

Unmanned aerial vehicles offer a niche

It is interesting to note that this year the US Department of Defense has requested \$61.8bn for its R&D work in 2004. This would be a 9% increase over the \$56.8bn currently being spent during 2003.

One of the areas where the DoD request for 2004 is much higher than in 2003 is in Unmanned Air Vehicles (UAV's) many of which make extensive use of satellite proven solar power.

The US military is arguing that UAVs must become cheaper, while simultaneously their ability to 'communicate' with the ground force has to be improved substantially.

Both of these attributes have considerable commercial appeal. For starters a shake up in the UAV manufacturing sector in the US last year will probably help to put mass production techniques potential into a formerly small batch build industry.

Quite apart from a battlefield role, UAV's are being tested in several commercial applications - monitoring crop ripeness, reporting on the weather, watching for fires, providing road accident alerting services, and even acting as radio and TV transmission stations.

This makes them in need of such compound products as lasers, LEDs, IR arrays, a range of sensors, communications, and optics.

Curiously enough at the end of last year, France, Germany, Italy, Spain, Sweden and the UK signed up to study defence capability requirements up to 2020. Each

country is teamed with its lead aerospace manufacturer - Dassault, EADS Germany, Alenia Aerospazio, EADS Spain, Saab and BAE Systems respectively, and will input into a number of technology demonstration programmes, the critical ones being safe operation, command and control of UAVs.

Included in this agreement is a European programme that aims to develop Europe's UAV capabilities. Here France has a dual lead through Dassault, and its investment in EADS.

EU developments are being watched by four companies awarded work on the assessment study phase of the UK's Watchkeeper programme, namely BAE Systems Ltd, Thales, and the US Lockheed Martin UK Government Systems Ltd, and Northrop Grumman.

Two bidders get contracts to undertake work on the selective integration and assurance activities and a preferred bidder is selected by end 2003.

Between the US and European defence interest in the UAV, this augers to be a reasonable market. And since many of the applications for UAVs have real world commercial appeal, it also augers well for niche compound devices.



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III-Vs Review is published nine times a year. Periodicals postage is paid at Rahway, NJ 07065. Postmaster send address corrections to: III-Vs Review, 365 Blair Rd, Avenel, NJ 07001.

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Printed by: The Manson Group Ltd, St Albans, UK.
Journal Number: 02076 ISSN 0961-1290

Colbrite Gloss is manufactured from ECF pulp produced from renewable forest resources. ECF pulp is pulp bleached without using elemental chlorine

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