



APPLETON LABORATORY NEWSLETTER

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Spacelab Candidates see laser and mm-wave experiments



Europe's Spacelab Candidates

The European Space Agency (E.S.A.) has selected four European candidates, one of whom will finally be chosen to fly as payload specialist on the first Spacelab mission in 1980 together with one American payload specialist. The reusable Spacelab, being built for E.S.A. by nearly forty firms in ten European countries, is to be carried into earth orbit by NASA's Space Shuttle.

The four, who were chosen from fifty-three from twelve European countries, visited the Laboratory earlier this month. This was part of a four-day tour of major space research groups in the U.K. It enabled the candidates to meet those leading British space scientists whose work is particularly concerned with atmospheric and magnetospheric physics.

The four are :

Dr. Franco Malerba (31), Italian engineer working in the computer field for the Digital Equipment Corporation in Milan;

Dr. Ulf Merbold (36), German research scientist working at the Max-Planck-Institut für Metallforschung in Stuttgart;

M. Claude Nicollier (33), Swiss researcher and pilot who has since 1976 been a visiting scientist at ESTEC, Noordwijk, (Netherlands);

Dr. Wubbo Ockels (31), Dutch physicist doing research work and lecturing at Groningen University.

Among the last 12 in the running were candidates from Belgium, Denmark, France, Great Britain and Ireland in addition to the countries of the four finally selected.

It had been intended to select six candidates but because of the severe evaluation criteria which ESA chose to impose for what will be Western Europe's first manned space mission (i.e. the Level II criteria used by NASA to select permanent mission specialists but not specialists to be trained for one specific payload) only four were retained. The medical criteria eliminated eight of the final group of twelve.

E.S.A.'s Director General, Mr. Roy Gibson, said that the severity of the selection procedure should not be allowed to obscure the high quality of the European candidates. It was particularly gratifying, he said, that the only woman among the fifty-three candidates made such an excellent showing.

By May 1978, three of the four candidates are due to be selected for appointment to the staff of E.S.A. as European experiment specialists to undergo training for the first Spacelab flight. A few months before the flight, one of them will be chosen to become the first West European to travel and work in space. The two others will act as back-up specialists and will participate in ground-based mission activities.

On the first Spacelab mission about seventy experiments will be carried out in the fields of stratospheric and upper atmospheric physics, materials processing, space plasma physics, biology, medicine, astronomy, solar physics, earth observation,

thermo-dynamics and lubrication. E.S.A.'s Spacelab Integration and Coordination in Europe (SPICE) organisation will manage European experiment training activities.

During their visit to the Laboratory, the candidates saw some of the rocket-borne experiments, including those for auroral studies. They also learnt of our work in mm-wave spectroscopy and radiometry and, after hearing about the laser probing of the atmosphere, were told something of the studies being conducted into sun-weather relationships.

In the afternoon a number of representatives of university research groups came to the Laboratory to meet the candidates and to give brief talks about their work.

The four day visit was arranged for E.S.A. by the Appleton Laboratory and was the particular responsibility of Dr. Lance Thomas.

(Based on S.R.C. Press Release)

Visitors

We are glad to welcome Dr. G. E. Goodwin and Dr. Y. K. Tulunay to the Laboratory.

Dr. Goodwin, who is spending three months here, is Head of the School of Physics at the South Australian Institute of Technology at Adelaide. His interests include atmospheric and ionospheric physics.

Dr. Tulunay, a lecturer at the Department of Physics of the Middle-East Technical University at Ankara, also investigates problems of ionospheric physics. For the next six months of sabbatical leave she will be working at the laboratory.

Both visitors will be with Dr. King's group studying Sun-weather relationships.

Staff News

Congratulations to :

Trevor and Patricia Dimbylow on the birth of their daughter, Charlotte Ann May, on 22nd February.

Roger and Wendy Burdett on the birth of their daughter Gemma on 22nd December.

Mrs. J. McDermott now D.O.A.

Welcome to :

S. Mrowka	S.O.	
A. C. Maroudas	A.S.O.	
Miss E. B. Bishop	A.S.O.	
R. P. G. Slattery	S.C.S.	
Mrs. J. A. Marshall	C.O.(P/T)	Winkfield
W. F. Willis	S/S Lab.	Chilbolton

Resignations and Retirements

A. Swallow	S.C.S.
M. R. Russell	S.C.S.
Mrs. T. A. Frederiksen	C.O.
G. E. Mackrell	H.S.O.
Miss G. Patel	S.C.S.
A. Hall	S.C.S.
H. C. Bryant	Lab.

Other Changes

D. Pennel	S.D.P.	Detached duty at Culham
Mrs. E. P. Mitchell	C.O.	Trans. from Winkfield

Mr. Herbert Bryant

January 31st 1978 marked the second retirement of Bert Bryant. Bert who has been Chilbolton's Handyman for the past 9 years was retired, with reluctance on both sides, by the inexorable age rule, although you would never have guessed it from his appearance and actions.

Born just after the turn of the century in Somerset he spent his formative years in Chilbolton as an apprentice and then craftsman builder. Moving on to Slough and London he completed the circle by returning to Chilbolton where he finished his first career as a master builder with a number of houses built in the village to his credit.

Renowned for his industry and hardiness, not to mention his tea, he is a happy worker who turns his hand to anything. The esteem in which he is held by his friends and colleagues was expressed at a gathering to mark his departure when together with their good wishes for a long and happy retirement for both himself and Mrs. Bryant, he was presented with some gifts to remind him of his stay here.

Obituary

We much regret to learn of the recent death of Jean, wife of Dr. J. E. Hall and, as the result of an accident, the death of Vincent, husband of Mrs. Bridget McFadden. To these members of staff and their families, colleagues at the Laboratory offer their deepest sympathies.

Staff will also be sorry to hear of the death, last August, at the early age of 39, of Mr. Derek Cowcher. After 14 years service in the R.A.F., Mr. Cowcher joined the Laboratory in 1967. After duties here and in the Falkland Islands he joined the Ministry of Defence in 1973. At the time of his death he was a member of the staff of British Petroleum.

FEBRUARY 1978 REPRINT LIST

A1222 H. Rishbeth
'Dynamics of the equatorial F-region',
JATP, 1977, Vol. 39, pp. 1159-1168.

INTERNAL MEMORANDUM

I.M. 375 'The accuracy of laser radar measurements of
atmospheric temperature by doppler broadening
by Rayleigh scatter'.

A. J. Gibson