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R 210640Z MAY 82
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DA-754

SM-017-82

CRYPT COMPUTER PROCESSING

- A. AD-408-82 240202Z MAR 82
- B. AD-464-82 072244Z APR 82
- C. DA-442 190056Z MAR 82

1. THE LATEST RELEASE FROM CONTROL DATA HAS DONE NOTHING TO CLEAR UP OUR UNCERTAINTY AS TO WHAT IS LIKELY TO BE AVAILABLE FROM THIS COMPANY AT THE TIME WE PLAN TO RE-EQUIP (1985/86). OF THE 800 RANGE, THE SLOWER MODELS (825, 835, 855) ARE MICRO-CODED MACHINES WITH A 64-BIT WORD AND AN 8-BIT BYTE CAPABILITY IN NATIVE MODE, ALTHOUGH THEY ARE INITIALLY RELEASED ONLY IN NDS/BE EMULATION (60-BIT WORD, 6-BIT CHARACTER). NONE OF THESE IS POWERFUL ENOUGH FOR OUR REQUIREMENTS.

2. TOP-END MACHINES (865, 875) ON THE OTHER HAND, CONSIST OF 170-SERIES ARCHITECTURE REALISED IN LATER TECHNOLOGY. THEY REPRESENT A DEAD END WITH NO PROSPECT OF UPGRADE INTO SERIES 180 WHEN IT EVENTUATES.

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3. SINCE FUTURE FOLKLORE/IMP SOFTWARE DEVELOPMENT IS LIKELY TO USE CRAY'S WE BELIEVE WE SHOULD TRY TO AVOID GETTING TIED TO 170 WORD/BYTE SIZE. WE THEREFORE WANT TO ESTABLISH WHETHER CDC WILL BE IN A POSITION TO OFFER A 64-BIT, GENUINE 180-SERIES MACHINE OF THE REQUIRED POWER BY 1985/86. HOWEVER, IT IS ALSO IMPORTANT FOR US TO BE ABLE TO EXAMINE THE ARCHITECTURE OF SUCH A MACHINE IN SOME DETAIL TO ASSESS THE FEASIBILITY AND COST OF CONVERTING FOLKLORE TO IT, AND THE DEGREE OF COMPATIBILITY WHICH WOULD BE ACHIEVED WITH EXISTING FOLKLORE PROGRAMS. WE HAVE MADE IT CLEAR TO CDA THAT THEY WILL BE IN A COMPETITIVE SITUATION AGAINST CRAY, THAT WE REQUIRE CONSIDERABLY MORE INFORMATION ON THEIR FUTURE RELEASES, AND THAT WE WOULD BE LOOKING TO CONTROL DATA FOR A SUBSTANTIAL CONTRIBUTION TO ANY CONVERSION REQUIRED TO MOVE FOLKLORE TO A 170/875 OR 180 SERIES MACHINE.

4. LOCAL CDA SUPERVISOR OF SALES ANALYST SUPPORT GROUP, PLANS TO VISIT MINNEAPOLIS IN LATE JUNE IN ATTEMPT TO GET US INFORMATION ON THEIR FUTURE MACHINES.

HE HAS PROVIDED ON-SITE SUPPORT FOR DSD CYBER SYSTEM FOR SOME TIME, AND IS FAMILIAR WITH THE CAPABILITIES OF FOLKLORE, AND WITH THE REASONS FOR DSD'S INTEREST IN IT. IN MINNEAPOLIS HAS BEEN INSTRUCTED THAT HIS CHIEF CONTACT AND SOURCE OF INFORMATION WILL BE , CDC DIRECTOR OF PROGRAM DEVELOPMENT.

GRATEFUL YOU CONFIRM THIS. IN ORDER TO ACHIEVE OBJECT OF TRIP, SHOULD BE ABLE TO REFER FREELY TO NSA, FOLKLORE, IMP AND OUR NEED FOR COMPATIBILITY. NO DISCUSSION OF HIGHLY CLASSIFIED APPLICATIONS WOULD BE NECESSARY, OR POSSIBLE GIVEN EXTREMELY LIMITED ACCESS TO SUCH INFORMATION.

5. FEEL THAT TALKS BETWEEN AND CDC REPRESENTATIVES COULD BE HELPFUL TO HIM, AND INDIRECTLY TO US, BUT ARE NOT SURE HOW BEST TO SUGGEST THIS TO WHO HAS MADE HIMSELF RESPONSIBLE FOR ITINERARY. COULD YOU PLEASE

SEEK NSA'S FORMAL APPROVAL FOR A VISIT FROM [REDACTED] FOR THIS
PURPOSE. GIVEN THIS APPROVAL WE WILL ADVISE [REDACTED] IN LIGHT OF
WHAT YOU CAN TELL US OF [REDACTED] RELATIONSHIP WITH NSA.

6. WE HAVE DISCUSSED OUR PROBLEMS OPENLY WITH [REDACTED]

7. WE WOULD ALSO APPRECIATE ANY FURTHER INFORMATION YOU CAN OBTAIN
ON [REDACTED]

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