

COTTON RESEARCH AND DEVELOPMENT CORPORATION

PROJECT CODE: CSP22C
ORGANISATION: CSIRO Cotton Research Unit
PROJECT TITLE: Computer System Manager (Narrabri)
STAFF INVOLVED: Mr C. Nutt

FINAL REPORT:

The Computer System Manager at NARS oversees all aspects of the function and services provided by the NARS Computer Facility. This is now a sophisticated system which has been progressively developed over several years to now consist of:

- * A VAX 4000 model 300 with 32MB memory,
- * A micro Vax 2 with 8MB memory,
- * 4 DSSI hard disks totalling 6,650MB storage,
- * 10 non DSSI disks totalling 3457MB storage,
- * A 6250 BPI 2400 Ft Magnetic tape unit,
- * 1 EXABYTE tape cartridge unit,
- * A 10MB Thick/Wire Ethernet,
- * A 6-channel AUSTPAC connection,
- * 6 telephone modems,
- * 9 Ethernet servers giving a total of 152 RS-232 terminal lines,
- * 5 9600 Bd dot matrix printers,
- * Kinetics Fastpath Bridge connected to MAC network,
- * 24 MACS, 14 PCs,
- * 3 CD-ROM readers,
- * 3 laserwriters
- * A computer-FAX connection,
- * Connection of all computing devices in the 6 major buildings on site,
- * An Uninterruptable Power Supply to maintain system availability for up to 15 mins. through power blackouts,
- * A Power Conditioner to eliminate power line surges and spikes from affecting the computing facilities on-site.

Upgrade implemented in August 92 have almost totally alleviated reliability problems experienced earlier. An extensive Networking program on the VAX system (Pathworks) is currently being implemented (funded by CSIRO Plant Industry). This will enable all the computers on-site to be inter-connected in a large network, allowing rapid and effective data transfer between different computers (Macintosh & IBM) along with using the VAX disk storage to act as a storage server to all computers.

In addition to local use, the computer system is accessed by numerous outside parties and will be the focal point for the operation of the new weather station network being established to service the cotton industry. A reflection of this use is that the system has been used by a total of 30,044 users during the last 12 months. Many of these were at remote locations, often accessing the system early in the morning or late and night. Throughout this time, user response has been quite rapid. The importance of the NARS facility will be heightened with the commencement of the CRC for Sustainable Cotton Production which will increase the number of local users and require greater networking with other systems of the core partners.

