#356

ASTP APOLLO

APOLLO-SOYUZ EPHEMERIS DATA

75-066A-00G

```
IEF236I ALLOC. FOR YZJRJKDE GC
IEF237I 332    ALLOCATED TO PGM=*.DD
IEF237I 232    ALLOCATED TO FT05F001
IEF237I 231    ALLOCATED TO FT06F001
IEF237I 232    ALLOCATED TO FT07F001
IEF237I 231    ALLOCATED TO SYSPRINT
IEF237I 232    ALLOCATED TO SYSPRINT
IEF237I 331    ALLOCATED TO SYSPRINT
IEF237I 0D3    ALLOCATED TO FT08F001
```

1.09812846 E+02

RECORD 1 OF FILE 1
LENGTH = 4960 BYTES

	0.					3.	0733	4883	E*01	
card # 1	4C404040	FC4E4C40	40404040	40404040	4C404040	4060F34B	F0F7F3F3	F4F8F8F3	C54EF0F1	40404040
	F14BF0F9	F8F1F2F8	F4F6C54E	F0F24040	4C40F24B	F1F9F4F4	F8F7F2F4	C54EF0F2	40404040	40404040
	4040404C	FC4E4C40	40404C40	40404040	40404040	4060F34B	F2F5F5F9	F8F2F3F4	C54EF0F1	40404040
card # 2	F14BF0F7	F5F9F7F3	F3F4C54E	F0F24040	4C40F24B	F1F9F9F2	F5F1F7F4	C54EF0F2	40404040	40404040
	40404040	F14EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F34B	F0F2F6F0	F9F0F1F0	C54EF0F1	40404040
	F14BF1F0	F3F3F2F4	F5F9C54E	F0F24040	4040F24B	F1F9F3F8	F6F5F5F1	C54EF0F2	40404040	40404040
	4C404040	F14EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F34B	F2F0F9F7	F4F0F6F6	C54EF0F1	40404040
	F14BF0F8	F0F9F9F1	F7F3C54E	F0F24040	4040F24E	F1F9F8F6	F4F9F6F6	C54EF0F2	40404040	40404040
	40404040	F24EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F9F7F8F5	F9F0F0F6	C54EF0F1	40404040
	F14BF1F0	F6F4F6F7	F1F9C54E	F0F24040	4040F24B	F1F9F3F2	F4F5F7F8	C54EF0F2	40404040	40404040
	40404040	F24BFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F34B	F1F6F3F2	F2F9F9F3	C54EF0F1	40404040
	F14BF0F8	F6F3F5F1	F5F4C54E	F0F24040	4040F24B	F1F9F8F0	F4F7F6F3	C54EF0F2	40404040	40404040
	4040404C	F34EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F9F3F0F8	F5F5F3F9	C54EF0F1	40404040
	F14BF1F1	F3F5F5F7	F4F9C54E	F0F24040	4C40F24E	F1F9F2F6	F2F8F6F6	C54EF0F2	40404040	40404040
	40404040	F34EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F34E	F1F1F6F4	F5F7F4F8	C54EF0F1	40404040
	F14BF0F9	F1F6F5F4	F0F7C54E	F0F24040	4040F24B	F1F9F7F4	F4F6F2F7	C54EF0F2	40404040	40404040
	40404040	F44BF0F0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F8F8F2F8	F9F2F6F4	C54EF0F1	40404040
	F14EF1F1	F8F5F5F6	F7F5C54E	F0F24040	4C40F24B	F1F9F2F0	F1F4F7F7	C54EF0F2	40404040	40404040
	4C404040	F44BFCF0	F0F0F0F0	F0F0C54E	FCF14040	4060F34B	F0F6F9F4	F3F0F4F7	C54EF0F1	40404040
	F14BF0F9	F6F5FCF0	F6F2C54E	F0F24040	4C40F24B	F1F9F6F8	F4F6F2F1	C54EF0F2	40404040	40404040
	4040404C	F54EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F8F3F4F7	F0F8F2F0	C54EF0F1	40404040
	F14BF1F2	F3F5F8F6	F1F3C54E	F0F24040	4040F24B	F1F9F1F4	F0F4F7F3	C54EF0F2	40404040	40404040
	4C404040	F54BFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F34B	FCF2F2F1	F5F5F8F9	C54EF0F1	40404040
	F14BF1F0	F2F0F9F2	F4F5C54E	F0F24040	4040F24B	F1F9F6F2	F4F8F0F8	C54EF0F2	40404040	40404040
	4C404040	F64EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F7F8F6F3	F0F8F3F0	C54EF0F1	40404040
	F14BF1F2	F8F5F2F7	F0F0C54E	F0F24040	4C40F24B	F1F9F0F7	F9F9F1F2	C54EF0F2	40404040	40404040
	4C404040	F64EFCF0	F0F0F0F0	F0F0C54E	FCF14040	4060F24B	F9F7F4F6	F4F0F5F7	C54EF0F1	40404040
	F14BF1F0	F7F2F3F0	F8F3C54E	F0F24040	4C40F24B	F1F9F5F6	F5F2F4F9	C54EF0F2	40404040	40404040
	4C404040	F74EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F7F3F7F6	F9F9F0F6	C54EF0F1	40404040
	F14BF1F3	F3F4F2F0	F4F1C54E	F0F24040	4C40F24B	F1F9F0F1	F9F8F5F7	C54EF0F2	40404040	40404040
	4C404040	F74EFCF0	F0F0F0F0	F0F0C54E	FCF14040	4060F24B	F9F2F6F8	F9F1F2F0	C54EF0F1	40404040
	F14BF1F1	F2F3F1F7	F0F5C54E	F0F24040	4040F24B	F1F9F5F0	F6F0F0F5	C54EF0F2	40404040	40404040
	40404040	F84EFCF0	F0F0F0F0	F0F0C54E	FCF14040	4060F24E	F6F8F8F8	F8F6F4F4	C54EF0F1	40404040
	F14BF1F3	F8F2F6F7	F6F0C54E	F0F24040	4040F24B	F1F8F9F6	F0F3F6F6	C54EF0F2	40404040	40404040
	40404040	F84BFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F8F7F8F9	F1F4F3F0	C54EF0F1	40404040
	F14BF1F1	F7F3F5F2	F3F1C54E	F0F24040	4040F24B	F1F9F4F4	F7F1F3F8	C54EF0F2	40404040	40404040
	4C404040	F94EFCF0	F0F0F0F0	F0F0C54E	FCF14040	4060F24B	F6F3F9F8	F7F6F2F9	C54EF0F1	40404040
	F14BF1F4	F3FCF6F9	F7F2C54E	F0F24040	4040F24B	F1F8F9F0	F1F4F9F8	C54EF0F2	404C4040	40404040
	4C404040	F94EFCF0	F0F0F0F0	F0F0C54E	F0F14040	4060F24B	F8F3F0F7	F1F6F2F5	C54EF0F1	40404040
	F14BF1F2	F2F3F3F7	F8F5C54E	F0F24040	4040F24B	F1F9F3F8	F8F7F0F8	C54EF0F2	40404040	40404040
	4C404040	F14EFCF0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F5F9F0F6	F7F4F3F1	C54EF0F1	40404040
	F14BF1F4	F7F6F2F7	F9F5C54E	F0F24040	4C40F24B	F1F8F8F4	F3F3F1F3	C54EF0F2	404C4040	40404040
	4C404040	F14EFCF0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F7F8F2F3	F0F3F2F9	C54EF0F1	40404040
	F14BF1F2	F7F2F7F4	F8F7C54E	F0F24040	4C40F24B	F1F9F3F3	F0F7F7F5	C54EF0F2	404C404C	40404040
	4C404040	F14EF1FC	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F5F4F1F2	F8F6F0F8	C54EF0F1	40404040
	F14BF1F5	F2F5F4F3	F4F0C54E	F0F24040	4040F24B	F1F8F7F8	F5F8F6F8	C54EF0F2	40404040	40404040
	4C404040	F14BF1F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F7F3F3F6	F8F1F5F0	C54EF0F1	40404040
	F14BF1F3	F2F1F6F4	F5F8C54E	F0F24040	4C40F24B	F1F9F2F7	F3F4F0F0	C54EF0F2	40404040	40404040
	4040404C	F14EF2F0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F4F9F1F7	F1F7F0F8	C54EF0F1	40404040
	F14BF1F5	F7F2F1F7	F2F2C54E	F0F24040	4C40F24B	F1F8F7F2	F9F2F2F2	C54EF0F2	40404040	40404040
	4C404040	F14BF2F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F6F8F4F8	F5F6F8F6	C54EF0F1	40404040
	F14BF1F3	F7F0F0F8	F1F6C54E	F0F24040	4040F24B	F1F9F2F1	F6F6F4F2	C54EF0F2	40404040	40404040
	4C404040	F14EF3F0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F4F4F1F9	F7F2F6F4	C54EF0F1	40404040
	F14BF1F6	F1F8F5F0	F5F1C54E	F0F24040	4C40F24B	F1F8F6F7	F3F4F3F0	C54EF0F2	40404040	40404040
	4C404040	F14EF3F0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F6F3F5F8	F3F5F1F8	C54EF0F1	40404040
	F14BF1F4	F1F6FCF6	F7F8C54E	F0F24040	4C40F24B	F1F9F1F6	F0F5F5F9	C54EF0F2	404C4040	40404040
	4040404C	F14BF4F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F3F9F2F0	F5F8F0F0	C54EF0F1	40404040
	F14BF1F6	F6F4F4F4	F3F6C54E	F0F24040	4C40F24B	F1F8F6F1	F8F5F5F0	C54EF0F2	404C4040	404C4C4C
	40404040	F14EF4F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F5F8F6F6	F2F2F1F6	C54EF0F1	40404040
	F14BF1F4	F6F5F6F1	F5F8C54E	F0F24040	4C40F24B	F1F9F1F0	F5F2F1F0	C54EF0F2	40404040	40404040

4C4C4C4C	F14EF5F0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F3F4F1F9	F7F8F2F9	C54EF0F1	40404040
F14BF1F7	FCF9F9F9	F8F6C54E	F0F24040	4C40F24B	F1F8F5F6	F4F6F3F7	C54EF0F2	40404040	40404040
40404040	F14BF5F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F5F3F7F2	F2F3F3F9	C54EF0F1	40404040
F14BF1F5	F1F2F7F3	F7F2C54E	F0F24040	4040F24B	F1F9F0F5	F0F6F5F2	C54EF0F2	40404040	40404C40
4C404040	F14EF6F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F2F9F1F7	F3F8F5F2	C54EF0F1	40404040
F14BF1F7	F5F5F1F8	F0F7C54E	F0F24040	4040F24B	F1F8F5F1	F1F7F4F7	C54EF0F2	40404040	40404040
40404040	F14BF6F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F4F8F7F6	F4F4F3F2	C54EF0F1	40404040
F14BF1F5	F5F9F4F4	F3F0C54E	F0F24040	4040F24B	F1F8F9F9	F6F9F4F3	C54EF0F2	40404040	40404040
4C404040	F14EF7F0	F0F0F0F0	F0FCC54E	FCF24040	4060F24B	F2F4F1F3	F4F3F6F1	C54EF0F1	40404040
F14BF1F8	FCFCFCF0	F0F4C54E	F0F24040	4040F24B	F1F8F4F5	F9F9F3F3	C54EF0F2	40404040	40404040
40404040	F14EF7F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F4F3F7F8	F9F0F2F8	C54EF0F1	40404040
F14BF1F6	F0F5F7F4	F4F4C54E	F0F24040	4040F24B	F1F8F9F4	F4F1F4F0	C54EF0F2	40404040	40404040
40404040	F14EF6F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F1F9F0F7	F9F8F3F8	C54EF0F1	40404040
F14BF1F8	F4F4F4F6	F8F1C54E	F0F24040	4C40F24B	F1F8F4F0	F9F2F4F8	C54EF0F2	40404040	40404040
40404040	F14BF8F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F3F8F7F9	F6F6F5F0	C54EF0F1	40404040
F14BF1F6	F5F1F6F5	F2F3C54E	F0F24040	4C40F24B	F1F8F8F9	F2F2F9F8	C54EF0F2	40404040	40404040
40404040	F14EF9F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F1F4F0F1	F0F7F5F4	C54EF0F1	40404040
F14BF1F8	F8F8F5F9	F4F0C54E	F0F24040	4040F24B	F1F8F3F5	F9F7F4F7	C54EF0F2	40404040	40404040
40404040	F14BF5F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F3F3F7F8	F7F8F1F0	C54EF0F1	40404040
F14BF1F6	F9F7F1F7	F7F5C54E	F0F24040	4C40F24B	F1F8F8F4	F1F4F7F2	C54EF0F2	40404040	40404040
40404040	F24EFCF0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F0F8F9F2	F7F5F7F2	C54EF0F1	40404040
F14BF1F9	F3F2F3F8	F8F2C54E	F0F24040	4C4CF24B	F1F8F3F1	F1F4F8F0	C54EF0F2	40404040	40404040
40404040	F24BFCF0	F0F0F0F0	F0F0C54E	F0F24040	4060F24E	F2F8F7F6	F3F0F0F9	C54EF0F1	40404040
F14BF1F7	F4F2F3F3	F0F7C54E	F0F24040	4040F24B	F1F8F7F9	F1F7F1F7	C54EF0F2	40404040	40404040
40404040	F24EF1F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F0F3F8F3	F0F7F4F7	C54EF0F1	40404040
F14BF1F9	F7F5F6F6	F0F7C54E	F0F24040	4C40F24B	F1F8F2F6	F4F4F9F9	C54EF0F2	40404040	40404040
40404040	F24EF1F0	F0F0F0F0	F0F0C54E	FCF24040	4060F24B	F2F3F7F2	F2F7F3F7	C54EF0F1	40404040
F14BF1F7	F8F7F1F2	F2F4C54E	F0F24040	4C40F24B	F1F8F7F4	F3F0F8F7	C54EF0F2	40404040	40404040
40404040	F24BF2F0	F0FCF0F0	F0F0C54E	F0F24040	4060F14B	F5F8F7F2	F0F7F2F2	C54EF0F1	40404040
F14BF2F0	F1F5FCF2	F1F3C54E	F0F24040	4040F24B	F1F8F2F1	F8F8F5F4	C54EF0F2	40404040	40404C40
4C404040	F24BF2F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F1F8F6F6	F7F4F7F6	C54EF0F1	40404040
F14BF1F8	F3F1F5F6	F2F8C54E	F0F24040	4C40F24B	F1F8F6F9	F5F6F3F5	C54EF0F2	404C4040	40404040
40404040	F24EF3F0	F0F0F0F0	F0F0C54E	FCF2404C	4060F14E	F9F3F5F9	F7F9F3F5	C54EF0F1	40404040
F14BF2F0	F6F1F5F7	F9F7C54E	F0F24040	4C40F24B	F1F8F1F7	F4F5F9F3	C54EF0F2	40404040	40404040
40404040	F24BF3F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24E	F1F3F5F9	F7F6F9F7	C54EF0F1	40404040
F14EF1F8	F7F5F6F6	F2F3C54E	F0F24C40	4C4CF24E	F1F8F6F4	F9F4F1F3	C54EF0F2	40404040	40404040
40404040	F24EF4F0	F0F0F0F0	F0F0C54E	F0F24040	4060F14E	F8F8F4F6	F2F8F1F5	C54EF0F1	40404040
F14BF2F1	FCF4F4F4	F5F4C54E	F0F24040	4040F24B	F1F8F1F3	F1F7F6F6	C54EF0F2	40404040	40404040
40404040	F24BF4F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F0F8F5F1	F3F8F6F1	C54EF0F1	40404040
F14BF1F9	F1F9F4F3	F0F8C54E	F0F24040	4040F24B	F1F8F6F0	F4F4F7F3	C54EF0F2	40404040	40404040
4C404040	F24EF5F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14B	F8F3F3F1	F5F7F8F3	C54EF0F1	40404040
F14BF2F1	F4F6F7F2	F8F0C54E	F0F24040	4C4CF24E	F1F8F0F9	F0F4F2F0	C54EF0F2	40404040	40404040
40404040	F24EF5F0	F0F0F0F0	F0F0C54E	F0F24040	4060F24B	F0F3F4F1	F6F4F2F3	C54EF0F1	40404040
F14BF1F9	F6F2F8F7	F8F5C54E	F0F24040	4040F24B	F1F8F5F6	F0F8F6F5	C54EF0F2	40404040	40404040
40404040	F24EF6F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14B	F7F8F1F5	F7F2F5F2	C54EF0F1	40404040
F14BF2F1	F8F8F7F3	F6F7C54E	F0F24040	4040F24B	F1F8F0F5	F0F6F0F0	C54EF0F2	40404040	40404040
40404040	F24EF6F0	F0F0F0F0	F0F0C54E	F0F24040	4060F14B	F9F8F3F0	F5F8F2F6	C54EF0F1	40404040
F14BF2F0	FCF6FCF1	F5F0C54E	F0F24040	4C4CF24B	F1F8F5F1	F8F6F3F9	C54EF0F2	40404040	40404040
40404040	F24BF7F0	F0F0F0F0	F0F0C54E	F0F24040	4060F14E	F7F2F9F8	F7F6F2F9	C54EF0F1	40404040
F14BF2F2	F3F0F4F8	FCF7C54E	F0F24040	4040F24B	F1F8F0F1	F2F3F5F1	C54EF0F2	40404040	40404040
40404040	F24BF7F0	F0F0F0F0	F0F0C54E	F0F24040	4060F14B	F9F3F1F8	F2F5F0F7	C54EF0F1	40404040
F14BF2F0	F4F6F6F5	F0F0C54E	F0F24C40	4040F24B	F1F8F4F7	F7F8F4F3	C54EF0F2	404C4040	40404040
40404040	F24EF6F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14E	F6F7F8F0	F7F3F1F2	C54EF0F1	40404040
F14BF2F2	F7F1F9F6	F9F2C54E	F0F24040	4040F24B	F1F7F9F7	F5F7F1F9	C54EF0F2	404C4040	40404040
40404040	F24BF6F0	F0F0F0F0	F0F0C54E	F0F24040	4060F14B	F8F8F0F4	F6F8F9F4	C54EF0F1	40404040
F14BF2F0	F9F1F3F9	F3F2C54E	F0F24040	4C40F24B	F1F8F4F3	F8F5F2F5	C54EF0F2	40404040	40404040
40404040	F24EF9F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14B	F6F2F6F1	F6F6F9F6	C54EF0F1	40404040
F14BF2F3	F1F3F2F1	F1F0C54E	F0F24C40	4C40F24B	F1F7F9F4	F0F7F4F4	C54EF0F2	40404040	40404040
4C404040	F24EF9F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14E	F8F2F8F9	F9F4F0F7	C54EF0F1	40404040
F14BF2F1	F3F3F6F5	F3F9C54E	F0F24040	4040F24B	F1F8F4F0	FCF7F3F3	C54EF0F2	40404040	40404040
4C404040	F34EFCF0	F0F0F0F0	F0F0C54E	FCF24040	4060F14B	F5F7F4F1	F6F1F6F6	C54EF0F1	40404040
F14BF2F3	F5F4F2F1	F5F1C54E	F0F24040	4040F24B	F1F7F9F0	F7F4F6F9	C54EF0F2	40404040	40404040
40404040	F34EFCF0	F0F0F0F0	F0F0C54E	FCF24040	4060F14E	F7F7F7F4	F0F4F6F0	C54EF0F1	40404040
F14BF2F1	F7F5F6F4	F1F4C54E	F0F24040	4C40F24B	F1F8F3F6	F4F5F1F0	C54EF0F2	40404040	40404040

RECORD 2 OF FILE 1
LENGTH = 4960 BYTES

40404040	F34BF1F0	F0F0F0F0	F0F0C54E	F0F24040	4060F14B	F5F2F2F0	F6F1F0F3	C54EF0F1	40404040
F14BF2F3	F9F4F9F9	F0F3C54E	F0F24040	4C40F24B	F1F7F8F7	F5F9F3F4	C54EF0F2	404C4040	40404040
40404040	F34EF1F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14E	F7F2F5F7	F0F4F5F8	C54EF0F1	40404040
F14BF2F2	F1F7F3F6	F5F0C54E	F0F24040	4040F24B	F1F8F3F2	F9F9F0F2	C54EF0F2	40404040	40404040
40404040	F34EF2F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14E	F4F6F9F8	F6F8F8F1	C54EF0F1	40404040
F14BF2F4	F3F5F5F4	F5F1C54E	F0F24C40	4C40F24B	F1F7F8F4	F6F1F7F9	C54EF0F2	404C4040	40404040
4C404040	F34EF2F0	F0F0F0F0	F0F0C54E	FCF24040	4060F14B	F6F7F3F8	F9F8F0F0	C54EF0F1	40404040

```
40404040  F64BF0F3  F8F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F2F9F7  F2F1F8F5  C54EF0F1  40404040
F34BF1F9  F3F8F1F9  F3F8C54E  F0F24040  4040F24B  F2F7F3F7  F5F3F3F3  C54EF0F2  40404040  40404040
40404040  F64EF0F3  F9F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F8F3F2  F6F5F4F1  C54EF0F1  40404040
F34BF2F6  F7F7F6F5  F0F7C54E  F0F24040  4040F24B  F2F4F5F1  F1F0F9F1  C54EF0F2  40404040  40404040
40404040  F64EF0F3  F9F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F4F0F3  F2F3F3F9  C54EF0F1  40404040
F34BF2F0  F4F0F3F8  F9F9C54E  F0F24040  4040F24B  F2F7F3F4  F9F9F9F4  C54EF0F2  40404040  40404040
40404040  F64BF0F4  F0F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F8F7F0  F4F3F7F7  C54EF0F1  40404040
F34BF2F7  F8F2F2F8  F5F3C54E  F0F24040  4040F24B  F2F4F4F6  F0F9F3F3  C54EF0F2  40404040  40404040
40404040  F64EF0F4  F0F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F4F9F9  F5F6F5F0  C54EF0F1  40404040
F34BF2F1  F4F3F0F5  F7F4C54E  F0F24040  4040F24B  F2F7F3F2  F1F1F0F8  C54EF0F2  40404040  40404040
40404040  F64EF0F4  F1F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F8F9F8  F1F5F7F7  C54EF0F1  40404040
F34BF2F8  F6F7F0F7  F9F3C54E  F0F24040  4040F24B  F2F4F4F0  F7F2F4F3  C54EF0F2  40404040  40404040
40404040  F64BF0F4  F1F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F5F8F6  F1F3F7F5  C54EF0F1  40404040
F34BF2F2  F4F6F1F5  F4F4C54E  F0F24040  4040F24B  F2F7F2F8  F8F6F6F4  C54EF0F2  40404040  40404040
40404040  F64BF0F4  F2F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F9F1F5  F7F9F1F2  C54EF0F1  40404040
F34BF2F9  F9F1F5F8  F5F9C54E  F0F24040  4040F24B  F2F4F3F5  F0F0F2F7  C54EF0F2  40404040  40404040
40404040  F64EF0F4  F2F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F6F6F2  F8F8F4F2  C54EF0F1  40404040
F34BF2F3  F4F9F6F3  F7F9C54E  F0F24040  4040F24B  F2F7F2F5  F2F6F5F6  C54EF0F2  40404040  40404040
40404040  F64EF0F4  F3F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F9F2F3  F3F2F3F7  C54EF0F1  40404040
F34BF3F0  F9F6F9F5  F5F0C54E  F0F24040  4040F24B  F2F4F2F8  F9F2F8F9  C54EF0F2  40404040  40404040
40404040  F64EF0F4  F3F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F7F2F9  F7F4F4F7  C54EF0F1  40404040
F34BF2F4  F5F3F4F6  F3F6C54E  F0F24040  4040F24B  F2F7F2F1  F3F0F8F0  C54EF0F2  40404040  40404040
40404040  F64EF6F4  F4F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F9F2F0  F7F4F8F3  C54EF0F1  40404040
F34BF3F2  F0F1F5F3  F8F2C54E  F0F24040  4040F24B  F2F4F2F2  F5F0F3F7  C54EF0F2  40404040  40404040
40404040  F64BF0F4  F4F0F0F0  F0F0C54E  F0F44040  4040F54B  F1F7F8F6  F6F6F6F1  C54EF0F1  40404040
F34BF2F5  F5F7F5F8  F6F0C54E  F0F24040  4040F24B  F2F7F1F6  F9F9F3F1  C54EF0F2  40404040  40404040
```

195 RECORDS IN FILE 1 OF TAPE

```
IEF142I - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS76238.T112028.RV000.YZJRJKDE.LODMOD        PASSED
IEF285I   VOL SER NOS= K3SCR5.
IEF285I   SYS76238.T112028.RV000.YZJRJKDE.S0000031      SYSIN
IEF285I   VOL SER NOS= K3SCR3.
IEF285I   SYS76238.T112028.RV000.YZJRJKDE.S0000031      DELETED
IEF285I   VOL SER NOS= K3SCR3.
IEF285I   SYS76238.T112028.SV000.YZJRJKDE.R0000027      SYSOUT
IEF285I   VOL SER NOS= K3SCR2.
IEF285I   SYS76238.T112028.SV000.YZJRJKDE.R0000028      DELETED
IEF285I   VOL SER NOS= K3SCR3.
IEF285I   SYS76238.T112028.SV000.YZJRJKDE.R0000029      DELETED
IEF285I   VOL SER NOS= K3SCR2.
IEF285I   SYS76238.T112028.RV000.YZJRJKDE.R0000030      KEPT
IEF285I   VOL SER NOS= JJ0200.
IEF280E K 003,JJ0200,YZJRJKDE,GO
IEF373I STEP /GO      / START 76238.1142
IEF374I STEP /GO      / STOP  76238.1152 CPU    0MIN 52.67SEC MAIN 186K LCS    0K
- STEP 02 -      RETURN CODE = 0000                    STEP TIME =     1.24 MINS=(CPU=      .87,IO=      .37)
                                   IO IN SECS. DISK=    20.20,DRUM=      .44,TAPE=     2.01,CELL=      .00,OTHR=      .23
IEF285I   SYS76238.T112028.RV000.YZJRJKDE.LODMOD        DELETED
IEF285I   VOL SER NOS= K3SCR5.
IEF375I  JOB /YZJRJKDE/ START 76238.1138
IEF376I  JOB /YZJRJKDE/ STOP  76238.1153 CPU    0MIN 54.31SEC
-  SYSTEM=MVT-21 (11-21-73)    K3                                   TIME=11.53.00.85 DATE=08-25-76
- JOB 0019-                                          TOTAL TIME =     1.46 MINS=(CPU=      .90,IO=      .56)
                                   IO IN SECS. DISK=    30.65,DRUM=     1.00,TAPE=     2.01,CELL=      .00,OTHR=      .39
 THERE WERE 01 TAPES MOUNTED FOR THIS JOB. TAPE MOUNT CHARGE WAS 00.0 MINUTES.
```

ASTP-APOLLO

APOLLO-SOYUZ EPHEMERIS DATA

75-066A-00G

This data set has been restored. There was originally one 9-track, 1600 BPI tape written in EBCDIC. There is one restored tape written in ASCII. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on an IBM 360 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES
DR005694	DS005694	D024553	1

REQ. AGENT	RAND NO.	ACQ. AGENT
WKD	RC6503	EGS

ASTP APOLLO

APOLLO-SOYUZ EPHEMERIS DATA

75-066A-00G

This data set consists of one Apollo-Soyuz Ephemeris data tape created on an IBM 360 computer. The tape is 1600, EBCDIC, 9 track, 1 file. The tape contains Apollo command-service module (CSM) and docking module (DM) position in geodetic coordinates. The data is written in card images 72 characters long followed by zero bytes to make 80 characters total.

D#	C#
D-24553	C-18243

75-066A-01

SMITHSONIAN INSTITUTION
ASTROPHYSICAL OBSERVATORY
60 GARDEN STREET CAMBRIDGE, MASSACHUSETTS 02138
TELEPHONE 617 864-7910

4 June 1976

Dr. E. G. Stassinopoulos
Code 601.1
Goddard Space Flight Center
Greenbelt, Md. 20771

Dear Dr. Stassinopoulos:

The magnetic tape containing Apollo command-service module (CSM) and docking module (DM) position in geodetic coordinates has been shipped. The tape format is as follows:

9-track, phase encoded (~~32~~16 00 bpi)
block size 4960 characters (EBCDIC)
card image length: 72 char. + 8 blanks
card images per block: 62

Each card image is 72 char long followed by zero bytes to make 80 char total. Each pair of card images contains the following data in 4E18.8 format:

card #1 DM coordinates
time in sec. from epoch
geodetic latitude in degrees
longitude in degrees east from Greenwich
altitude in km above reference ellipsoid.

card #2 CSM coordinates, same format

The reference figure for the earth is an ellipsoid of revolution with equatorial radius 6378.160 km and polar radius 6356.774 km. Altitude is along the normal to the reference ellipsoid.

There are a total of 195 blocks of 62 images each on the file. The positions are given at a 10 second interval throughout.

I am leaving SAO immediately so please contact Dr. Grossi if there are any problems and he can consult with me.

Sincerely,

Ray H. Gay

Ray H. Gay