These new surveillance technologies, which US intelligence says are being aggressively pursued in the Soviet Union, threaten to end the 30-year era of submarine invulnerability which has made them the most secure and most "survivable" component in the West's deterrent system.

Details of the experiments were first disclosed in yesterday's editions of the conservative Washington Times

newspaper.

The US deterrence system also contains the land-based balllistic missiles and the B-1 and B-2 manned bombers as main components of the strategic triad.

However, the future of Britain's deterrent depends almost completely on the new generation of Trident II missile-carrying submarines, which are due

while operators listen for the echo as the amplified sound-waves bounce back when they strike a submarine. The operators also listen for the sound of a submarine's propellers.

Spurred by the relative ease with which their noisy submarines have been detected by Western navies, the Soviet Union has been a pioneer in non-acoustic ASW.

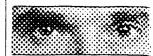
US Defence Intelligence Agency experts have suggested that two Soviet satellites. Cosmos 1870 and Cosmos 1500, are trying to monitor US nuclear submarines through spacebased radar detection of the surface wakes.

"The West's acoustic advantage has been decreasing in recent years, and so all advanced countries are doing R&D into non-acoustic anti-submarine warfare for offensive experiments so far have been ambiguous, and that too much is being read into tentative results by other agencies with axes to grind, such as the US Air Force, which fears Congress will further slash funding for their B-2 Stealth bomber.

The \$28 million taken from the Darpa budget in the House appropriations committee's revised budget has been given to the Department of Energy's Lawrence Livermore laboratory near San Francisco for further research into the new surveillance technology, which is being dubbed "non-acoustic ASW".

But Darpa officers complain that this will lead to a longdrawn-out and academic-led research programme, rather than to the building of prototypes of a quickly-deployable system.

Poles a



Eyewitness

Michael Simmons in Warsaw

T A few minutes after lpm yesterday, Wasaw time, Europear history change course. The Polish Parliamen on a show of hands, voted Citzen Tadeusz Mazowiecki, one of the "brains of Solidarity" to be the country's next Prim Minister.

One of the first to congratilate him, with a vice-like handshake, was the outgoing Prim. Minister and Interior Minister Gen Czeslaw Kiszczak. The Defence Minister, Gen Floria: Siwicki, bemedalled and in fuluniform, was close behind, remains to be seen whether M Mazowiecki will be seein much more of them both.

For the man of the moment the announcement of the vot

Weekend

Guardian

Tomorrow: As the media gathers to read the barometer of race relations at the Notting Hill Carnival, Ferdinand Dennis and Val Arnoid-Forster recall its history and chronicle the behind-the-scenes political and financial in-fighting. Pete and Dud prepare for the Secret Policeman's Biggest Ball and talk a lot of just that. And Kate Kellaway speaks to Chinese poet Duoduo, who was shot at on June 4 in Tiananmen Square, but whose good fortune put him on a plane for Europe that same night.

News in brief

Listeria in 10pc of pâté

One in 10 portions of pate bought in England and Wales is contaminated with listeria, the Government's chief medical officer said. Page 22

Artist dies

Feliks Topolski, the Polish-born artist and writer who settled in Britain in 1935, has died at 82. Obituary, page 33

Refugees concern

Peace deals for repatriation, and the West's desire to be rid of its refugee burden are adding to pressure on the United Nations agency aiding displaced peoples. Page 11

Argentine visit

Mr Eduardo Menem, brother of the Argentine president and provisional leader of the Argentine Senate, will head a delegation to the Inter-Parliamentary Union in London next month.

Bass hotels deal

Bass brewing group is paying nearly £1.3 billion for 1.270 US Holiday Inns. Page 12

Inside

Arts, Reviews	24-29, 32
Cartoons	33
Crosswords	22, 33
Financial News	12-14
Futures	19
Home News	2-7, 22
International News	8, 10, 11
Listings	30, 31
Obituary	33
Review Guardian	23
Sports News	15-17
TV & Radio/Weather	34

Appeal for action on blood checks

Aileen Ballantyne Medical Correspondent

HE Government was urged yesterday to carry out an immediate review of international evidence on the newly-developed test for the hepatitis C virus to ensure the national blood supply is protected.

The recommendation came from the British Medical Association, which represents Britain's doctors. It follows disclosure by the Guardian that the Government is considering screening every pint of blood donated in the UK for the virus, which can in some cases lead to the disease hepatitis C and fatal liver failure.

Dr Vivienne Nathanson, assistant secretary of the BMA's science and ethics division, said that blood donors should also be given "clear, well defined advice" from the Government on the exact meaning of a positive test for the recently isolated hepatitis C virus, so as to allay anxiety.

If the test proved reliable, this would allow those found to be carrying the virus to receive expert treatment and counselling "at the earliest possible proportionity".

expert treatment and counselling "at the earliest possible opportunity".

But Dr Marcela Contreras, director of the North London Blood Transfusion Centre, who carried out a pilot study of the test on more than 5,000 blood donors, writes in a letter in today's issue of the Lancet that "precipitate action" in using the test to screen donors should be avoided.

She warns of the "enormous

and costly undertaking" involved in contacting up to 25.000 of the 2.5 million donors who give blood every year.

The pilot study using the new test found that up to one in every 100 blood donors is the tested positive for the hepatitis C virus (HPC).

Dr Contreras was commenting on a leading article in the Lancet earlier this month, which concluded that results from the new tests in Germany, Spain and Holland showed that the test was "sensitive and specific".

The Lancet suggested that the results "underline the urgency of making the system available for donor blood screening."

Dr Harold Gunson, national director of the Blood Transfusion Service, said yesterday that availability of the test for the hepatitis C virus could make the blood supply the UK even safer, provided that it proves to be a suitable test.

A spokesman for the Department of Health said the UK's blood supply was considered one of the safest in the world. "We are continuing to investigate ways of making it safer still."

Along with other countries, the National Blood Transfusion Service was "examining all available data" before making a decision on extending testing to all donated blood.

Dr Nathanson added that those found to be carrying the hepatitis C virus after their blood was screened might consider liver function tests.

People, page 2; Leader comment, page 20