Spacewalks add power
to Salyut 7
MOSCOW

Soviet cosmonauts Vladimir
Lyakhov and Alexander Alex-
androv took a spacewalk on
November 1, during which
they added a solar-array wing
to Salyut 7. They spent 2hr
50min in space, carrying out
the "difficult and time-
consuming" tasks needed to
install and deploy the array.

The pair made a second
spacewalk to install another
solar array on November 3.
This time the exercise took
2hr 55mm.
Soviet officials claim that
the extra solar arrays were
envisaged during Salyut 7
development, and that the
necessary fittings and hand-
holds were built into the
orbiting craft before it was
launched. The extra arrays
travelled up to Salyut 7 in
Cosmos 1443, and were
apparently retrieved from
an airlock (presumably that
of the orbiting laboratory)
before installation.

Practice at in-orbit assem-
bly, with a view to creating
large orbital complexes, was
the main reason given for the
venture. No further comment
has been made on the possi-
bility of a Salyut 7 fuel leak.

Spacelab 1 tries again
.WASHINGTON D.C.

Spacelab 1 is on course for
lift-off on November 28 at
ll.OOhr EST (16.00hr GMT).
The launch window for STS
9/Spacelab 1 is just 14min
long (Flight, November 12,
page 1267). Spacelab 1 is due
to last nine days, and will
culminate in a landing at
Edwards AFB at 08.11hr PST
(16.1 lhr GMT) on December
7.

During the past month

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Nasa has made only minor
changes to the Spacelab pay-
load, including the replace-
ment of film and batteries in
il some experiments. It has also
solved a problem with
Columbia's Ku-band antenna,

(FLIGHT International, 26 November 1983

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which provides the link with
Nasa's tracking and data-
relay satellite (TDRS A). The
replacement of suspect Solid
Rocket Booster (SRB)
nozzles, the cause of the one-
month delay, went without a
hitch, and the vehicle
returned to the launch pad on
November 8.

Spacelab 1 is a joint
ESA/Nasa mission, and is the
first real test of the European-
built orbiting laboratory.
More details of the mission
can be found in the October 22
issue of Flight. The five-man
Spacelab 1 crew includes the
first ESA astronaut, Ulf
Merbold.

RCA sells

more weather eyes
PRINCETON ~

RCA Astro-Electronics is to
supply the USAF with four
more Block 5D-2 weather
satellites, under a contract
worth $171 million. The craft
are part of the Defence
Meteorological Satellite Pro-
gramme (DMSP), and
can provide "live" weather
pictures with a resolution of
0-5km. Each satellite is able
to view any part of the Earth
at least twice a day.
RCA describes the satellites
as "smart", because they
perform routine housekeeping
tasks autonomously, and
because their on-board com-
puters can be re-programmed
from the ground. Block 5D-2s
have a design life of three
years, twice that of their
Block 5D-1 predecessors (of
which five were built). They
also have a much larger
complement of sensors.
Block 5D weather satellites
are launched into polar orbits,
and there are normally two in
use at any given time.

First glimpse of the USAF's Block
5D-2 weather satellite. RCA Astro-
Electronics has just won an order
to supply four more

SPACEFLIGHT

Cosmonauts Lyakhov and Alex-
androv added two more solar
arrays to Salyut 7 earlier this
month. Each of the new solar
panels is smaller than the orbiting
laboratory's three original solar
wings. It is unclear how the new
arrays are attached to the existing
wings, but both "grippers" and
welding were mentioned in a
Soviet news release

Mitsubishi

wins comsats
TOKYO

Mitsubishi Electric has won
the battle to provide Japan's
next two communications
satellites, CS-3A and 3B. It
had teamed with Ford Aero-
space on its proposal, which
beat a bid by Nippon Electric
and its partner, Hughes
Aircraft.

Japan's National Space
Development Agency (Nasda)
plans to launch CS-3A and B
in February and August 1988,
respectively. It will use the
Japanese-built H I rocket to
launch the craft.
CS-3 will be similar to the
CS-1 and 2 satellites which
Ford Aerospace built in
conjunction with Mitsubishi.
In addition to acting as CS-3
prime contractor, Mitsubishi
will build the structure, bus
components, and antenna.
This is the first time that
Mitsubishi has taken such a
commanding role on a
comsat—previous craft have
tended to be masterminded
by the US partner. Nippon
Electric is contributing the
communications transpon-
ders, while Ford is supplying
major components and
subsystems.

Each CS-3 will weigh
550kg, and, like its predeces-
sors, will be spin-stabilised.

SPACESHOTS

Nasa's third flightworthy
Orbiter, Discovery, arrived at
the Kennedy Space Centre
(KSC), Florida, on November
9. It had been ferried from
Palmdale, California, aboard
Nasa's modified Boeing 747.
Discovery is now in the
Orbiter Processing Facility
being prepared for its debut.
Prime contractor Rockwell
had been due to roll-out the
craft at the end of September.

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