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PRESS RELEASE

**THE INTERNATIONAL SPACE STATION:  
ALAIN DUCASSE FORMATION'S DISHES IN THE STARS**

*The Russian spacecraft Progress was launched by a Soyuz launcher from the Baikonur cosmodrome in Kazakhstan on October 23<sup>rd</sup> 2006. As planned, the spacecraft carried the meals developed by ADF, the consultancy and training department of Groupe Alain Ducasse with CNES and ESA. The objective of this cooperation was to create a full range of tasty, healthy and nutritious meals for astronauts.*

"Caponata" (a Sicilian speciality made of peppers, tomatoes and zucchini, flavoured with honey and almonds), "Roasted quails in a Madiran wine sauce", "Smooth celeriac (celery root) purée with nutmeg", "Rice pudding with preserved fruit", all make up a mouth-watering menu, but not, as you might expect, from the latest trendy restaurant. In fact it is intended for Thomas Reiter, a European astronaut taking part in the ASTROLAB mission which reached the ISS last July. Reiter will be the first to taste these dishes in the weeks to come.

How did these meals created by ADF's chefs come to be aboard the International Space Station? It all began with a pedagogical project undertaken by Richard Filippi and his students at the *Lycée hôtelier de Souillac* in the Lot. Following unanimous praise by the Russians, French and Americans who had tasted the meals, CNES wished to continue the project with professionals.

The initial teaching project has now become an operational one, henceforth entrusted to ADF, whose initial assignment was to create tasty, balanced and healthy dishes according to specifications for meals for the International Space Station. Thirteen recipes were certified by the IMBP (the institute for biomedical problems) and the Food Institute in Moscow, CNES' Russian partners and were then made in the ADF laboratory in the Basque country. Among them were "Preserved duck breast with caper condiment", "Riviera style swordfish steak", "Melt-in-your mouth apple slices" and "Space Far" (a traditional Brittany tart).

These "French meals", as the Russians call them, do not compete in any way with the daily meals provided by the Russians and Americans (now serving in equal numbers on the ISS) which are the only ones recognised in International protocols. The French proposal only concerned exceptional, special event meals (known as SEMs), for particular assignments such as crew relief missions or extra-vehicular activity.

These "space certified" dishes are packaged in aluminium alloy and light manganese boxes which are suitable for heating in the Russian segment of the International Space Station. The transportation (mass and storage), packaging and appearance of the meals will probably be improved in the future. To tempt the astronauts' palates, one or two new recipes will be invented each year.

The meals are not only intended to taste good but also to match requirements following scientific research into human physiology. This type of research, which was suspended in 1999 after the long duration Perseus mission and the end of French manned flights, has now been renewed as part of the CADMOS activities at the CNES Technical Centre in Toulouse. The technical centre coordinates European activities on the ISS. As for next year, a scientific protocol defined by CNES and ESA will attempt to quantify the energy needs of astronauts during long duration flights. ADF will be working on new recipes particularly for breakfasts. Four meals will be provided (two breakfasts, a lunch and a dinner) and they will be eaten the night before and the morning of the experiment. A precise knowledge of the contents of the meals will enable researchers to follow a carefully defined, experimental protocol.

The meals developed by ADF's chefs were tested under extreme conditions such as polar crossings. Other terrestrial applications are being considered, for instance for expeditions and solo sailing races.

Some of the goals of the cooperative project are to make the meals taste more like good food cooked on Earth. Meal times are an essential part of the life on a space station and should thus do more than merely satisfy the physiological needs of astronauts during their missions.

Find out more about CNES at [www.cnes.fr](http://www.cnes.fr)

Find out more about ADF at [www.alain-ducasse.com](http://www.alain-ducasse.com) and [www.ad-formation.com](http://www.ad-formation.com)

**PICTURES AVAILABLE ON REQUEST**

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