The London node of the ARPA network has been operational since early September. It consists of a TIP (Address 42) and, at present, a local HOST (0), a PDP-9 which front-ends the Rutherford High Energy Laboratory 360/195 located 60 miles from London and connected to it by a 2.4 Kbps link. The specific details of the 360 will soon appear in the Resource Notebook, but, in brief, it has 2 megabytes of fast store (750ns), a fixed head disk and a large number of other peripherals. It operates under OS/MVT release 21.7 and HASP II version 3.1, with a locally written message switching system MAST and an interactive editor ELECTRIC. In addition to the local hardware, it supports about 20 remote workstations which are, in many cases, simulating IBM 360s. Eventually, other hosts will be attached to the Very Distant Host Interface (Address 234).

The PDP-9 at the Institute of Computer Science also simulates an IBM 1130 with 2 card readers, 2 card punches, two line printers, three MAST consoles and a system console. It has a 16K (18 bit) word store, a 256K word drum and a number of devices usually attached by modem interfaces. The 1130 simulator software has been interfaced to an ARPA system which, at present, has IMP-HOST, HOST-HOST, ICP and TELNET protocols. The TELNET link is initially to the PDP-9 from whence the user may login to the 360 provided one of the two MAST ports is available (the third being for local use). The access is to ELECTRIC, and the user may enter and edit files, submit them to the batch stream, and inspect the output interactively from a terminal. The facilities will be extended soon to allow the printing of jobs at TIPS and later the RJE and FTP protocols will be implemented.

The 360 is available for limited experimental use, and a free login facility has been provided (GUEST). This account has a very limited allowance (currently 1 min CPU time/week), and is designed only for demonstration purposes.

All jobs under this account must be Class X which has a maximum run time of 10 secs. Proper accounts, for which there will be no charge, can be arranged for appropriate users by contacting KIRSTEIN@ISI. It is not planned, at present,
to make the 360/195 a normal service Host, like for example, the CCN machine. However, the machine will be made available for cooperative projects involving a US group and an interested party in the UK. Of particular interest to us are applications in Network measurements, high energy physics, and accelerator design, though other projects would be considered.

Primitive HELP facilities exist on both the PDP-9 and the 360, and they are accessed by %H and TYPE JB=HELP respectively. Up to date details will be given in the message obtained on connecting to the PDP-9 and in the PDP-9 Help file.

A typical scenario is attached.

The intention is to keep the PDP-9/360 available as a HOST between 19.00 and 09.00 local time, as well as a number of periods during the day (the local time is 8 or 9 hours ahead of California, and 5 hours ahead of the East Coast). There will be no operator available on the PDP-9, although during the day and at least the early part of the evening, there will be users in the computer room who will give assistance where necessary. The 'operator's console' is a Teletype, so any messages sent during the night will be read in the morning, and we will try to send replies to all queries (if you tell us where to reply to). Network mail for our site may be sent to KIRSTEIN @ ISI, or to myself (IDENT=AVS) at the NIC. Connection problems should be referred to Peter Higginson (NIC ident = PLH).

... Enc.

K.Y.
HELLO 315
@1 42
LOGGER

OPEN
INDRA COMPUTING SERVICE - 17 27 GMT ON 06 NOV 73
TYPE %H<CR> FOR HELP

%h
THE HOST AT ULICS IS A PDP-9 AS FRONT END TO AN IBM 360/195
COMMANDS TO THE PDP-9 ARE:
%HELP (%H)
%LOGIN ID=**,ACCT=**
%LOGOUT
%OPERATOR (%O)
%STATUS (%S)

ALL COMMANDS TERMINATE WITH CARRIAGE RETURN
WHEN NOT LOGGED IN TO 360 ALL LINES GO TO OPERATOR

WILL USA USERS PLEASE TYPE A COUPLE OF LINES SAYING WHO THEY ARE
BEFORE THEY LOG IN TO THE 360

FOR FURTHER HELP LOG IN TO THE 360 WITH:
%LOGIN,GUEST
AND IF SUCCESSFUL TYPE:
TYPE J8=HELP

THE IBM 360/195 IS UP

THE SYSTEM HAS NO PROMPT AND ONLY TWO CONTROL CHAR:
CTRL U TO CANCEL A LINE
DELETE (177) TO DELETE A CHAR

%login guest
USER 8 F7 BL= 113/ 250 TL= 197 NL= 13 TG= 8 NG= 2 TJ= 0.01 NJ= 2
** ELECTRIC TERMINATING IN 0 MIN 50 SECS AVAILABLE AGAIN AT 1847 HRS *
%logout
OK F7 BL= 113/ 250 TL= 198 NL= 14 TG= 8 NG= 2 TJ= 0.01 NJ= 2
@c
CLOSED T
CLOSED R