MARSIK FRONT END/DATA BASE

15 November 1985

DDT
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Chief

1. emphasised the need to remain compatible with NSA (and GCHQ) so that FOLKLORE applications programs can be easily relocated and installed. He also made the point that he considered that it was inefficient to have cryptanalysts connected directly to such a powerful and costly machine; in particular it was a waste to have a Cray servicing large numbers of terminals and being used for software development.

2. industry move to UNIX. However there was a very large investment in FOLKLORE and it would be around for many years to come. One view was that machines now running FOLKLORE would run it until they die - another was that some or all machines would be converted to UNIX before the equipments were phased out. As yet there were no firm plans.
would run FOLKLORE. (expected CRAY to announce officially within 12 months that UNIX is available on the two and four-processor XMP machines).

3. General plans being developed were to 'front-end' CRAY machines with processors compatible to the CRAY machines. Contenders were a mini-CRAY (a possible future CRAY product) a CDC 800, CONVEX (64 bit machine built by a Texas company in the CRAY 1 class -

There are also two companies with computer designs (in the CRAY 1 class) on paper - Scientific Computer System (SCS) Oregon and American Supercomputing Incorporated (ASI) California. CONVEX seemed to have the edge so far.

4. suggested we keep in close touch with developments so that we can progressively adapt our plans as necessary and sensible. On another occasion he mentioned that he might visit DSD during 1986 after our CRAY was installed. I said we would very much welcome his visit.

5. later that day described a possible system architecture illustrated in the attached diagram.

It seems to me that we should take and use LIBRETTO to provide the long term file storage requirements. If when MARSIK becomes saturated we could front-end MARSIK with a CONVEX (or equivalent) to which the operator terminals could be converted. At that time we would need to or would have to consider converting to UNIX. At some time later we could upgrade to a more powerful computing engine.