



Mr. Armand Carlier, Chairman & CEO Astrium

Armand Carlier – Chairman and Chief Executive Officer

Armand Carlier joined Matra Marconi Space as Chairman in 1994 and was appointed Chief Executive Officer in 1995.

He is also a member of the Management Board of Arianespace.

Previously Carlier was at Schlumberger responsible for a number of subsidiaries dealing with metering, electronic products and oilfield services.

After qualifying from the Engineer du Corps des Mines in 1971 he worked in the Ministry of Industry in Paris and was Technical Adviser to the Minister, Andre Giraud.

Interview With CEO

Mr . Armand Carlier
Chairman & CEO
Astrium

Interviewer : Takao Ueda

Editorial Advisor & International Affairs Officer
of AIAA JFSC

How do you assess from inside the result of large scale consolidation into Astrium since last year? What have been the biggest challenges you have faced since your assignment as CEO of the new huge company, Astrium?

Carlier : *Astrium combines the experience, resources and facilities of the major space companies of three of Europe's principal space nations: France, Germany and the United Kingdom. The company is aiming to deliver an improved "return on investment" for its shareholders, by using its expertise in space applications. Astrium is a chance for Europe to make optimal use of its space budget. Our company will be the main contributor to develop*

space solutions in Europe for major challenges: global environment monitoring, European reconnaissance and space navigation systems.

The biggest challenge for Astrium is obviously to have a smooth multicultural organization with people from different countries, speaking different languages and with different cultures, having to work together. But as Matra Marconi Space we had ten years experience of this situation and as European space programs in general are since the beginning joint multinational efforts we know how to make it work.

Some people say that the goal of space industry consolidation in Europe is to become single huge company to be competitive with U.S.
What is your view for this idea?

Carlier : *Space industry consolidation is going on worldwide and restructuring in Europe is just a part of this process. Our goal with Astrium is to build a company competitive on the world market. At the present time the leading US space companies are still two to three time larger than their European counterparts. In the meantime there are large overcapacities of space manufacturing facilities. Astrium, pioneer of European consolidation and leading European space company is keen to further this movement by joining with other space companies.*

European satellite manufacturers have overcome U.S. historically strong manufacturers in 2000. In your view, what have been the important factors of this success, other than the effect of U.S. technology export regulation?

Carlier : *The contracts which Astrium won since a year were from major international organizations such as Intelsat, Inmarsat or Eutelsat and in each case they were both European and U.S. competitors. Astrium won by a combination of technical solutions and performances. Our customers gave us credit for our technical record with 22 Eurostar spacecraft in orbit, which are all operating with an excellent service availability. Besides I want to point out that our spacecraft have some U.S. components at equipment level and, therefore, US export controls regulations also apply to Astrium.*



Intelsat X (EUROSTAR 3000)



ENVISAT (Monitoring Earth's Environment Satellite)



Mr. Armand Carlier, Chairman & CEO and Mr. Takao Ueda

What is your view for the communications satellite market trend for the broadband communications for the next few years? What kind of innovative satellite technology do you think are necessary to be provided to satellite carriers, in order for them to establish unique position by satellite and survive in broadband communications business?

Carlier : *The broadband market is increasing rapidly, even if the growth is not as fast as what has been dreamed two years ago. It is clear that broadband will take a larger part of the market, but not at once. Our approach to propose scalable solutions based on GEO satellites has proven to be the most sensible.*

The trend we observe for larger satellites, at the upper range of the capability of existing launchers, is a way to reduce the cost per transponder. We have developed the Eurostar 3000 satellite series for high power satellites able to carry more transponders. We also offer more flexible spacecraft and sophisticated payloads, able to cope with variation in the actual demand of services. More efficient satellite service will be obtained by focusing signals precisely to those they concern, leading to a better use of satellite power and a great saving in frequency spectrum. In terms of technology, this means precise pointing, multi-beam antennas or on-board signal processors. We are at the forefront in these developments.

European space industries have in general not been so active, compared to U.S. industries, to establish intense business relations with Japanese manufacturers, except for the procurement of some satellite components from Japan.

How do you think about the future possibility of collaboration by Astrium with Japanese companies, not only in communications satellite area but also in other area like observation satellites? What would be the merit? What would be the obstacles?

Carlier : *The history of relation between US and Japanese contractors may be also linked to the willingness of Japan to get technology from where it was supposed to be the best. The commercial strength and the political power of the US did the rest. Now that European technology is in no way second to the US, I believe we have reached the conditions for a more balanced relation with European contractors and we, at Astrium, are ready to have intense business relations with Japan. The co-operations will not be driven only by governmental programmes, subjects of agencies agreement, but will be extended to all commercial areas*

such as communications, observation and eventually new services. Conversely, we expect fair conditions from customers and partners in Japan, and would like that being European is not a disadvantage in the relations, from chances to win contracts up to establishing solid partnerships. We welcome any opportunity to put this principle for fair and equal partnership into action.

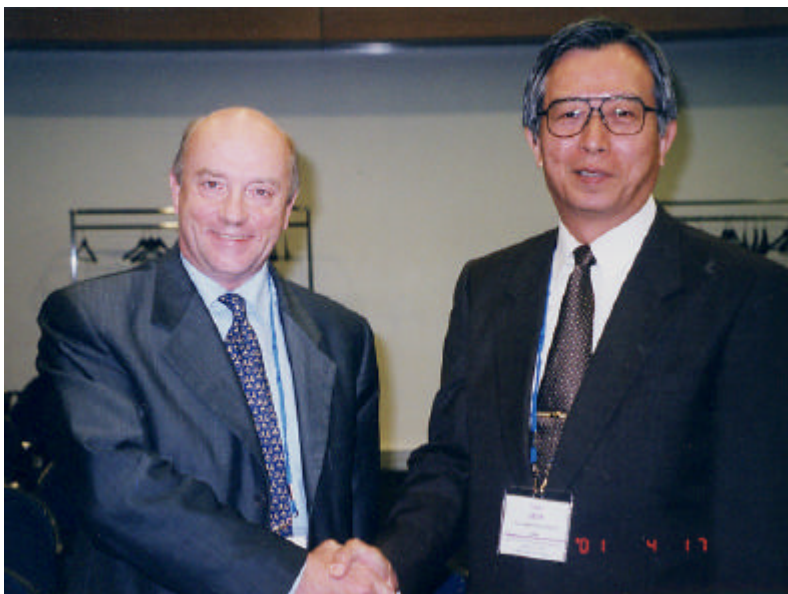
How do you feel about the business capability and role of Japanese industries in world market? Possible partner for European industries, or just the potential competitor?

Carlier : *We view other contractors, be it in Europe, in the US or in Japan, as potential partners for some business while competing on other programmes. The Japanese industry, through its on-going restructuring, is playing an increasing role on the world market, as supplier, as partner and as customer. We expect competitive products from our suppliers and we know that our customers expect this from us. Consequently, it is an Astrium policy that teaming with the right partner is key to be more successful, with mutual benefits. This briefly describes our philosophy, not only in Japan.*

What do you do in your spare time to relax?

Carlier : *Reading, listenning classical music and gardenning. This is another reason why I have a lot of admiration for japanese culture and civilisation which I had the chance to know when I spent one year of my life in your country, several years ago: at the same time a great talent for high technology and the most civilised and sophisticated art of gardens like the ones I visited several times in Kyoto. This is something Japan and Europe old civilisation are sharing. My goal is be to build a robust cooperation and long term relationship between the japanese and european space industries.*

Thank you very much.



After the Interview