

## The profile

Around the world, there are some people who leave a distinct footprint on events linked to the space era - people who have managed to make space activities more easily understood among the general public. For Norwegians, one person's picture and voice are synonymous with historic space events. His name is Erik Tandberg.



**Erik Tandberg interviews John Glenn for the Norwegian Broadcasting, 18 May 1966.**



**Near thirty years later, Erik been interviewed in connection with the IAF Congress in Oslo October 1995.**



**Using the Space Shuttle's robotic arm in a simulator.**

All Photos: Erik Tandberg

Personally I remember that long night when we were waiting for the first human being to step onto the moon. Whilst waiting for Neil Armstrong's historic leap for mankind, Erik's riveting comments and explanations, not only about the moon trip but about space research and progress generally, kept most Norwegians glued to their television sets throughout the night. Although a well-known TV commentator, he has also held other posts for most of the time, and during the last few years he has acted as a consultant to the Norwegian Space Centre. His media commenting - and the work that goes with it - occupy his leisure time.

Erik Tandberg has followed space activities from the touchline for more than four decades, after his first visit to the USA in the fifties. "My interest in space travel and space research was a natural step from my childhood interest in aviation, he says. I stayed, in connection with my engineering education, in United States from 1953 and I was still there when the first satellite was launched in 1957, so my interest in space has been from the beginning and still is strong."

Back in Norway Erik Tandberg was soon engaged as a space contributor to radio and television. "I did my first television programme in November 1960, he remembers, in connection with the launch of the earth observation satellite, Tiros 1, earlier same year. Tiros 1 provided the first pictures of clouds seen from space and meteorologists quickly recognised the opportunities

satellite pictures provided for practical meteorology. I received some pictures taken from Tiros I and together with a professional producer and a meteorologist we made a television programme specifically about meteorological satellites".

For several years, he was a link to the public, reporting and commenting on steadily more advanced events in space, both Soviet and American. "Both the Moon landing on the 20th July 1969, in the late evening in Norway, and the first step on the Moon early the following morning were big events in human history. It was also a very long day in the studio, but Norwegian television produced a very varied and interesting programme and I remember that when we began transmitting repeats of it later on the morning, I was the only one left in the studio. The Moon landing will forever be a major milestone for humankind. No matter how we exploit space in the future, that was the first time a human being set foot on another celestial body. To be so close to such an historic event was for me an adventure that I will remember for the rest of my life."

*To begin with, the Soviet Union was the real space superpower, but, after the Apollo-programme, the U.S. was in a dominant position. What is the situation now?*

"Despite economic difficulties, Russia still retains a lot of competence in the construction and operation of space stations and systems for these. They are also in the forefront in terms of launchers and launcher engines, although today they do not have resources they need to capitalise on this advantage. USA, on the other hand, has made steady economic progress and has developed a leading position in most fields. Europe has played an important part within several fields, mainly because it has centred resources through ESA. Of course, there have been times when ESA has found that being united is not always easy and that acquiring the necessary financial basis for desirable projects can also be a challenge. Nonetheless, Europe is on way to being a leading participant, and is already at the forefront within space research and Earth observation. Among the others China will probably be the next nation to launch astronauts with their own space carrier. Japan is strong in certain fields within space science, in earth observation and launchers, and India is strong in earth observation and space research, and also has a useful launcher programme.

*At one time, the pressure was to develop politically significant projects. Has that altered following the collapse of the Soviet Union, or is politics still a motivation?*

"Yes, that will always be a significant aspect, but perhaps in some another way. Investigation of the planets and outer space is scientifically important, but such advanced projects are also interesting for the man in the street. It has been

## Erik Tandberg

# Following the whole space era

written about and mentioned in TV, all of which has created a greater interest in space. This is very important because such interest influences the politicians and, as a result, the way they allocate funds to space research. So in many cases, research programmes are a mix of political and scientific interests. But the power of politics today is nowhere near what it was prior to the seventies, when the space race was an integral part of the cold war. The race to launch the first satellite and send people to the Moon was real political prestige. The scientific benefit often was in second place.”

*Is space research and space exploration as important to society in general as we like to believe?*

“My answer is yes. Space activities have supplied us with mountains of new knowledge, which it would not have been possible to obtain without despatching instruments outside the atmosphere and to other celestial bodies. Sensors in orbits collect much of our knowledge about our own planet and processes in the atmosphere. Some types of research are to a large degree dependent on space activities. The question is whether society can invest such large resources in space research, exploration and exploitation when there are so many other vital - and expensive - issues that need to be tackled around the world. I believe that most of the grants have been repaid in the form of technological advances, products, employment and, not least, new knowledge. I mean the activities are useful and necessary. The discussion about priority of resources has been going on from the start, and that discussion will continue”.

*What drives space technology forward most, space research or commercial investment?*

“Both, but in different ways. The will to investigate our neighbouring planets, the most distant parts of our solar system, and even further out, demands steady new technology within several fields to give the desired results. Technology developed for the investigation of space has in many cases been handed down for the commercial exploitation of space and Earth-based activities some time later. Commercial space utilisation is a mainly a result of research activities carried out in space, but demand, development and separate technologies adjust to commercial needs. Without doubt, space research and commercialization have contributed jointly to the advancement of technology in many fields “.

*If you had the same job in Norway as Sean O’Keefe has at NASA, in what way do you think future developments will head?*

“In just about the same direction as now. We will continue to use satellites for communication, earth observation, navigation, and science. The International Space Station will get more attention, but it is important to remember that Norway is a small country with limited resources. We cannot do everything. When selecting participation in future projects I think I would stress explaining to the public what it is all about and maybe pick one now and then that would, in addition to meet scientific criteria, stimulate the imagination and excite – in particular young people”.

*Space activities are dominated by large nations, large institutes and large commercial companies. What are the possibilities for the small?*

“Small nations, small institutes and small companies unquestionable have a role to play within space activities. The key to this is finding the right niches, and collaboration. In other words, developing leading-edge technology within special fields and developing niches where they have high competence. Not everyone can participate in big projects. But through ESA and other collaboration organisations, we as a relatively small nation, and later our institutes and companies, can indeed participate in projects that we normally would not have been able to. The International Space Station is an example”.

*Among the billions of celestial bodies, is it likely that only Earth has life?*

“I believe, that among the many solar systems in the Universe, some celestial bodies must be so like our own planet that they could have life, perhaps even intelligent forms of life. But the latest research has shown that even if life might exist, it is a long, uphill way to higher intelligent life forms such as animals and humans. Intelligent life may not be as common as we would like to believe. Personally, I am quite sure we will find life, but of a more primitive type than we are earlier supposed. And this could happen within a timespan of ten to fifteen years. With today’s technology, it is not feasible to visit Earth-like planets around other stars to look for life, but nothing is impossible. The last few decades have shown that progress knows no limits, concludes Erik Tandberg. “So who knows, one day in the far future perhaps we may indeed be able to visit extrasolar planets and find life”.

