AVIONICS

STL and ICL

win VAD

contracts
LONDON

Standard Telecommunication
Laboratories (STL) and ICL
have been awarded three UK
Ministry of Defence (MoD)
contracts worth nearly £17
million.
Awarded under the second
stage of the MoD's very high
performance integrated cir-
cuit application demonstrator
(VAD) programme, the five-
year contracts cover develop-
ments in advanced radio and
electronic counter-counter-
measures (ECCM) and high-
speed parallel processing.

STL will develop a battle-
field communications system
that can be carried as a
manpack. Using a recently
developed unique radio tech-
nique called zero intermediate
frequency it is hoped to
provide a single transceiver
capable of working with all
types of current and future
radio modes used in tactical
military communications.
Second of the three
contracts covers development
of a multi-purpose ECCM
mode chip. This will be very
high speed floating-point pro-
cessor purpose-designed to
improve anti-jamming perfor-
mance using parallel process-
ing.

The ICL contract calls for
very large scale integration
implementation of the com-
pany's distributed array
processor (DAP) to reduce the
size and power consumption
of the hardware package. The
ICL DAP is a large array of
simple processors operating in
parallel each with its own
memory and operating to
process data. Two prototypes
of a military DAP with 1,024
simple processors are to be
delivered shortly.

Smaller distributed array
processors will have a wider
range of possible defence
applications from ship sys-
tems to airborne missiles. ICL
aims to cut DAP size by at
least 75 per cent while
improving performance by a
factor of four.

The VAD programme,
which is funded equally by the
MoD and the companies
involved, is the UK equivalent
of the VHSIC very high speed
integrated circuit programme
now running in the USA.

BAe buys
micro stake

LONDON ~

British Aerospace has taken a
$5m stake in a newly formed
European silicon micro-elec-
tronics consortium. The
initiative, which gives it a 7
per cent stake, is intended to
preserve an independent
source of custom-built silicon

circuits at competitive prices.
The consortium, European
Silicon Structures (ES2), is
headed by Robb Wilmot,
former chairman of ICL. Elec-
tronics companies in Sweden,
Italy, the Netherlands, and
Switzerland have also joined
ES2. UK electronics concerns
have yet to show interest,
however.

Wilmot says that ES2 will
provide a fast prototyping and
low-volume production ser-
vice to customers. The
project, which "might have
relevance to the European
Eureka technology initiative,"
will be financed from private
sources and by a number of
European institutions.

VAAC Harrier

flies

CRANFIELD ~~

A two-seat Harrier destined
for the vectored thrust air-
craft advanced flight control
(VAAC) programme being
run by the Royal Aircraft
Establishment, Bedford, has
made its first flight from
Cranfield. Delivery to RAE
Bedford is set for the spring.
Under a contract awarded
in January 1983, the Cranfield
Institute of Technology has
installed a digital fly-by-wire
flight control system in the
aircraft, which will be used to
test control concepts for
British Aerospace's advanced
vectored-thrust designs.

Light Hawk flies by fibre
The US Army's advanced digital/optical control system (Adocs) research programme into fly-by-light flight control has begun in earnest. The UH-60 Black Hawk Adocs testbed, dubbed Light Hawk and modified by Boeing Vertol to use optical signalling in lieu of mechanical or electrical links and flown via a sidestick controller, flew in November.

PULSES

Thorn-EMI Electronics
has won a £1 million contract
to supply two radar simu-
lators to the Royal Air Force
for air traffic controller train-
ing. The equipment is to be
operational by mid-1987 at
RAF Shawbury in Shropshire.

Rockwell-Collins claims
that its Navstar global posi-
tioning system (GPS)
receivers for the US armed
forces will cost significantly
less than the Government
estimated in 1979: a single-
channel manpack set 42 per
cent less, a two-channel set 53
per cent less, and a five-
channel fighter set up to 62
per cent less. Equipment will
also be more reliable and
easier to repair than specified
by the Government, says
Collins. In March the
company received a contract
potentially worth $434 million
to build GPS receivers for the
US military.

Hazeltine is to supply
sonobuoy receivers for US
Navy P-3C Orion and S-3B
Viking anti-submarine war-
fare aircraft. The initial $20
million production contract
covers 43 ARR-78(V) ad-
vanced sonobuoy communi-
cations link receivers with
options for a further 103.

Texas Instruments is to
develop a signal processor
incorporating very high speed
integrated circuits (VHSIC)
for the imaging infrared Hell-
fire missile seeker already
under development for the
US Army. The alternative
VHSIC seeker electronics are
expected to be smaller, require
less power, and have a higher
processing throughput.

Nor malair- Garret is to
supply lightweight operator's
consoles to Thorn-EMI for
use with the Skymaster
airborne early warning radar,
which will begin flight trials
early this year in a Pilatus
Britten-Norman Islander.
The company is also sup-
plying cooling components for
the radar, which is a deriva-
tive of the anti-submarine
Searchwater.

Texas Instruments is to

develop a monolithic phased-
array jammer under an almost
$6 million US Air Force
advanced development con-
tract.

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