

ASTRONOMY IS RICH IN THEORIES BUT SOMEWHAT DEFICIENT IN PRACTICAL RESULTS. IN THAT RESPECT IT CAN BE LIKENED TO ECONOMICS. IN ITS ATTEMPT TO PROVIDE ANSWERS TO THE ULTIMATE QUESTIONS ABOUT MAN'S ENVIRONMENT AND HIS PLACE IN REALITY, IT CAN BE LIKENED TO RELIGION. IT IS NO ACCIDENT THAT THE HIGH PRIESTS OF ASTRONOMY CONDUCT THEIR NOCTURNAL RITES IN REMOTE TEMPLES ON INACCESSIBLE MOUNTAINTOPS. SO I THINK THERE IS AN EXCELLENT CASE FOR GOVERNMENT SUPPORT FOR ASTRONOMY, JUST AS WE GIVE STATE AID TO OTHER RELIGIOUS ENTERPRISES. WE ARE NOT ALONE IN THIS. THE AMERICANS, A PRAGMATIC AND HARD-HEADED PEOPLE, HAVE PROVIDED VAST PUBLIC FUNDS FOR

A SPACE PROGRAM WHOSE ULTIMATE PURPOSE IS TO ADD TO MAN'S KNOWLEDGE OF THE COSMOS AND HIS PLACE WITHIN IT. I WOULD NOT WISH TO JUSTIFY THE SCALE OF THAT EXPENDITURE, BUT I APPROVE WHOLEHEARTEDLY THE PURPOSES BEHIND IT.

GOVERNMENT SUPPORT FOR ASTRONOMY HAS A LONG HISTORY. IT CAN BE TRACED FROM THE ANCIENT CIVILIZATIONS TO THE PRESENT DAY. FROM THE EGYPTIANS, THE PERSIANS, COPERNICUS, GALILEO, NEWTON AND KEPLER, TO THE PLATFORM OF THE AUSTRALIAN LABOR PARTY. OUR POLICY ON SCIENCE PLEDGES "PARTICULAR SUPPORT TO AREAS IN WHICH AUSTRALIA CAN MAKE A SPECIAL CONTRIBUTION, INCLUDING ASTRONOMY...".

IN THE EIGHTEENTH AND NINETEENTH CENTURIES ASTRONOMY WAS RECOGNISED FOR ITS IMPORTANCE TO NAVIGATION AND CARTOGRAPHY. IT WAS SUFFICIENTLY IMPORTANT AT THE TIME OF FEDERATION FOR THE FOUNDING FATHERS TO MAKE SPECIFIC PROVISION IN THE AUSTRALIAN CONSTITUTION FOR THE PARLIAMENT TO MAKE LAWS WITH RESPECT TO ASTRONOMICAL OBSERVATIONS. TWO SUCH LAWS HAVE BEEN MADE: IN 1930, WHEN PARLIAMENT ESTABLISHED THE COMMONWEALTH SOLAR OBSERVATORY, AND IN 1970 WHEN IT PASSED LEGISLATION SETTING UP THE AGREEMENT FOR THIS TELESCOPE AT SIDING SPRING. IT IS APPROPRIATE THAT THE STUDY OF THE LAWS OF THE PLANETS AND STARS SHOULD BE MENTIONED IN THE AUSTRALIAN CONSTITUTION - A DOCUMENT AS TIMELESS AND IMMUTABLE AS THE HEAVENLY BODIES THEMSELVES.

THE PRESENT AUSTRALIAN COMMITMENT TO ASTRONOMY IS EXTENSIVE. THE AUSTRALIAN NATIONAL UNIVERSITY OPERATES MAJOR OPTICAL TELESCOPES AT MOUNT STROMOLO AND HERE AT SIDING SPRING. MAJOR RADIO TELESCOPES ARE OPERATED BY THE C.S.I.R.O. AND BY SYDNEY UNIVERSITY. THE UNIVERSITY OF TASMANIA HAS A GROWING INVOLVEMENT IN ASTRONOMY AND THERE ARE STATE GOVERNMENT OBSERVATORIES IN SYDNEY AND PERTH. THE AUSTRALIAN NATIONAL UNIVERSITY ASTRONOMERS HAVE GAINED A WORLD-WIDE REPUTATION FOR THEIR WORK ON THE STRUCTURE AND EVOLUTION OF GALAXIES, STELLAR STRUCTURE AND THE CHEMICAL COMPOSITION OF STARS. RADIO ASTRONOMERS IN C.S.I.R.O. AND SYDNEY UNIVERSITY HAVE MADE IMPORTANT CONTRIBUTIONS TO QUASAR ASTRONOMY AND TO THE STUDY OF THE STRUCTURE AND EVOLUTION OF THE UNIVERSE.

GROUPS WORKING WITH THE PARKES RADIO TELESCOPE HAVE RECENTLY DISCOVERED MANY DIFFERENT SPECIES OF ORGANIC MOLECULES IN THE GAS CLOUDS OF INTERSTELLAR SPACE. THESE DISCOVERIES MAY THROW LIGHT ON THE PROCESSES THAT LED TO THE EXISTENCE OF LIFE ON EARTH. ASTRONOMERS AT SYDNEY UNIVERSITY HAVE PERFORMED WORK OF FUNDAMENTAL SIGNIFICANCE IN THE MEASUREMENT OF THE SIZES OF STELLAR OBJECTS. THE BUDGET LAST MONTH PROVIDED A GRANT TO ENABLE A STUDY OF A NEW INSTRUMENT TO EXTEND THIS WORK.

ASTRONOMY FOR MANY YEARS HAS ENJOYED A WIDE MEASURE OF INTERNATIONAL CO-OPERATION BOTH AT THE INSTITUTIONAL AND THE INDIVIDUAL LEVEL AND AUSTRALIAN ASTRONOMY HAS BENEFITED FROM THIS. AUSTRALIA AND BRITAIN ARE SHARING EQUALLY THE CAPITAL COST OF THIS TELESCOPE, AMOUNTING TO \$16 MILLION AND THE ESTIMATED ANNUAL OPERATING COST OF \$1.3 MILLION. MANY OF THE ASTRONOMICAL FACILITIES IN AUSTRALIA WERE BUILT WITH FUNDS CONTRIBUTED PARTLY FROM ABROAD AND MANY OF THE ASTRONOMERS WORKING IN AUSTRALIA WERE BORN OVERSEAS. SOME ARE HERE AS VISITORS AND SOME ARE PERMANENT RESIDENTS. THEY COME FROM A VARIETY OF COUNTRIES INCLUDING SRI LANKA, INDIA, KOREA, THE PEOPLE'S REPUBLIC OF CHINA, ISRAEL, POLAND, THE UNITED KINGDOM, GERMANY, U.S.A., NEW ZEALAND AND SWEDEN. THE DIRECTOR OF THIS TELESCOPE, DR E.J. WAMPLER, IS AN AMERICAN CITIZEN AND TWO OF THE THREE AUSTRALIAN MEMBERS ON THE AAT BOARD, DR WILD AND PROFESSOR STREET, WERE BORN IN THE UNITED KINGDOM. THERE ARE MANY AUSTRALIAN ASTRONOMERS WORKING OVERSEAS.

I AM PROUD TO BE ASSOCIATED WITH THE INAUGURATION OF THIS TELESCOPE. I AM PROUD THAT MY GOVERNMENT IS CONTRIBUTING TO ITS COST. ITS BEAUTY, ITS POWER, ITS PRECISION REFLECT THE HIGHEST CREDIT ON ALL WHO DESIGNED AND BUILT IT. THOSE WHO USE IT, LIKE POLITICIANS, WILL SIT THROUGH THE LONG REACHES OF THE NIGHT. YOU WILL CONTRIBUTE TO MAN'S UNDERSTANDING OF THE EARTH AND THE UNIVERSE. THE QUESTIONS YOU ASK ARE OF TRANSCENDENTAL IMPORTANCE TO OUR KNOWLEDGE OF OURSELVES AND OUR SURROUNDINGS. IT MAY WELL BE THAT THE ULTIMATE ANSWERS YOU SEEK WILL ALWAYS ELUDE YOU; THAT IN THE LAST RESORT THE MYSTERIES YOU ATTEMPT TO UNRAVEL WILL REMAIN IN THE PHILOSOPHER'S COURT. FOR ALL THAT, IT IS GOOD TO REFLECT THAT HERE IN THIS BUILDING AND IN OTHERS LIKE IT, AMONG YOU AND YOUR COLLEAGUES, SCIENTIFIC RESEARCH IN ITS PUREST, MOST PEACEFUL AND MOST DISINTERESTED FORM WILL GO FORWARD FOR THE ENRICHMENT OF OUR UNDERSTANDING AND FOR THE BENEFIT OF FUTURE GENERATIONS.
