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EB Communications and STK
of Norway and SRA of
Sweden.

EB and STK are major sub-
contractors to Racal, and
when the equipment construc-
tion program is under way will
provide a proportion of the
major hardware items and the
system control software. The
main switch is a STK project.

Software development for
the Australian environment
will be done under sub-
contract by the Thorn subsidi-
ary Software Sciences of Au-
stralia.

As with Raven, Discon and
Austaccs the Australians re-
quire maximum domestic
work content in Parakeet and
the present contract, which is
for detailed equipment defini-
tion, is awarded to Racal
Electronics Pty of Sydney. Its
value is A\$6.5m and about
two-thirds of the work has to
be done in Australia.

Racal will be preferred
equipment supplier for the
follow-on procurement pro-
gramme which should be worth
about A\$200m, of which two-
thirds has to be procured in
Australia.

Plessey and the Australian
company AWA also competed,
the latter offering American
equipment. Plessey's offering
will have included Ptarmigan
technology and failure to win
Parakeet makes success in the
American competition for
Mobile Subscriber Equipment,
also based on Ptarmigan tech-
nology, all the more important
to maintain long-term employ-
ment at Plessey's Christchurch
plant.

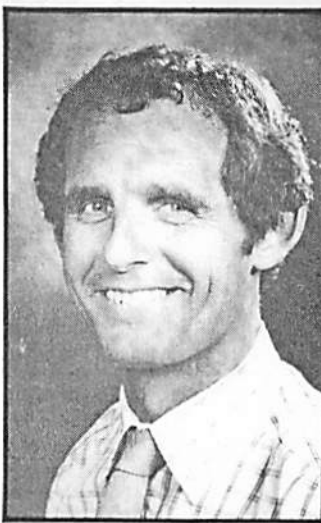
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thin film head technology as
the latest 5GByte double
capacity magnetic disk drive,
and a new coating formulation
based on a chrome dioxide
coat manufactured by Du
Pont and BASF.

A string of 3480 drives uses
60 per cent less floor space
than its 3420 predecessor,
costs slightly less to buy, and
up to 55 per cent less to main-
tain. The cartridge unit for
which IBM has such high
hopes measures approximately
4¼in. by 4¾in. compared
with the 10½in. tape diameter
tape reel of the 3420 yet offers
20 per cent greater capacity on
average.



Macfarlane: new MD for
Lex.

Macfarlane steps up at Lex

ANDREW Macfarlane has
replaced Peter Smitham as
managing director of Lex
Electronics in Europe.
Smitham is leaving Lex to be-
come a partner in Schroder
Ventures, a leading merchant
bank venture fund.

Macfarlane's appointment
should encourage any ambi-
tious personnel within the Lex
Group. He joined Jermyn Dis-
tribution in 1963 to head up
Mogul, became managing
director of Jermyn Distribu-
tion, until moving to his pre-
vious post, managing director
of Lex Electronics UK.

He now takes responsibility
for a £105m business which
boasts eight companies in the
UK, France and West Ger-
many. Macfarlane does not en-
visage any major changes in
Lex strategy in Europe. His
successor as managing director
of Lex Electronics UK is yet
to be named.

If Lex policy is followed, it
is likely that the job will be
filled from within the Lex
organisation. A Lex spokes-
man regretted Smitham's de-
cision, but added, "... we are
fortunate to have someone like
Andrew Macfarlane to assume
overall responsibility."

Peter Smitham has experi-
ence in venture capital
through his directorship at
Murray Ventures. "I have had
a satisfying 12 years with Jer-
myn, and then Lex, and
achieved practically all my
ambitions.

"My interest is helping
small companies grow, and
that is what I will be doing at
Schroder Ventures."

He added: "I will be look-
ing for growth opportunities
to fund in technology com-
panies."

Chip Rack makes first appearance

CHIP RACK, the first
three-dimensional racking sys-
tem for the interconnection of
VLSI chips, made its debut at
the Royal Society last week. A
working prototype, carrying
the Z80 chip, was shown to
the Institute of Radio and
Electrical Engineers.

Further production-sized
prototypes will be available for
viewing at the Internepcon ex-
hibition in Brighton next
month, and the systems
should be in volume produc-
tion at Dowty Electronics ear-
ly next year.

UPSURGE

Dowty Interconnect sales
and marketing manager, Ray
Willis, said that patents had
been granted in both the UK
and US, and applications have
been made in the EEC and
Japan. Willis said that there
has been an upsurge in in-
terest in the racking systems
as the future alternative to
printed circuit boards, particu-
larly for multi-processor sys-
tems.

Primary applications would
be in the computer and mili-
tary fields, he said, although
some unexpected uses for the
product are turning up in the
consumer electronics arena.

"We're in there first, no one
else has a truly 3-D approach
to the interconnection prob-
lem," Willis told EW. "The
only remaining difficulty will
be making sure we have the
semiconductor houses with us.
They are interested but they

need to see the dollar signs
shining before they show
heavy commitment."

Chip Rack designer, Mike
Anstey, claims that the system
is far superior to the tradition-
al printed circuit board for
connecting advanced VLSI
circuitry. Once designers be-
come used to designing on to
silicon, much of the complex-
ity of interconnection will be
incorporated into the circuitry
itself, opening up the way for
regular, simple interconnec-
tion systems which are cheap-
er to produce and much more
suited to automated assembly
than the PCB.

PCBs, he points out, have
to be customised for each ap-
plication, which restricts the
use of automatic assembly, are
inefficient in terms of heat dis-
sipation and give rise to high
reject rates due to solder frac-
tures and distortion of leads or
misalignment of components.

PACKAGES

With the Chip Rack, inter-
connection between leadless
chip carrier type packages is
achieved using a standard 3-D
skeletal racking structure
which, coupled with the car-
rier, enables interconnection
of PCB complexity to be
achieved cheaply. Anstey
stresses that the rack doesn't
rely on a through bus struc-
ture, and adds that because
the structure is constant for
each component, assembly
equipment need not be soft-
ware controlled.

Insurance fear faces satellite operators

FEWER satellites may be
ordered if insurance premiums
go through the roof as a result
of the loss of two communica-
tions satellites last Thursday.
They were blown apart during
launch when controllers des-
troyed the Ariane rocket be-
cause of a fault in the third
stage.

Insurance can already
amount to one fifth of the cost
of a satellite and rumours that
insurance could become more
expensive or even impossible
to obtain have worried some
operators.

But it's very unlikely that
satellites would become im-
possible to insure according to
Terry Atkins, a spokesman for
Lloyd's of London. And the
Lloyd's man who master-

mind the rescue of two
other wayward satellites to re-
coup insurance losses, Stephen
Merret, doesn't think that pre-
miums will change. "It's im-
possible to say at this stage, it
depends on the launch vehicle,
the type of satellite and other
things. But I doubt if pre-
miums will rise," he said.

However, he did point out
that when comparing the rela-
tive risks of the space shuttle
to Ariane, every loss that
occurs to one will affect the
other.

"Communications satellites
are very economical and re-
turn a healthy profit. Insur-
ance increases would be
second-order effects," said
John Humby, a spokesman for
British Aerospace.