Stipends for physics graduate students will go up 23% by 2004 to £9000. "We have got to send a clear signal to young people that research should no longer be seen as a Cinderella career," said a spokesperson for the government's Office of Science and Technology.

The 10% increase above inflation in the higher education budget has three main goals: to modernize university facilities, expand student numbers by at least 8%, and increase the pay of academics. Despite the funding boost to education, the UK still spends less as a proportion of its gross national product than most members of the Organization for Economic Co-operation and Development. To bring higher education up to the OECD average would cost an additional £7.5 billion per year.

Roughly one third of the new education cash (£330 million) is earmarked for salaries. The money is in addition to any nationwide pay increase negotiated with trade union leaders in the next few months. Universities have been told they can use the money for recruiting new staff or to break the national payscale and increase existing salaries at their institutions. "Universities and colleges have to compete internationally to recruit the best staff," says Brian Fender, CEO of the Higher Education Funding Council for England, which distributes public money to universities and colleges. "This funding settlement is a major step in helping them do that."

Currently an English literature professor earns the same salary as a physics professor anywhere in the country, but the pay raises are expected to change that. "There is now an acknowledgment amongst the government and some university institutions that it is no longer relevant to have a nationwide payscale," says Peter Cotgreave from Save British Science, a UK pressure group. "It should reflect national priorities." Science and technology are among those priorities, and low pay is widely believed to be the main reason for a UK academic "brain drain" both to industry and abroad.

PAUL GUINNESSY

Stirling to Head European Synchrotron

William Stirling, a physicist at the University of Liverpool in England, began a five-year stint this month as director general of the European Synchrotron Radiation Facility (ESRF) in Grenoble, France. He succeeds Yves Petroff, who has led the

AIP Forum Focuses on Energy and Defense

The annual Industrial Physics Forum, sponsored by the American Institute of Physics' Corporate Associates, was hosted by General Atomics (GA) in San Diego on 6-7 November. Some attendees opted to arrive a day early to participate in an academia-industry outreach workshop, which focused on training students for industry, designing a professional master's degree program, and forming collaborations between universities and industry. The forum was held in cooperation with The Industrial Physicist and the APS Forum on Industrial and Applied Physics. Additional sponsors of the workshop included several corporations and professional coalitions.

The theme of the forum was "Physics, Energy, and Defense: Synergistic Interactions." To reinforce the theme topics, the roughly 150 industrial and academic physicists in attendance toured two GA facilities. One was the DIII-D National Fusion Facility, housing GA's experimental tokamak, which has a D-shaped plasma. The other facility toured was



THE UNMANNED PREDATOR AIRCRAFT features synthetic aperture radar and stays airborne for up

the GA Aeronautical Systems, Inc, production facility for the Predator (see photo) and other remotely operated aircraft that are used for surveillance in combat operations.

At the banquet, held on Monday night at the Scripps Institution of Oceanography, the crowd was addressed by Robert Dynes, chancellor of the University of California, San Diego, and by two local Congressional representatives: Randall "Duke" Cunningham and Robert Filner. AIP then presented its 2000 Award for Science Writing by a Scientist to Charles H. Townes of the University of California, Berkeley, for How the Laser Happened (Oxford University Press, 2000).

Next year's forum is slated for 22-23 October 2001, at the Xerox Wilson Center for Research and Technology in Webster, New York. The theme will be "Color Documents in the Internet Era.



STIRLING

ESRF since before its first beam lines opened in 1994. Petroff is initially taking one year of sabbatical leave.

Leading the **ESRF** is a chance to help shape science, Stirling says. "It's one of the

most exciting jobs in Europe for a physical scientist." He has worked in Grenoble before: from 1973 to 1987 at the neighboring Institute Laue Langevin's high-flux neutron research reactor.

The ESRF has 16 member countries, whose annual dues provide the facility's budget of Fr 420 million (about \$55 million). "Over the last 10 years, the ESRF has been very successful at building and developing new beam lines," says Stirling. "It is now a very fine machine indeed." But that space is limited, he adds, "Almost everywhere you can put an instrument has been taken."

A challenge now, he says, is how to keep developing the facility. In particular, Stirling will continue Petroff's move to let scientists concentrate on their science, rather than on the mechanical details. For example, planned automation means that aligning a protein crystal will soon take seconds rather than minutes. Other aspects of data collection, such as powder diffraction, are also in line for automation.

The ESRF is used for research in physics, chemistry, materials science, and, increasingly, biology and medicine—for example, to do experiments on imaging human tissues. "Personally, as a physicist, I'm looking forward to getting to know more about the life sciences," says Stirling. His research as a condensed matter physicist involves xray investigations of magnetic structures and phase transitions of magnetic materials. LYNLEY HARGREAVES

AAS Reviews Education Strategy

When news got out this past May that the American Astronomical Society was closing its Chicago education office, Bruce Partridge, chair of the AAS's astronomy education board